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Navigating Organizational Change in Higher Education: A Case Study of Change Processes, Strategies and their Cultural Implications

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ABSTRACT

The existing body of literature on organizational change in higher education (HE) has long been a subject of scrutiny and critique, revealing a landscape categorized as fragmented, limited in influence and underdeveloped. This is added to the lack of consensus among scholars on the most effective change management strategies within HE. This discordance in the field has hindered the development of pragmatic insights and a unified framework for navigating the intricate terrain of change in academia. This doctoral research aimed to address these critical gaps by embarking on an exploratory case study of a private university in Oman that emerged as a notable exemplar of transformative change. The main aim of this study was to explore the intricate change process, specifically focusing on identifying the diverse change processes and strategies that the university employed and their potential short and long-term implications on the institutional culture.

The study employed a mixed-methods approach focusing on the embedded design. This approach synergized the combined potential of the qualitative and quantitative research to gain an in-depth and nuanced understanding of the transformational journey of the university in question. The qualitative inquiry was premised on core documents analysis, individual, semi-structured and in-depth interviews with the senior management, and focus group discussions with the middle management. The integration of the quantitative strand harnessed the potency of surveys in garnering input from both staff and students. This methodological synergy between the two approaches enhanced the extrapolation of a comprehensive and thorough understanding of the multifarious transformational dynamics.

This study exhibited originality and made significant contributions in several ways. Regarding focus, the study shifted from the conventional way of investigating 'what' makes change successful to 'how' it can be effectively managed and implemented within academia, hence offering a comprehensive, actionable change framework. In terms of context, the study's unique Arab world context addressed the paucity in organizational change research on change navigation and management in an underrepresented region, making it the first case study of its kind in this domain. In addition, the insider perspective employed in exploring the six-year transformational narrative enhanced authenticity and depth, providing nuanced insights of the change processes and strategies and their implications on the institutional culture. The contribution of a ground-breaking case study with a distinctive focus, context and perspective represents a significant addition to the field.

Moreover, the contribution of a comprehensive framework for managing and executing change marks another significant enrichment to the field. Within this framework, ten key principles emerged as practical guideposts for HE leaders, offering a potential trajectory for navigating the turbulent waters of change in academia. The implication of identifying these principles lies in guiding institutions, particularly in the Arab world, into a new phase of transformative change, while providing a pragmatic itinerary that empowers HE leaders to navigate the complex terrain of change with clarity and purpose. It is recommended that researchers build on the emerged framework by

conducting empirical studies in different HE settings to further refine and validate it to ensure wider applicability and effectiveness. Lastly, this study deepened understanding of change management dynamics in HE and paved the way for institutions to navigate change while remaining dynamic and innovative in the evolving educational landscape.

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DEDICATION

To the memory of my late mother, Sofia Al-Ghodban, whose love and sacrifice can never be forgotten.

To my wife, Ines Ben Aziza, whose unwavering support fuelled my determination in spite of the toughness of the journey.

To my lovely children, Ossama, Nour, Islem and Laith, whose warmth and love continued to be the beacon of my inspiration throughout the journey

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Known for being oftentimes unsettling, puzzling and fear-invoking, change is nevertheless integral to the life cycle of both individuals and organizations. The ever-changing environment in which organizations operate nowadays call for no less than constant, yet sustainable, change. Traditionally known for resisting change (Caruth & Caruth, 2013; Chandler, 2010; Altbach, 2010), higher education providers (HEPs) have found themselves in a position where change has become a real necessity, not only for improvement, but for survival. The comfortable days of "trust us, we are the experts" are rapidly fading. The ever-increasing trend to globalize education, decrease government funding and increase accountability (Lynch, 2014; Rodriguez, 2020) has forced HEPs worldwide to contemplate change more seriously than ever.

However, as change in HEPs has never been easy, difficult to justify and tough to sustain, the senior management seems to face countless challenges (Hargreaves & Fink, 2003). Some of these challenges revolve around redesigning the educational system, increasing efficiency, removing boundaries, heightening flexibility of academic staff and entering into new markets (Barth et al., 2015). With an ever-growing emphasis on accountability, HEPs have found themselves under pressure to transition from a traditionally reputation-based system to a more modern, yet stringent, performance-based system. This has required that HEPs arm themselves with both courage and imagination, with courage needed to challenge the long-prevailing traditions and conventions that may impede change; and imagination required to develop creative ways to enhance the efficacy of education and cater for the new emerging reality.

HEPs' leaders, however, appear to be struggling with making meaningful and sustainable change (Chandler, 2010, citing Diamond, 2006). They do not seem to question whether to change or not, but *how* to change, especially that most change efforts either fail completely or come short of achieving their intended objectives (Kezar, 2011; Kotter, 1996; Kotter & Schlesinger, 2008; Beer & Nohria, 2000). Beer and Nohria (2000) agree that one of the most difficult endeavours for leaders is to lead and manage the change process successfully. It should be highlighted that the implementation of organizational change (henceforth OC) has long been problematic, with failure usually attributed to the implementation process, not the change strategy itself (Waldersee & Griffiths, 2004). Thus, to reduce the possibility of failure, change leaders should be familiar with the nature and process of change (Adserias et al., 2017; Stouten et al., 2018).

One of the most trustworthy approaches that dominated OC for around thirty years until the early eighties was Kurt Lewin's planned three-phase approach to change (Cummings & Worley, 2001; French & Bell, 1995). However, due to the ever-increasing complexity of the environment in which organizations operate and the unpredictability of change, the emergent approach came to the surface, though not without its own challenges. This has created significant disagreement amongst scholars and change practitioners on how OC can and should be processed. The questions that have created and fed this debate are related to whether, and most

importantly when, change should be planned or emergent, horizontal (bottom-up) or vertical (top-down), incremental or transformational, intermittent or continuous (Brown & Eisenhardt, 1997; Dawson, 2003; Gersick, 1991; Romanelli & Tushman, 1994).

This disagreement amongst scholars in the literature on OC in general and in higher education (HE) in particular was what motivated this study. Although the OC literature in the business sector has shown signs of attempting to clear the discrepancies relative to the change process (cf. Bamford & Daniel, 2005; Pettigrew, Woodman & Cameron, 2001; Stouten et al., 2018), little effort has been made to minimize the differences on how OC in HE should, or can, actually be navigated and implemented. This has dubbed the OC literature in HE as lacking and fragmented (Kezar & Eckel, 2002), relatively underdeveloped (Bleiklie, 2014) and limited in influence (Scott, 2015). The literature on OC in HE in the context of the Sultanate of Oman (henceforth Oman), where this study is situated, is even more lacking. This comes at a time when government scrutiny of HEPs is on the rise. Part of this scrutiny is mandating that all HEPs in Oman go through a rigorous accreditation process, which aims at optimizing education standards in the country. This process has turned accreditation into a central impetus for change. However, although the accreditation agency in Oman has set the standards that HEPs have to meet, they have left it to the discretion of the institutions to decide how to go about making changes and meeting the standards.

In light of the gap in the literature and the need of HEPs in Oman to make changes to avoid probation and, possibly, closure, deepening understanding into the change processes in HE in general and in Oman in particular has become imperative. This was done through a thorough investigation of a successful change intervention that a private university in Oman has recently made, propelling it to distinction, following years of mediocrity. The aim of this in-depth, exploratory case study was to investigate the six-year change process (2014-2020), with a view to identifying the various processes and strategies that the university employed to navigate and manage change. The emergent processes and strategies were compared with the ones documented in the literature so as to identify commonalities and gaps. The implications of the changes on the institutional culture were also explored

This chapter is constituted of eight sections. The general introduction gives an overview of the general field of OC, emphasizing the gap in the literature while briefly introducing the research problem and aim of the study. This is followed by an illustration of the academic context of the study, highlighting the predominant theories that have shaped the field of OC, the gap in the literature that motivated this study, and the specific Omani context where the study is situated. The third and fourth sections highlight the research problem and the research aim and objectives, respectively. The fifth section presents the research questions and the sixth section throws some light on the significance of the study. The seventh section draws attention to the limitations of the study. Finally, the last section concludes with an outline of the entire thesis structure.

1.2 Context of the study and case study university

This section provides an overview of the context of the study, situating it within the relevant literature and specific case study university. This involves positioning the study in the pertinent academic discourse and the chronological evolution of higher

education in Oman. It also explores briefly the inception and evolution of the accreditation system in Oman and outlines the contextual background of the selected case study university. By connecting the study to its broader literature landscape and detailing the inception and evolution of the higher education and accreditation system within the Omani context, this brief overview sheds light on the nuanced context in which the study took place.

1.2.1 Situating the study in the literature

This research is situated in the field of OC in higher education. Broadly speaking, OC deals with how organizations can change their organizational structures, operational strategies and technologies, and the implications of all that for the organization. For an OC intervention to be successful, change leaders should familiarize themselves with a decent understanding of the theory and practice of change (Adserias et al., 2017; Kotter, 1996; Silver et al., 2016). The lack of that understanding can be said to account for the high rate of unsuccessful OC endeavours (Kotter, 2008; Raelin & Cataldo, 2011). For the last fifty years, the discipline of OC has been dominated by two major approaches— the planned approach and the emergent approach. Initiated by Kurt Lewin in 1946, the planned approach managed to dominate and influence organizational change until the beginning of 1980s (Burnes, 2004). Due to the inability of the planned approach to acclimatize to the rapid pace of change (Schein, 2004), among other issues, the emergent approach appeared and gained traction (Bamford & Forrester, 2003; Burnes, 2005). Unlike the planned approach to change, the emergent approach saw organizations as complex, non-linear and dynamic systems operating in unpredictable environments.

However, notwithstanding the large body of literature on organizational change, there is still no consensus among scholars on the best way or ways to change organizations (Stouten et al., 2018). Moreover, there is a strong belief that the existing change approaches do not yet cover the wide range of required changes that modern organizations are facing (Burnes, 2004); neither do they provide a universal rule on how to manage change successfully (Dawson, 2003). In fact, while the currently existing change theories enjoy some support and empirical evidence (Bamford & Forrester, 2003; Burnes, 2004; Todnem, 2005), there is a mounting belief that there is no one best approach to change that fits all situations (Kezar, 2001; O'Brien, 2002). Another concern is that the theories and models of organizational change have been predominantly preoccupied with non-academic organizations (mainly the corporate sector) and that only recently, OC has become a hot topic in HE. However, whereas the OC literature is replete with how organizations can possibly implement and institutionalize change, the literature on OC in HE is still lacking in that respect, hence the need to conduct this study. In fact, the focus on OC in HE has been on *what* makes the change successful and not *how* to actually make change.

Moreover, HEPs worldwide, and so is the case in Oman, have recently been under mounting pressure to align their operations to the fast spreading global cosmopolitan trends and values (Lynch, 2014). As a result, the criteria for successful HEPs have undergone drastic changes, in that success is now judged against such concepts as competitiveness, income generation, relevance, excellence and reputation (Shattock, 2000). This trend has also been accelerated by a growing demand for accountability (Rodriguez, 2020), mainly through institutional and programme accreditation. In this

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context, HEPs, including the university under study, have found themselves under pressure to relinquish their traditional management styles, characterized by decentralization and collegiate decision-making, in favour of a more proactive approach to change oriented towards the market (Eastman, 2003; Rodriguez, 2020, citing Sanchez & Elena, 2007). Consequently, answering the question of *how* to possibly enact meaningful and sustainable change in HE to live up to these challenges has become even more pressing than ever before.

1.2.2 Genesis and evolution of higher education in Oman

In order to spur national development and promote economic growth, the government in Oman turned to higher education (HE). In 1977, Teacher Training Institutes were established to train Omanis to be school teachers (Al-Issa & Al-Bulushi, 2012). Later, in 1980s and 1990s, there was a remarkable growth in the number of public higher education providers (HEPs): 14 health institutes, seven technical colleges, six colleges of education (later renamed to Colleges of Applied Sciences) and one institute of Banking and Finance Sciences (ibid.). The establishment of the first state university, Sultan Qaboos University, in 1986 was a turning point in the HE sector in Oman.

Due to a substantial escalation in demand for HE in the 1990s, the private sector was mandated by the government to establish private colleges (Al-Lamki, 2006; Carroll et al., 2009). A Royal Decree issued in 1995 commissioned the colleges to establish academic partnerships with foreign universities for quality assurance and consultancy purposes (Carroll et al., 2009). This strategic partnership took place over two phases. In the first phase, the private colleges were allowed to provide TNE (transnational education) programmes in partnership with foreign universities up to diploma level. The second phase started in 1999 with the issuance of a Royal Decree N0. 41/99, allowing the establishment of private universities with degree-awarding powers (Al Abry, 2018). Following this decree, the first private Omani university was established in 2001. During the same year, another Royal Decree N0. 42/99, allowed private colleges to offer bachelor degree in affiliation with reputable foreign universities up to Master level (ibid.).

The above regulations resulted in a rapid growth in the private higher education sector. In fact, due to the high demand for higher education, the private HEPs in Oman far outnumbered their public counterparts (McNamara & Knight; 2015; Wilkinson & Yussof, 2005). According to the Higher Education Admission Centre (HEAC) and the National Centre for Statistics & Information, the number of HEPs in Oman grew to 70, including 31 private institutions in 2022 (HEAC, 2022; NCSI, 2016), as shown in Table 1 below. To maintain the momentum of growth in the private HEPs, the government pledged to provide direct and indirect forms of support. The support took the form of subsidies granted to these institutions in return for helping the government achieve its target of building national capacity for growth and development (Carroll et al., 2009).

Table 1 Number of Higher Education Providers in Oman

Higher Education Providers	Number	Percentage
Public	37	53.6%
Private	32	46.4%
Total	69	100%

Source: Higher Education Admission Centre (2022) &
          National Centre for Statistics & Information (2016)

1.2.3 Evolution of higher education accreditation in Oman

Oman's striving for social and economic growth and development due to the influence of globalization has made the innovation of the education system a priority. The Ministry of Higher Education, Research and Innovation (MOHERI) has made this clear in the following statement:

> "In view of the rapid development at the global and local levels, preparing generations of educated and trained youth at higher levels has become an urgent necessity imposed by the requirements of comprehensive development so that the state has skilled competencies capable of dealing with international changes and data of modern technology, and has the ability to interact and benefit from all developments and to prepare a new generation of academics, researchers and graduates with higher educational levels and to meet the needs of the Sultanate for specialized cadres in various fields." (MOHERI, 2023)

The privatization in the higher education sector in Oman has been spurred by two factors. The first is the rapid increase in the numbers of school graduates. The second factor is the impact of globalization which necessitated the involvement of the private sector in the management of higher education. Both the World Trade Organization (WTO) and the International Agreement on Education (GATS) advocated the privatization and liberalization of the global HE sector (de Wit, 2010; Kirk, 2015; Knight, 2008; Teichler, 2004).

To ensure legitimacy and start a learning process, colleges and universities in Oman engaged in affiliations with credible foreign universities. Although the importing of a variety of programmes from these universities proved effective for the rapid growth of the sector, "one of the consequences is that Oman imported not only a diverse range of educational opportunities, but also a diverse range of quality assurance systems, including wide variances in standards, data, approval mechanisms, transnational quality assurance mechanisms and transparency" (Razvi & Carroll, 2007, p. 2). This situation has necessitated the intervention of the MOHERI for systematization and uniformity across the institutions. In 2001, the late Sultan Qaboos Bin Said issued a Royal Decree No. 74/2001 to establish the Oman Accreditation Council (OAC). This decree signalled the transition to a new phase characterized by its emphasis on quality assurance in higher education. The OAC, a full member of both the Arab Network for Quality Assurance in Higher Education (ANQAHE) and the International Network of Quality Assurance Agencies in Higher Education (INQAAHE), was tasked with aiding the development of the higher education sector in Oman through institutional quality audits and institutional and programme accreditation.

Alongside these duties, the OAC was also charged with the development of a number of infrastructural policies and frameworks that included a national "qualifications framework, a standard classification of fields of study, an institutional classification framework, and a bilingual glossary to assist the sector with the plethora of terms used in higher education quality management" (Carroll et al., 2009). To assess the progress of the OAC, the OAC Board commissioned an international consultant to assess progress and make recommendations for further improvement. This exercise resulted in a draft Plan for Omani Higher Education Quality Management System, known as the Quality Plan (OAC, 2006).

Modelled on an American design, the first Oman tertiary qualifications framework (OQF) was approved in 2005. The design is based on a four-year bachelor degree followed by one or two-year master's degree. The establishment of OQF was deemed instrumental to the quality management system in Oman, though it required working on integrating it with other national strategies. Another development that the education system in Oman made was the development of a standard classification of education framework (OSCED). This was done through benchmarking twenty foreign national higher education systems. Oman Academic Accreditation Authority (OAAA, originally called OAC) settled on the Australian solution, known for its robust structure (Carroll et al., 2009). The Australian framework was further streamlined for the local context with consultation with different local stakeholders including ministries (Carroll et al., 2009).

OAAA also worked on developing a set of standards for HEPs and a number of processes for institutional and programme accreditation between 2001 and 2004. These standards and processes, along with the OQF and the institutional classification system were collated and published as the *Requirements of Oman's System of Quality Assurance* (ROSQA) (OAC, 2004). Following this, the OAAA invited all HEPs in Oman to apply for accreditation as per ROSQA. However, most HEPs were not familiar with the requirements, which caused some tension in the sector. The OAAA concluded that most HEPs were not ready for accreditation, hence the need for training and support so as the sector builds its own internal quality management systems. In order to create a developmental pathway among HEPs, OAAA, based on models of the Quality Assurance Agency for Higher Education (QAA) in the United Kingdom and the Australian Universities Quality Agency (AUQA), decided to do accreditation in two stages. The first one is a formative evaluation against goals, or a quality audit, and the second is a summative assessment against external standards.

To make the quality audit process more transparent and more tangible for HEPs, the OAAA released its Quality Audit Manual in 2008. The manual detailed the protocols and processes of external audits for HEPs. The second stage of intuitional accreditation required HEPs to undergo a standards assessment. Institutions that satisfy the standards will be awarded accredited status; those not, will be placed on a probationary status and will be given time to address the given recommendations. To improve the national quality assurance system, the OAAA, in collaboration with the Ministry of Higher Education, established a National Quality Training Programme (NQTP) and the Oman Quality Network (OQN). The first provided interactive workshops to selected representatives from each institution on various topics related

to quality management system. Established in 2006, the OQN, on the other hand, was concerned with establishing

> "…a strong and vibrant higher education sector by improving quality in higher education within the Sultanate of Oman. It aims to build a quality conscious, knowledge rich higher education sector through the sharing of ideas, strategies, research, and practices that inform the pursuit of quality improvement" (Heming, 2007, cited in Carroll et al., 2009).

1.2.4 Establishment and evolution of the case study university

This study explored the organizational narrative of Dhofar University (DU), a private university in Salalah, Oman, currently ranked among 89-90 universities according to the QS World University Rankings for the Arab region for 2024. DU has transitioned from anonymity to national acclaim through dedication and perseverance. Aspiring to occupy a distinct position among HEPs in Oman and the region, DU started its journey of incremental change in 2007. DU embarked on this developmental path by initiating a self-study audit, employing the ADRI approach for continuous improvement (McGregor, 2003; Oliver et al., 2006).

Three years later, DU became the first university to complete its quality audit process, culminating in national accreditation by the Oman Academic Accreditation Authority (OAAA) in 2018 and the international accreditation status by the Accreditation Service for International Schools, Colleges and Universities (ASIC), UK, in 2019. This relentless process of change propelled it to the rank of 121-130 in the QS World University Rankings for the Arab Region in 2021 to 111-120 in 2023, ultimately ranking among 89-90 universities in 2024 (a detailed account of DU's history, main events and achievements can be found in Appendix F). This successful track record made DU an exemplary case study, offering an opportunity to explore the effective implementation of transformations in its structure, operations and culture.

Historically, DU commenced operations in September 2004 within the premises of the National College of Science and Technology, but later absorbed the college into its framework. Since its inception, DU received academic and administrative support from the American University of Beirut (AUB) until 2010. DU, though technically a joint stock company known as Dhofar University SAOC, operates practically as an educational trust. After six years of existing on rent premises, DU transitioned in 2010 to its own, purpose-built campus stretching over 45000 square metres. Boasting a picturesque environment, DU is located in a tourist attraction in the outskirts of Salalah, yet 1000 km away from the capital, Muscat. Operating its own fleet of buses for student convenience, DU has grown into a mission-driven university pursuing excellence in teaching and learning, research, and community service.

Starting with three small colleges and a Foundation Program, with around 1500 students and 25 academic programs in 2004, DU has expanded into four colleges—College of Arts and Applied Sciences, College of Engineering, College of Commerce and Business Administration, and College of Law, with a fifth, a Medical College, in the offing. Currently, DU accommodates a total of 18 academic departments, offers 57 academic programmes, and enrols around 5500 students, of which 5% are international, and has a network of 12000 alumni. DU's campus features essential facilities, including a female hostel and residential villas for senior personnel.

Governed by a Board of Trustees (BoT), managed by a Vice Chancellor and overseen by a University Council comprising 12 senior personnel, DU has relentlessly pursued its vision of recognition within the higher education landscape in Oman and the region.

1.3 Research problem

Relentless globalization trends, reduced government funding and spiralling accountability (Lynch, 2014; Rodriguez, 2020), among other factors, have brought HEPs worldwide and in Oman in particular to a watershed. These factors put the very existence of HEPs under threat, forcing them to opt for change not only for improvement, but for survival. Although HEPs' leaders acknowledge that change is inevitable, they seem to be lacking guidance on how to go about effecting and sustaining change (Chandler, 2010, citing Diamond, 2006). In fact, scholars strongly believe that understanding the processes and strategies of OC and how to execute them is critical to making change not only successful but also sustainable (Adserias et al., 2017; Kotter, 1996; Silver et al., 2016).

However, although the literature on OC in higher education appears to be replete with *what* makes change successful, it does not seem to have touched enough on *how* to actually make change. In fact, the literature on higher education has repeatedly been described as lacking and fragmented (Kezar and Eckel, 2002), relatively underdeveloped (Bleiklie, 2014) and limited in influence (Scott, 2015). Moreover, change models addressing higher education seem to be too limited when juxtaposed with their counterparts dealing with non-academic organizations, notably the business sector. In reality, the literature on OC in higher education seems to have focused on whether to approach change from a political, cultural, socio-cognitive, or teleological perspective, alongside exploring the factors that can facilitate successful change.

However, a clear gap remains regarding the practical navigation and execution of change within the higher education landscape. While there seems to be an agreement that no one single theory is sufficient to encompass the wide spectrum of changes called for by the rapidly changing environment (Hearn, 1996; Kezar, 2001; Thor, Scarafiotti, & Helminshi, 1998), there is little agreement on how to manage and orchestrate changes effectively. Even seminal change models such as Clark's (1992, 1998) and Keller's (2004), for instance, just provided broad 'components', 'elements' or 'strategies' (to use their terminology) on how to make the change successful. What is lacking in these change models is a comprehensive framework outlining the initial steps and ensuing processes needed to effectively navigate and manage change.

It is worth noting though that some scholars believe that developing a process-based change model in higher education is too prescriptive and limiting. Kezar (2001, 2009), for instance, argues that having a change model may create a temptation of using it all the time regardless of the specificities of the context of the intervention. Instead, she contends that OC in higher education requires the establishment of a common language amongst change stakeholders, while ensuring that change is context-based, not 'one size fits all'. Although this might seem to be a valid justification, the suggestion still holds true for all organizations, not just HEPs, hence the continuation of the dilemma of how change actually happens in higher education. Understandably, the dilemma continues at a time when HEPs are increasingly pushed to adopt the model of strategic management, just like corporate organizations, and hence be accountable

for goal setting, use of resources and outcomes (Rodriguez, 2020, citing Sanchez and Elena, 2007).

In summary, given the gap in the literature, this study shifts focus from the examination of the factors contributing to successful change into the exploration of the intricate process of managing and executing change within the context of higher education.

1.4 Research aim and objectives

In light of the aforementioned gap in the literature, this in-depth, exploratory case study sought to deepen understanding of the OC processes and strategies within the context of higher education. This was done through a thorough investigation of a successful change intervention that a private university in Oman has recently made, propelling it to distinction, following years of mediocrity. The study specifically aimed to retrospectively examine the incremental change process the university has gone through, with a view to identifying the change processes and strategies that the leadership employed to bring about change. The emergent processes and strategies were compared to the ones describe in the literature to identify commonalities and potential disparities. The study also aimed at investigating the implications of the implemented changes on the institutional culture. To achieve its aim, the study put forth the following objectives:

i.   Use the case study approach to thoroughly investigate the change intervention at the university.
ii. Identify the change processes and strategies that were used during the initiation, implementation and institutionalization phases.
iii. Compare the emerging change processes and strategies to the ones in the literature.
iv. Investigate the extent to which the change has influenced the institutional culture.

1.5 Research questions

Being an in-depth, exploratory investigation into the processes and strategies of change and its implications on the institutional culture at DU, this study posed four research questions, each of which sought to gain insight into the intricacies of the change process at key junctures of its trajectory. Recognizing that change initiation is one of the most challenging aspects of the change process (Jacobs, 2016), the first research question sought to explore how the university embarked on change in the first place. This was followed by an in-depth exploration of the change implementation phase. Given the strategic imperative in effecting and sustaining change, the second research question sought to unpack the specific change strategies the university employed to create change throughout the transformation journey. The third research question investigated whether these strategies align with the ones in the literature. Given the fundamental significance of institutionalizing change, the fourth and last research question delved into investigating the impact the change efforts had on the institutional culture. In short, below is how the research questions were articulated.

i.   How was the change process (a) initiated and (b) implemented?
ii. What were the strategies used to initiate, implement and institutionalize change?
iii. How do these strategies align with organizational change theories?
iv. To what extent has the change influenced the institutional culture?

1.6 Significance of the study

This study holds significant importance on multiple fronts. Unlike previous studies on OC that primarily focused on *what* makes change successful (cf. Gornitzka & Maassen, 2000; Kezar, 2001, 2013, 2018; Phelps 2019; Storberg-Walker & Torraco, 2004; Vlachopoulos, 2021), this study takes a distinct and practical approach by concentrating on *how* change can actually be navigated and managed in higher education. Through a shift in focus from the theoretical underpinnings to actionable and practical steps, this study sought to provide a comprehensive guide for HEPs leaders and decision-makers looking to embark on change within the HE landscape. Moreover, the study's context adds a layer of novelty and relevance, in that the paucity in research investigating OC within HEPs in the Arab world poses a notable gap in understanding, particularly the lack of insights into how universities navigate and manage change in this unique context. Being the first case study in the Arab world addressing this gap, this research then comes as a pioneering endeavour that sheds light on the potential change processes and strategies propelling change initiatives in higher education in the Arab world and worldwide.

In terms of perspective, the focus on a successful change initiative within a rapidly changing higher education landscape in Oman, investigated through the researcher's emic or insider lens notably strengthens the significance of the study. The insider perspective provided a distinct vantage point that allowed a nuanced understanding of the intricacies of the change processes and their implications on the institutional culture. In addition, the transitioning of the university from a state of mediocrity to distinction and renown epitomizes the real-world impact of effective change management, especially that more than 70 percent of change efforts tend to fail (Kotter, 2008). This successful management serves not only as an inspiration but also provides actionable insights that are adaptable and implementable across other educational settings, in the Arab world and beyond. Overall, this study's attempt to fill a gap in research, alongside its unique focus, contextual exploration, insider perspective and actual success story, all contribute to its profound significance in furthering understanding of OC in higher education, particularly in the Arab world.

1.7 Limitations of the study

The limitations of this study are threefold: limitations related to generalizability, the survey sample and the researcher himself. Being a single case study, the findings of this research might not be widely generalizable to other HEPs. However, even having multiple case studies does not guarantee generalizability. In fact, Zucker (2009) argues that multiple case studies might dilute the rigour of the case. He adds that what makes a successful case study is the inclusion of five key components: specific research questions, plan of action, units of analysis based on the research questions, clear link between the data and the action plan and metrics to interpret findings— all of which are present in this case study. Interestingly, it is argued that a single case study can be more rigorous if it avails of detailed description and analysis of *how* and *why* a given phenomenon happened (Ridder, 2017). It is worth noting that this study satisfies these two requisites

The second limitation comes from the fact that the staff and student survey samples were not large enough, due to the shortages in responses. Although this is a clear limitation, the primary focus of this mixed methods study is qualitative, with the

quantitative inquiry assuming a secondary role. As the study was qualitative in essence, hundreds of pages of information-rich core documents were examined and around 40 senior and middle management personnel were interviewed to ensure depth and inclusion of all viewpoints and perspectives.

The third possible limitation has to do with the researcher who played the role of the main investigator. The researcher has been part of the university under study before and after the change intervention. He occupied the position of Director of the Foundation Programme and was therefore one of the senior management personnel for eight years from 2014 to 2022. While being part of the main decision-making body in the University Council, the researcher was a witness of the entire change process at the university and was a change leader in the departments under his leadership. As an insider, the researcher's handling of the study could be claimed to tinge the study with some kind of subjectivity (more details about the researcher are given in the methodology chapter, Section 3.4). However, being an insider turned out to be an asset, as it helped the researcher to identify the core documents easily and to dig deeper during the semi-structured interviews, to the extent that most of the interviewees were impressed by the depth of the questions posed, as stated by many. Besides, every precaution possible was taken to remain objective and keep bias to a negligible minimum, if at all, throughout the various phases of the study.

1.8 Outline of the study

This thesis comprises a total of six chapters. The first chapter, or introduction, explores the study's background and context, problem statement, research aim and objectives, research questions, the significance of the study, its limitations and, finally, the thesis structure. The second chapter encompasses the literature review and is divided into four main sections. The first section, or introduction, sets the stage, highlighting the aim and objectives of the study and outlining the chapter's structure. The second section delves into defining the core concepts, encapsulating the essence and scope of organizational change (OC) and organizational change management (OCM) in general, i.e. not specific to higher education. The exploration then sheds light on the change drivers within the higher education landscape, highlighting the myriad factors that drive change. The section also goes on to unravel the different facets of resistance that can impede change initiatives and bring them to a halt.

The third section constitutes the core of the chapter, as it embarks on exploring the various approaches and theories of organizational change which constitute the conceptual frameworks underpinning transformative endeavours. As the study deals specifically with higher education, the discussion goes on to unravel the unique tapestry of higher education, highlighting the factors and principles that are believed to facilitate change within this distinct context. Moreover, the third section discusses seminal change models, highlighting their role in shaping transformational trajectories. Finally, the last section brings the discussion to a close by summing up the diverse facets explored within the literature review chapter.

The third chapter comprises nine sections and illustrates the research design and methodology. The first section (3.1) introduces the chapter and outlines its main components. The second section (3.2) discusses the methodology of the study, illustrating the researcher's epistemological reflections and justifying the choice of the

case study approach, while disambiguating the main misconceptions about case studies. Since the study employs a mixed-methods approach, the third section (3.3) centres on justifying the alignment of this choice to the nature and objectives of the study. Sections 3.4 to 3.8 delve into such critical aspects as the selection of participants, data collection, data analysis, ethical considerations and, lastly, the pursuit of truth within this case study. The chapter ends with a brief summary of the main points discussed.

The fourth chapter is dedicated to the findings of the study and consists of five sections. The first one introduces the chapter and outlines how the findings are presented. The second and third section (4.2, 4.3) highlight the emergent change processes and strategies during the initiation and implementation stages. Section 4.4 describes the strategy used to anchor change, and the impact the change initiative had on the institutional culture. The last section (4.5) concludes the chapter, highlighting the main findings.

Retaining the same structure as the findings chapter, the fifth chapter offers an evaluative analysis of the study's findings. While the first section (5.1) introduces the chapter and outlines its overall structure, the second section (5.2) focuses on discussing the findings related to the change initiation. The third section (5.3) delves into discussing the change processes and strategies that emerged from the change implementation. The fourth section (5.4) explores how the change was cemented and its impact on the teaching and learning culture, research and community. The last section (5.5) concludes with a summary the overall findings, constituting a comprehensive change framework and highlighting the ten key principles of organizational change that have surfaced through the study.

The conclusion chapter provides a comprehensive summary and reflection on the main aspects of the study. It comprises seven sections. The first one introduces the chapter, setting the stage and outlining its components. The second section (6.2) offers a reflective summary of the study, distilling the main results and insights gained. The third section (6.3) highlights the significance and broader implications of the findings. The fourth section (6.4) reflects on the process of the study, highlighting the main limitations and challenges faced. The fifth section (6.5) highlights the originality of the study and its contribution to the body of knowledge. Based on the findings, the sixth section (6.6) provides recommendations for future research. The last section (6.7) ends with final remarks, highlighting the main takeaways and drawing the study to a conclusion.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Two decades ago, Kezar and Eckel (2002) lamented the paucity and fragmentation of organizational change (OC) theories in higher education. A decade later, Bastedo argued that "modern organization theory is built upon the study of colleges and universities" (2012, p.30), a statement believed by Scott (2015) to be highly exaggerated. However, it is true that a number of distinguished social scientists have recently turned their attention to higher education, but their influence has been too limited (Scott, 2015). This limitation is also underscored by Bleiklie (2014) who asserts that the field of research on OC in higher education is relatively underdeveloped. The fragmentation and relative underdevelopment in the literature on OC in higher education can understandably make the implementation of meaningful and sustainable change a real challenge, especially that HEPs are traditionally known to be averse to change (Caruth & Caruth, 2013; Chandler, 2010; Altbach, 2010).

Besides, it is argued that the broader literature on OC lacks consensus on basic change management processes (Bamford & Daniel, 2005; Pettigrew, Woodman, & Cameron, 2001; Stouten et al., 2018), and that its counterpart in higher education in particular has primarily focused on discerning the elements contributing to successful change, but not on the practical mechanics of executing and managing change from inception to institutionalization. It should be highlighted then that the lack of theoretical coherence in the literature on OC within HE impedes the construction of a comprehensive and coherent corpus of knowledge about navigating and managing change in academe (Reinholz et al., 2021).

Given this gap in the literature, this study aimed to deepen understanding into how OC in higher education can actually be accomplished. This was done through the investigation of a successful change intervention that a private university in Oman has gone through. This investigation aimed to identify the specific processes and strategies that have informed change throughout the change journey. However, to achieve this, it becomes imperative to deepen understanding of the complex phenomenon of OC and to situate the study in the relevant literature context through a discussion of the main approaches, theories and models of OC, while concurrently highlighting the gap in literature that needs closing.

To achieve this, the literature review is divided into four main sections. The first section (2.1) introduces the chapter and outlines the sections included. The second section (2.2) sets the scene through situating the study in the field of OC and discussing such fundamental concepts as OC itself, organizational change management (OCM) and change resistance, while shedding light on globalization, being one of the main change drivers worldwide (Altbach, 2015) and in Oman in particular (Al'Abri, 2011). The third section (2.3) discusses two mainstream approaches to OC, i.e. planned and emergent change, and six change theories through which OCM in HE can be approached, as highlighted by Kezar (2013). Being the main section in this chapter, the third section also highlights the uniqueness of the HE context, along with the factors and principles that can guide successful change in HEPs. Moreover, subsection (2.3.6) takes the discussion to a more tangible level through the examination of six seminal change

models— the latter are deemed tangible tools that can practically inform change interventions. To ensure maximum benefit, these models are evaluated against Stouten et al.'s (2018) ten key scientifically-proven change principles. This comparison is intended to identify discrepancies and highlight potential gaps within the change models. The last section (2.4) concludes the literature review with a summary of the main points.

2.2 Organizational change: definition, management, rationale and resistance

The literature has been reviewed to find out about the OC approaches, theories and models that can deepen understanding into the intricate organizational change phenomenon, particularly the actual change management within HE— notorious for resisting change (Caruth & Caruth, 2013; Chandler, 2010; Altbach, 2010). However, before delving into this discussion, it becomes important to illuminate certain fundamental concepts such as organizational change (OC), organizational change management (OCM), change drivers, and change resistance. This preliminary discussion is intended to deepen understanding into the field of OC in general and to set the scene for further discussion about the change approaches, theories and models. So, what is OC in the first place?

2.2.1 Organizational change defined

While much ink has been generated on OC since Kurt Lewin first originated his three-step change model in 1948, a common definition on OC is still disputed (Kezar, 2001). Perhaps the reason behind the lack of consensus is that scholars tend to define OC based on the approach or theory that underpins their ontological and epistemological conceptualization of the phenomenon of change. Yet, however distinct the definitions of OC are, one thing seems to be common among scholars: change is a change in form, quality and state in an organization or part of it (Kezar, 2001). While change is regarded as the only constant in organizational life (Elving, 2005), it is defined most basically as an observable move from one state to another through time in one or more dimensions (Hargreaves, 2005; Harigopal, 2006; Van de Ven & Poole, 1995).

A more dynamic definition conceives of change as a relentless, dynamic journey; thus, emphasizing the complexity of the operations and processes involved in change (Van de Ven et al., 2008). This understanding of change seems to depart from how change is perceived from a planned approach perspective, which holds that change is a shift away from one discrete unfrozen state to another frozen state. Thus, according to the emergent approach, OC is viewed as a continuum, with a set of continual flow of events orchestrated by the organization (Garud & Karnoe, 2001). Similarly, but more specifically, Burnes (2004) sees change as the continuous alterations that an organization goes through at the individual and collective levels. Looking from a social-cognitive perspective, Loomis and Rodriguez (2009) believe that change is the construction of the employees of a new conceptual image of their work and work activities.

Given the wealth of definitions and their applicability to different contexts and settings, the researcher believes that singling out one definition seems to be too reductionist, for two reasons. The first is that a single definition tends to fall short of encompassing all the intricacies OC entails, especially in today's rapidly changing, multidimensional

environment. The second is that these definitions come from various change theories and models and, therefore, are more likely to pertain to a particular worldview that may work for some organizations, but not necessarily for others. This calls for no less than a careful and thorough consideration of more than one theory or model when attempting change. The consideration of more than one theory or model of OC holds true especially in the context of higher education, given the complexity and uniqueness of its environment (Kezar, 2013). With organizational change being defined, the question remains as to how change can be managed according to the literature.

2.2.2 Organizational change management (OCM)

As the study seeks to gain a deep and nuanced understanding of OC processes and strategies in HE through the investigation of a successful change intervention of a young university in Oman, understanding how OC is managed and the factors affecting its management becomes essential. In addition to being an integral part of the life of an organization (Szamosi & Duxbury, 2002), effective change management is believed to avail organizations a stronger competitive edge over their competitors (Burnes, 1996a, 1996b). Nickols sees OCM as "the making of changes in a planned and managed or systematic fashion", and also as "the response to changes over which the organization exercises little control" (2004, p.1). This understanding seems to have captured the true essence and complexity of change management in both its planned (linear) and emergent (dynamic) fashion.

Given the inevitability of OC, the need to identify the required changes and to devise effective management strategies for them has become a critical and challenging task for organizations (Pettigrew, Woodman & Cameron, 2001). Some of these responsibilities involve leading, planning, communicating, training and rewarding (Aladwani, 2001). Similarly, Anyieni et al. (2013) believe that change management covers planning, initiating, realizing, controlling and stabilizing the change processes at the individual and organizational level. Although these change levers can help make OCM effective, they may be weakened by a number of issues such as defective change plans, complex problems, superficial solutions, misunderstanding, resistance and misjudgement (Gilley, 2005) Therefore, it is critical to avoid these pitfalls to ensure a successful management of OC. To maximize effectiveness, change leaders should not only manage the organization's structure and operations, but also the organizational culture (Burke & Trahant, 2000; Kotter, 1996; Mead, 2005; Nickols, 2004).

Moreover, it should be highlighted that understanding such things as the degree of change, the timing of change, the scale of change and the focus of change can significantly impact change management. The degree of change is concerned with whether change is first-order or second-order (Kezar, 2009). First-order change is all about small-scale innovations and adjustments in some aspects of the organization. It is usually an evolutionary, linear, incremental and single-loop learning type (Kezar, 2001). Second-order change, however, is deep-seated, transformational and usually results in a paradigm shift. It is multidimensional, multilevel and involves double-loop learning. It goes into the mission, structures, values and overall culture of the organization (ibid.). The other factors that can impact upon change management are the timing and scale of change. These are related to whether change is evolutionary or revolutionary (Gersick, 1991). Evolutionary change is limited in scale, usually

incremental, natural and happens over time. Revolutionary change, however, is large-scale, radical, sudden and rapid. The investigation of the change intervention at the university in question revealed that the change was deep-seated and transformational, as shall be elaborated in the forthcoming Findings and Discussion chapters.

The last factor that may influence OCM is focus, that is the areas the change leaders choose to focus on during the intervention. Bergquist (1992) describes three foci in this regard: structure, process and attitude. Whereas focus on structure targets the organization's policies, procedures, and systems, a process-focused intervention is more concerned with the social aspect— communication on campus. An attitude-focused intervention, on the other hand, targets the culture prevailing among employees while performing their duties. OCM usually deals with structure, process or attitude, either individually or in combination. It should be highlighted that structural changes are considered less difficult to manage than changes in process or attitude (Schein, 2004). However, as organizations and change are dynamic, changes in one dimension, say structure, can affect the other dimensions: process or attitude. In addition to these influential factors, change management is said to become effective when learning correlates with the change process. In fact, Beckhard & Pritchard state that "change is a learning process and learning is a change process" (1994, p. 14). Hence, it should be seen as integral to change management to view change as a process, not an event. Failing to come to terms with this understanding accounts for one of the most common failures in change management (Angehrn, 2005, citing Hall & Hord, 2001). To ensure effective change management, Kotter (1996) identified eight errors that should be avoided while attempting change, as can be seen in Table 2 below.

Table 2 Kotter's Eight Errors of Change Management

i.	Allowing too much complacency in the organisation
ii.	Failure to create a powerful guiding coalition
iii.	Lacking a vision
iv.	Under-communicating the vision
v.	Failure to remove obstacles
vi.	Concentration on long-term gains at the expense of short-term benefits
vii.	Declaring victory too soon
viii.	A failure to firmly anchor changes in the corporate culture of the organisation

To summarize, there is no doubt that managing change is no easy task and that sustaining change is even more challenging. Being a process, not an event, change takes a great deal of time and effort, as is the case in the change process that DU has gone through since 2007— the time when DU started self-auditing its quality assurance for accreditation purposes. As change depends on the human factor in either driving or impeding it, an effective management of change should also mean working on changing behaviours, rituals and values of individuals and teams in the organization. Most importantly, organizations should be clear about why to change, what to change, how to manage the process, what strategies to use, how to involve the human resources and, finally, how to deal with resistance. It should be highlighted that managing the change process should not be isolated from managing those who are affected by change (Nickolas, 2006). It remains to find out if these questions were

addressed by the leaders at this university— a question that necessitated a thorough investigation of the change processes and strategies the leaders adopted during their management of the change intervention. Having discussed OCM, what follows is a discussion of change drivers, that is the catalysts propelling change in HE.

2.2.3 What is driving change in higher education?

One way of deepening understanding into the dynamics of change in HE is to examine the driving forces behind the ever-growing call for change in academia worldwide and in Oman in particular, and whether change is needed at all in these longstanding institutions. This section starts with examining the main factors that are driving change in HE globally, followed by the factors behind the change in this sector in Oman, where the university under study is located. The literature shows that change in HE is motivated by either internal or external factors or both. Internal factors usually revolve around the arrival of a transformational leadership that holds a futuristic vision, readiness for change, and access to resources (Kezar, 2011). External factors, however, are many but they can be summarized according to McMillan (2004) in five major forces: new and revolutionary technologies, globalization, relentless and ruthless competition, speed of modern life, and, lastly, complexity and paradox (relentless changes and growing uncertainty).

Of all the external factors catalysing change in higher education, globalization seems to be one of the most influential forces that have dramatically, yet controversially, impacted change in HE worldwide (Altbach, 2015) and in Oman (Al'Abri, 2011). For instance, change in HE is found to be partly driven by the government's reduced financial support, where support is conditioned with achieving certain targets, such as increasing relevance to fit the 'knowledge economy' or to strengthen 'academic excellence' (Teichler, 2019). In addition, due to changes in workforce employability, universities are now under pressure to gear their programmes to adjust to the needs of the market (Teichler, 2019). Another influence caused by globalization is the competition over world university rankings. This pursuit of higher rankings serves as a catalyst for change, especially in certain areas crucial to these rankings, such as the number of publications in renowned journals, as highlighted by Teichler (2019).

Although believed to be radically different from business organizations, HEPs have been under constant pressure to align their operations to the fast spreading global cosmopolitan trends and values. The latter have been visible in such globalization discourses as knowledge economy, global economy, lifelong learning and English as a global language. These discourses have influenced education policies and practices all over the world and in Oman (Al'Abri, 2011). Some of what these discourses champion is the incorporation of new technologies, diversification of teaching-learning pedagogies, redefinition of student attributes and competencies, and most importantly, though controversially, is the implementation of the neoliberal systems of governance and management. This is coupled with a fast-growing demand for accountability, the creation and development of networks for international student movement, and global inter-agency cooperation (Rodriguez, 2020, citing Atria, 2012).

Consequently, the criteria for gauging successful HEPs have undergone dramatic changes. Success is now judged against such concepts as competitiveness, cost reduction, income generation, opportunism, relevance, excellence and reputation

(Shattock, 2000). The idea that HE can be, and should be, subjected to the forces of the market has gained ground and infiltrated the HE discourses at various levels. It is assumed that universities should change their management style to adopt a proactive approach to change oriented towards the market, just as private corporations did (Eastman, 2003; Rodriguez, 2020). However, it is questionable whether strategic management, or managerialism, is relevant to organizations whose aim is not economic gains (ibid.). Unlike in the past when universities used to enjoy a great deal of autonomy, today's universities are increasingly treated like business organizations, just as accountable for goal setting, results, spending and use of resources (Rodriguez, 2020, citing Sanchez and Elena, 2007). This trend has brought tight controls, accountability, measurement and, most importantly, a deprivation of decision-making for the top management and a denial of resistance for the academic staff.

It is clear then that there is a global trend to change the role of HEPs in society (Lynch, 2014, citing Angus, 2004; Pinheiro, R. et al., 2015). Universities are now under pressure to change their roles from being "a centre of learning to being a business organization with productivity targets" and to "transfer their allegiance from the *academic* to the *operational*" (Lynch, 2014, citing Doring, 2002, p. 140). This is oftentimes camouflaged in the name of productivity, efficiency and excellence. This camouflage is covertly colonizing "the hearts and minds of academics and students" through an apolitical agenda garbed in a highfalutin jargon of economic efficiency (Lynch, 2014, p.7). As accountability has become the order of the day, measurable performance indicators have replaced academic and professional integrity. These changes seem to have refocused all university activities, including research and teaching, leading to the supremacy of image over substance.

In contemporary knowledge-driven economies, the role of HEPs is to enhance the social and economic development (Jongbloed et al., 2008). This has necessitated public accountability through the assessment of the quality and effectiveness of HEPs (Goos & Salomons, 2017). Due to the rapid rise in students' numbers, the HE sector has become customer-oriented and highly competitive (Duzević et al., 2015). This has brought about an obligation on the part of HEPs to evidence quality, efficiency and effectiveness to convince and appeal to various stakeholders (Jongbloed et al., 2008). In this context, national and international accreditation bodies were developed to evaluate the quality of HEPs using international standards and processes. Given the rigorous standards and the intricacy involved in fulfilling the accreditation criteria, HEPs struggle to develop their international quality systems so as to meet the external quality audits and accreditations (Cheng, 2015; Ramírez, 2015; Wilkerson, 2017; Zhang & Gao, 2012). Consequently, the accreditation bodies have come to be seen as change agents whose role is to "enhance quality control, accountability and transparency, and quality enhancement" (Nguyen & Ta, 2018, p. 11). This has compelled HEPs to make substantial enhancements in their academic and administrative services (Nguyen & Ta, 2018) and to guarantee quality assurance (Komotar, 2020).

Like its counterparts all over the world, higher education in Oman have been affected by globalization in many ways. Global trends such as the massification of education has resulted in a rapid increase in the numbers of Omani students applying to join HE in 1990s, a trend which mandated the establishment of private universities in Oman

(Al-Lamki, 2006). This was followed by a rapid growth in the private HE sector to meet demographic, social and economic demands for growth and development. With a fledgling yet steadily growing HE sector, Oman adopted a policy of importing programmes from a number of countries such as the UK, the USA and the Netherlands, alongside developing its own programmes (Carroll et al., 2009). In this way, most private HEPs in Oman functioned as satellite campuses for credible affiliate universities.

Another impact of globalization in Oman has been seen in the establishment of a national accreditation system. Attempting to monitor and spur the growth and development of its HE sector, the government in Oman decreed the establishment of the Oman Accreditation Council (OAC) in 2001, which was later renamed to Oman Academic Accreditation Authority (OAAA) and then to (OAAAQA), with an obvious emphasis on quality assurance (QA). With a robust vision "to provide efficient, effective and internationally recognized services for accreditation to promote quality in HE in Oman and meet the needs of the public and other stakeholders", OAAAQA turned out to be a catalyst for change across all HEPs in Oman, including the university under study. Through the development of internationally-benchmarked quality assurance processes, institutional and programme accreditation standards and infrastructural policies and frameworks, the HE management system in Oman has undergone substantial changes (Carroll et al., 2009). Commenting on the OAAAQA, Ross and Trevor-Roper (2015) argue that one of the main concerns of this accreditation authority is to ensure rigour and transparency in the accreditation processes and results.

Given the robustness and rigour of the OAAAQA in Oman, meeting the requirements of the accreditation standards can be daunting for colleges and universities, especially those undergoing accreditation for the first time (Paquibut & Al Naamany, 2020). Oftentimes, meeting these requirements results in performing drastic organizational change. However, how to go about creating and implementing those drastic changes is left to the discretion of the HEPs' leaders. This conundrum has posed a real challenge for many leaders in Oman, especially in the absence of any guidelines in this regard, their lack of experience in OCM and the still fledgling nature of the HE sector in Oman. The conundrum is further compounded by the fragmentation in the OC literature and the paucity of clear-cut change models in HE.

In seeking to bridge this gap in the literature and to resolve the conundrum for the HEPs leaders, this empirically exploratory study investigates a successful change intervention that a young, private university has made while attempting to meet the international standards of the national accreditation authority— OAAAQA. Being the first university to be accredited nationally in 2018 and internationally in 2019, following the implementation of drastic, though incremental, changes, Dhofar University (DU) emerged as an exemplar deserving investigative exploration of the intricate dynamics of the change processes and strategies employed by its leaders.

2.2.4 Resistance to organizational change

The aspirations of change initiators do not always align with some of those affected by change, hence resistance. Although resistance may well complicate the change process, it seems to be inevitable, just as change is inevitable. However, without

understanding the nature, causes and potential solutions to resistance, managing change may unnecessarily be complicated (Angehrn, 2005; O'Toole, 1995). So, what is resistance, what causes it and how to mitigate it?

Resistance usually happens in order to voice dissatisfaction with a particular course of action during the change process. It is deemed to be a defense mechanism to thwart change and maintain the status quo. O'Connor (1993) describes it as a slow response to change or an outright refusal to join forces already engaged in change. Resistance can take two forms: active or passive (Hultman, 1995). In its active form, resistance can be manifested through manipulations, ridicule, fault-finding or fear. The passive form can be seen in such behaviour as withholding, ignoring, procrastinating, sabotaging, mishandling, pretending and avoiding (Ingbretsen, 2008). In a novel reconceptualization of the notion of resistance, Thomas and Hardy viewed resistance from a Foucauldian perspective of power relations, in that power and resistance "lie at the heart of organizational change" (2011, p.1). Therefore, instead of demonizing or celebrating resistance— as is the case previously, they argue that power and resistance should reconcile to produce the needed change.

However, to produce the required change and facilitate change management, it is important to come to grips with what causes resistance. A review of the literature shows that resistance to change is grounded in various reasons. Hultman (1995) argues that some employees are predisposed to resistance, even though change may ultimately work better for them. In an old, yet seminal, study, Kotter and Schesinger (1979) found that resistance has four reasons: parochial self-interest, misunderstanding and lack of awareness of change implications, different viewpoints, and, lastly, no or low tolerance for change. A more recent review of the literature found six common reasons for resisting change in HEPs (Chandler, 2010), as illustrated below.

Table 3 Reasons for Change Resistance in HE

Reasons	Explanation
Faculty Members	Faculty enjoy a great deal of autonomy with regard to class management, course content and student assessment, etc. "Resistance to new ideas is inborn among academic communities." (Becher, 1989; p.71, cited in Chandler, 2010).
Time Factor	Faculty are usually pressurized for time. Any change requires additional time to be accomplished, and therefore faculty feel more pressure and resist change. Change often mean re-doing things, e.g. re-designing a curriculum.
Resource Allocations	Change usually requires reallocation of funds. Some faculty see funds reallocation as a loss for that particular activity and therefore resist shifting funds around (Diamond, 2006, cited in Chandler, 2010).
Leadership	Lack of management skills. Lack of knowledge of change models. Most leadership and faculty positions are occupied by people who are far from being able to play the role of change agents (Diamond, 2006, cited in Chandler, 2010).
Communication	Poor communication between faculty and decision makers at the university level and beyond can cause mistrust and insecurity, and leads to resistance.
Power of Unions	Unions empower faculty to resist change. Faculty contract wording is found to limit exploration of innovation (Diamond, 2006, cited in Chandler, 2010)

As it is clear from the reasons above, the higher education environment seems to naturally create and nurture a climate of resistance. In fact, higher education has been historically known for "its success in preserving the traditions of culture, values, and customs" against change (Caruth & Caruth, 2013). Interestingly, it is argued that resistance exists in higher education whether there is change or not (Chandler, 2010). However, the question remains as to how to mitigate resistance so that the change process does not fall apart. Citing Theron and Westhuizen (1996), Chandler (2010) mentioned four ways of mitigating resistance in higher education, as shown below:

Table 4 Ways of Mitigating Change in HE

Ways	How to Implement them
Education & Communication	Staff should be part of the change process especially during the early stage of sensitization. They should be made aware of the logic and necessity of change and that change is to the benefit of all university constituents. This could be done through awareness sessions, group discussions, workshops, reports and memoranda.
Participation & Involvement	Making the staff part of the decision-making process both empowers them and puts responsibility on them. Staff involvement gives them professional and personal stake in the success of the institution and hence lowers their resistance inclinations.
Facilitation & Support:	A number of re-educational and emotional support programmes can be used to support the staff go through the throes of change pressures. The change agent should give a voice to the staff, hear them out and answer their concerns and worries and reassure them.
Negotiation & Agreement	Leaders should involve the staff in discussion, negotiation and bargaining at times. The staff should feel secure. A promise or something in return could work wonders in such situations.

Finally, because HEPs are known to inherently resistant change, taking both a strategic and humanistic approach to change management can help alleviate resistance and facilitate change. Having so far set the scene for the literature review through introducing and discussing such fundamental concepts as OC, OCM, change drivers and resistance to change, it remains to further deepen understanding of the phenomenon of OC through the examination of the main approaches, theories and models of change vis-à-vis the unique context of higher education.

2.3 Organizational change in higher education

This literature review cannot be complete without a discussion of the salient approaches, theories and models of OC. This discussion constitutes the theoretical underpinning of this study, which not only positions the study in the relevant literature framework but also deepens our understanding of the complex phenomenon of OC in higher education. This section includes seven subsections. The first examines the two mainstream approaches to change: planned and emergent change. The second explores six change theories through which OC in HE can be facilitated. The third subsection highlights the uniqueness of the higher education landscape. Given this uniqueness, the fourth subsection throws light on 17 principles that can effectively facilitate change within this particular environment. The fifth subsection discusses six seminal change models. The first two models are general models that can be applied to a wide range of industries and organizations, including higher education, though they are not specific to higher education per se. The subsequent three models were developed from empirical case studies of colleges or universities that underwent transformations. The last model is specifically designed to address organizational culture and is therefore applicable to various contexts. Finally, the last subsection engages in an evaluation of these six change models against Stouten et al.'s (2018) scientifically proven 10 fundamental change principles, with a view to identifying discrepancies and commonalities, thus providing insights into the alignment between the models and principles.

2.3.1 Approaches to organizational change (OC)

Two main approaches to OC in general have been recognized in the literature: the planned approach and the emergent approach. The exploration of these approaches highlights the different types of approaching OC, thus helping to deepen understanding of the intricacies of this phenomenon. This differentiation in the approaches to OC serves to identify whether change was intentionally planned or organically emerged at the university under question. This might highlight insights into the potential trends of OC within HE in Oman and possibly the broader context of the Arab world. What follows is an overview of these two approaches.

     i.   **The planned approach**

Usually equated with organization development (OD), the planned approach is said to have its origins in the work of Kurt Lewin (Bamford & Forrester, 2003), whom Schein calls the "intellectual father of planned change" (1994, p.239). The planned approach sees OC as a process moving from a present fixed state to a future state through a series of predictable, pre-planned actions (Burnes, 1996). Initiated within the organization in response to external forces, change under the planned approach is visualized as a top-down enterprise that is initiated, planned and implemented by the

leadership (ibid.). Change recipients, however, are encouraged to contribute to the change but within a priori set framework. The leader tends to create a vision, communicate the vision, monitor the implementation and adapt the best processes (Kotter, 2017). By doing this, the leadership aims to change the behavioural elements of the organization such as people, processes and culture, leading to the betterment of organizational outcomes (Porras & Silvers, 1991).

Highlighted as the "best developed, documented and supported approach to change", the planned approach is said to have dominated the theory and practice of OC "from the late 1940s to the early 1980s" (Burnes, 2000, p. 281). Given the significance of Lewin's three-stage model, which was the most dominant OC model for many years (Todnem By, 2005), many other models were modelled after it (Livne-Tarandach and Bartunek, 2009). The planned change model aims to improve "the operation and effectiveness of the human side of the organization through participative, group- and team-based programs of change" (Burnes, 2004, p.888). Lewin believes that through targeted learning, individuals are encouraged to comprehend and restructure their views and perceptions of the world surrounding them. However, the planned approach to change came under criticism for a number of limitations. One of the major limitations is that it assumes that organizations operate under stable conditions (Burnes, 2004; Kanter, Stein & Jick, 1992). Another limitation is its perception of change as top-down, undertaken by the top management in a linear fashion (Moorhead & Griffin, 1998). As academic staff possess a significant amount of power in HE, top-down approaches to change may not be effective (Buller, 2015). A third limitation lies in the notion of 'refreezing' which is considered not relevant to the current situation of organizations that operate in an ever-changing and turbulent environment (Dawson, 1994).

ii. The emergent approach

Born as a response to the criticism levelled at the planned approach (Tsoukas & Chia, 2002), the emergent approach views OC as a continuous process of experimentation and adaptation through the alignment and realignment of the organizational processes and competences to a constantly changing environment (Burnes, 2009). Unlike the planned approach which tends to develop a detailed plan with a number of steps, the emergent approach focuses on understanding the complexity of the situation in which the organization is operating so as to acclimatize to the ever-changing environment. It recognizes that a series of small adjustments happening simultaneously across different parts of the organization can accumulate and result in significant change over time (Weick & Quinn, 1999).

Central to the emergent approach is the belief that change is a learning process, not just mere adjustments in organizational structures and practices (Burnes, 2004). Another fundamental issue in the emergent approach is the notions of continuity and scale. While continuity is associated with the gradual change in the organizational culture, scale involves micro-level changes as the basis for ultimate transformational change. Although under an emergent strategy of change the goal remains the same, how to go about executing that goal changes depending on the situation. Moreover, planning a particular change starts when the environment provides support for the resources needed to implement change. When an emergent change happens, it gathers supporters and momentum as it progresses and it is basically guided by principles instead of processes.

An example of an emergent change is the team of volunteers that emerged following the destruction of the World Trade Centre in 9/11 (Voorhees, 2008, cited in Livne-Tarandach & Bartunek, 2009). The volunteers coordinated work after the need to do so arose then and there. This said, the emergent approach to change is found to be supported by relatively limited research, a lack of consistency and a diversity of techniques (Henderson et al., 2015; Wilson, 1992). However, it seems that looking at the planned and emergent approaches to change either in isolation or in conflict with each other is reductionist and does not reflect the entire reality of change as it occurs in real life. It seems that a more effective approach to change processes calls for an understanding that synergizes both the planned and emergent approaches (Tarandach & Bartunek, 2009). This view sees the planned and emergent approaches as inevitably complementary, not necessarily exclusivist. Both approaches seem to be essential in bringing about change in organizations, hence the need to accommodate emergence in a planned change process and also some sort of planning in emergent change.

Although it seems that the transformations Dhofar University have gone through are the fruit of some external pressure, of which accreditation is a huge part, a thorough investigation of the root cause behind the university's shift from mediocrity to distinction is still needed. It is believed that the individual and focus group interviews with the senior and middle management is expected to shed light on the approach or approaches the university used to perform change. The first research question about how the change at the university was initiated seems to be vital in unpacking whether the change was planned or emergent or both. To ensure no ambiguity in this regard, all the interviewees were asked specifically about whether the change was "intentional or by chance". It should, however, be highlighted that opting for planned change does not necessarily mean that the entire process is planned, as the latter can be interspersed with instances of emergent change at different junctures during the process. The same could be said about emergent change, as change can start without prior planning but subsequently engages in planning as it gathers momentum.

Having discussed the main approaches to change, it remains to deepen understanding of the various theories through which OC in HE can be facilitated.

2.3.2 Theories of change

There has been a growing tendency among scholars in believing that the deployment of multiple change theories can make change efforts in HEPs more successful (Boyce, 2003; Kezar, 2013, 2021). This is because theories of change propose various ways of contemplating "why change occurs, how it occurs, what are the outcomes of change, types of change … [and] strategies" to make change (Kezar, 2013, p.22). One of the best attempts that highlights the use of multiple change theories is Bolman and Deal's leadership frames. In this framework, Bolman and Deal use the structural, political, human resources and strategic frames to illustrate how the OC process works (Kezar, 2021, Bolman & Deal, 2007). Recently, Corbo, et al. (2016) resort to multiple theories of change to expand the use of evidence-based teaching practices across a number of departments in a science education initiative.

In a recent book— *How Colleges Change: Understanding, Leading and Enacting Change*, Kezar (2018) suggests six main theories of change that can help leverage

change in HEPs. Revisiting these theories of change in this quick overview is vital to the purpose of this study, as the theories provide different perspectives on how the process of change can be approached, drawing on various schools of thought. What follows is an overview of these theories, i.e. the scientific management theory, evolutionary theory, social cognitive theory, political theory, cultural theory and lastly, the institutional theory.

i. Scientific management theory

The scientific management theory, or Taylorism, uses tests and other scientific methods to enhance the efficacy of the organization's operations and productivity. While focusing on outputs, performance, hierarchy, planning and monitoring, the theory gives credence to innovation, empowerment and entrepreneurship (Exworthy & Halford, 1999; Thrupp & Willmott, 2003; Trujillo, 2014, citing Clarke et al., 2000). Four main principles guide the scientific theory: (a) replacing the rule-of-thumb methods with scientifically-proven methods, (b) making a strategic selection of employees and training them to carry out the scientific methods, (c) monitoring and supervising employees, and (d) dividing work as per specialization. The theory encourages the tendency to regularly collect and analyze data to inform performance and to reach desired outcomes. Although the change process according to this theory is rational and learning-based, it is nevertheless linear and too dependent on individual managers to unleash change.

ii. Evolutionary theory

The main premise underlying the evolutionary theory is that social entities, characterized by their complex, distinctive, yet interdependent, systems, grow and evolve naturally due to pressure from external forces (Kezar, 2013). Change, therefore, happens as a reaction to the situational circumstances playing out in the external environment surrounding the organization (ibid.). This means that the evolutionary theory can help understand the ever-changing environmental factors that impact change in HEPs. Some of these environmental factors that are growing in scope and influence and forcing HEPs to solicit change are accreditation and legislations. These two factors seem to be the ones that have been catalysing change in HE in Oman. Government legislations and the establishment of an accreditation authority seem to be the external factors that spurred an incremental change process since 2007 at Dhofar University (Damaj & Chaaban, 2014).

iii. Social cognitive theory

Another theory that can be leveraged to influence OC in HEPs is social cognition (Kezar, 2001, 2013; Kezar & Holcombe 2019). The social cognition theory is associated with sense-making and learning, where people see the need to grow, learn and develop. In other words, change happens when people in a given organization reach some cognitive dissonance, resulting in discursive clashes in viewpoints, values and beliefs. Kurt Lewin described this dissonance as discomforting the belief system of the employees (Meltz, 2014). Asking how change actually happens in HE is necessarily looking at how the belief system of the employees is 'discomforted', as will be shown in this study.

While this theory places emphasis on how change happens, which constitutes the central focus of this study, not just what causes it to happen, it highlights the paramount importance of the communicative, interpersonal and human aspects of change, as opposed to the more rigid components such as the organizational structures and systems. What is also important about this theory is that change happens not in sequences or stages, but in overlapping, multifaceted processes that impact individuals and their worldviews. However, the overemphasis of this theory on individuals as the main catalyst for change has earned it some criticism. Another element of criticism came from its downplaying of the role of the environment and external factors in catalyzing change— both are deemed major change factors. Setting aside criticism, this theory holds special significance for both investigating or executing change within HE, especially due to its emphasis on sense-making and learning— two critical elements for navigating the intricacies of the change process.

iv. Political theory

The political theory, otherwise called the dialectical theory, postulates that the dynamic interplay between vying forces results in inevitable change (Kezar, 2001, 2013). According to this theory then, change happens due to ongoing conflict. The latter seems to be a characteristic of organizations, which are said to exist in a pluralistic environment where events, forces and interests collide and vie for control and supremacy. Although unique in nature, HEPs seem to partake of this pluralistic, conflicting environment— one that has the potential to grow the seeds of change. Speaking about how the system works in HEPs, Kezar describes it as one that is characterized by a "shared governance system; organized anarchy; conflicting administrative and professional values; and ambiguous, competing goals" (2001, p.77). This demonstrates that the political theory is a viable approach to making or evaluating change within HE.

v. Cultural theory

The need for a cultural theory of change in HEPs can be justified by "the embeddedness of members who create and reproduce the history and values, stable nature of employment, strong organizational identification of members, emphasis on values, and the various cultures of the academy" (Kezar, 2001, p.77). From a cultural perspective, this theory highlights the symbolic nature of the organization more than the structural, human or cognitive aspect. Accordingly, change happens when the belief system of the employees undergoes a shift, especially a fundamental one. Kezar (2009) argues that change in the institutional culture usually starts with modifying the vision and mission, securing buy-in through the metaphorical use of language, encouragement and motivation, and the development of new rituals and practices across the institution. Unlike the other theories, the main contribution of the cultural theory to the change literature is its focus on values and beliefs, context, the unconscious, and the complexity and fluidity of organizations (Kezar & Holcombe 2019). Given the intertwinement of change and culture, this review includes Schein's (2004) seminal change model about organizational culture. It also draws on this model to investigate the impact of the change initiative on the institutional culture of the university in question, as illustrated in this study's fourth research question.

vi. Institutional theory (IT)

The institutional theory (IT) views people and organizations as being engaged in a quest for legitimacy. Given this need for legitimacy in society, the institutional theory is recognized as one of the most prominent theories that can impact change in organizations (David & Bitektine, 2009; Kezar, 2021). External forces such as accrediting authorities, national agencies and regulatory societies are usually pursued to gain the seal of legitimacy. Legitimacy can also be sought through homogenization or isomorphism; that is, the emulation of a given institution of a more prestigious institution so as to gain more recognition in society (Kezar, 2021, citing Scott, 2008; Stensaker, B., 2019). In the context of Oman, colleges and universities seem to have been pursuing legitimacy either through emulation or through accreditation (Miller-Idriss & Hanauer, 2011; Omboosuren, et al., 2021). In fact, these two legitimizing factors seem to be the main driving force behind change in the HE sector in Oman.

In summary, the importance of the theories of change comes from their ability to provide a number of lenses to evaluate or enact change. This multiplicity of perspectives appears vital for the change process in HE, a setting characterized by plurality and diversity (Meister-Scheytt & Scheytt, 2005). Moreover, it is argued that there is an ever-growing evidence that change in HE can best be handled through synergizing more than one change theory (Kezar, 2013, 2021). The political theory to change, for instance, is best at capturing the spirit of decision-making, negotiation, influence and power— all of which impact the change process from inception to institutionalization. The social cognition theory is efficient in capturing the level of thinking, learning and communication among stakeholders during the process of change. The cultural theory is powerful at capturing the antagonism between the beliefs and conventions prevalent on campus on the one hand and decision-making on the other.

The reviewed change theories can undoubtedly be used to facilitate the investigation of the change processes at the university. For example, the cultural theory can be used to explore the extent to which the change has influenced the institutional culture of the staff and students. The fourth research question in this study addresses the cultural aspect. In fact, all individual and focus group interviews included questions pertaining to culture so as to discern whether the change at DU was confined to the structural and operational aspects or extended to cover the cultural dimension. Likewise, the social cognition theory can also be used to gain insights into how the change was communicated, how the buy-in was achieved and how the learning process evolved. The social cognitive aspect of the change at the university is explored through questions about 'how the change was initiated', 'how it was implemented', and 'how awareness was heightened and communication implemented'. Lastly, the political theory is certainly useful in examining the power relations that played out between different stakeholders either charged with carrying out change-related duties or affected by change (like students and staff). This theory is also useful in assessing the influence that the university trustees or the accreditors exercised during the change process.

Having reviewed the different theories of change that can contribute insights for navigating the complex landscape of HE, it becomes inevitable to unravel the distinct

attributes of this unique environment prior to delving into the exploration of the seminal change models.

2.3.3 Uniqueness of higher education and factors believed to facilitate change

Obtaining a comprehensive and nuanced understanding of the complex phenomenon of change in HE and the strategies for successful implementation requires a degree of familiarity with the unique organizational character of HEPs. Undoubtedly, the uniqueness of universities typified in their plurality and complexity is well documented (Bruntman, 1987; Green, 1997; Hardy, 1991; McNay, 1995; Mintzberg, 1998; Smith & Langslow, 1995). The unique culture of universities is sometimes associated with their special societal and educational mission (Gaus, Tang & Akil, 2019). As professional service organizations, universities have significant variations in their professionals, faculties and programmes of study. As such, managing this plurality and diversity is complex (Meister-Scheytt & Scheytt, 2005) and attempting to make changes in this environment poses a real challenge.

In addition, the rapid change in the landscape of HE due to market demands, diversity of students, advances in technology, and the reorientation towards strategic partnership with the community and financial supporters make change a complex problem (Mili, 2015). Moreover, the lack of specific models of change for HE and the dissimilarities between the industry and HE contexts compound the challenge (Torraco, et al., 2005). Drawing on the works of Berdhal (1991), William Bergquist (1992), Robert Birnbaum (1991), Burton Clark (1983a), and Karl Weick (1991), Kezar (2001) identified 14 unique characteristics specific to higher education. Unlike change in other organizations, Kezar argues that "change in higher education is unique and needs to be contextualized to the institutional setting" (2009, p.2). She recommends that these 14 unique features be considered when attempting change in higher education. The features are as follows:

    i.   independent organizations
    ii.   relatively independent environment
    iii.   unique culture of the academy
    iv.   institutional status
    v.   value-driven
    vi.   multiple-power & authority structure
    vii.   loosely coupled system
    viii. organized anarchy
    ix.   anarchical decision-making
    x.   professional & administrative values
    xi.   shared governance
    xii.   employee commitment & tenure
    xiii. goal ambiguity
    xiv. image & success

In a more recent analysis of the nature of HEPs, Manning (2012) gives an interesting illustration of their features, relating them to a certain theoretical foundation and a metaphor showing how HEPs are viewed, as shown in Table 5 below.

Table 5 Higher Education Organizational Metaphors

Organizational Perspective	Theoretical Foundation	Metaphor
Organizational anarchy	Political philosophy	Anarchy
Collegium	Sociology	Circle
Political	Sociology	Jungle
Cultural	Anthropology	Carnival and theatre
Bureaucracy	Modernist	Machine
New science	Philosophy of science	Hall of mirrors, hologram, woven fabric, the "world as a great thought"
Feminist	Feminist theory	Web
Spiritual	Psychology	Journey

Sourced from Ruben and Gigliotti (2017, p. 31)

The 14 unique features highlighted by Kezar (2009) and multiple metaphors construed by Manning (2012) cannot but embody the multiplicity, complexity and uniqueness of the higher education context. Given the distinctive character of HE, the question remains as to how change can be facilitated in this unique environment. Kezar argues that "[s]imply developing a vision, creating a plan, implementing the plan, and evaluating the plan is unlikely to work and has not proven successful in most change processes", (2009, p. 3). She contends that systems change by establishing intermediary organizations, creating external levers, forging strong networks, understanding politics, history and values of the institution, and also understanding that change is a life-cycle process (see change facilitators in Table 5 below). Given that campuses have loads of priorities which may detract them from focusing effort on monitoring the progress of change, the role of intermediary organizations, such as accreditors, foundations, disciplinary societies, federal and state agencies, etc., in monitoring and evaluating the change process becomes indispensable.

The second facilitator of change is external levers. Kezar argues that the establishment of intermediary bodies not only helps "the systems change gain legitimacy through endorsements and support, but this support also allows for external levers to be in place" (Kezar, 2009, p. 4). External levers include regulations, policies, funding and several other external factors that may steer change in a particular trajectory. The third change facilitator is setting up networks, in that campuses need to establish networks around the change agents or initiators to facilitate the change initiatives. Individuals who share the same interests should be brought together through the formation of a dedicated coalition that supports and sees the change through. Networks could extend beyond their internal settings, seeking the collaboration of external bodies at the national or regional level.

The fourth facilitator of change is understanding the institution's mission, history and values. In other words, there is a real need for the change initiators to evaluate campus politics, past change initiatives and past leadership, considering the institution's climate and culture. In fact, the contextualization of the change strategies can help

mitigate resistance and overcome roadblocks (Kezar, 2009, p. 5). The fifth facilitator that change initiators should bear in mind is understanding that change has a life cycle and, in particular, understanding which stage the change is at currently. In other words, skipping a stage or putting a stage in place of another may result in providing the wrong support to that stage. Researchers have identified three main stages in the life-cycle of change: mobilization, implementation and institutionalization. The mobilization stage requires the creation of a vision, rallying for support, and professional development for employees. The implementation stage needs reconsideration of the institutional structures, supply of human, financial and technical resources, and the establishment of a reward system to support the initiative. The institutionalization stage requires monitoring of the progress, analysis of outcomes and establishment of accountability.

Table 6 Change Facilitators in HEPs

i. establishing intermediary organizations
ii. creating external levers
iii. forging strong networks
iv. understanding the institution's politics, history and values
v. understanding that change is a life-cycle process.

2.3.4 Principles for successful change in HEPs

Organizational change is argued to be highly complex and oftentimes elusive to planning, decision-making and strategizing (Bushnell, 2018; Kezar, 2001, 2013). Drawing on a sizeable scholarship of how OC can be made successful in HE, Kezar (2001) identified 17 principles for change facilitation, as illustrated in Table 7 below. It is worth highlighting that the word 'principles', as used by scholars of OC, denotes fundamental concepts and guidelines that underpin effective strategies for managing and implementing change. These principles are in essence key insights derived from research or practical experience of how to approach and navigate the intricate process of change.

Table 7 Principles for Successful Change in HEPs

i. Promoting organizational self-discovery	xi. Maintaining core characteristics of HEPs
ii. Institutional culture and type affect change	xii. Considering self-image of the institution
iii. Considering institutional politics	xiii. Creating ownership of change at the individual and institutional level
iv. Laying groundwork	xiv. Creating a culture of risk and encourage change of belief system
v. Focusing on adaptability	
vi. Interacting with stakeholders to develop mental models and sense-making	xv. Realizing that different change models are needed within the organization
vii. Creating homeostasis within the institution	xvi. Realizing that change strategies vary as per change initiative
viii. Combining traditional teleological tools with social-cognition, symbolic, and political strategies	xvii. Considering combining models and approaches of change
ix. Realizing that change is disorderly	
x. Promoting participative governance and collective decision making	

Gleaned from scores of peer-reviewed articles over the course of 30 years, these principles are deemed fundamental to the facilitation and success of the change process in HE (Kezar, 2001). As the study is about investigating the change processes and strategies the university employed to enact change, these change principles were partly used as a benchmark to assess the alignment of the emergent processes and strategies to these principles, as shall be discussed in the Discussion chapter. What follows is an elucidation of these principles to deepen understanding of their significance and how they can contribute to navigating change within the intricate landscape of HE.

i.   Promote organizational self-discovery

This principle seems to converge with the notion of 'diagnosis' prevalent in business-related change models. The literature on OC in HE suggests that the unique structures of HEPs, that is the loosely coupled system, shared governance, and employee commitment, can affect the change process deeply (Kezar, 2001), hence the need to know how the systems work before engaging in change. Change theories differ in their foci on what can influence the change process. Where some theories highlight the influence of the external environment or individuals on the change process, other theories stress the indispensability of attending to the internal environment. Whatever is the influence on the change process— whether internal or external, it is argued that "the system needs to learn more about itself from itself" in order to allow change to occur (Kezar, 2001, citing Wheatly, 1999, p.115). Organizational self-discovery can be facilitated through dialogues, meetings, campus summits, and retreats.

ii.   Institutional culture and type affect change

Similar to the first principle, the second one still revolves around self-discovery, or diagnosis, though with specific focus on institutional culture and type. Studies based on cultural theories show that familiarizing oneself with the institutional culture and type is key to knowing how to approach the change process and what change outcomes can be expected (Kezar, 2001). For example, institutions should know the extent to which their culture is collegial, political, managerial, or organized anarchy. Therefore, once the institutional culture and type are known, change strategies can be devised accordingly.

iii.   Be aware of politics

The third principle for successful change in HR is understanding the politics, or power dynamics, on campus. In other words, change agents have to be aware of the type of politics and power conflicts among individuals, groups, coalitions and alliances. Being aware of these power dynamics can make a big difference because influential individuals or groups can either motivate or stagnate change. It is clear then that the third change principle, like the previous two, has an element of diagnosis, which is geared towards deciphering campus politics.

iv.   Lay groundwork

Laying the groundwork is another principle that can help make the change initiative successful. This principle requires posing three questions to set the stage for change— the 'what', 'how' and 'why'. The *what* question revolves around whether the

change type is first-order or second-order; the *how* question is about whether the change is revolutionary or evolutionary; and the *why* question centres on the rationale behind the change initiative. Research shows that laying the groundwork for change can pave the way for change and promote generative learning amongst the personnel to guarantee adequate mobilization (Kezar, 2001). Laying the groundwork entails self-assessment, institutional audits, evaluation of the change initiative, dissecting of institutional culture, and more. When planning the change processes, change leaders should include a self-assessment tool to come to grips with the current state of affairs and the potential actions for improvement. During this stage, involving more people ensures that the change process is collaborative; hence, more likely to be successful.

v.   Focus on adaptability

It is widely recognized amongst the cultural, social-cognition and political change models that in a loosely coupled system such as the one prevalent in HE, radical or transformational change is very unlikely to happen (Kezar, 2001). Transformational change usually takes a great deal of coordination, tremendous time and enormous resources, which is unlikely to be availed in loosely coupled systems. Given this, Kezar (2001) argues that it is wiser to focus on adaptability and invest in small, incremental change efforts that may over time accrue and synergize to produce a radical or second-order change (Bergquist, 1992; Eckel, et al., 1999).

vi.   Develop new mental models and sensemaking

Since change is not an event but a process that requires concerted efforts and time to take root in the belief system of the institutional character, all change theories (e.g. teleological, cultural, political, social-cognition and life-cycle) champion the involvement of employees throughout the change process phases, particularly in a developmental learning process. There is a real need to develop a common language to articulate change and to integrate the new understanding in the existing one. It should be highlighted that, in a place characterized by a heavy presence of expert power as is the case in colleges and universities, change should be rationalized through explanation and sensemaking. This can help create new mental models that can in turn be more receptive to embracing change.

vii.   Strive to create homeostasis and to balance forces

HEPs are usually known to be slow in responding to external change. However, evolutionary studies show that certain types of HEPs (private or community colleges) and even certain departments (e.g. the humanities) can be more vulnerable to the external environment (Kezar, 2001). In view of this, social-cognition and cultural change models suggest that leaders protect the homeostasis through the reinforcement of shared governance and the establishment of dialogue in response to the external forces for change. Similar to the previous one, this principle places emphasis on collaboration and dialogue amongst all constituents within the institution and even with external parties.

viii.   Combine traditional teleological tools with social-cognition, symbolic, and political strategies

Studies show that combining more than one change theory can facilitate change. For example, combing teleological tools such as developing a vision, strategic plan and

implementation strategies with other change theories such as the social-cognition, symbolic or political theory can help make change more successful. This is because change needs to be approached from different perspectives. Combining planning, assessment and learning with sensemaking, storytelling, metaphors and symbolism makes change more comprehensible and accessible to various stakeholders (Kezar, 2001).

ix.   Realize that change is disorderly

The ninth principle of successful change in higher education emphasizes that change is not a linear process, but a disorderly one. This could explain why Birnbaum (2000) argues that imposed linear change interventions in higher education have often failed to bring about the desired result. Studies have shown that repetitive dialogues and discussions about change, even in the presence of no clear strategy, have ultimately led to some fundamental changes in higher education (Kezar, 2001). Although the change process envisioned by the political, cultural and social cognition approaches is said to be disorderly and sometimes even irrational, they are still believed to bring about successful change for higher education (ibid.).

x.   Promote shared governance or collective decision-making

Another principle that can make a difference in making successful change in higher education is the adoption of shared governance and collective decision-making. Although shared governance has sometimes been critiqued for delaying change in higher education, research shows that change in loosely coupled systems can be successful in the presence of functional shared governance where both the academics and non-academics are actively involved in the change process (Clark, 1983; Kezar, 2001, Sporn, 1999).

xi.   Articulate and maintain core characteristics

HEPs need to articulate and communicate their core values to their stakeholders, such as academic freedom, shared governance, supremacy of student learning, knowledge production, and serving the community. Maintaining core values during change helps the institution maintain continuity— a feature that has been highlighted as a core characteristic by the teleological, social-cognition, evolutionary and cultural approaches to change (Kezar, 2001).

xii.   Be aware of image

The twelfth principle for successful change in academia is striving for recognition and self-image. In fact, both the institutional and cultural theories of change in higher education argue that change is to a large extent driven by a desire to enhance the institutional image (Kezar, 2001). Hence, it is not unusual that universities tend to imitate other universities that enjoy wider recognition and prestige.

xiii.   Connect the change process to individual and institutional identity

The thirteenth principle centres on maintaining identity. Given the centrality of identity in academia, research shows that change in higher education needs to address the individual and institutional identity (Clark, 1998). The social-cognitive and cultural theories, for instance, show how the norms, beliefs and even habits are deeply

engrained in identity formation on campus. The teleological theory goes a step further into highlighting the connection between the university's mission and the institutional identity. This connection necessitates that HEPs should embark on a serious discussion of the new mission in light of the change intervention.

xiv. Create a culture of risk and help people to change belief systems

Similar to the previous one, the fourteenth principle targets the institutional culture through the nurturing of risk taking. For instance, the social cognitive theory stresses the need to cultivate a culture of risk, where failure becomes part of the learning process. Ensuring that employees feel safe during the change process makes change not only doable but also palatable. Indeed, working in a safe and secure climate can help recreate norms, reshape beliefs and reconstruct the institutional culture.

xv. Realize that different change models are needed within the organization

This principle highlights the need to utilize a multiplicity of change models on campus. Research shows that change is too complex to be accommodated by a single change model (Bolman and Deal, 2007; Kezar, 2001). For instance, Bolman and Deal's (1997) model can be useful in understanding a departmental change intervention. However, Birnbaum's (1991) cybernetic model can be more beneficial for a university-wide change intervention. In addition, a teleological model can work best for administrative sections, whereas a political model is more suited for academic departments (Kezar, 2001). Likewise, life-cycle theories can help comprehend the transition stages of an organization, whereas the evolutionary models can be useful in looking at change from a broader perspective. The social-cognitive models, however, can be exploited to know more about individual-based change interventions.

xvi. Know that strategies for change vary by change initiative

The sixteenth principle highlights the need to align change strategies with change type. Research shows that change can be facilitated when change type and change approach are aligned (Al-Haddad & Kotnour, 2015). In fact, large-scale change (second-order) seems to align best with strategies from the cultural and social cognition models. First-order, or small-scale, change interventions can benefit from the teleological and evolutionary models. On the other hand, teleological models can be harnessed to implement structural changes, whereas the political, social cognitive and cultural theories can serve as a springboard to launch more deep-seated values-based changes.

xvii. Consider combining models or approaches

The last principle suggests that change models be combined. In other words, institutions are encouraged to utilize more than one change model so as to develop an approach that suits the type and scale of the needed change, while considering the specificities of the institution, both structural and cultural. Kezar (2001) suggests that three change models be considered in this regard: Birnbaum's cybernetic model (1991), Bolman and Deal's reframing organizations (1997) and Lueddeke's AGD-M model (1999).

In conclusion, the reviewed principles seem to present a comprehensive view on how to approach and facilitate the change process within higher education. However, they

seem to be too lengthy and sometimes overlapping. Consequently, Kezar (2001) herself synthesized them into a concise set of six principles, as shown in Table 8 below. Although these principles are useful in evaluating or implementing change within the unique context of higher education, they nonetheless fall short of addressing the research question about the actual and practical enactment of change in HE. This is in no way diminishing the value of the principles, which are undoubtedly helpful in guiding the change process in HE. Rather, it is simply an acknowledgement of their limitation in this respect, hence the necessity to still address the gap in the literature that motivated this study.

Table 8 Synthesized Principles for Successful Change in HEPs

#	Main Principles	Sub-Principles
1	Develop a process of systematic, systemic institutional and environmental assessment	i ii iv vi vii viii x xv
2	Work with individuals, be inclusive, and realize that this is a human process	ii iii v ix x xii xiii xiv
3	Be aware of the distinctive characteristics of higher education	i ii iii v vii viii ix x xi xii
4	Realize the need to develop your own context-based model of change	i ii iii iv vii viii xi xv xvi xvii
5	Be open to surprises, focus on creativity, and leverage change through chance occurrences	iii iv xi ix xiv
6	Balance is an important principle	vii x xi xiii

In a later study, Kezar (2009), conducting an extensive survey of the literature, identified some key concepts that change leaders should consider to make change more convincing and more effective. These are sense-making, data evidencing, multi-frame thinking, transformational and transactional leadership, contextualizing, structural support, rationalizing and priority making. Having discussed the unique features of HE and the factors and principles that can help make change more successful in such a challenging context, it is time to examine seminal change models that can inform the change processes in the unique landscape of HE.

2.3.5 Seminal models of organizational change

Organizational change management (OCM) models represent a practical framework of how organizational change can be approached. They usually function as a guide to navigate the change process from mobilization through to institutionalization. For the purpose of this study, six seminal change models are chosen to help deepen understanding of how change can be managed in HE. The first model framed by Kurt Lewin is a three-phase model developed in 1947. Being foundational, Lewin's model epitomized the planned change approach for more than a quarter of a century. The second model is an eight-step model developed by John Kotter in 1996. In addition to being used in different settings, these two models have been recommended for change in colleges and universities for their ability to balance power and politics (Vlachopoulos, 2021). For instance, Wentworth et al. (2020) describe how they used Kotter's model to inform change in the university's system of student evaluation of teaching, incorporating changes in both instruction and technology. The third and

fourth models are attributed to Burton Clark (1992; 1998), while the fifth model is credited to George Keller (2004). Clark (1992, 1998) and Keller's (2004) models emerged from empirical case studies conducted in colleges and universities, either in America or Europe. The sixth and last change model is associated with Schein (2004) and revolves around the central concept of organizational culture. What follows is an exploration of these six models.

2.3.5.1 Kurt Lewin's model

It is argued that the planned approach to change dominated the theory and practice of OC "from the late 1940s to the early 1980s" (Burnes, 2000, p. 281). This approach has been often highlighted as the "best developed, documented and supported approach to change" (ibid.). It is mainly rooted in the work of Kurt Lewin (Bamford & Forrester, 2003) whom Schein recognizes as the "intellectual father of planned change" (1994, p.239). Given the significance of Lewin's three-stage model, which held a dominant position in the field of OC for many years (Todnem By, 2005), numerous other models were modelled after it (Livne-Tarandach & Bartunek, 2009). Lewin's change model comprises three stages:

   i.   Unfreezing
  ii.   Moving
 iii.   Refreezing

The unfreezing stage begins by destabilizing what Lewin calls the "quasi-stationary equilibrium" (i.e. the organizational status quo) that exists in a compound field of driving and inhibiting forces (Livne-Tarandach & Bartunek, 2009). It is argued that driving forces should outweigh inhibiting forces if change is to happen. Lewin (1951) advises that leaders create a state of anxiety at this stage to ensure that employees turn into a driving force for change. As it is not unusual for employees to resist change, Lewin argues that organizational behaviours, beliefs, structures and processes should be carefully dissected to figure out what is hindering change. It is critical at this stage to create awareness of the rationale behind change; and therefore, sufficient communication becomes essential to convince the employees of the benefits of change both for them and the organization.

The moving stage is the process of transition to a new state of affairs. Once people are "unfrozen" (stage one), they can start moving. However, this stage is usually fraught with uncertainty and fear, as the employees left stability and are now moving towards uncertainty. As the learning of new behaviours, new ways of thinking and new processes is critical to this stage, special attention has to be given to communicating with, educating and supporting employees to ensure smooth 'moving'. Ample time has to be allocated to this stage for the learning to take place and for the employees to be ready to move to the third stage.

The third stage in Lewin's change model is refreezing. In fact, Lewin called it freezing, but it later became known as refreezing, so as to stress the need for reinforcing, stabilizing and solidifying the new state of affairs (Burnes, 2004). Lewin argues that in order to ensure that employees do not revert to old behaviours and practices, the changes made with regard to people, structures, processes and goals must be frozen into new norms and behaviours. This helps cement the new gains into the new culture. To ensure sustainability, good and positive behaviour should be encouraged through

rewards and acknowledgements (Kotter, 1996). As the refreezing stage is grounded in the assumption that change is a process that "moves from one 'fixed state' to another through a series of pre-planned steps" (Bamford & Forrester, 2003, p.547), it is believed that it should be systematically analysed, well initiated and well executed (Livne-Tarandach & Bartunek, 2009). To help organizations analyze the change status, Lewin developed a "field force analyses" methodology (Armstrong, 2006).

Although Lewin's change model was deemed so indisputable that several scholars such as Bullock and Batten (1985) and Cummings and Huse (1989) developed resembling models (Bamford & Forrester, 2003), it came under criticism in the 1980s. The major criticism came from the culture-excellence school, the postmodernist and the processualists (Burnes, 2004), and centred on Lewin's neglect of the environmental factors and his underestimation of the role of politics and power. Besides, the model's assumption that human conflicts can be resolved easily was thought unrealistic in most organizational settings (Livne-Tarandach & Bartunek, 2009). However, despite this criticism, Lewin's model of change remains a practical and valid approach to changing humans, be it at the individual or group level. Lewin's emphasis on unlearning old habits and relearning new ones is still recognized as a fundamental aspect of the change process. It is still argued that the provision of continuous organizational learning in HEPs is considered as key to sustaining successful OC in colleges and universities (Boyce, 2003; Webb, 2018).

2.3.5.2 John Kotter's eight-step model

In his book, *Leading Change, K*otter (1996), a Harvard Professor emeritus and a renowned expert on change management, developed an eight-step model of OCM. This model, now considered a "classic" (Vlachopoulos, 2021), was the fruit of his investigative study of 100 organizations that went through change. The model includes the following eight steps:

i. Establishing a sense of urgency
ii. Creating a guiding coalition.
iii. Creating a vision for change.
iv. Communicate the vision.
v. Remove obstacles.
vi. Creating short term wins.
vii. Consolidate gains
viii. Anchoring change in culture

Kotter (1996) found that establishing 'a sense of change urgency' is critical to the success of the change process. He argues that leaders should create a need rather than a want for change, emphasizing that creating a need garners more support. To do that a sense of urgency has to be created. During the urgency phase, the employees should not only be alerted to the need for change but also be educated and mobilized into action. Cameron and Quinn call this stage "creating readiness" (1999, p. 88). Being lengthy and challenging, change needs a strong coalition to nurture, support and guide it. Kotter (1996) argues that *creating a strong coalition* is completely different from creating committees or task forces because the latter are usually slow to act, political and frustrating. Building a strong coalition, therefore, means finding the right people with a range of skills, capabilities and experience. The coalition should spread the message across, delegate tasks and rally support from all stakeholders.

The third stage is *creating 'a* vision'. Kotter asserts that "[w]ithout a sensible vision, a transformation effort can easily dissolve into a list of confusing and incompatible projects that can take the organization in the wrong direction or nowhere at all" (1996, p. 63). He argues that the vision should specify the core values and show the direction in an inspirational way, based on the opportunities and threats the organization is facing. Collins (2001) emphasizes that what makes a vision actionable is to get enough buy-in from all concerned parties. Understandably, failed change enterprises are oftentimes associated with no vision or a blurry one that lacks the inspirational thrust needed to rally support and mobilize people.

Like Kezar (2001), Kotter (1996) argues that just creating the vision is not enough and does not generate support. The guiding coalition should reach out to all stakeholders, communicate the vision and ensure all potential risks are mitigated. As communication does not happen overnight, it should be frequent and take place over an extended period of time (Eckel et al., 1998). In addition to being cogent and persuasive, communication has to span the entire organization and not part of it. It should be highlighted that absence of the required information may open the doors for speculations and interpretations and may cause employees to create their own reality. Moreover, Kotter emphasizes that the leadership should embody the vision both in words and deeds. To maintain the momentum of change, obstacles should be identified as early as possible and an action plan put in place to overcome them. Obstacles can be physical, psychological, behavioural or legislative, and they could be at the individual or group level. The guiding coalition should consistently check for barriers or individuals who resist change and implement proactive action to ensure change is making headway.

The sixth stage in creating change is *creating short-term wins*. Real change usually takes time to come to fruition. However, employees may not be ready to go on the long march unless there is compelling evidence that the organization is moving in the right direction. Waiting for the final victory may cause support for change to sluggish, as employees may feel that their sacrifices are wasted. Kotter (1996), therefore, advises that short-term wins be celebrated to keep the urgency level high and to unleash analytical thinking to clarify or revise the vision. An example of celebrating short-term wins could be rewarding and appreciating the employees who aligned themselves and actions with the vision in public.

Stage seven is about consolidating gains. Kotter (1996) believes while celebrating short-term wins is required, declaring premature victory is deadly. It is important to sustain and cement the change process after targets are accomplished. Change is a process, not an end in itself, and, hence, consolidation of the gains should continue to avoid employees' regression into old habits and practices. The last stage is about *anchoring change* which means inculcating change into the organizational culture. Kotter advocates that the change should be rooted in the social norms and shared values of the organization.

In summary, Kotter's change model is an elaborate step-by-step process which mirrors the inherent intricacies within the change process itself. The model emphasizes the need for employees' involvement and awareness to ensure effectiveness of the change enterprise. However, it seems that Kotter has placed more emphasis on the

preparation for change (the first five steps) at the expense of the implementation of change (steps six and seven). Kotter's model also was also criticized for treating change as a one-time event, with a defined beginning and a clear end in perspective (O'Keefe, 2011). Besides, the model's over-reliance on the top-down approach may engender frustration and alienation among employees for the lack of back-and-forth communication (ibid.).

2.3.5.3   Burton Clark's change model

Being one of the leading and most influential scholars in the field of higher education, Clark was obsessed with how to create and sustain change in colleges and universities. His scholarly work influenced not only HE in the United States but transcended national boundaries and cultures. His *Distinctive College*, published in 1970, was one of the leading sociological study of the development of American HEPs (Shattock, 2010). It played a significant role in the analysis and understanding of the change dynamics and change culture in higher education. Clark's (1992) model of organizational change was developed following his empirical study of three liberal arts colleges in the Unites States: Antioch, Reed and Swarthmore. His study sought to understand how these colleges managed to transform through examining the factors that propelled them to distinction, how that was done, who did it and whether that can be replicated. Drawing on site observations and interviews, Clark developed the concept of 'organizational saga'— a central concept that illustrates the role of the college in establishing distinctiveness through incremental changes that run into the very culture of the organization. Analysing and synergizing the three sagas, Clark developed his change management model comprising five key components that influenced the change process, i.e. personnel core, programme core, social core, student subculture, and ideology, as illustrated in the chart below.

Figure 1 Clark's Five Components of Change

The first component that Clark finds influential in catalysing change in the three colleges is the 'personnel core'. It represents the senior personnel that possess power and can influence decision-making and lead change. Their role is to spread awareness, mobilize employees and secure the buy-in from all constituents. They are also charged with developing the faculty's social and cognitive capabilities in preparation for the change. The second key component that is noticed to influence change is the 'programme core', i.e. the academic programme and curriculum. Clark argues that any OC initiative must have some visible outcomes, which he calls the 'visuals' or the visible gains of the change process. The change in curriculum and how it is taught is a manifestation of these visuals.

The 'social core' represents the third component that is found to leverage change in the colleges. It is characterized as the articulated clientele and financial support bodies. These two constituents are deemed crucial in supporting change. The fourth component is 'student subculture'. This subculture forms a fundamental part of the culture, norms and values prevailing on campus, and therefore, needs to be aligned with the change aims and targets. Without enough support from students, the change

effort may be thwarted, hence the need to ensure that the student subculture is in consonance with their core ideas for improvement and change. The last change-influencing component is 'ideology'. Clark (1992) argues that subsequent to its implementation and maturation, change has to be cemented into the institutional culture or ideology. Failing this step poses the risk of taking the institution back to old practices and beliefs.

In a further development to his study of the three colleges, Clark transcended the American context and undertook an empirical study, examining the transformations in five European universities. Clark's analytical study of Warwick in England, Twente in Holland, Strathclyde in Scotland, Chalmers in Sweden, and Joensuu in Finland shed light on the transformational strategies these universities used to transform their operating systems. Responding to severe state funds cuts, these universities followed the entrepreneurial model to pursue deep transformational changes, hoping to survive and prosper. Proclaimed as one of the best books that has significantly influenced higher education (Rhoades & Stensaker, 2017), Clark's (1998) *Creating Entrepreneurial Universities* identified five "irreducible minimum" elements for successful institutional transformations. These are as follows:
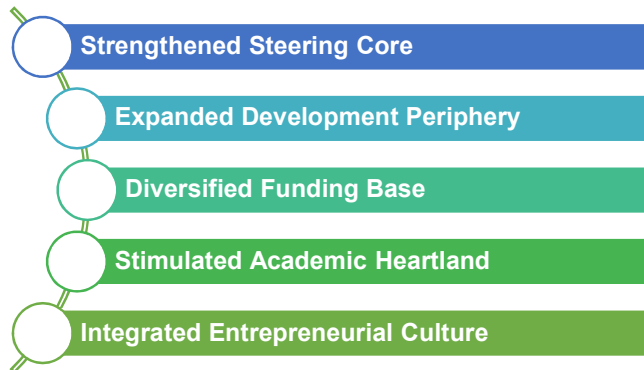
Figure 2 Clark's Five Elements of Change in HEPs

Extrapolated from the five case studies, these five common elements, also named as the 'organizational pathways of transformation', transcend the collective individualism of the five entrepreneurial universities that Clark examined. It is worth noting that entrepreneurial universities are those capable of diversifying their funding base while creating a culture of enterprising self-reliance, resulting in lesser reliance on the government. What follows is an explanation of the five elements that Clark identified as influential factors driving change in the five aforementioned universities.

The first element that is highlighted as having great influence on the change management process is a *strengthened steering core*. This core starts with a strong-minded president assisted by a team of decision-making body and includes central managerial groups from various departments (Clark 1998). In view of the limited resources available due to the downsizing of state funding as opposed to the expanding demands necessitated by change, the steering core needs to be more adaptive, more selective and more focused in order to provide funds for the new strategic priorities. The second element that is found to weigh in on the change process is the *expanded development periphery.* The idea is that the academic departments alone cannot do all that an entrepreneurial university requires. These departments need the help of a new periphery of non-traditional units such as the

"continuing and professional education units" as opposed to the institutional core of traditional research universities (Fleming, 2013). These units or centres should cross old boundaries to mediate between the academic departments and the outer world.

The third element of the irreducible minimum is the *diversified funding base.* Entrepreneurial universities usually require greater financial resources in view of the dwindling of the mainline government support. Clark found that entrepreneurial universities turn this financial challenge into an opportunity by widening their financial base. Enterprising universities look for more funds from a second-stream source, research councils and also from a third-stream source such as industrial firms, local governments and philanthropic foundations (Clark, 1998). These are essential in providing discretionary money needed for independent development, as government money usually comes with rules of standardization, not necessarily innovation. The fourth pathway of transformation is the *stimulated academic heartland (SAH).* Now that the entrepreneurial university has established a strong steering core and a strong outreach programme, and has diversified its funding streams, the *SAH, or the academic departments,* cannot be left behind doing traditional practices. It is critical that the *SAH* follows suit, embraces change and becomes entrepreneurial itself. Members of these units and departments need to take an active part in the managerial line. The *SAH* should combine traditional values with innovative managerial beliefs to develop a new belief system that is in harmony with the new mission of innovation.

The last pathway in Clark's empirical recipe for transformation is the *integrated entrepreneurial culture. Arguing that* "strong cultures are rooted in strong practices", Clark highlights that the new beliefs and values resulting from the transformations should be entrenched into the new work culture (1998, p.7). However, he warns that organizational values cannot and should not be treated independently of organizational structures and procedures. This said, Clark recognizes that transformational change can extend over many years and this needs collective action to solidify the new beliefs and practices. In conclusion, Clark's five transformational pathways can help modern universities overcome the myriad of challenges and realize the much-needed progressive and sustainable innovations. Taken together, these pathways can help universities overcome the growing imbalance between environmental challenges and their traditional academic values. Clark believes that the successful implementation of the new managerial perspectives can help universities worldwide to become more innovative and entrepreneurial and therefore escape from the traditional government straitjacket.

In Oman, universities are increasingly playing a vital role in the social and economic growth of the country. Entrepreneurship and entrepreneurship education have become part of the curricula and institutional culture at DU since the introduction of a mandatory entrepreneurship course in 2014. However, although "the environment [in Oman] is propitious for the establishment of entrepreneurial universities" (Yarahmadi, 2019, p.9), there is still uncertainty that the Omani universities are capable of successfully transitioning into entrepreneurial institutions. The challenge lies in the procurement of funds. Most private universities in Oman secure funds through government subsidies and study fees. Although the industry sector in Oman is regarded as a strategic partner in the country's entrepreneurial economy, it is still incapable of playing a bigger role in advancing entrepreneurship due to its small size, which makes it unable to accommodate the research and innovation outcomes of the

universities. Being young, the university under study is facing the same problem in its aspiration to become an entrepreneurial university, though trying hard to increase research, serve the community and partner with the industry.

2.3.5.4   George Keller's change model

More than 40 years ago, Elon College, in Elon, North California, USA, was struggling to attract students to remain solvent. The college then used to attract average students, but now, in addition to having more than doubled its student population, it has managed to attract students of high academic standards from across the nation (Renn & Edwards, 2005). As a result of a number of remarkable transformations, Elon turned into one of the most desirable universities in America (ibid.). Impressed by this paradigm shift, George Keller, an organizational change consultant, scholar and strategic planner, sought to examine the strategies that Elon developed to reposition itself. Keller's compelling case study of Elon was published in a book titled *Transforming a College: The Story of a Little-Known College's Strategic Climb to National Distinction* and was since translated into many languages. The central question for Keller was how these transformations happened. Keller (2004) identified three key factors that led to Elon's astonishing turnaround: people, financial acumen and marketing, and he highlighted six strategies that contributed to the success of the change management in the college, as illustrated below.

- *Mantra of Excellence and Quality Everywhere*
- *Addiction to Planning*
- *Attention to Selection, Training and Rewarding*
- *Creation of a Niche*
- *Financial Wisdom*
- *Marketing Oneself*
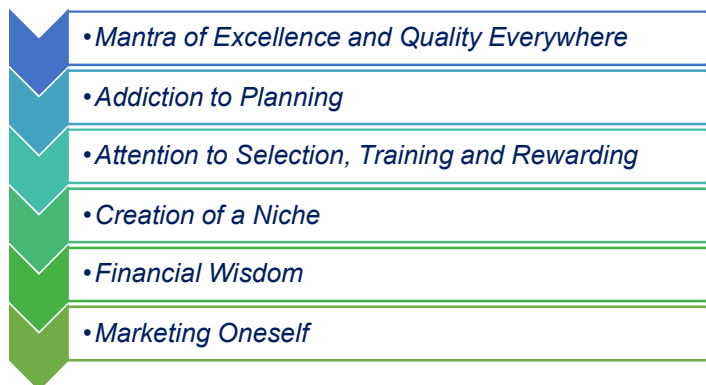
Figure 3 Keller's Strategies for Change in HEPs

Keller found that the leadership instilled the *mantra of excellence and quality everywhere* and in everything the college did. Faculty and staff were encouraged to embrace excellence and top quality in all their operations starting from classroom instruction, to on-campus food services to even answering phone calls. The second strategy that the college used to transform was *addiction to planning* (Keller, 2004). Elon engaged in a relentless process of planning that focused on strategic priorities. The leadership set short and long-term goals and ensured due communication of those goals and continuous monitoring of the progress of the plans. The third strategy was the attention to *selection, training and rewarding*. To transform the college, the leadership realized the need and urgency to recruit the best staff in every position. As a result, professors, department heads, secretaries, workers and even security guards were well selected against rigid criteria. This created more stability at the college and led to a remarkable decrease in staff turnover. The leadership also placed great emphasis on professional development and training, and rewarded excellent performance among faculty and staff.

The fourth strategy the college deployed was *creating a distinctive niche*. Elon chose to focus on and invest in student learning, resulting in a remarkable emphasis on engaged learning, action-oriented pedagogies and an experimental style of education. The fifth strategy Elon's leadership used was *financial wisdom*. This meant wise spending, with strategic priorities put first in all decisions made. Keller quoted, Gerald Whittington, Elon's Vice President for Business, Finance, and Technology, as saying, "We try to get three dollars worth of results out of every two dollars we invest" (2004, p.103). The last strategy Keller found to be crucial to Elon's rise to distinction was *marketing oneself*. Keller (2004) noticed that Elon focused on the 5Ps of higher education marketing: product, price, place, people and promotion. The leadership recruited Dan Anderson, a soft-spoken and modest but masterly ex-journalist, whose role was to introduce new initiatives aimed at the news media, higher education leaders, publishers of college guides, influential people in the government and non-profit sector. He also brought world famous people to campus such as former president George H. W. Bush to broadcast legend Walter Cronkite (Keller, 2004).

Although well disseminated and largely cited, Keller's study was criticized for a number of shortcomings. First, Renn and Edwards (2005) argue that Keller's sources of information are not always clear, and the level of details and evidence is at times short of a typical scholarly work. Second, they also argue that Keller sometimes falls into self-contradiction; for example, Keller justified Elon's ascension to distinction by citing its advancement in a number of national college rankings and then conceded that some of these rankings are "dubious" (Keller, 2004, p.3, cited in Renn & Edwards, 2005).

Similar to Elon College, Dhofar University (DU), in its aspiration for distinction, focused on strategic planning, which involved formulating its first 2014-19 Strategic Plan, followed later by its second 2021-2030 Strategic Plan. It also focused on recruiting high-quality staff, while prioritizing diversity and inclusivity. Professional development and dedicated targeting academic and non-academic staff formed part of the institutional culture. The university also worked hard to establish a niche through heavy investment in research, frankincense and medicinal plans, and students with disabilities.

2.3.5.5   Edgar Schein's organizational culture model

Known for his remarkable contributions to organizational development, career development and organizational culture, Edgar Schein is considered one of the founders of organizational psychology. Schein's model is considered a landmark in the field of organizational culture (Vlachopoulos, 2021). The model sheds light on the different layers of organizational culture and the intricate interplay between these layers and change. As this study is about the practical mechanisms of change within HE, discussing organizational culture becomes imperative. This is because culture is a substantial facet of the institution that influences and gets influenced by change. Besides, one of the research questions that this study sought to answer is the evaluation of the degree to which change has influenced the institutional culture. To ensure a clear and deep understanding of the intricate phenomenon of organizational culture, this section begins by defining the concept, then proceeds to unpack its various components and concludes by illustrating the mechanisms through which change can possibly affect it.

Always warning against the oversimplification of organizational culture, Schein (2004) argues that organizational culture is a very intricate phenomenon and is not merely "the way we do things around here". In its simplest terms, organizational culture can be described as the climate, behaviours and practices that organizations develop vis-à-vis people. A more nuanced understanding depicts culture as "a pattern of basic assumptions…that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1985a, p.9). Given the complexity of organizational culture, Schein (2004) argues that changing it is not an easy task and that creating a new one can never happen overnight. He adds that during the time of change employees need time to adapt to the new 'behaviourial artefacts' and values, and to adjust their modes of thinking to the new burgeoning culture. However, the question remains as to what exactly constitutes this culture.

Known for his widely accepted classification of organizational culture, Schein (2004) categorizes culture in three layers: artefacts, values and assumptions (see Figure 4 below). This organizational culture model is also known as the onion model with three compartmentalized layers. As you move deeper into the core layer, change becomes difficult to realize. Schein (2004) names the outer layer as the 'artefacts' layer, which is easy to adapt or change, unlike the other two layers. In HEPs, the artefacts layer would correspond to buildings, furniture, dress code, facilities, visible behavior, strategies and bylaws. The middle layer, however, represents the 'espoused values' held by the organization. Finally, the core layer stands for the 'assumptions' held by the employees. Interestingly, Were (2014) gave another classification of Schein's three-layer model, where he refers to the external layer as the material layer, the middle layer as the system layer, and the core layer as the spiritual layer. Before proceeding to how these layers interact to make change, it is important to deepen understanding of these three layers and what they represent in an organizational culture.
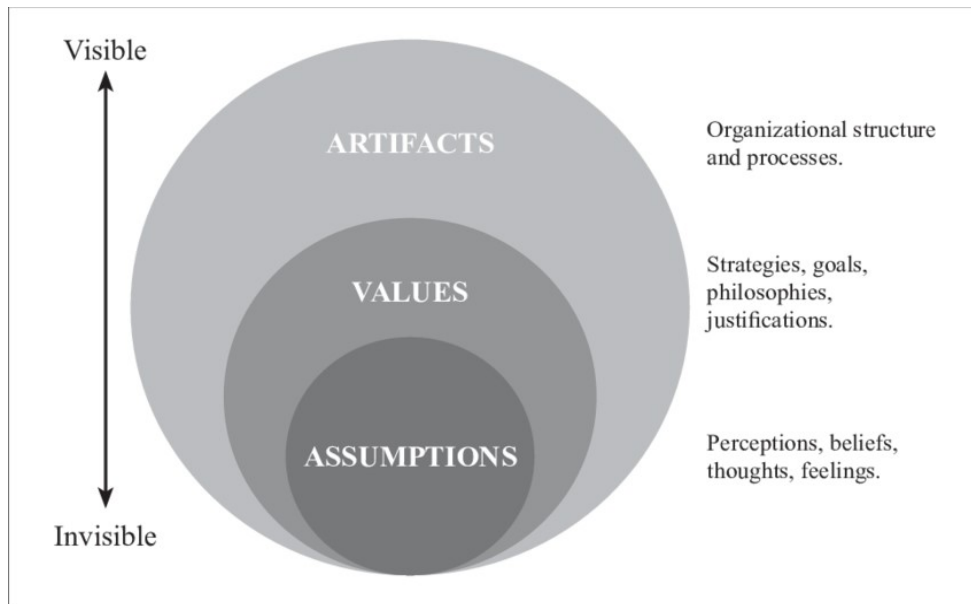
Figure 4 Schein's Multi-layered Organizational Culture Model (Schein, 2004)

i.   Artefacts

The artefacts in an organizational culture include any elements that are tangible, overt and verbally identifiable and which can be viewed and heard by people from outside that culture (Schein 2004). These elements include the organization's architecture, facilities, office furniture, dress code, employee behaviour, mission, vision, etc. All these elements represent the overall visible, perhaps unique, culture of that organization.

ii.   Values

The espoused values of the organization represent the second layer that sits beneath the artefacts layer. It is about how the employees represent their organization, often in their official philosophies, public identity statements, and collective thought process and attitude (Schein, 2004). An example of the espoused values is the organization's espoused mantra.

iii.   Assumptions

The shared assumptions constitute the third layer that comes beneath the espoused values. Although these assumptions have an impact on the organizational culture, they cannot be easily noticed or measured. They usually form the collective unconscious, taken-for-granted employee behaviours that are fed by the unconscious thoughts, beliefs, perceptions and feelings.

Having discussed the components of the organizational culture, the fundamental question remains as to how this culture changes. It is true that organizational culture has its own visible artefacts, but what is interesting is that changing them does not lead to a change in culture. Culture is deep and it usually "points us to phenomena that are below the surface, that are powerful in their impact but invisible and to a considerable degree unconscious" (Schein, 2004, p.8). Schein (2004) argues that focusing on the visible 'culture iceberg' at the expense of the less visible aspects of culture is what causes change efforts to fail.

In reality, what changes organizational culture is a change in the espoused values of the employees. This happens by 'discomforting' the old set of values (cf. Lewin's unfreezing stage) and by creating a new set of fresh values. The new values should be repeatedly reinforced so as to gradually become the new mainstream culture. Once the new values become integral to the everyday organizational culture, they start sinking into the collective unconscious thinking of the employees to form what Schein calls the basic assumptions. Schein believes that leaders are the real motors of change and that,

> The only thing of real importance that leaders do is to create and manage culture; that the unique talent of leaders is their ability to understand and work with culture; and that it is an ultimate act of leadership to destroy culture when it is viewed as dysfunctional" (2004, p.11).

According to Schein, leaders should focus on individual behaviour because it constitutes the collective organizational behaviour. Given the inherent difficulty in attempting to change culture and that culture does not change by directly changing it (Schein, 2004), leaders should initiate the process by changing the employee behaviour artefacts, i.e. how they go about doing their everyday work. This can be through focusing on solving problems and overcoming challenges by means of

creating a new set of work processes. This change in processes will help create new behaviour artefacts, which will ultimately lead to a change in how employees feel and think about their work. The gradual change in the collective organizational behaviour will lead to a change in the espoused values of the organization.

2.3.6 Evaluating organizational change models

Given the fragmentation of the literature on OCM (Kezar & Eckel, 2002), the lack of consensus on basic change processes (Stouten et al., 2018) and the paucity in change models for higher education (Torraco et al., 2005), there is a real need to find a unifying framework that can provide a common ground for evaluating the six reviewed change models so as to narrow the gap between these disparate approaches to change. It seems that Stouten et al.'s (2018) 10 evidence-based change principles, though not specific to the HE context, provide a reliable benchmark for assessing the effectiveness of the aforementioned change models. In addition to being practical and actionable and providing a comprehensive view of effective change management, these principles are backed by rigorous, empirical research spanning decades. This evaluation is intended to provide valuable insights into the best practices that can guide effective change management.

For ease of reference, two tables are created. The first one (Table 9) sums up the tenets of each of the six reviewed change models. The second table (Table 10) evaluates the models against Stouten et al.'s (2018) change principles.

Table 9 Organizational Change Models

Lewin 1951	Kotter 1996	Clark 1992	Clark 1998	Keller 2004	Schein 2004
Unfreeze Destabilize the equilibrium Create anxiety Increase the driving forces Decrease the inhibiting forces Create awareness through communication	Establishing a sense of urgency	Personnel core	Strengthened Steering Core	Mantra of Excellence and Quality Everywhere	Disconfirmation: anxiety and disequilibrium are needed to push individuals to seek change
	Creating a guiding coalition.	Program core	Expended development periphery	Addiction to Planning	
	Creating a vision for change.	Social core	Diversified funding base	Attention to Selection, Training & Rewarding	Cognitive restructuring: individuals change behaviours and restructure their thinking
Move Transition to a new state Communicate, educate & support Allow time for learning Ensure employees are ready to move	Communicate the vision.	Student subculture	Stimulated academic Heartland	Creation of a Distinctive Niche	
	Remove obstacles.	Ideology	Integrated entrepreneurial culture	Financial Wisdom	
Refreeze Reinforce, stabilize & solidify the new state Acknowledge & reward positive behaviour Analyse status of change & improve	Creating short term wins. Consolidate gains Anchoring change in culture			Marketing Oneself	Refreezing: individuals get used to the new behaviours and thinking, transitioning to a new organizational culture

Table 10 Evaluating Change Models against Stouten et al.'s Change Management Principles

PRINCIPLES	LEWIN 1951	KOTTER 1996	CLARK 1992	CLARK 1998	KELLER 2004	SCHEIN 2004
Diagnose Problem						
Assess Readiness for Change	√	√				
Implement Evidence-based Interventions	√				√	√
Develop Effective Leadership	√	√		√	√	√
Develop & Communicate Vision	√	√			√	√
Use Enabling Practices	√				√	√
Tap the Influence of Social Networks				√	√	
Assess Progress & Outcomes	√	√				
Promote Micro-Processes & Experimentation	√	√				
Institutionalize Change	√	√	√	√		√

Table 10 above shows some interesting discrepancies between the models in their applicability to the change principles. What follows is a discussion of each change principle and how it applies to the six reviewed change models.

i. Diagnose the problem

While the empirical literature on OC underscores the importance of diagnosing the problem prior to embarking on change (Stouten et al., 2018), the six reviewed change models seem to exhibit a complete negligence or, at best, show an implicit mention of this critical phase. Indeed, the importance of diagnosis lies in its ability to determine if change is really needed (Armenakis & Harris, 2009) and to identify a potential

obstruction that may impede change (Rafferty & Restubog, 2017). Given its importance in orienting the change process, the literature recommends that diagnosis be carried out meticulously to avoid bias and to ensure that all stakeholders' opinions are included.

ii.   Assess readiness for change

It seems that only two of the six change models include the principle of assessing readiness (see Table 9 above). Assessing readiness in an organization includes verifying whether the senior management is able to lead and maintain change and whether employees are in a position to be engaged in change. If employees are found to have a high level of stress, applying Kotter's (1996) strategy of creating urgency, for instance, may risk being counterproductive. Bordia et al. (2011) argue that employees can be affected by past change interventions, whether successful or otherwise. Hence, a previous successful change experience can be exploited to reassure employees and mobilize support. However, if the previous intervention was unsuccessful, it is crucial to differentiate the current one from its predecessor to avoid making employees apprehensive and doubtful (Rafferty & Restubog, 2017).

iii.   Implement evidence-based interventions

Stouten et al. (2018) argue that empirical literature suggests that three sources be consulted to ensure evident-based interventions to the diagnosed problems: (a) consulting experienced people within and outside the organization, who are familiar with the issues and who have working solutions to them; (b) seeking the views of affected employees and managers who have already grappled with the problems and who may have radical solutions; and lastly (c) consulting systematic reviews and meta-analyses of change interventions that have analyzed the same problems and provided solutions to them. In line with what Lewin (1951), Keller (2004) and Schein (2004) advocate in their models, the empirical literature suggests that, in order for interventions to be effective, a set of required skills among certain employees be developed, a reward and incentives system be in place, and a supportive change environment, not a coercive one, be nurtured (Bos-Nehles et al., 2017; Marin-Garcia & Tomas, 2016). Finally, it should be highlighted that full compliance with the essence of the intervention, not the formalities, is observed.

Despite the practical significance of identifying relevant interventions to the diagnosed issues in an organization, most of the reviewed models are largely silent on how to identify appropriate interventions. Where Clark (1992) and (1998) pinpoints the areas that need to be influenced to effect change (e.g. program core; social core), he does not mention how those specific areas can be improved. Despite his insistence on the need to 'remove obstacles', Kotter (1996) does not seem to be clear about the specific strategies of removing obstacles. However, while Lewin (1951), Keller (2004) and Schein (2004) do not specify evidence-based interventions to the diagnosed issues, they insist on educating and supporting employees during the change process, while not forgetting to highlight the powerful impact of rewarding good performance on maintaining the change momentum.

iv.   Develop effective leadership

The notion of leadership seems to be omnipresent in the six models, though explicitly as in Kotter (1996) and Clark (1992, 1998), and implicitly as in Lewin (1951), Keller (2004) and Schein (2004). The models with implicit reference to leadership associate leadership with the senior management, whose role is to initiate, lead and oversee change. However, this may not be the case in higher education where the systems are loosely coupled and where governance is participative and decision-making is collective (Kezar, 2001). Both Clark's (1992, 1998) models, for example, include strategies that draw on collective leadership: 'personnel core' and 'strengthened steering core'. Both strategies involve influential people who are charged to lead and monitor the change intervention.

Moreover, while Keller's (2004) model does not mention leadership explicitly as one of the strategies for successful change, almost all his strategies depend on a visionary leadership that embraces the mantra of excellence and high quality in all aspects of the university life. Although the democratic style leadership seems to influence group performance the best, Lewin (1951) acknowledges that the autocratic (authoritarian) and laisser-faire (delegative) styles of leadership have their own merits depending on the situation of the organization. Finally, while the centrality of leadership in driving change is inevitable, the emphasis on leadership becomes insufficient if the competencies of the leader are merely assumed, not intentionally developed (Schaubroeck et al., 2007). Moreover, it is argued that change does not just need generic leadership competencies; instead, change needs a range of change-related skills and capabilities (Anderson & Anderson, 2002).

v.   Develop & communicate vision

All the reviewed change models, except for Clark (1992), express the need to develop and communicate a vision, either explicitly or implicitly. Kotter (1996), for instance, explicitly mentions that change leaders have to first develop a compelling vision and then communicate it to all stakeholders. In the other four models, the notion of developing a vision is implicit. In Clark's (1998) model, for example, the vision is how to help conventional universities metamorphose into entrepreneurial institutions. As to Keller (2004), the leader's vision is to chase excellence and quality in all activities at the university. According to Stouten et al. (2018), although there is no disagreement in the empirical literature on the necessity of developing and communicating a change vision, what makes a compelling vision remains unclear and sometimes contradictory. Despite the fuzziness of what makes a compelling vision, the literature makes mention of the necessity to get feedback regarding the suggested vision from various stakeholders such as managers, employees, clients and other stakeholders. The literature also suggests communicating the vision through various channels such as meetings, media, and one-on-one discussions, while resorting to repetition and evidence to reinforce it.

vi.   Use enabling practices

To increase the success of the change intervention, a number of enabling practices are said to be helpful: goal setting, learning, involving employees, fairness and justice, and, lastly, transitional structures (Stouten et al. 2018). These can help the initiation of the change intervention and ultimately accelerate the change process. It seems that

only three out of the six reviewed models touch on all or some of these enabling practices. Lewin (1951), Keller (2004) and Schein (2004) seem to highlight the importance of setting goals, developing the employees' skills through targeted learning and building knowledge and change capabilities while experimenting with new routines and practices. Although Kotter (1996) and Clark (1992, 1998) do not seem to have highlighted all these enabling practices explicitly in their models, they seem to recognize the usefulness of getting some of the human resources ready to lead change through upskilling their capabilities, involving the majority of them to maintain change momentum, and monitoring the change process so as to modify and expand change as needed.

vii.　Tap the influence of social networks

Social networking is a powerful tool to leverage change (Stouten et al. 2018; Kunnari & Ilomäki, 2016, citing Rogers, 2003). It can be both within and outside the organization. Within the organization, networking with influential employees who can be used to urge the less motivated ones to join forces (Battilana & Casciaro, 2013). Change leaders can also network socially beyond the sphere of the organization to rally support (Battilana & Casciaro, 2012; Schaubroeck et al. 2007). Three of the reviewed models seem to touch on this change principle. Where Keller (2004) terms it as 'marketing oneself', Clark (1992) calls it 'social core' and in his later model (Clark, 1998) names it 'diversifying funding base'. To diversify funding, Clark (1998) advocates networking with influential individuals, groups or associations to support change financially.

viii.　Assess progress & outcomes

The eighth principle that can help make change successful is assessing progress and outcomes. This can be done thorough collecting feedback from different stakeholders. This assessment can evaluate the initial outcomes of the intervention so as to make necessary corrections and improvements (Wiedner et al., 2017). It is also important that assessment varies so as to gain a thorough and comprehensive analysis of the progress. For example, assessment can measure employee learning, and the degree of the implementation of the new practices, among other things. However, although assessing the progress and outcomes of change can be seen as straightforward, only two models of the six reviewed ones include it. Lewin (1951) highlights assessment in his 'refreeze' stage by insisting on analysing the status of change to close gaps and improve deficiencies. Kotter (1996), though not explicitly mentioning assessment of the change intervention, touches on it in his seventh step of 'consolidating gains'. The latter involves identifying the small gains achieved during the change process for consolidation and improvement purposes.

ix.　Promote micro-processes & experimentation

Stouten et al. (2018) advocate that implementing incremental change or small-scale change(s) is fundamental to making effective change. They argue that incremental change allows employees to experience how the change is affecting their operations and systems. It also allows them to give feedback to improve change or even propose more small-scale changes. Moreover, experimenting small-scale changes usually eases the atmosphere and allows employees to make mistakes and learn by doing. Although this may sound prolonging the change process, the literature highlights the

criticality of considering this change principle in a context such as HE (Kezar, 2009), where power is shared and resistance can pose a challenge. Change is a process, not an event and that process has to unfold naturally and incrementally, not to fatigue employees or stress them out. Despite the importance of this principle, only three of the reviewed models make mention of it. Lewin (1951) and Schein (2004) recognize that changing behaviours and beliefs takes time, recommending that ample time be allowed for employees to learn how to move toward change and be ready to transition to the new state of affairs. Although Kotter (1996) warns against allowing too much complacency in the organization— hence his advocation of creating a sense of urgency to mobilize change— he also cautions change leaders to declare victory too soon. He deems creating short-term wins helpful in reassuring employees, maintaining change momentum and making course correcting interventions.

x. Institutionalize change

This change principle is about integrating change into the management system and culture of the organization in order to routinize the new practices and beliefs, not only among the change supporters but also with those who were not initially supportive of the change (~~Kim et al., 2011~~). One way of reinforcing the institutionalization of change is through the enabling structures, that is taking the learning process to a new level of sophistication while continuing to educate the newcomers (Stouten et al., 2018). Given the centrality of this principle, all the six reviewed models make it part of their change process, though not always explicitly. Keller (2004), for instance, does not specifically mention institutionalization as one of his change strategies, but his first and third strategies ('mantra of excellence and quality everywhere', and 'attention to selection, training and rewarding', respectively) are nothing but an earnest attempt at ensuring that the new institutional culture imbibes the envisioned mantra of excellence and quality in all aspects of the institution.

In conclusion, it has become clear from the evaluation of the six change models that there are some huge discrepancies between them, especially in their alignment (or misalignment) with Stouten et al.'s (2018) ten fundamental, empirically-proven change management principles. It seems that three change models— Lewin (1951), Kotter (1996) and Schein (2004)— show more alignment with the Stouten et al.'s (2018) principles of OC compared to the models proposed by Clark (1992, 1998) and Keller (2004). This could justify why the first three models are used widely across diverse contexts, including HE. For instance, Lewin (1951) and Kotter's (1996) change models have been recommended for use in colleges and universities, as noted by Vlachopoulos (2021).

However, the misalignment of the change models that originated from empirical case studies in HE can evidence the gap in the literature that this study sought to bridge— how to actually navigate and execute change in HE. This said, it should be noted that as Stouten et al.'s (2018) change principles are not developed primarily for HE, alongside their focus mainly on planned change, it is more pragmatic to synergize these principles with Kezar's (2001) '17 principles for successful change'— being developed for the distinct and intricate landscape of HE. This synergy of principles will serve the purpose of enriching the discussion of the findings in the Discussion chapter.

2.4   Summary

Given the fragmentation of the literature on OC in higher education (Kezar & Eckel, 2002), the lack of consensus on the basic change processes among scholars (Stouten et al. 2018) and the paucity of change models in higher education on how to enable actual, meaningful and sustainable change (Torraco et al., 2005), this chapter has sought to deepen understanding of the complex phenomenon of OC in HE, focusing on the current gaps in the change models and how to potentially close them.

To position the study, the chapter begins with defining OC and OCM, while highlighting the common errors that leaders usually make when managing change (Kotter, 1996). This is followed by discussing the main change factors driving change in HE, while focusing on globalization as one of the most influential factors, both worldwide and in Oman. As resistance is one of the main change blockers, its causes and manifestations are discussed. Solutions to mitigate resistance particularly in HE are also explored (Chandler, 2010).

To gain a more nuanced understanding of OC, the literature review explored the main approaches to OC and the main theories of change that are applicable to the HE context. Given the uniqueness of this context (Kezar, 2009; Manning, 2012), the chapter sought to explore the unique features that distinguish higher education from other organizations, while highlighting the main factors that can facilitate change in this sector. The review also highlighted Kezar's (2001) 17 key principles that can help make change interventions in higher education more successful.

The last section of the review examined six seminal change models, highlighting their merits and downsides. The models were also evaluated against Stouten et al.'s (2018) empirically-proven change principles to check their robustness and identify potential gaps. Having completed one of the major parts of this thesis— the literature review, what follows is to explore the methodology and methods this study adopted to achieve its aim and objectives.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The design and methodology chapter is one of the most important chapters in a research thesis. It sets out to outline the researcher's ontological and epistemological positioning, research strategy, data collection and analysis methods, participant sampling, ethical considerations and ways of establishing research validity and authenticity. The ontological and epistemological conceptualization of the researcher characterizes the chosen paradigm the study adopts. Such paradigm should be in consonance with the aim of the study and the research questions to ensure feasibility of the study and validity of findings.

This chapter discusses the design and methodology of this study and justifies the choices made. In addition to the introduction and summary, the chapter comprises seven sections. The first section (3.2) delves into the epistemological considerations underpinning this study and presents case study as a research strategy. As a number of misunderstandings have surrounded case studies, these are pointed out, discussed and invalidated. The second section (3.3) goes on to discuss the mixed methods approach. However, because this study is predominantly qualitative, but includes an embedded quantitative inquiry, the discussion revolves around the embedded design method only, and not all the four known mixed methods designs. This section is intended to shed some light on this particular design and its variants as it underpins the theoretical framework of this study.

The third section (3.4) deals with the selection of participants and elucidates the position of the researcher as emic, or insider, while maintaining an objective distance to ensure the credibility of the findings. The fourth and fifth sections (3.5; 3.6) centre on data collection and data analysis, respectively and explicate how data collection and analysis are handled in detail. As ethicality and validity are key concepts for the success of any given research, the six and seventh sections (3.7; 3.8) are devoted to ethical considerations and validity, respectively. The chapter concludes with a summary to wrap up the major discussions and thoughts.

3.2 Choosing an appropriate methodology

This section discusses the choice of the methodology through the illustration of the researcher's epistemological reflections, his choice of the case study approach and the clarification of the main misconceptions surrounding case studies.

3.2.1 Epistemological considerations

The researcher believes that research should be construed as an argument rather than a search for an, or *the*, absolute truth. This argument is normally shaped by the researcher's ontological stance which feeds into their epistemological beliefs, which, in turn, determines their axiological values. The researcher's epistemological beliefs regulate the choice of the research paradigm which settles the researcher on a specific research methodology (Doyle et al., 2009, citing Hanson, et al., 2005). It is argued that well-grounded research should be based on a certain paradigm that is justifiable and

appropriate to the topic under study. Morgan describes a paradigm as "the set of beliefs and practices that guide a field" (2007, p. 49).

The researcher's paradigm or worldview is specifically determined by their belief in a positivist (quantitative) paradigm or a constructivist, also called interpretivist, (qualitative) paradigm. These two paradigms are said to be incompatible with each other because they hold antithetical worldviews of the ontological and epistemological traditions (Creswell, 2013; Creswell & Clark, 2011; Lanham, 2006). Because of this dichotomous ideology, researchers have to choose between the positivist or interpretivist paradigms. Positivism argues that there is only one reality and that this reality could be reached through objective measurement by means of quantitative analysis. In a positivist worldview, the researcher is claimed to be unbiased due to maintaining an independent and objective attitude towards all aspects of his study. To achieve this, the researcher posits some hypotheses which are later tested through the collection and analysis of large samples of data.

At the other end of the spectrum sits constructivism which has emerged as the opposite of positivism. Constructivist or qualitative research is another way of inquiry that seeks to examine the context of human phenomenological experience (Schwandt, 2000). This relatively new trend, or qualitative research, is also referred to as the post-positivist, constructivist, interpretivist or naturalist approach. The constructivist approach proposes that there are multiple realities and therefore multiple interpretations can result from a given inquiry of those realities (Appleton & King, 2002). The constructivist paradigm tends to depict reality (-ies) through the detailed description of the lived experience(s) of the very people involved in the events.

Although conducted on a smaller sample, the main aim of the interpretivist inquiry is to gain a richer and deeper understanding of the lived experiences retrospectively. This constructivist researcher's close proximity to or immersion in the research is claimed to be ground for subjectivity and bias. Therefore, logical positivism is assumed to be objective whereas the interpretivist inquiry is claimed to be subjective. Doyle et al. (2009), however, oppose the claim of subjectivity levelled at the constructivist approach, stating that no research endeavour can be free from some kind of bias or value judgement, adding that an "attempt to bracket values" only produces more insidious bias (citing Howe, 1985, p.12). The researcher of this study believes that a detached approach (positivist) may well be unable to capture the minute details of the phenomenon under study and hence may fall short of depicting the true reality as it was truly experienced.

The view that quantitative research is an objective way of deduction whereas qualitative research is a subjective process of induction is very simplistic (Morgan, 2007). Recently, however, the literature has been replete with debates about the possibility of combining the two approaches into a mixed methods approach (Howe, 1985; Smith 1986; Yanchar & Williams, 2006; Bryman, 2007; Morgan, 2007, Molina-Azorin & Fetters, 2019). Flyvbjerg argues that the dichotomy between the qualitative and quantitative methods is specious and is "an unfortunate artefact of power relations and time constraints in graduate training" (2014, p.241). Sandelowski calls the over-exaggerated debate concerning qualitative and quantitate approaches as 'methodological acrobatics' (2001, p.335). The researcher believes that both quantitative and qualitative research methods have their own undeniable merits and

they both complement, rather than oppose, each other. As research is all about seeking the 'truth' about a particular phenomenon or phenomena, all that should matter is relevance of the research method to the research questions and the context of the study. Combination, and not separation, of both methods, when appropriate, would be ideal to harvest the merits of both methods. This view is corroborated by Flyvbjerg (2014) who emphasizes that good social science is logically against the either/or binary opposition and more into both/and. He aptly argues that good social science should supposedly be "problem driven", not "methodology driven", in that social science should be more concerned about the method that best suits the research questions (2014, pp.241-2).

Given the above discussion, the researcher of this study believes that his research would benefit from the combination of the qualitative and quantitative approaches, though the bulk of the study is qualitatively driven. The inclination towards the qualitative approach is not a choice as much as it is a necessity to attain an in-depth understanding of the phenomenon of organizational change within a university. This requires tapping into the perceptions and views of the senior and middle management that have either engineered or executed change. These views and perceptions would remain inaccessible without the resort to probing interview questions centred on the 'why' and 'how'. The study, however, would not have been complete without involving faculty and students, who are two main constituents within the studied context. Given the substantial number of these participants, it becomes imperative to use questionnaires to reach them, hence the embedding of the quantitative inquiry alongside the primary qualitative investigation.

3.2.2 Case study as a research strategy

This research is an empirically exploratory investigation, focused on a single, in-depth case study. It is holistic and not embedded, in that it looks at a university as a whole, not specific sections or units across multiple universities. Before further elaboration on case studies, it is worth establishing a clear definition of what constitutes a case study. Upon examining the literature, settling on a single definition seems to be challenging, as case studies have been given multiple interpretations. According to Robson, a case study is "a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real-life context using multiple sources of evidence" (1993, p.146).

The unit of investigation for a case study can vary from an individual to a group to an organization. Typically, case studies focus on "an *individual* representative of a group (e.g. a school administrator), an organization or organizations, or a phenomenon (e.g., a particular event, situation, program, or activity)" (Hancock & Algozzine, 2017, p.15). Whichever unit of investigation case studies take, they are commonly regarded as either retrospective or prospective. Within the said broad categorization, case studies, Merriam (1998) argues, fall under three types: descriptive, interpretive or evaluative. A combination of all three types in a case study would make it really thorough and highly informative. As to where from a case study derives its data, Zucker (2009, p.2, citing Yin, 1994) argues that case studies largely derive data from "documentation, archival records, interviews, direct observations, participant observation and physical artefacts".

Definitions aside, what is most important is what makes a case study successful. Zucker (2009) argues that a successful case study must involve five components, i.e. the research questions, a plan of action or propositions, units of analysis related to the research questions, a clarification of how data is linked to the action plan, and metrics to interpret the findings. What makes a case study even more successful, Zucker (2009, citing Feigin, Orum & Sjoberg, 1991) adds, is its rigour— not purpose, unit of analysis or design. Nevertheless, Zucker (2009) argues that multiple case studies may dilute the rigour of the case.

However, Stake (1995) holds a different opinion arguing that the number and type of case studies should be determined by its purpose. For example, an instrumental case study is used to examine an issue, whereas an intrinsic case study aims at gaining thorough understanding of a given phenomenon. Notwithstanding whether the case study is single or multiple, what really matters, Yin (2003) argues, is that the case study method is an excellent choice for probing a phenomenon, especially if the 'how' and 'why' questions are employed. A similar opinion is expressed by Ridder who believes that the real benefits of a single case study particularly come from the detailed description and analysis of 'how' and 'why' things happen (2017, p.282).

Having highlighted the multiplicity of definitions and the factors that make a case study successful, the question remains as to why choose a case study strategy in the first place. To answer this question, it might be illuminating to draw on Zucker's statement:

> [T]here are many considerations prior to embarking on case study method but at the onset it should be clear that no other descriptive method is possible or will get the level of description the researcher is looking for, except case study method" (2009, p. 3).

The researcher believes that the case study method is the only way to gain in-depth and multi-sided understanding of the phenomenon of change in a given HEI. Understanding the insights of how the change process has been initiated, implemented and institutionalized, alongside comprehending the strategies used and their impact on the institutional culture would have remained elusive without the in-depth individual and focus group interviews offered by the current case study.

However, a pertinent question arises concerning the extent to which the studied university is truly representative. Organizational change is relatively new to the higher education sector and it is even more so in higher education in the Arab world, particularly Oman, whose higher education is still in its developmental stages. The researcher believes that this case study is a representative case in point for a number of reasons. This university holds the distinction of being the first university to gain rigorous national and international accreditation. It also stands as the only university in Oman to receive a 5-star rating as a higher education institution, ranking fifth in the Gulf Cooperation Council (GCC) and ninth among Arab World universities in 2021, according to the QS Intelligence Unit, Quacquarelli Symonds, UK. Moreover, it is ranked among 121 universities in the QS World ranking for the Arab Region in 2021.

Lastly, it is worth highlighting that case studies are needed not only to carry out research and draw conclusions but also to ensure the richness of a given discipline. In this regard, Flyvbjerg confirms that "a discipline without a large number of thoroughly executed case studies is a discipline without systematic production of exemplars, and that a discipline without exemplars is an ineffective one." (2014, p.

242, citing Kuhn, 1987). However, despite the invaluable utility of case study research, the literature is replete with several misunderstandings. As this research is a case study, it becomes imperative to demystify these misunderstandings so as to clear uncertainties and rebut misconceptions. What follows is an attempt in this direction.

3.2.3 Clarifying misunderstanding about case studies

A case study is an in-depth study of a particular phenomenon rather than a sweeping statistical survey. What constitutes the basis of case studies is the good selection of the subject and relevance of the case to the issue discussed. Indeed, the deliberate isolation of a particular situation, study group or individual case and the in-depth examination of the case is what yields interesting results that can lead to new insights. Flyvbjerg argues that "[c]oncrete experiences can be achieved via continued proximity to the studied reality and via feedback from those under study" (2014, p.223). It is important to plan and design the study well and make sure that the collected data is relevant and sufficient. However, while case studies are argued to provide a more realistic response than a purely statistical survey, some argue that because case studies work within a narrow scale, their results cannot be extrapolated to fit an entire population or ecosystem. Flyvbjerg (2014) argues that because of some misconceived common wisdom, five misunderstandings have long been rehashed in the literature, as shown below:

i.   general context-independent knowledge is more valuable than concrete, context-dependable knowledge;
ii.   findings from case studies cannot be generalized;
iii.   case studies are useful for making hypotheses, but not for testing them;
iv.   case studies have a bias towards verification; and
v.   case studies cannot be summarized.

These misconceptions purport that the fundamental concerns about case studies are their theorization, reliability and validity, that is the very status of case studies as a scientific method (Flyvbjerg, 2014). What follows is an attempt at invalidating these misconceptions.

The first misunderstanding attached to case studies purports the superiority of general, context-independent knowledge over concrete, context-dependent knowledge. Drawing on Bourdieu's (1977) concept of "virtuosos" and on Dreyfus and Dreyfus' (1986) similar notion of "true human experts", Flyvbjerg argues that case studies produce the kind of concrete knowledge that "research on learning shows to be necessary to allow people to develop from rule-based beginners to virtuoso experts" (2014, p. 221). He contends that personalized and concrete experiences are not only essential but also unattainable except "via continued proximity to the studied reality and via feedback from those under study" (2014, p. 223). Moreover, Campbell acknowledged that he was once mistaken about case studies and that his work has gone through "an extreme oscillation away from [his] earlier dogmatic disparagement of case studies" (1975, p. 179, cited in Flyvbjerg, 2014, p. 223).

The second misconception is that findings from case studies cannot be generalized, making their contribution towards scientific research very limited. Generalization is "considerably overrated as the main source of scientific progress", argued Flyvbjerg

(2014, p. 226). Kuper and Kuper contend that "More discoveries have arisen from intense observation than from statistics applied to large groups" (1985, p. 95, cited in Flyvbjerg, 2014, p. 226). In the same vein, Galileo's rebuttal of Aristotle's Law of gravity was a mental and practical case study that was not supported by statistical data and yet managed to change the world (Flyvbjerg, 2014). What really matters when choosing a case study as a research method is the strategic choice of the case. A well-chosen case study coupled with an in-depth investigation and insightful findings can lead to generalizability. Yet, whether generalizability for a case study happens or not, there is no doubt that the insights gained from a pertinent case study are indispensable and can be life-changing for individuals, groups or organizations.

The third misconception claims that case studies are useful for developing hypotheses, but not for testing them. This misunderstanding stems from the first misconception about the non-generalizability. Eckstein argues that case studies "are valuable at all stages of the theory-building process, but most valuable at that stage of theory-building where least value is generally attached to them: the stage at which candidate theories are tested" (1975, p.80, cited in Flyvbjerg, 2014, p. 229). Interestingly, atypical or extreme case studies disclose more information because "they activate more actors and more basic mechanisms in the situation studied" (Flyvbjerg, 2014, p. 229). Moreover, it is worth noting that instead of simply describing the symptoms and frequency of a phenomenon, there is added value in investigating the underlying causes and subsequent consequences.

The fourth misunderstanding suggests that case study research has a bias towards verification. This comes from the common misconception that case study researchers have a tendency towards asserting their preconceived beliefs because of close proximity to the researched topic. This bias undoubtedly compromises the scientific integrity of the research. Diamond holds the same view against case studies, contending that case studies have a "crippling drawback" for not applying "scientific methods", that is the lack of detachment from the subject of study (1996, p.6). Campbell (1975) and others, however, have shown that this critique is erroneous because qualitative inquiry case studies have their own rigour, which is as stringent as the rigor of the quantitative methods. Subjectivism and bias, Flyvbjerg (2014) argues, apply to all research methods with a varying degree, not just case studies and other qualitative methods.

The fifth misunderstanding revolves around the argument that it is impossible to summarize a case study into a general proposition or theory. Typical case studies, Flyvbjerg (2014) argues, often examine and report the intricacies and ambiguities of real phenomena, which means that they entail a great deal of indispensable narrative in them. These detail-filled narratives tend to defy summarization (Benhabib, 1990; Mitchell & Charmaz, 1996; Roth, 1989; Rouse, 1990; White, 1990, cited in Flyvbjerg, 2014). However, this defiance should not be seen as a shortcoming; instead, it is a compelling evidence of the depth and richness inherent in case studies, with all the insights they have to offer. In addition, Peattie argues against summarizing dense case studies, confirming that, "[i]t is simply that the very value of the case study, the

contextual and interpenetrating nature of forces, is lost when one tries to sum up large and mutually exclusive concepts" (2001, p.260). Peattie (2001) also asserts that dense case studies are more thought-provoking for social theory than mere factual findings or the overarching generalizations of theory. Interestingly, Flyvbjerg advises researchers to shy away from wearing the hat of an omniscient narrator or summarizer when dealing with a case study. Instead, researchers should allow the story to unfold as naturally as possible in its minutest details and fullest diversity, even when conflicting, to allow the reader to have a quasi-first-hand experience of its multi-sidedness and multi-dimensionality (Flyvbjerg, 2014 p. 238).

To conclude, case study is one of many research methods that has its pros and cons. The most important thing for a researcher is to verify which research method best answers his or her research questions and makes research solid. What is intriguing about case study research is that while the statistical method tries to prove or disprove a hypothesis, case studies do something different; they probe the researched subject with the intention of uncovering new insights and directions. Because they investigate real life situations and take the views of personas directly related to the events as they happened, case studies are indispensable for research (Flyvbjerg, 2014, p. 235). Even single case studies can be of great importance. Ragin (1992) argued that disparaging single-case studies for being less valuable than multi-case studies is wrong (cited in Flyvbjerg, 2014). In fact, even single case studies, Ragin argues, "are multiple in most research efforts because ideas and evidence may be linked in many different ways" (1992, p. 225, cited in Flyvbjerg, 2014, p. 235). Arguably, it is good to conduct a case study and synergize the potential of the qualitative and quantitative approaches to add to the study's more validity and rigour.

3.3 Mixed-methods Approach

As noted by McLean, "the movement towards mixed methods has been gaining steam since the early 1970s" (2006, p. iii). By the end of the 1980's, the mixed-method methodology started to take shape and this was after the amalgamation of the Evaluation Network and the Evaluation Research Society to form the American Evaluation Association in 1988 (McLean, 2006). Ever since, the mixed methods approach has gained ground, focusing on collecting, analysing and merging data using quantitative and qualitative data. Whereas the statistical quantitative inquiry seeks breadth of understanding, the interpretive qualitative inquiry looks for depth of understanding. The combination of these two methods brings together breadth and depth, which can remedy the deficiencies inherent in either of the methods (Robins, et al., 2008). Tashakkori and Teddlie (2003) confirm this when they state that the quantitative method is used "to test and confirm hypotheses based on an existing conceptual model and obtain breadth of understanding of predictors of successful implementation'' and that the qualitative method is used to probe into the 'how' and 'why' of what happened, hence getting to the bottom of things (cited in Palinkas, et al. 2011, p.44). Likewise, Greene emphasizes that "a mixed method approach offers greater possibilities than a single method approach for responding to decision makers agenda, as well as to the interests of other legitimate stakeholders" (2009, p.209).

However, although the mixed methods approach seems to be a more viable option for many researchers, it appears controversial for others. Some scholars (e.g. Howe,

2004; Denzin & Lincoln, 2003) believe that this mixing is nothing but another way of relegating the qualitative approach to a secondary or auxiliary position vis-à-vis the statistically proven quantitative method. Critics of the mixed methods argue that the mixing reinforces the secondary status of the qualitative interpretive approach. This controversy, the researcher believes, comes from the fact that the qualitative and quantitative approaches are still seen as antagonistic, not as complementary. This complementarity does not necessarily mean giving equal status to both methods. Rather, complementarity means that one method is at the service of the other, in what is known as embedded designs of the mixed methods approach. What comes next is an explanation of the different types of the mixed methods approaches.

3.3.1   Types of mixed methods designs

There are four major types of mixed methods designs: Triangulation Design, Embedded Design, Explanatory Design, and Exploratory Design (Creswell & Clark, 2007). As the blending of methods in this research aligns with the embedded design model, the ensuing discussion centres on this model and its variants to the exclusion of the other three. This exclusion is intended to make the discussion relevant and to the point.

3.3.1.1   The Embedded Design

The Embedded Design is another mixed methods approach that uses one dataset to serve a secondary or supportive role to the primary data collection and analysis method (Creswell et. al., 2003, cited in Creswell & Plano Clark, 2007). The logic behind this design is that different research questions require different data collection methods and, therefore, one data type falls short of doing the job on its own. This design is particularly useful when a researcher needs to embed a qualitative element into a primarily quantitative design, or vice versa. For example, quantitative data can be embedded within a qualitative interpretive approach, as is the case for a phenomenology design, or qualitative data within a quantitative statistical approach, as in an experimental design. This means that both quantitative and qualitative data should be collected but one data type should be supplemental to the other. The embedded design can be a one-phase or two-phase approach, and the data can be used to answer different research questions (Hanson et al., 2005, cited in Creswell and Plano Clark, 2007) (see figure 5 below).
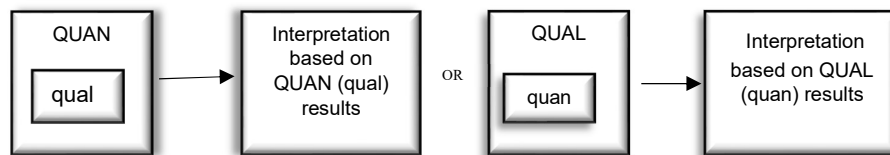
Figure 5 Embedded Design (Creswell & Plano Clark, 2007)

Creswell and Plano Clark (2007) mentioned two variants of the embedded design, although more exit. These are the experimental model and the correlational model. The experimental model tends to embed qualitative data within an experimental design, thus giving primacy to the quantitative, experiential methodology (Creswell & Clark, 2007). This design can be either a one- or two-phase approach, depending on the timing of the intervention, that is embedding the qualitative element during or after the intervention. The one-phase approach is called the concurrent nested mixed

methods design (Creswell, et al., 2003, cited in Creswell & Plano Clark, 2007). The sequential approach, however, uses a two-phased approach, either before or after the intervention. Either of the two phases can be chosen depending on the objective the research sets out to achieve. If the researcher needs qualitative data before the intervention to decide on how to carry out the intervention or to select potential participants or to develop an instrument, then the qualitative method of collecting and analyzing data should go first. If, however, the researcher needs to further explore or expand on the results of the intervention, then the qualitative study should be left to the second phase (see figure 6 below).
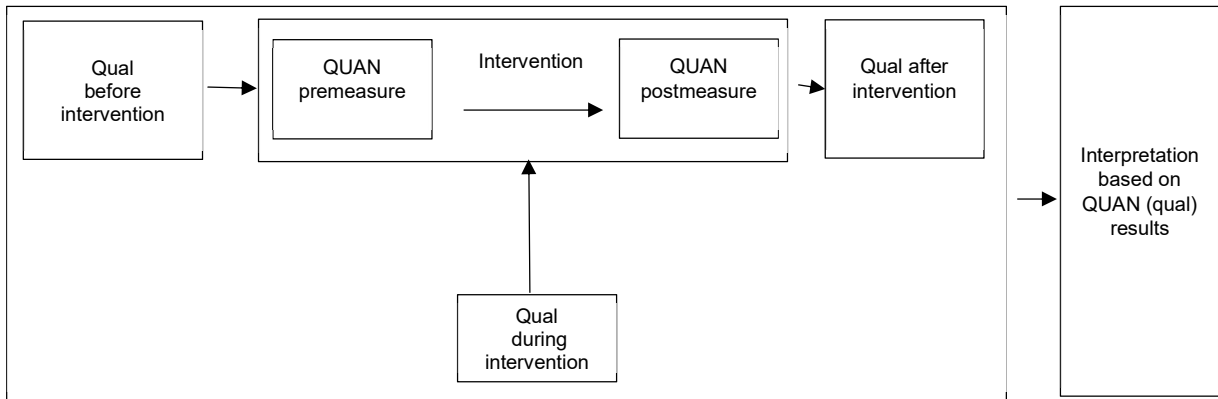
Figure 6 Embedded Design: Embedded Experimental Model (Creswell & Plano Clark, 2007)

The correlational model is another embedded variant that gives dominance to the quantitative method, with the qualitative method being embedded. In this design, researchers collect correlational qualitative data to probe how and why a phenomenon played out the way it did (see figure 7 below).
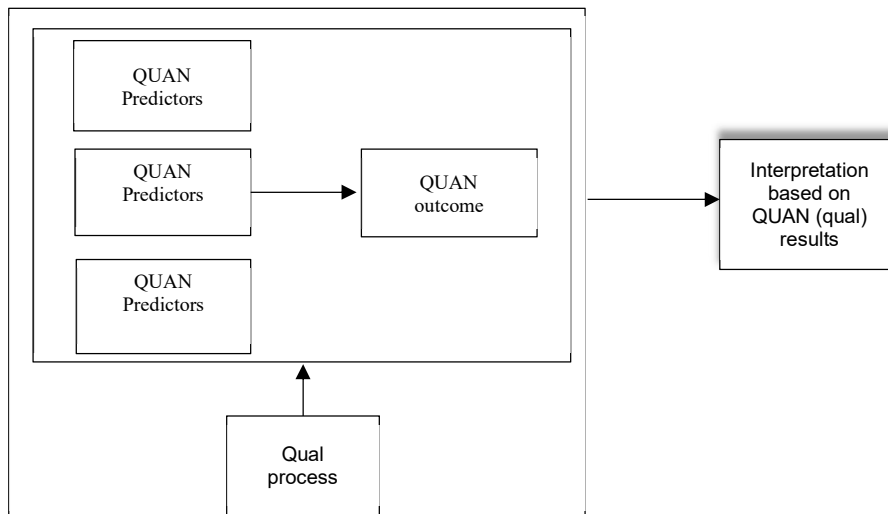
Figure 7 Embedded Design: Embedded Correlational Model (Creswell & Plano Clark, 2007)

Unlike the formerly mentioned two quantitative-dominant variants, the embedded design has a qualitative-dominant variant. This primarily qualitative variant embeds some quantitative data in a supplementary role to enrich the description of the sample participants. The sequential quantitative data may be used prior to the intervention to

shape the intervention, develop an instrument, or perhaps select participants; or after the intervention to further explain results or elaborate on the experiences of the participants (Creswell & Plano Clark, 2007). In this case, the predominant qualitative method guides the entire project, with the quantitative data assuming a secondary role while the interpretation is qualitatively led (Lieberman, 2005). The research begins with the predominant qualitative phase, then follows this up with the secondary quantitative phase. This design is usually used to "confirm, cross-validate, or corroborate findings within a single study", (Creswell, Plano Clark, Gutmann, & Hanson, 2003). Creswell, et al., (2006) argue that qualitatively driven mixed methods studies have the potential to better capture the complexity of some educational and social issues.

The embedded design has its own strengths and challenges. The strengths are as follows:
- There is usually no sufficient time and resources to do a fully-fledged extensive quantitative and qualitative study, hence the embedded approach.
- The embedded design is manageable within a certain limit of time.
- It can be appealing to funding agencies because of the predominant quantitative aspect—more trusted by them.

As to the challenges, Creswell and Plano Clark (2007) mention the following:
- The embedded design researcher must have a good reason for choosing which method as supplemental.
- It can be difficult to integrate findings of the two approaches if the two methods addressed different questions.
- Embedding quantitative data within a largely qualitative design is not very frequent
- In an experiential model, the reason to embed qualitative data and when to embed them is of high important and should be well thought of from the start.
- In the before-intervention approach scenario, there should be a good correlation between the qualitative result and the quantitative phase. Without this a priori correlation, the qualitative data may not be relevant.
- In the scenario of a during-intervention approach, the researcher needs to be aware of the potential bias during the qualitative data collection, which may affect the outcomes of the embedded experimental mode study.
- In a scenario of an after-intervention experimental mode approach, a decision has to be made regarding which aspects of the experiment should be explored further and which participants should be selected to ensure good results.

3.3.2 Choosing an appropriate research method

The aim of this study was to investigate the process of change within a university in Oman that underwent significant transformations and rose to distinction. This investigation delved into the initiation, implementation and institutionalization of change, exploring its diverse implications on the institutional culture. To achieve this aim, the study put in place four research questions and embraced a mixed methods approach, with the qualitative inquiry being primary and the quantitative one secondary. While opting for a single method approach, either qualitative or

quantitative, requires justification, combining both methods necessitates even more justification (Creswell & Plano Clark, 2007).

Before justifying the rationale behind using the mixed methods approach in this study, it is worth mentioning the reasons that usually drive researchers to adopt mixing methods. A five-year long study conducted by Palinkas et al. (2011) examined the literature and found that researchers use mixed methods for five reasons. What follows is a brief overview of these five reasons, followed by identifying the reason behind adopting the mixed methods approach in this study.

According to Palinkas et al. (2011), researchers adopt mixing methods for several reasons. One such reasons is the employment of the "quantitative methods to measure intervention and/or implementation outcomes and qualitative methods to understand process" (Palinkas et al., 2011, p.48). Another reason for mixing methods is to carry out both exploratory and confirmatory research. The qualitative method is known to be more suitable for exploration while the quantitative method is more rigorous for confirmation. A third reason is "to examine both intervention content and context" (ibid. p. 49). The qualitative method is found to be useful in understanding the context, whereas the quantitative method is helpful in gauging the intervention content and outcomes. The fourth reason has to do with the need to include the perceptions and stances of key stakeholders. It is the qualitative method that gives voice to the key participants through the expression of their viewpoints and perceptions (Sofaer, 1999, cited in Palinkas, 2011). Lastly, mixing methods is found to be used for compensation purposes, that is one method makes up for any potential inaccuracies or lacunae left behind by the other method.

In this study, the use of the mixed methods approach corresponds with the second reason mentioned above. To elaborate, the qualitative method was employed to explore the perspectives and viewpoints of such key stakeholders as the senior and middle management personnel— regarded as the architects of change in the university. This exploration was deemed incomplete without corroboration from the other two stakeholders who were influenced by the change process— staff and students. However, conducting interviews with scores of staff and students was impractical, which led to the adoption of the surveys as a quantitative instrument. This instrument provided an opportunity for triangulation and validation of findings garnered from the other qualitative instruments. Overall, a combination of document analysis, individual and focus group interviews and questionnaires were utilized as instruments to collect comprehensive and in-depth insights from the narrative of the transformative journey the university in question went through.

In order to explore all aspects of the change process, the study drew on four questions. Addressing the first question that revolved around exploring the initiation and execution of the change process at the university necessitated the use of three qualitative instruments: core documents, individual interviews with the senior management, and focus group interviews with the middle management (more details about participants will come under Section 3.4 below). Given that the first question is fundamentally exploratory in nature, the employment of interviews and document analysis was indispensable. The primary aim of the first question is not to gain a numerical verification or justification of the change process, hence the use of the qualitative method.

The second research question, aiming at unveiling the change strategies used to enact change, combined the use of core document analysis, semi-structured, in-depth individual and focus group interviews. However, the third research question did not need to follow either a qualitative or a quantitative method. It only sought to juxtapose the change strategies employed by the university with those expounded in the literature review chapter. The aim of the question was to determine whether the university utilized the same change strategies as established in the literature or potentially utilized new strategies that could be more suitable to a local Arab-world context.

As most change models, including Schein's (2004), highlights the centrality of culture in any change enterprise, the fourth research question explored whether the change has influenced the institutional culture and whether that influence has gone beyond the 'artefacts' layer, infiltrating into the 'values' layer and onto the 'assumptions' layers (refer to the discussion of Schein's model in Section 2.4.4 in the literature review above). As the cultural aspect was not very evident in the documents, there was a real need to explore this question in the interviews with the senior and middle management. Moreover, as faculty and students are part and parcel of the cultural constituency of the university, exploring their views and thoughts about the change was much needed. To reach out to the staff and students, two surveys were developed and addressed to them via their official email accounts (more details will come under Section 3.5 below).

Finally, according to Creswell and Plano Clark (2007), the use of a mixed methods approach necessitates making three decisions. The first is whether to conduct the qualitative and quantitative inquiry concurrently or sequentially. The second involves determining which approach is primary and which secondary. The third decision requires deciding which research components should be involved in mixing. As this study was predominantly qualitative, the quantitative inquiry was given a secondary role. As the qualitative and quantitative methods were not dependent on each other, they were conducted concurrently, with the quantitative inquiry meant to supplement and validate the qualitative one. While the interviews were taking place, the researcher requested the research centre at the university to circulate the surveys to all faculty and students via the official email system. As is the custom at the university, the research centre recirculated the same surveys encouraging those who had not responded initially. However, as is often the case with surveys, the turnout was not very impressive.

3.4 Selection of participants

The selection of a well-representative case study is not sufficient to ensure the success of the study. Equally important to the robustness and validity of the study is the meticulous selection of participants. According to Wierma (2000), 'good' respondents are ones that are well-informed about the researched area, approachable and readily available. This study used purposive sampling (Merriam, 1998) to select individuals or focus groups that are most knowledgeable about the change process and its cultural implications. Unlike probabilistic or random sampling which seeks to ensure generalizability of findings, purposive sampling is a qualitative technique that is commonly used to identify truly representative cases when limited resources are available (Patton, 2002).

Applying purposive sampling to the qualitative inquiry in this study led to the identification of two categories of respondents, i.e. the senior and middle management. Individual interviews were held with the senior management personnel, comprising a total of eight members: Vice Chancellor (VC), Deputy Vice Chancellor (DVC), college deans (four members), dean of the Department of Admissions, Registration and Student Affairs (DARSA) and Director of Quality Assurance (QAD). Being the architects of change at the university, these respondents have full knowledge of the researched area and, hence, they are well-positioned to provide the depth and breadth needed to answer the research questions. These respondents were invited to take part in the interviews via the university's email system. To ensure they have full knowledge of their contribution to the study, they were emailed the participant information sheet (PIS) (refer to Appendix D), consent form (Appendix E), letters of approval from the ethics reviewers (Appendix A), the Research Board (Appendix C) and the gatekeeper (Appendix B).

The in-depth, semi-structured interviews were also held with the middle management personnel, comprising the heads of the academic departments in the four colleges and also the heads of the non-academic departments. Given the substantial number of these participants, totalling 10 separate groups, the researcher resorted to focus group interviews (refer to Appendix H). These focus group respondents were information-rich cases and were thus indispensable to the study, as they were instrumental to the implementation of the changes and directly affected by them. These respondents were well positioned to answer questions about the implementation of change, the strategies used and the extent to which change has affected the cultural fabric of both staff and students. The quantitative method, on the other hand, targeted the academic staff and students of the university through two surveys, one each. For a graphic visualization of all participants, see Figure 14 below.
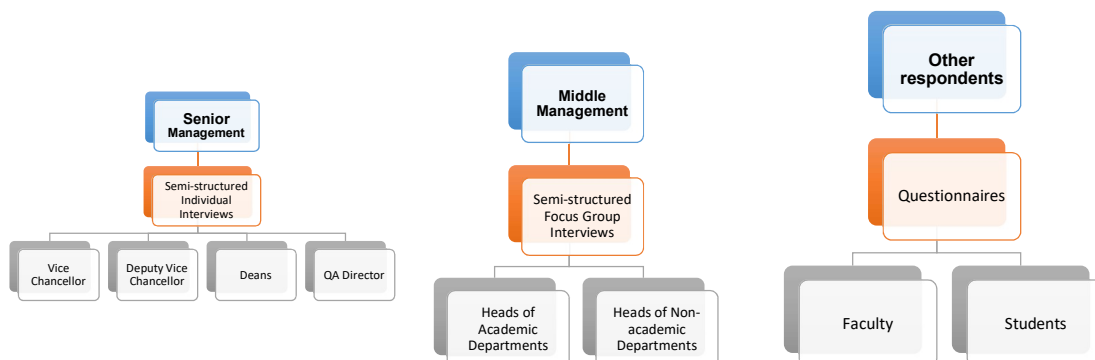
Figure 8 Categories of Respondents

It remains, however, to shed light on the positioning of the researcher vis-à-vis the study. In a predominantly qualitative study such as the one in hand, the researcher is considered an instrument of data collection (Denzin & Lincoln, 2003). Being a human instrument that may have its own bias, assumptions and expectations, Greenbank (2003) argues that the researcher needs to shed light on these aspects that may impact the outcomes of the study. As the researcher is an employee of the university

under study, he is considered an emic (insider). The researcher has held the position of Director of the Foundation Program from 2014 to 2022, having previously served as Deputy Director, Program Coordinator, and lecturer. The researcher's association with the university dates back to 2007. The researcher considers himself a valuable asset to this research due to his extensive experience and combination of both academic and managerial expertise.   Under "ethical considerations" (Section 3.7) below, the researcher mentions his relationship with the interviewees and survey takers.

3.5 Data collection

The process of data collection went through four stages. Document analysis took up the first stage. The rationale behind commencing with documents is that documents, mainly written texts, are the repository of valuable data (Altheide et al., 2008) that is expected to shed light on strategic negotiations, thoughts and decisions and implementation strategies. The themes drawn from documents informed the selection and formulation of the interview questions in stage two. The university documents were too many and lengthy, which raised the question of which ones were most appropriate to the purpose of the study. It stands to reason that spending time on casual or static documents such as catalogues, manuals and handbooks was not worthwhile, as they were expected to disclose very little insights about the change process. As such, only core documents written between 2014-2020 were used for data collection. These were the vision and mission document (1), the university strategic plan (1), operational plans (6), annual reports (6), the university academic council minutes (180 minutes), the university council minutes (40), accreditation reports (2) and the budget books (30).

Stage two started once core themes from document analysis were identified and interview questions formulated. At this stage, the researcher held individual, semi-structured interviews with the senior management in their respective offices at the university, except for the Deputy Vice Chancellor who retired in August 2019. The interview with the former DVC was held at the University Ibn Khaldoune, Tunisia, where he was employed as Consultant. Although documents disclosed much about the change process and evolution at the university, hearing from those who lived and led the 'change saga' was indispensable. Being a powerful, enlightening tool of data collection in qualitative studies (Fontana & Prokos, 2016), both the individual and focus group interviews offered themselves as an invaluable source for exploring personal and collective live experiences.

The question remained, however, as to which type of interviews to opt for to ensure effectiveness. Sarantakos (2005) argues that the type of interview depends on a number of criteria such as the topic, purpose, resources, methodological standards and preferences. The decision to use semi-structured interviews was grounded in their ability to steer the conversation, maintain focus on the subject matter and ensure the extraction of in-depth insights, due to the open-ended type of the questions posed. Another advantage of the semi-structured interviews was that respondents were given room to express themselves freely, allowing them to provide an authentic account of the change narrative.

In line with Oltmann's (2016) contention that individual interviews represent a rich source of information, the one-on-one, face-to-face interviews with the senior

management personnel yielded a wealth of information about their lived experience of the change process. When compiling the list of questions for the semi-structured interviews, a number of question types were avoided. These were the *yes/no* questions, known for their limited ability to provide profound understanding, interpretive questions which potentially impose particular perceptions onto interviewees, and l*eading* questions which embed implicit answers in their wording. To probe for deep understanding, questions such as 'what', 'how', 'why' and 'to what extent' were used. Probes and follow-up questions were used to ensure deep responses and to reach data saturation.

The interviews were piloted prior to conducting them in real situations to ensure that the questions yielded depth and thoroughness of the respondents' experiences. The interviews lasted between 35 to 75 minutes and that was enough to distil the respondents' views and perceptions. Given the criticism levelled at the interview method regarding whether the data collected is actually what the respondent said or meant to say (Brinkmann & Kvale, 2018), two precautions were put in place. The first was to verify understanding of the respondents' thoughts on the spot through a follow-up question summarizing the point and asking if that was what they meant. The second was to request the respondent's clarification if some doubt arose during the transcription and review phase. All interviews were recorded after seeking permissions from the respondents, except for one (technical affairs department head), who preferred writing his answers to being recorded.

Stage three of the data collection process centred on interviews with the middle management. This category was further divided into two main sub-categories: heads of academic departments and heads of non-academic departments. As individual interviews were too time-consuming with such a large number of respondents, the middle management personnel were divided into 10 focus groups— five groups for academics and five for non-academics. The first five focus groups comprised two groups from the College of Arts and Applied Sciences, one group from the College of Commerce and Business Administration, one group from the College of Engineering and one group from the College of Law. Similarly, the focus groups of the non-academic departments were divided into five focus groups, with two to four respondents in each group.

The fourth and last stage of the data collection process was quantitative in nature, targeting all academic staff and students through a couple of online four-point scale questionnaires. The choice of four-point, not five-point, scale was intended to circumvent a tendency among some respondents to do it the easy way and tick the 'neutral' option rather than think carefully about where they stand along the agree/disagree spectrum. The questions were fed into a Google form survey linked to an excel sheet for feedback collection. The survey links were sent via the official email system of the university through the Research Centre to all staff and students. The surveys were circulated twice to prompt participation from those who missed the first instance. Figure 9 below illustrates the four stages of the data collection process.

QUALITATIVE METHOD

Document Analysis
Stage 1

In-depth Interviews
Stage 2

Focus Group Interviews
Stage 3

Set 1 | Set 2 | Set 3

Senior Management

Middle Management

Vision & Mission Doc | Strategic Plan | Operational Plans | Annual Reports | Academic Council Minutes | University Council Minutes | Accreditation reports | audit reports | Budget books

VC | DVC | Deans | QAD

Heads of Academic Departments | Heads of Non-academic Departments

QUANTITATIVE METHOD
Stage 4

Faculty | Students

Figure 9 Data Collection process (stage 1-4)

3.6 Data analysis

Leech and Onwuegbuzie argue that "[k]nowing which analysis to use with different types of research questions and various types of data can be very confusing, especially for a novice researcher" (2011, p. 70). This quote highlights that data analysis is not only one of the most important steps in a research project but also one of the most complicated among all. Given this complexity, the researcher familiarized himself with the different types of data analyses and their relevance to the research questions. The exploration showed that the most common methods used to analyse qualitative data are content analysis, narrative analysis, discourse analysis, framework analysis and grounded theory.

What follows is a quick overview of these five data analysis methods. Content analysis is used to examine patterns in communications or texts. It involves systematic reading of textual artefacts with the intention of assigning codes or labels to signpost interesting and meaningful information. Data is then categorized for the purpose of classification, summarization and tabulation. Content analysis can be descriptive, i.e. describing the data as is, or interpretive, that is interpreting what is meant by the data. Narrative analysis, on the other hand, is used to analyze content from interviews, observation or surveys. As the name denotes, emphasis in narrative analysis is placed on the stories and experiences shared by the respondents as they relate to the research questions. Like narrative analysis, discourse analysis is used to analyse interactions with people, focusing on the *social context* in which the communication between researcher and respondent occurred.

Framework analysis is another way of analyzing gathered data. It is flexible, in that it allows the researcher to either collect all the data and then analyze it or analyse the

data concurrently. Data is sifted, charted and then sorted under thematic headings. This is commonly done in a five-step process: familiarization with the data (anthropologists call this 'deep hanging out'), identifying a thematic framework through the process of coding, indexing, which means identifying portions of data that correspond with certain themes (Nvivo, for instance, is ideal for this task), charting, which is arranging indexed data in thematic charts, and lastly, mapping and interpretation, that is searching patterns, associations, concepts and explanations (Ritchie & Spencer, 1994). The fifth and last common method to analyse qualitative data is grounded analysis. It explains why a certain phenomenon happened. It starts by studying a variety of similar cases in different settings. The data is then used to derive causal explanations. These explanations may be altered or new explanations provided as more cases are studied until the researcher reaches an explanation that fits all cases.

This study used the framework analysis method to examine and analyze data. This method was chosen for its methodological and structured approach to data analysis, which helped to ensure validity and trustworthiness of findings. Similar to the four stages of data collection, this study had likewise four main stages of data analysis, with the two occurring simultaneously. The simultaneity was meant to ensure that the themes and subthemes were constantly revisited and updated, as the process of data analysis was iterative and cyclical, not static. The process of data analysis began with the analysis of core documents, followed by the analysis of interviews with the senior management, then interviews with the middle management and ended up with the analysis of the two surveys.

The core documents were divided into three sets to ensure strategic and orderly management of the data analysis process. The first set covered the mission and vision, and strategic and operational plans together. These documents were seen as the bedrock of the change process. The analysis of these strategic documents gave insights into the planning and implementation of change. To ensure systematization of data analysis, the five-step framework analysis method was adhered to throughout the data analysis process. This meant familiarizing oneself with these documents, one at a time, by reading them over and over again until reaching a point of knowledge saturation. While reading, the researcher kept thinking about broad themes in light of the research questions (step 2 in the framework: identifying a thematic framework).

Once tentative themes were developed, the researcher started piloting coding data and fitting it under the developed themes (step 3: indexing). It is worth noting that before availing of NVivo, the researcher started working on coding in Word just to have a feel of where things could be moving. This helped to avoid any potential bias that might arise from the use of NVivo. The indexed data was then arranged in thematic charts (step 4: charting) and lastly, the thematic charts were examined looking for patterns and association to pave the way for explanations and interpretations (step 5: mapping and interpretation).

The second set of core documents included the annual reports, achievement report and minutes of the university academic council and minutes of the university council. The annual reports are documents that record the progress and achievements of the colleges vis-à-vis the execution of the strategic and operational plans. The minutes are the depots of all weekly and monthly decision-making held by the senior

management. The achievement report is an evaluation of the end of the strategic period document that highlights achievements and areas for improvement if a strategy or objective was not met. All these documents together gave insights into the change strategies that were executed to implement change. In analysing these invaluable documents, the researcher used the same five-step protocol laid out in the framework analysis method to ensure that the findings are systematic and rigorous. Words and phrases collected from the first set of documents are utilized to search for strategies-related words in the second set of documents.

The third set of core documents comprised the national and international accreditation reports, along with the budget books. The accreditation reports highlighted the achievements (changes) the university made. The examination and analysis of the budget books revealed how the financial strategies informed the change process. A close examination of the accreditation reports and budget books together revealed the critical areas the university chose to focus on to make improvements and the funds injected to improve those areas.

Having explored how the core documents were divided and the data analysis method used to dissect the data, it is time to shed light on the coding process. To begin with, it is important to differentiate between 'a code' and 'coding'. A code is a word or short phrase that represents the essence or key attribute of the narrative information and is used to codify or categorize the gathered data. Coding, however, is the process of organizing data into chunks or segments that are similar. According to Saldana "[C]oding is not a precise science; it is primarily an interpretive act" (2016, p. 4). Once extracted, codes can then develop into a code structure which is a compilation of emerging codes into brief definitions or properties that may contain illustrative quotes. Codes structures can be developed through purely inductive grounded method, start list method or an integrated approach.

The first approach was driven by the researcher's experience, where codes were developed through a line-by-line reading of the data, which the researcher constantly perused for similarities and differences. This inductive approach is good at preventing preconceived judgements and conclusions. The start list method, on the other hand, brings an initial organizing framework to the table. This process is somewhat deductive in nature. Initial codes are drawn from the researcher's zone of expertise, topic of inquiry and existing literature. The researcher comes to the study with the anticipation of a list of codes. The last method, the integrated approach, starts from broad code types and then develops the codes from the collected data. Here, coding is iterative and evolving and the researcher goes through five phases: (a) reads the document freely before coding, (b) creates initial codes and properties, (c) codes a few transcripts, negotiates and revises accordingly, (d) codes more transcripts, discusses and revises them as done previously, and finally, (e) creates a final code structure and applies it to all.

According to Strauss and Corbin (1990), coding data can come in three forms: open coding, axial coding and selective coding. Open coding is "[t]he process of breaking down, examining, comparing, conceptualizing, and categorizing data" (ibid, p. 61). Axial coding is "[a] set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilizing a coding paradigm involving conditions, context, action/interactional strategies

and consequences" (ibid, p. 96). Selective coding is, however, "[t]he process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development" (ibid, p. 116). Word repetition or frequencies can help a lot in the process of coding.

In this study, the integrated approach was adopted to develop code structures. This approach was chosen on the grounds that it was inherently iterative and cyclical, deliberately avoiding predetermined codes and ensuring the reliability of the coding process. This strategic approach was intended to thwart the infusion of preconceptions that could compromise the validity of the findings. To enhance reliability, the coding process followed a rigorous manner. First, broad code types were developed and iteratively refined as data reading progressed. A preliminary trial saw the coding of the first set of documents, strategic and operational plans. These initial codes were then scrutinized in light of the corresponding research question, resulting in necessary refinements. To ascertain reliability, these initial codes were given to an another more experienced researcher in the department for verification and feedback on the process and interpretation. My supervisors were also consulted to ensure that the coding process is robust and reliable. Subsequently, the entire strategic and operational plans were meticulously coded, revised and tentatively finalized. This rigorous process culminated in the development of a final code structure, which was systematically applied to the entire set of documents.

Even though the documents were divided into three sets, the same coding procedure was observed with each set. Two forms of coding were used: open and axial. Open coding was used with each set of documents and axial coding was used across the three sets of documents. Open coding helped to categorize data scattered all across the document, whereas axial data helped establish connections across the categorized data. The inductive coding strategy was instrumental in the formulation of patterns and categories (Miles & Huberman 1994). During the coding process, NVivo, a qualitative coding software, was used to ensure clarity and systematicity to the coding and analytical processes. Understandably, the software does not conduct analysis and draw conclusions for the researcher; rather, as Fielding and Lee (1998) explain, the software supports analysis "but leaves the analyst firmly in charge" (p. 167). Additionally, the software can help maintain the transparency, trustworthiness and plausibility of the study because it renders all stages of the analytical process traceable and transparent.

After having coded and thematized all documents, attention was then directed to the second stage of data analysis: individual interviews with the senior management. Like documents, interviews were analysed using the framework analysis method. The interview transcripts were first read through carefully, a preliminary thematic framework was identified, data was indexed thematically and then arranged in thematic charts, and pattern and categories were mapped and interpreted. Open coding of the interviews was done first and was then followed by axial coding to look for commonalities. The latter helped make associations, patterns and categories. When stage two of the data analysis was over, all research questions were answered but from a single set of angles, i.e. the senior management one. To triangulate and validate the findings, other perspectives had to be tapped.

Stage three stretched the breadth of perspectives through the involvement of the middle management in focus group discussions. The middle management itself was divided into two sets: heads of the academic departments and heads of the non-academic departments. This helped ensure that the collected/ analyzed data was rich and versatile, not unilateral, monolithic or parochial. Interview transcriptions were done by the researcher himself in google forms, except for one which was done through an online transcription service. The researcher believed that transcribing the interviews himself helped him gain a first-hand understanding of the respondents' output, which facilitated the process of coding and thematization. The interviews were likewise analysed following the framework analysis method. Before committing all interviews transcriptions to NVivo, the researcher used Word to code an interview in order to have a feel of how the coding process would play out. As the fourth and last stage of data analysis was quantitatively driven, another quantitative data analysis software has to be used. The questionnaire responses were fed into SPSS, analysed and evaluated, with a summary of findings written.

3.7 Ethical considerations

The ethical considerations discussed in this study were threefold: respondents-related, researcher-related and data-related. These considerations were informed by the Ethical Guidelines for Educational Research (4th edition, 2018) authored by the British Education Research Association (BERA). As to the respondents-related considerations, respondents were given an information sheet illustrating the nature and purpose of the study, why they were approached, whether they needed to take part or not, what would happen to them if they took part, benefits, disadvantages and risks of taking part and assurances about their full right to anonymity and data confidentiality. Respondents were also assured that participation was voluntary, with assertions that no pressure or coercion of any sort should be exercised on them prior to, during or after participation, as highlighted by Sarantakos (2005). Respondents were also assured of their right of informed consent defined as "the prospective subject's agreement to voluntarily participate in a study, which is reached after assimilation of essential information about the study" (Crookes & Davies 1998, pp.320-321).

Prior to conducting the interviews, respondents were given consent forms to sign if they were willing to take part in the study. According to Burns (1997), obtaining signatures on consent forms makes things clear and provides a proof that the person is informed and consented to participate in the research. Respondents were assured of their right to withdraw from participation at any stage of the study. Before launching the study, a formal ethical approval was taken from the ethical approval committee at the University of Sunderland as well as the case study university. Given the inclusion of students in this study, it is important to highlight that these participants aged 20 and above. A preamble was included in the questionnaire stating the purpose of the study and that completion of the questionnaire implied consent of participation. It should be highlighted that all communications with the participants were conducted through the secure online systems of the university.

Secondly, researcher-related considerations were taken to ensure that the researcher was under no risk that might arise from his conducting of this study. The researcher also affirms that none of the interviewees were under his direct jurisdiction. He has

never been the supervisor or appraiser of any of them. On the other hand, online questionnaires might have involved academic staff under the researcher's authority. However, the questionnaires were conducted anonymously. Although being emic, the researcher maintained the highest possible degree of objectivity throughout the study. The third considerations were related to data. Data was stored safely and securely in a password-protected hard disk and processed through a password-protected personal computer. Data did not show real names of respondents; initials were used instead. Along these lines, the concern about potentially identifying interviewees at the senior level within an identifiable institution was considered. The relatively big number of the senior team, comprising nine members, alongside the consistent utilization of initials to reference names throughout the entire study, not only mitigated the risk of persona revelation, but also strengthened the confidentiality of who said what. Even after two years since data was collected, there has been no complaint or concern raised by any senior management member, affirming the rigor and effectiveness of the confidentiality safeguards employed throughout the research process.

It should be highlighted that data shall not be given to any third party in such a manner as to identify the respondents. Once the study is successful and data is no longer needed, data will be disposed of securely: either erased or destroyed so as it is no longer retrievable.

3.8 Ascertaining the 'truth' in this case study

The task of researchers working within a constructivist paradigm conducting case study research lies in reconstructing respondents' understanding of a certain phenomenon (Denzin and Lincoln, 2000). In this paradigm, the conventional criteria of research 'validity' is replaced by such terms as 'trustworthiness' and 'authenticity'. To achieve these, the researcher has to rely heavily on methodological techniques such as sampling diversity, triangulation and monitoring bias. The challenge for the researcher is to determine whether the respondent is telling the truth or not and whether what they are saying is impressionistic, subjective, biased or idiosyncratic (Price et al., 2015). One way of overcoming this challenge is to have well-thought-of questions, good conversational skills and good prompting (Vrij, 2008).

The researcher is alert to "possible influences operating on [employees]—ulterior motives, the desire to please, situational factors like a recent traumatic incident, values—all of which may colour their judgements" (Woods, 1983, p. 81). The researcher is likewise aware of too emotional and rosy accounts that may taint the truth and hence should not be satisfied with one account. Prompting the respondent in such a way as to dig out the truth and verify the respondent's account is essential for achieving trustworthiness. The latter is also ensured through triangulation where the use of multiple data sources allows for alternative interpretations and narratives.

The use of the General Guide Interview Approach also helps the researcher to collect the same general areas of information from each interviewee (McNamara, 2009). Besides, the researcher peer-reviewed the gathered data using feedback from a colleague not involved in the research project, so as to confirm the interpretation of data (Merriam, 1998). Moreover, to avoid bias while interpreting the interview data, the transcriptions are shared with the respondents to make their own comments and rectify any misunderstanding that might have arisen. Lastly, mixing the qualitative and

quantitative methods in this study aims to ensure the trustworthiness of gathered data and therefore validity of findings.

3.9 Summary

This chapter presented the methodology and design implemented to carry out this case study. It first discussed the researcher's rationale behind choosing the methodology, delving into the epistemological considerations and providing the grounds for which the case study approach was employed. It also demystified the prevalent misconceptions surrounding case studies. Second, the chapter elaborated on the embedded design adopted, highlighting the reasons for choosing the mixed methods approach and aligning it with the study's aim and research questions. Third, the chapter shed light on the selection of participants both for the qualitative and quantitative inquiries. Fourth, the data collection and analysis processes were illuminated, highlighting the four-stage procedure followed for the two stages of collection and analysis. Fifth, the chapter spotlighted the important issue of the ethical considerations pertinent to this study, highlighting the three main considerations related to the respondents, researcher and data. Finally, the researcher concluded with expounding the study's credibility and the precautions taken to ensure its trustworthiness.

CHAPTER 4: FINDINGS

4.1 Introduction

This chapter presents the findings derived from the mixed methods single, in-depth case study that extensively examined Dhofar University's (DU) rise to distinction over a six-year period starting in 2014. The aim of this study is to contribute towards filling the gap in the literature of organizational change (OC) in higher education (HE), which is described as lacking and fragmented (Kezar & Eckel, 2002), relatively underdeveloped (Bleiklie, 2014) and limited in influence (Scott, 2015). Unlike previous studies that predominantly focused on identifying generic factors contributing to successful OC in HE, this study places special emphasis on the change management process itself, aiming to deepen understanding of the entire change process from initiation to institutionalization. This was done through an in-depth investigation of the change processes and strategies employed and their implications on the institutional culture. With its persistent pursuit of creating a distinctive organizational identity through continuous, incremental change, DU emerged as a compelling empirical case study from which to gain insights and generalizations that can potentially be applicable to other HEPs.

The findings of the study are organized thematically in terms of processes and strategies, following a descriptive analysis approach that aligns with the order of the research questions. In other words, the processes and strategies derived from the change initiation process are presented first, followed by the processes and strategies that emerged from the change implementation process and the change institutionalization process, respectively. This chapter entails five sections. The first section introduces the chapter and outlines its overall structure. The second section (4.2) details four change processes and two strategies that the university deployed to initiate change. The third section (4.3) presents seven change processes and five strategies that emerged from the investigation of the change implementation phase. The fourth section (4.4) highlights the impact of the change on the institutional culture and describes the strategy that was used to cement change. The last section (4.5) offers a summary of the main findings derived from this case study.

4.2 How change was Initiated

The first part of the first research question sought to investigate how the change process was initiated. Findings from the data analysis of core documents, individual interviews with the senior management personnel, focus group interviews with the heads of all departments, and surveys highlighted four change processes and two strategies, as illustrated in the chart below. What follows is a descriptive analysis of these findings.
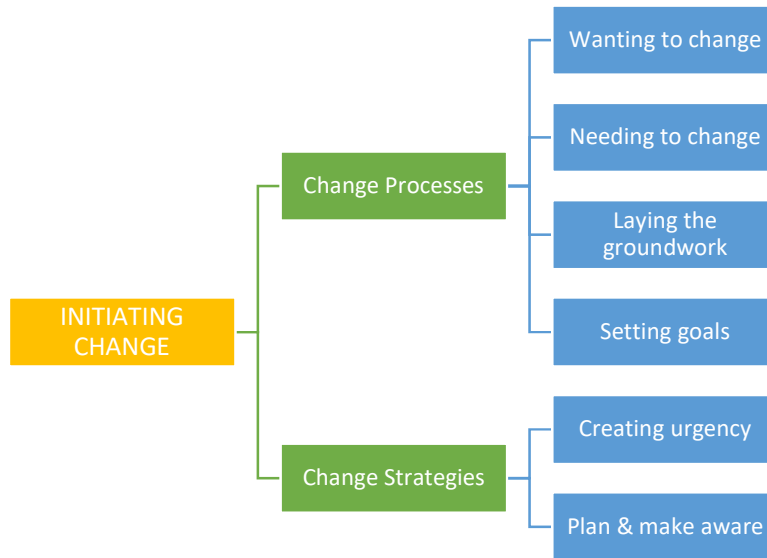
Figure 10 Processes & strategies of initiating change

4.2.1 Wanting to change

Findings from data analysis showed that the transformations the university has gone through were motivated by both internal and external factors. The *wanting to change* urge represented the internal force for change for the university. Findings showed that the change at the university was deliberate and planned. It started with a burning desire to raise standards, improve the quality in teaching, research and community service, and compete with fellow HEPs at the national and regional level. Interviews with the senior management corroborated the deliberate and resolute drive behind the change project at the university. One of the senior management interviewees said,

> It's not by chance for sure (emphatic). It's intentional because we have a management that actually was determined to make change. Intentional yes, intentional, if this short answer is enough (Individual interview, H. T, June 2021).

Responses varied regarding who ignited the desire for change. some interviewees attributed it to the Vice Chancellor (VC), while others attributed it to the Board of Trustees (BoT). Those who pointed to the VC claimed that he persuaded the BoT Executive Committee to embrace the change enterprise. Those who attributed the change to the BoT believed that they were the ones who pushed the VC to embrace change. Below is what one of the senior management interviewees had to say about this,

> I think the Board of Trustees which actually pushed it, not the Vice Chancellor, it's the Board of Trustee which actually pushed and they were so much particular about bringing this kind of change to the University; therefore, it was initiated in that time and once it was initiated at that time it worked well for us (Individual interview, L. M., July 2021).

However, interviews with the senior management personnel revealed that while there was a strong desire for change at the upper management level, the initial reaction from some stakeholders was resistance. One of the interviewees stated that:

> At the micro-level, there was resistance for the idea of change. Some stakeholders such as faculty and students did not seem to be accepting the changes we were planning to do (Individual interview, J. S., Oct. 2021).

Another interviewee from the focus groups highlighted that,

> At the department level, maybe the culture was a challenge. When change was introduced, some people resisted it because of wanting to keep the old culture and because accepting a new culture is difficult for them (Focus group 3 interview, Oct., 2021).

4.2.2 Needing to change

The interviews revealed that change at DU was also driven by an external factor, *needing to change*. This was an answer to a call from the Oman Academic Accreditation Authority (OAAA)[1] to engage in a national institutional accreditation. Interviewees from the senior and middle management believed that change at the university was the result of a combination of an internal factor, *wanting to change* and an external one, *needing to change*. Confirming this, an interviewee said,

> It was a combination of both. When AUB left, the university was in bad shape in terms of number of students and financially so that was why we were forced to change to survive and progress and then another impetus came when OAAA accreditation started. We had to change (Individual interview, L.M., July 2021).

Although there is a consensus that change at DU was the outcome of a synergetic mix of internal and external forces, some interviewees argued that the change process started prior to engaging in the accreditation process, though it was slow. Others believed that the two change drivers were "almost simultaneous" (Individual interview, S.R., Apr. 2021). Regardless of whether the change started prior to accreditation or along with it, almost all interviewees were of the opinion that the accreditation process accelerated change at the university. Interviewees also argued that when the call for accreditation was proclaimed, DU was already in the mood for change. In short, the *needing to change*, driven by accreditation, was believed to be the catalyst for change that reinforced the already existing *wanting to change* urge. Data from the faculty survey supports this, as 90.6 percent of the respondents believed that accreditation was the main driver for change, as illustrated below.

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[1] See official website of OAAA here https://oaaaqa.gov.om/?lang=en-GB

The pursuing of national and international accreditation was a catalyst for change
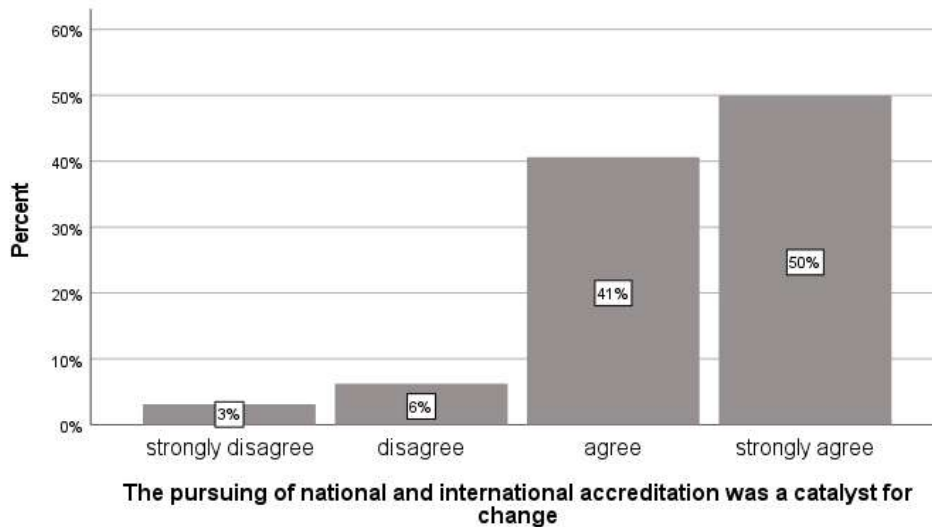
4.2.3 Laying the groundwork

A third process that characterized the change initiation phase, as transpired from the interviews, was *laying the groundwork*. This process was marked by two undertakings: (a) making key appointments at the senior level and (b) developing a new vision for the university. One of the interviewees summed this up, saying,

> The VC joined in 2011. I joined in April 2012 and the DVC joined in December 2012. Since that time we started the University Academic Council. The steering committee consisted of the UAC with Deans and FP Director. So, it was definitely guided by that steering committee under the leadership of Prof Kashoob, the VC, and also some impetus from the BOT (Individual interview, S. R. April 2021).

Another interviewee saw that the relocation to a new campus was the starting point of the change process. He said,

> The actual change started with the relocation to the new campus. A new identity started on the new premises with a new vision and mission and strategic plan. So, the kick-off came with the relocation coupled with the cooperation of the University Academic Council and recommendation from the Board of Trustees (Focus group 2 interview, Oct. 2021).

Findings from individual interviews with the senior management confirmed that such measures as new appointments, discontinuing the turnover of college deans and the formation of a steering committee with significant authority were instrumental in paving the way for change at the university. During the interviews, a senior management member stated that he was interviewed by the BoT Executive Committee, which inquired about his potential strategies to enhance research output and manage accreditation at the university. The interviewee concluded that this showed their intention to bring about change and that these senior appointments were aligned with that intention.

A scrutiny of one of the core documents, Horizon 2020— a document that framed the university's ambition for change and recognition, revealed that the university

developed a new vision, mission and values, alongside a number of strategic goals. The vision and mission read as follows:

> **Vision:** DU aspires to occupy a recognized position among the institutions of quality higher education

> **Mission:** DU strives to achieve excellence in teaching, research and community service in an open learning environment conducive to creativity and innovation and to the acquisition of cutting-edge professional knowledge

During the interviews, it was revealed that the vision was not imposed but a product of collective agreement, as highlighted in this quote:

> What was special about the vision is that it was a shared one, with all concerned stakeholders collaboratively and actively contributing to its formulation. Representatives from all DU stakeholders were invited to the Hilton Hotel to deliberate, refine and finally solidify the new vision. That was an interesting, yet long forum (Individual interview, L.M., July 2021).

The interviews also confirmed that the vision and mission statements were translated into a five-year strategic plan for the entire university and customized operational plans for each college. These strategic and operational plans were premised upon an in-depth SWOT analysis, identifying the university's strengths, weaknesses, untapped opportunities and potential threats. The survey results showed that 96.9 percent of the academic staff believed that the vision, mission and strategic plans were instrumental in initiating the change process, as illustrated in the chart below.

The vision, mission and strategic planning were instrumental in the development of the university
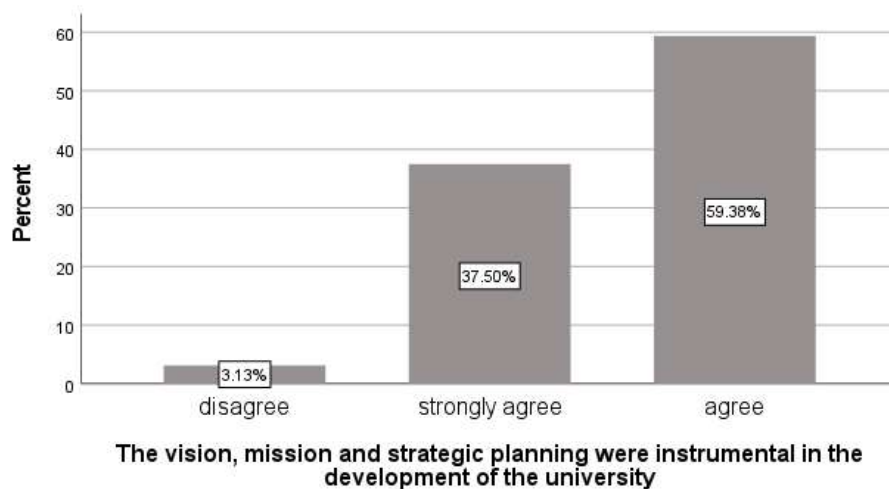
4.2.4 Setting goals

Findings from the interviews and document analysis showed that the initiation phase was characterized by *setting goals*. The leadership felt that there was a real need to identify the core goals that should guide the change process and lead the university to realize its ambition for recognition and distinction. Talking about these goals and targets, one of the focus group interviewees said,

> The process started actually with the strategic plan in 2014 until 2019; it was a five-year strategic plan to meet those strategies and those targets, and then an operational plan was developed to see whether the strategic plan was working. They fixed some targets to see if those objectives were covered. So given this process the university changed from 0 to 100%. Before there was no planning there was no guidance (Focus group 3 interview, Oct., 2021).

Seven core goals emerged from the interviews and document analysis:

i. revamping the physical infrastructure
ii. making structural changes
iii. prioritizing research
iv. upskilling the human resources
v. improving graduates
vi. strengthening the periphery
vii. chasing quality

What follows is a descriptive analysis of these goals.

i.   Revamping the physical structure

One of the primary goals targeted by the university was revamping the physical infrastructure. The interviews revealed that DU initially operated from temporary premises and in order to establish a more stable organizational identity, it was vital to possess its own campus. Hence, constructing an all-purpose campus that can accommodate up to 10 thousand students became a central goal. The significance of relocating to a new campus was highlighted multiple times during the interviews. One of the interviewees said,

> The actual change started with the relocation to the new campus. A new identity started on the new premises with a new vision and mission and strategic plan. So the kick-off came with the relocation (Focus group 2 interview, Oct. 2021).

A senior management interviewee commented on the relocation to the new campus with the following sentiment:

> The change was very positive because once the infrastructure changed and you come into a new system, people have that feeling of elation and conviction, an amount of positive vibe from all across the stakeholders. There were new faculty, new students, new classrooms, new projectors, new technology, a bigger campus, no more a small temporary campus. It did play a very very very important role (Individual interview, J. S., Oct. 2021).

ii.   Making structural changes

Another crucial goal that the university planned to achieve was making structural changes. Document analysis and interviews revealed that the targeted structural changes entailed the following:
- Developing a new vision and mission
- Reviewing the bylaws of the university
- Structuring hierarchy and responsibilities

- Reviewing the university's policies
- Creating new policies
- Reviewing the university's entity and activities
- Strengthening the policy management system
- Strengthening governance and management
- Strengthening risk management

An interviewee, echoing the envisioned structural changes, said,

> We drafted the first strategy in 2014-19, the first strategic plan. That was when we changed the vision and mission and discussed all those issues and that was the roadmap for the structural change. (Individual interview, L. M., July 2021)

Another interviewee related his experience regarding witnessing the revision of old policies and the creation of new ones, saying,

> Many policies were revised and actually many policies did not exist at all. University made new policies related to research and students. That was a big change that I've seen here and that had affected faculty members whether that was regarding research or teaching (Focus group 1 interview, Oct. 2021).

iii.   Prioritizing research

A third goal that the university aimed to achieve was prioritizing research. Being one of the strategic goals, research featured in the university's mission statement. The pursuit of excellence in research was also emphasized in the strategic and operational plans. All findings indicated that the university was deeply committed to establishing a robust research profile. To achieve this goal, DU devised plans to formulate research policies, foster a culture of research among the staff and provide moral and financial incentives to researchers. The university also networked with the government Research Council to secure funds for its research projects. Echoing this emphasis on research, one of the interviewees said,

> DU has worked a lot on developing policies that regulate and systemize the research contribution by its faculty, so that the research is nurtured and enriched by giving incentives and trying to provide the environment which is helpful for all faculty to produce more research. (Individual interview, H. T., June 2021)

The interviews also revealed that DU planned to set up a Research Department and a Centre for Frankincense, Medicinal Plants and Biodiversity. In Horizon 2020, under *Research and Consultancy,* DU pledged the following:

> DU aims to be a research hub for all research activities that are important to the region. It aspires to create a research environment by establishing a number of research centers starting with a biodiversity center. DU will provide an environment conducive to consultancy services (Horizon, 2020).

iv.   Upskilling human resources

The fourth strategic goal that was set during the change initiation phase was upskilling human resources. Several arrangements were taken to achieve this goal, as outlined below:

- develop an Annual Faculty Appraisal Policy
- develop an Incentives and Awards Policy
- strengthen the Centre for Teaching and Learning (CTL)
- provide teaching, research and community-related professional development for the academic staff
- establish a unit that provides professional development for the non-academic staff
- encourage self-professional development

Findings from the 2014-19 Strategic Plan showed that DU planned to provide comprehensive professional development programmes to academic and non-academic staff, as part of its commitment to providing good governance and management. This initiative aimed at fostering growth and ensuring continued relevance of its staff.

Acknowledging DU's plans for professional development, OAAA Panel wrote:

> DU's current S&OP for Human Resources makes specific provision for professional development. The University also has developed a Professional Development Policy, which applies to academic and non-academic staff. This policy provides for a systematic approach to professional development (OAAA ISA report, June 2017).

v.   Improving graduates

Findings from document analysis and interviews showed that the goal of improving graduates was present from the very beginning of the change. Considering students as a top priority, Horizon 2020 clearly stated that,

> DU aspires to be a University of a "Preferred Choice" in Sultanate of Oman by providing quality education with wide choices of programs extended up to Doctoral level, which will provide ready employment for its graduates. It will also be a university known for producing entrepreneurs (Horizon 2020, p.1).

Under the section of "Industry and employers", Horizon 2020 makes the following declaration:

> DU aspires that its graduates will be widely recognized for their abilities and skills. For that, DU will work with close collaboration and cooperation with private and public sectors to know their expectations and meet their demands of human resources, applied research and consultancy services. (Horizon 2020, p.2)

Findings from document analysis also showed that Goal 2 in DU's Strategic Plan was related to graduates. The goal stated that the university aims to "enhance employability of graduates and promote entrepreneurship" (Horizon 2020, p.2). The goal was also fleshed out into the following objectives:

- ensure that graduate attributes are embedded throughout the curricula and are clearly communicated to faculty and students
- provide graduating students with opportunities to improve their soft skills
- encourage entrepreneurship as a viable option for DU graduates

Findings from the interviews also supported what transpired from document analysis. One of the interviewees said,

> I think many changes have been implemented in the University. The organizational structure is very clear; policies talk about the assurance of the teaching and learning and how to focus on the quality of students who would be graduates (Individual interview, J. S., Oct. 2021).

vi.   Strengthening the periphery

Strengthening the periphery emerged as another important goal that DU sought to pursue from the outset. The word *"periphery"* refers to the non-academic departments that play a supportive role to the academic departments. Findings from both document analysis and interviews revealed that the leadership planned to strengthen the non-academic departments to ensure they are fully supportive of the mission of the academic departments. Goals 5 and 6 in DU's strategic plan, for instance, commit to a) *enhancing the quality of support services* and b) *strengthening relationship with the community and industry*, respectively. These two goals are indicative of DU's commitment to strengthening the periphery to support the academic base. Moreover, document analysis revealed that DU pledged to:

- improve and strengthen the admission and registration process
- continuously build on the library resources to meet the teaching and learning requirements
- regularly provide opportunities for extra-curricular activities to the students
- expand and strengthen the activities of the Learning Support Centre
- strengthen the university's association with alumni
- expand the activities of the Continuing Education Centre
- strengthen and expand the activities of the Community Services Centre
- Foster open and fruitful relationships with industry and employers
- collaborate with other national and international HEI's and professional bodies

Under the section of *Research and Consultancy* in Horizon 2020, for instance, the university committed to creating research centres and conducting consultancy services for the community to boost the university's outreach within and outside campus. This is expressed in this statement:

> DU aims to be a research hub for all research activities that are important to the region. It aspires to create research environment by establishing a number of research centers starting with biodiversity center. DU will provide an environment conducive to consultancy services. (Horizon 2020, p. 1)

Being part of the periphery, the library had its share in the improvement plans. Acknowledging this in the accreditation report, OAAA Panel said,

DU has implemented policies and systems to manage library resources and the library has a mission that is aligned with DU Mission. There is a short-term and medium-term Library plan (OAAA ISA Report, June 2017).

The OAAA Panel also commented on the enhancement of the information systems and learning technologies, saying:

DU has taken various steps to improve and upgrade its information and learning technology services (ILTS) to support its strategic goals. I&LTS is given a prominent organisational status, and the University has a Computer and Networking Centre (CNC) to provide and manage these services for academic and administrative purposes (OAAA ISA Report, June 2017).

The Panel said,

The internet capacity in terms of bandwidth has been improved significantly, and appropriate software packages are in place to support the needs of academic programs and research, while Wi-Fi coverage is available in all buildings (OAAA ISA Report, June 2017).

The Panel also noticed the improvement realized in another periphery, the Community Service and Continuing Education Centre (CSCEC), and noted it in their report, as follows:

CSCEC provides access to the educational resources of the University and offers quality educational programs to meet the ongoing professional and personal needs of Dhofar's adult community. It partners with public and private sector organizations to support positive initiatives in the local community. It also encourages DU students and staff to make meaningful connections with the local community through participating in various events and programs organized by the Centre (OAAA ISA Report, June 2017).

vii.   Chasing quality

One last core goal DU pledged to pursue during the change initiation stage was *chasing quality*. This commitment was found to have translated into the university's mission statement which read: "DU strives to achieve excellence in teaching, research and community service" (Horizon 2020). Findings also revealed that this moral commitment to chase quality was reinforced by a financial commitment to invest in quality education and support services, as is clear from the below statement:

Over the next phase DU will invest extensively in enhancing and ensuring the quality of education, research, new initiatives and improves services. Our resources will be harnessed to deliver rich and rewarding student educational experiences and to provide positive environment to the faculty to conduct research and provide consultancy services (Horizon 2020).

To ensure quality, the same document, i.e. Horizon 2020, pledged "to recruit the best, most diverse and innovative faculty and staff from Oman and around the world" (P.1). The university's Strategic Plan, under Goal 1 and 5, highlighted the leadership's intent to "continually improve the quality of education" and to "enhance the quality of support services" (pp. 2-3), respectively. Moreover, the appointment of a veteran Quality Assurance Director was another step in that direction. As a result of that intent to infuse quality into all aspects, one of the focus group interviewees commented saying, "things

are moving actually forward and we have tangible results of adopting quality" (Focus group 3 interview, Oct. 2021).

In addition to the aforementioned change processes that DU utilized to initiate change, findings from document analysis and interviews showed that DU resorted to the deployment of two strategies to facilitate this initiation. What follows is a descriptive analysis of these strategies.

4.2.5 Creating urgency

The first strategy that DU deployed to usher in change was *creating urgency*. Findings from interviews showed that the burning desire of the university to make change and rise to distinction, coupled with the university's embarkment on a rigorous accreditation process, sent a wave of urgency across the university. This sense of urgency was associated with (a) getting accreditation and (b) enhancing research output. The urgency around accreditation was manifested through:

- the need to get accredited
- the need to take risks
- the need to make structural changes
- the need to do in-depth SWOT analysis
- the need to create a new vision and mission
- the need to have a new strategic and operational plan
- the need to do a thorough audit
- the need to have all hands-on deck
- the need to set targets and to fix roles and responsibilities
- the need to oblige to submission deadlines

The below statement from Horizon 2020 sums up the commitment DU made to getting accreditation on a prompt basis. This commitment was communicated to the university stakeholders so as to create a sense of urgency and to rally support.

> DU will be the university known for meeting the requirements of regulators, especially MOHE and OAAA, promptly and satisfactorily and setting its own standards. It will be a university having accreditation by OAAA and with majority of its programs being recognized and accredited nationally and internationally (Horizon 2020).

An interviewee expressed this urgency of having to adapt the university systems and act proactively, saying,

> This means that we have to tailor our systems to ensure that we are in the right place and take the right proactive steps to gain programme accreditation (Individual interviews, Ul. I., Oct. 2021).

Another interviewee expressed the same idea of needing to comply urgently to the new situation, saying:

> The colleges had to comply to the many rules and regulations according to the standards of the accreditation. This drove us to change many things and we had to comply to the urgency of the situation (Focus group 3 interview, Oct. 2021).

On the other hand, the urgency around research was manifested through:

- the need to have a competitive research profile
- the need to increase research output
- the need to make research compulsory
- the need to have a faculty appraisal policy that includes research
- the need to enter QS World University Ranking

The commitment to becoming a research hub was also thought to have fuelled urgency. This commitment is captured in the following statement:

> DU aims to be a research hub for all research activities that are important to the region. It aspires to create research environment by establishing a number of research centres starting with biodiversity centre (Horizon 2020).

In this connection, an interviewee conveyed the difficulty of publishing, especially in the presence of a heavy workload. He said: "the challenges are having to publish with all that workload. It's difficult to publish" (Focus group 4 interview, Nov. 2021). Moreover, individual interviews revealed that urgency was initially faced with resistance from staff and students. A senior interviewee believed that this resistance could have been addressed through better communication and engagement (Individual interview, M. K., Oct. 2021). While communication was acknowledged, the same interviewee thought it was insufficient, because it was overly influenced by the accreditation process. There is also indication that staff and students gradually rallied behind change, though the forceful approach might have generated mixed sentiments among the staff (Individual interview, L. M., July 2021). He added that the sense of urgency might have also contributed to the creation of some kind of fear and anxiety in the beginning.

4.2.6 Plan & make aware

The second strategy the university deployed to initiate change was *plan and make aware*. This strategy entailed:

- creating a steering committee to lead change
- empowering the QA Director to oversee the accreditation process
- holding regular weekly meetings of the Academic University Council
- holding regular monthly meeting of the University Council
- holding regular weekly meetings with heads of departments
- developing a strategic plan
- developing operational plans
- developing action plans
- holding meetings and circulate minutes
- holding awareness workshops
- holding discussion retreats

Commenting on the strategy of planning, the OAAA Panel said,

DU has an operational planning system which is aligned to the strategic planning process. The system identifies objectives; actions; and key performance indicators; and designated responsibilities for implementing actions. Operational planning enables the HEI to manage the achievement of strategic objectives and supports quality improvement (OAAA ISA Report, June 2017).

The Panel also noticed the level of awareness among the staff during their visit to the university and commented, saying:

During interviews the Panel confirmed a good awareness of policies among staff, easy access to these policies, and evidence of their implementation (OAAA ISA Report, June 2017).

Speaking about creating awareness on campus, an interviewee said,

When it comes to awareness it comes down to meetings and workshops. When the university was creating awareness, it was actually reinforcing that awareness through actual practice. The chairs were made responsible to follow up on the changes with their faculty members. The quality assurance department was responsible to oversee the overall consistent implementation by all departments. So, awareness was both theoretical and practical (Individual interview, H. T., June 2021).

Overall, the interviews revealed that the initial phase of transformative change was marked by synergetic collaborations, including:
- Integrating internal and external decision-making, epitomized by collaborations with the Ministry, OAAA and internal governing bodies (Individual interview, K. H., Apr. 2022).
- Laying the groundwork was a collaborative process involving the efforts of the Board of Trustees, VC, DVC, leading to the formation of a change steering committee (University Academic Council). This collaboration resulted in the development of a shared vision and the setting of seven overarching goals (Individual interview, K. H., Apr. 2022).
- Goal-setting was comprehensive, addressing changes in infrastructure, structure, research prioritization, human development, graduate improvement, periphery strengthening, and quality commitment (Individual interview, J. S., Oct. 2021).
- Urgency was complemented with planning. The imperative for accreditation and the commitment to becoming a research hub prompted comprehensive planning efforts (vision, mission, strategic and operational plans, establishment of committees, councils, and advisory boards) (Individual interview, K. H., Apr. 2022).

4.3 How change was implemented

The second part of the first research question sought to gain insights on how the university implemented the change enterprise. Data analysis showed that implementing change happened through pursuing recognition and maintaining the change momentum. Seven change processes and five strategies were found to be fundamental to this stage, as illustrated in the below chart.
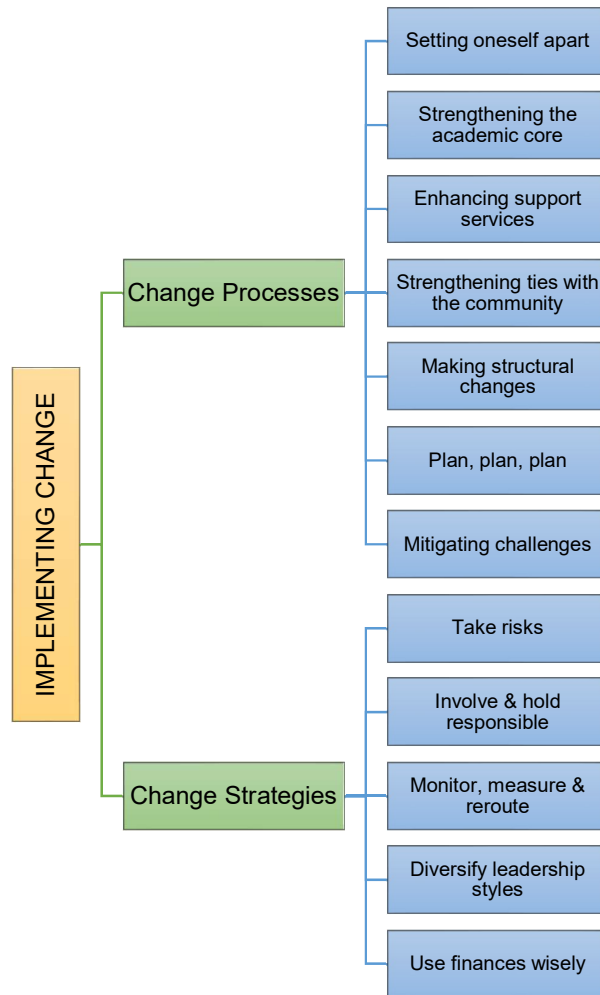
Figure 11 Processes & strategies of implementing change

What follows is an explanation of first the change processes and then the strategies.

4.3.1 Setting oneself apart

Findings from interviews, core documents and surveys showed that the university was committed to setting itself apart through:
  i.   establishing a niche
  ii. improving research output
  iii. gaining accreditation

i.   Establishing a niche

DU, as transpired from the interviews, displayed a strong determination to set itself apart by establishing a distinctive niche. The initial vision of the leadership was to create a niche in the field of engineering, where a state-of-the-art engineering workshop worth more than two million Omani rials was established. However, the project did not unfold as intended due to unforeseen shortages in engineering student enrolment. This attempt at establishing such a niche was captured by a senior management interviewee who commented, saying:

We bet on engineering by investing in the workshop, but things did not go as planned due to shortages in students from the scientific stream. (Individual interview, Ul. I., Oct. 2021).

Another interviewee from the senior management also expressed his belief that the establishment of the workshop was crucial, in that it provided engineering students with practical training opportunities. He said,

We have continued to make more investments in different things for example spending a lot of money on building an engineering workshop and that was something which was very very imperative for the engineering specialisation to have practicality in their education. (Individual interview, J. S., Oct. 2021)

The second niche that the university tried to establish was research in frankincense, medicinal plants and biodiversity. Interviews showed that the university made significant investments to establish a specialized Research Centre equipped with a fully operational scientific laboratory. An interviewee expressed his admiration for the achievements that were made in this specialization, saying,

I think we have found our niche in the research of the biodiversity, medicinal plants in which we have invested a lot and we have achieved a lot (Individual interview, K.H., Apr. 2022).

Another interviewee opined the same views about this particular niche, but he refrained from expressing a definitive opinion about its success or failure. He said,

I think the university tried and is still trying to be identified as the-go-to in terms of frankincense research; whether it has succeeded or not that's a different story but I think the university is trying to be the expert in terms of medicinal products from luban and frankincense (Individual interview, M. K., Oct. 2021).

The interviews also showed that the university gave tremendous support to the centre, aiming at making breakthroughs in this area. The following quote from the annual research report showed the innovations that this centre managed to make.

The Frankincense, biodiversity & medicinal plants unit has been actively involved in innovative research. Hence, since its inception, the unit has published over 40 publications in recognized journals, have been granted one international patent from South African Patent Registration Agency and have filed one national and two more international patent applications. The unit has also developed some nutraceutical products using Omani medicinal plants that can be used to treat different ailments (Annual Research Report 2020-21).

As to surveys, 90.6 percent of the respondents from faculty believed that this niche has boosted research and experimentation on local plants, as shown in the chart below.

The establishment of the Frankincense, Medicinal Plants and Biodiversity Centre boosted research and experimentation on local plants
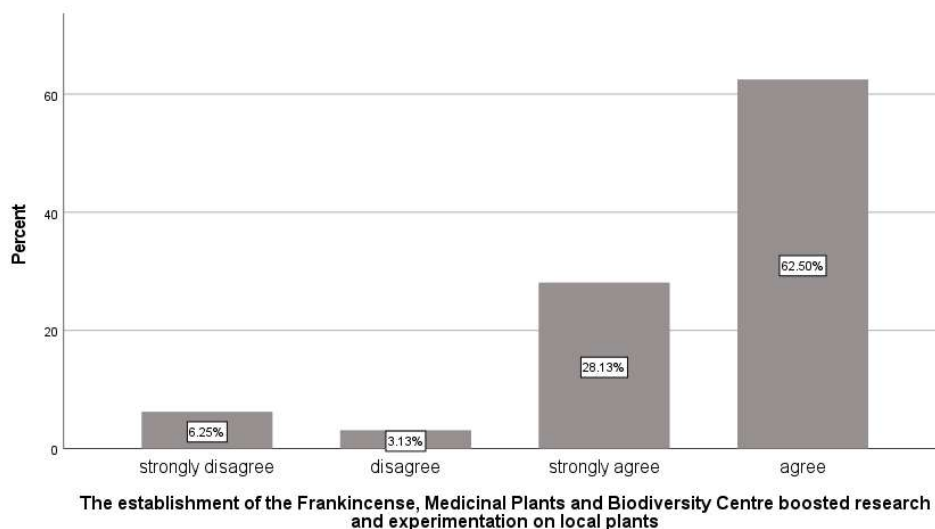
It was also found that the university established a third niche related to students with disabilities. Talking about the university's attempt to undertake unique initiatives, a senior management interviewee said, "we are aiming to be distinct so we wanted to do something unique; for example, the centre for students with disabilities" (Individual interview, S. R., Apr. 2021). Another interviewee commented along the same lines saying,

> [W]e are the first university that has a Students with Disability Centre, we have a programme now tailored to that and we have been getting a lot of support from the various ministries, the Ministry of Social Development and the Ministry of Higher Education, Research and Innovation have been supporting the university's mission in terms of that. It's also one of the strategic goals to leverage a Students with Disabilities Centre. So I believe that that is a niche in itself (Individual interview Ul. I., Oct. 2021).

A third interviewee believed that establishing a centre for students with disabilities is the most visible niche at the university. He said,

> We have celebrated just recently having a recognized centre, a centre for Students with Disabilities which is a nationwide centre. It was actually supported by all levels at the university, top and middle management, So yes, this is the most visible niche that the university is trying to help the community with (Individual interview, H.T., June 2021).

Other interviewees confirmed that the university received an inclusivity award from the Accreditation Services for International Schools, Colleges and Universities in the UK (ASIC), for its commendable efforts in promoting opportunities and inclusivity for people with disabilities.

ii. Improving research output

Another way of setting oneself apart was to improve the research profile of the university. Findings from interviews revealed that DU had plans to enter QS World

University Rankings for the Arab region and that research output was mandatory for application. One of the interviewees expressed this saying,

> [T]here was a strong push towards QS ranking, as one of the indicators for the ranking is the number of publications in Scopus. So they provided incentives for conferences and paper publication (Individual interview, I. Ul., Oct. 2021).

The interviews also showed that to improve the research output, the leadership established a dedicated Research Department and also formulated a comprehensive research policy. Echoing this, one of the senior management interviewees said,

> When I arrived, there were nothing formal about research. We established a research department, we implemented policies and now we have a well-accomplished research policy and I am really glad of that (Individual interview, L. M., July 2021).

It was also found that the university made research a mandatory component in the annual staff appraisals. It also offered research-related professional development opportunities to enhance the research skills of the staff. The following statement reflects these findings:

> Another strategy was the upskilling of the academic staff in terms of research which was made compulsory to urge young researchers to improve their research profiles (Focus group 2 interview, Oct. 2021).

Another interviewee added that the annual faculty activities report (AFAR) helped create a culture of research and competition among the staff. He commented, saying,

> [T]here is a very strong factor that drives the faculty towards doing research which is the AFAR policy. The policy is very clear and it promotes this kind of culture among faculty members and there is some kind of competition towards strong achievements between the departments (Focus group 1 interview, Oct. 2021).

It was also revealed during the interviews that, in order to ensure that research gains exponential growth, the university increased the research department budget. This is confirmed in the following statement: "we started off with a very minimal budget, then we went from almost zero to 40,000 OMR" (Individual interview, I. Ul, Oct. 2021). Another interviewee said that "the university has allocated a sizeable amount for research, which has encouraged the faculty to pursue research" (Individual interview, Elz. A., Oct. 2021). Interviewees also stated that the university started celebrating an Annual Research Day in recognition of the good research and researchers, as echoed in this statement:

> Yes, researchers were celebrated, especially during the Annual Research Day and if someone has an award it is announced on that day. Also, certificates are given to faculty if they win some competitions at the national or international level. (Focus group 1 interview, Oct. 2021)

It was revealed that as a result of making research mandatory, the staff started forming research groups, as reflected in the following testimony:

> In 2015 when I joined his department as an assistant professor, people were doing solo research but recently we have established research groups in every department.

> So, this was one of the initiatives which produced more papers and more projects for the faculty. Even the University has notified us that this is your research group and you can publish in your research group. (Focus group 4 interview, Nov. 2021)

However, although research output saw a remarkable increase, some interviewees highlighted a number of challenges that hampered them from enhancing their research profiles. They highlighted that the demands of administrative work and the teaching workload left them with limited time for research. They also highlighted the lack of substantial support for research activities and the absence of master and doctoral students as hinderances to realizing the university's full research potential. These concerns are captured in this quote:

> Challenges include a lack of master's and PhD students which hinders research project publication. Also, the heavy workload presents a major obstacle; assistant professors teach five courses and lecturers six. The workload and the pressure from AFAR lead to faculty sacrificing health and family time. The shortage of faculty leads to increased community work (Focus group 4 interview, Nov. 2021).

As to the survey findings, 96.9 percent of the surveyed staff believed that the establishment of a Research Department and the use of incentives contributed to the enhancement of research productivity and growth, as can be seen in the chart below.

The establishment of a Research Centre, along with research incentives has enhanced research productivity and growth
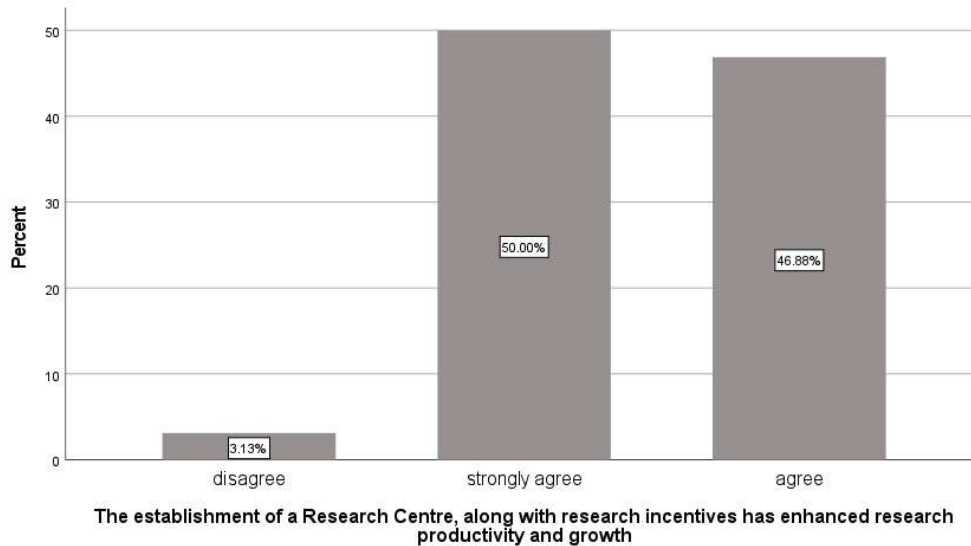
iii.   Gaining accreditation

A third way to *setting oneself apart* from the rest of HEPs involved pursuing and obtaining accreditation. This was manifested in three ways:
a) securing national accreditation,
b) acquiring international accreditation, and
c) earning a position in QS World University rankings.

Regarding the process of obtaining accreditation, data from the core documents revealed the following chronological sequence:
- In 2007, DU prepared its Self-study Quality Audit
- In 2009, OAAA panel of external reviewers visited DU

- In 2010, OAAA published the Quality Audit Report
- In 2011, DU established a Quality Assurance Unit
- In 2011-12, DU worked on the panel's recommendations and affirmations
- In 2013, DU prepared its 2nd Self-study Quality Audit
- In 2016, DU submitted its Institutional Standards Assessment Report
- In 2018, DU got accredited

When discussing the accreditation process, an interviewee expressed the following statement:

> It was done in a phased manner but these phases came at a very rapid pace. In 2011, a new Vice Chancellor took over and the accreditation was due in 2014, though it was subsequently delayed by two or three years. So, we had to make many changes but everything was in a phased manner. (Individual interview, S. R., April. 2021)

Document analysis also showed that DU made the decision to pursue further recognition through international accreditation. The list below outlines the international accreditations that DU has achieved:
- In 2018, DU applied for international accreditation
- In 2019, DU gained international accreditation
- In 2019, DU won the Inclusivity Award from ASIC (for its work to promote people with disabilities)
- In 2019, DU won the Chariman's Award from ASIC (for the development of outstanding student-centred education)
- In 2018, College of Engineering started work on ABET accreditation
- In 2018, College of Business launched its AASCB accreditation
- In 2020, College of Arts & Applied Sciences launched its AQAS accreditation
- In 2020, DU became a member of Advance HE, UK (staff accreditation)
- In 2021, College of Engineering Workshop became ISO accredited
- In 2021, Deanship of Admissions and Registration and Student Affairs gained ISO accreditation

Regarding ranking, data from the core documents revealed that DU applied for QS World University ranking for the Arab region. The following list shows the process and achievements:
- In 2020, DU applied for QS World University Ranking
- In 2021, DU was ranked number 121 in the Arab World
- In 2021, QS Intelligence Unit awarded DU the '5-Star Institution'
- In 2021, QS awarded DU the 1st position among Arab universities in the criteria of International Faculty

It was, however, highlighted that the accreditation process was not smooth sailing. There were challenges concerning data availability, demand for a more supportive environment such as extended contracts for successful researchers (Focus group 4 interview, Nov. 2021). The trial-and-error approach used by the accreditation agency was potentially confusing for the university and its stakeholders (Individual interview,

M. K., Oct. 2021). Lastly, the initial attempt at accreditation was not successful and was followed by an appeal process (Individual interview, Ul. I., Oct. 2021).

4.3.2 Strengthening the academic core

A major change DU witnessed was *strengthening the academic core.* Document analysis highlighted that this was accomplished through the implementation of the following measures:
- updating curricula for relevance and suitability
- enhancement of the teaching pedagogies and inclusion of modern technology
- embedding graduate attributes in curricula
- strengthening the student learning support
- alignment of assessment with learning outcomes
- restructuring assessment to include more formative assessment
- restructuring the Foundation Program
- improving exam moderation
- improving extra-curricular activities
- providing a variety of remedial classes
- introducing supplemental instruction
- strengthening academic advising
- increasing teaching practicum
- maintaining rigorous program entry standards

Data from the core documents showed that OAAA acknowledged the changes made in the academic programmes at the university, as confirmed by the Panel in the following statement:

> Academic Programs Development and Review Committee (APDRC) is established in all colleges. This committee is responsible for the oversight of the development of new programs through the Program Development Team (PDT) and the review of curricula of existing programs through the Program Review Team (PRT) (OAAA ISA report, Dec. 2018).

The Panel also made note of the active engagement of employers in the review and development of the academic programmes. This was captured in this quote:

> DU has also established a "College Advisory Board" in all its Colleges, which includes industry and employers' representatives. The board provides a forum for interaction with industry and employers and for involving them in the planning process, especially during program review and development of new academic programs (OAAA ISA report, June 2017).

The interviews also touched on the changes related to teaching and assessment policies and procedures. An interviewee said,

> We were more interested in getting accreditation so we went through the changes in the policies, teaching pedagogies, and changes in assessment (Focus group 3 interview, Oct. 2021).

The surveys also captured DU's efforts in making its academic programmes relevant. The majority of the surveyed staff believed that the expansion and diversification of the academic programmes helped meet the marketplace needs, as shown in the chart below.
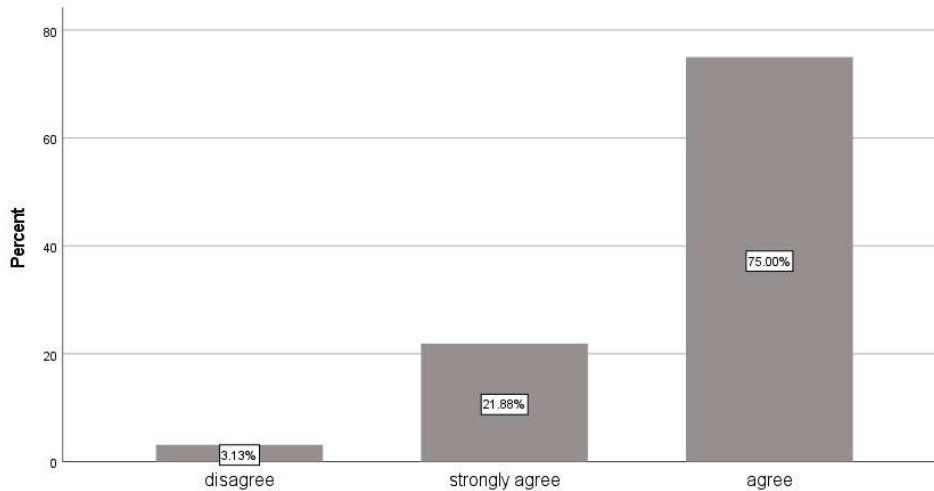
The expansion and diversification of the academic programs has helped meet marketplace needs

Moreover, 87.1 percent of the respondents thought the reviews of the academic programmes helped make them relevant and of international level, as shown in the chart below.
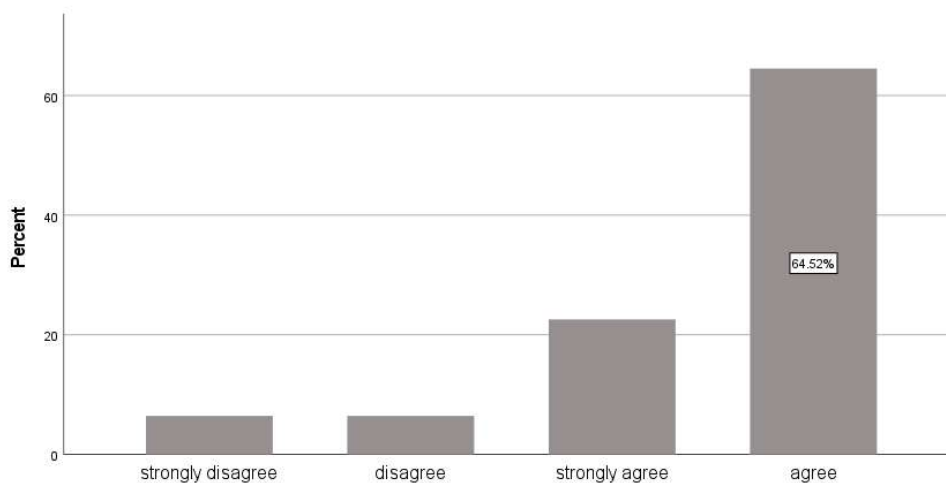
The regular review of the offered programs has made them current, relevant and of international level

4.3.3 Enhancing support services

In order to reinforce the changes in the academic core, DU deemed it necessary to enhance the support services. Data from the core documents showed that the below measures were taken to improve the services:

- Checking stakeholders' level of satisfaction
- Enhancing the quality of support services
- Increasing library electronic and print resources
- Improving the admission and registration services
- Improving students' grievance procedures and petitioning
- Strengthening college advisory councils
- Improving student learning support
- Improving academic integrity
- Improving graduates' soft skills

- Incorporating entrepreneurship
- Strengthening student placement
- Strengthening career and employment services
- Increasing opportunities for professional development
- Fostering of congenial work environment
- Enhancing health and safety on campus
- Establishing a call centre for students
- Strengthening teaching and learning online services
- Improving student recreational activities
- Improving induction for students and staff
- Involving students in the university affairs

The OAAA Panel noticed those improvements and wrote the following in their report:

> The Panel established that a variety of student support services are provided in order to enhance the student experience and facilitate their academic achievements, including job fairs, a soft skills cell, and an alumni club (OAAA ISA Report, June 2017).

The Panel also saw improvement in the academic support services and made this statement:

> It is also noticeable that according to the feedback report for academic support services, the rating for the effectiveness of the online registration system has improved appreciably amongst members of academic staff and students (OAAA ISA Report, June 2017).

They also noted an increase in the number of peer tutors, as stated in the following quote

> The number of peer tutors has increased from 38 in 2014-2015 to 51 in 2015-2016. According to the 2014-2015 feedback report on academic support services, students are satisfied with the peer-tutoring system (SM065) and their satisfaction level is rising (OAAA ISA Report, June 2017).

Examining the financial resources allocated to the academic support services, the Panel noted the following:

> The University appears to dedicate significant financial resources to some aspects of its academic support services (DU Budget: SM1.7.1- 2014-2015), such as Information Technology, (OAAA ISA report, June 2017).

The surveys also reinforced the documents findings. The staff survey showed that 87.5 percent of the respondents believed that the student support services saw a significant improvement over the last few years, as illustrated in the chart below.

Student support services have seen a significant improvement over the last few years
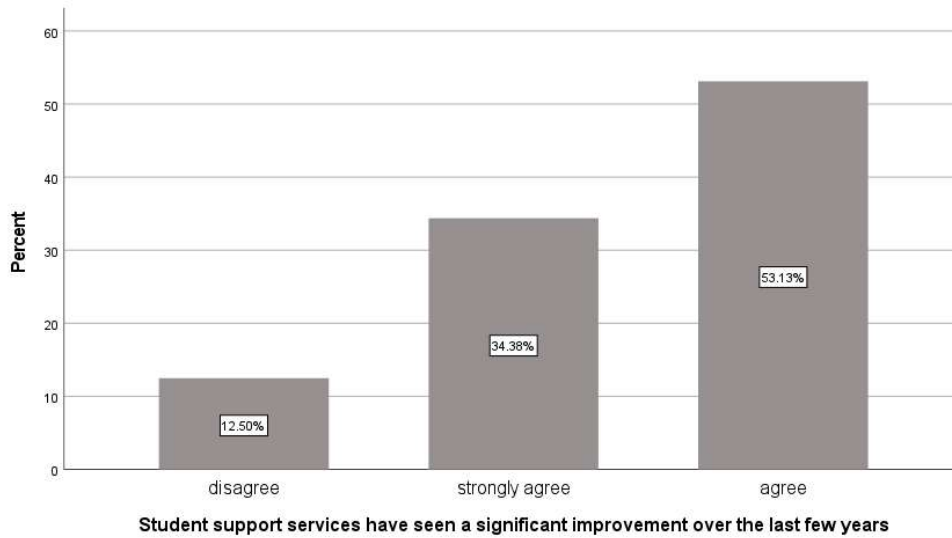
Similarly, the student survey indicated that 81.4 percent of the respondents agreed that the student support services have undergone a notable improvement.

Student support services have seen a significant improvement over the last few years
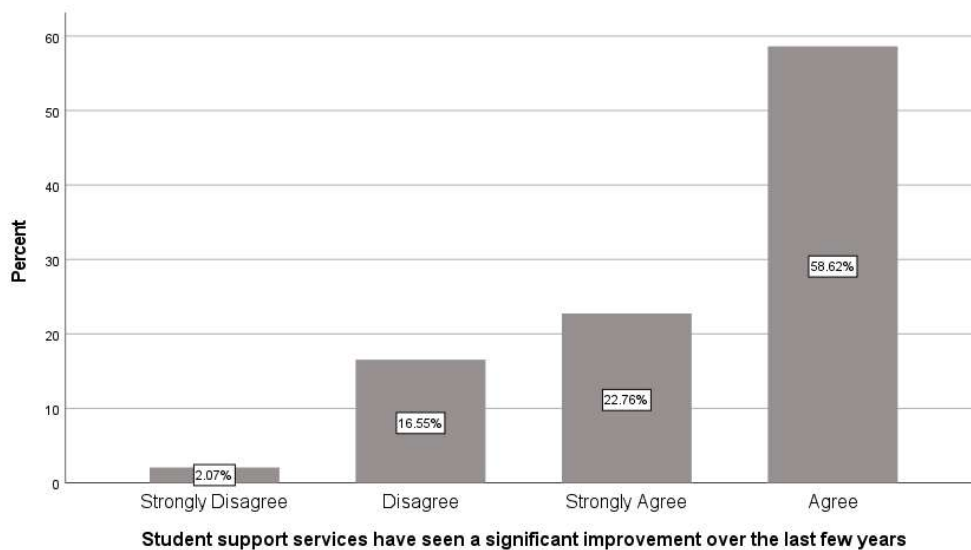
4.3.4 Strengthening ties with the community

Strengthening ties with the community was one of the commitments DU made during the change initiation stage. Findings from document analysis showed that these commitments were put to action during the implementation phase through:
- Merging the community service with the Continuing Education Centre
- Strengthening relationship with industry and employers
- Expanding the activities of the Community Service Centre
- Expanding the Continuous Education Centre activities
- Encouraging consultancies services
- Holding national and international conferences
- Strengthening association with alumni
- Involving the alumni in various activities

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- Forging partnerships with HEPs and professional bodies

The OAAA Panel noticed the merger and the new mission of the newly born centre as noted in their statement:

> DU established Community Service and Continuing Education Center (CSCEC) in September 2016 merging the existing CSC and CEC. The newly established CSCEC aspires to assist the Dhofar community in solving local challenges and issues by linking the University's resources and expertise with the needs of the community (OAAA ISA Report, June 2017).

The Panel also found evidence of the collaboration between the university and the industry and community representatives, as stated in their report:

> DU's industry and community engagement activities are coordinated through a network formed by its Centers for continuing education, entrepreneurship, and community service, while the University Advisory Board, and advisory boards for all the Colleges, provide mechanisms for regular interaction with industry and community representatives. Minutes of meetings (SM015, SM034) and Panel meetings with representatives of these boards provided evidence of significant activity and constructive engagement at both University and College level (OAAA ISA Report, June 2017).

The survey findings were aligned with the Panel's observations, as 93.6 percent of the respondents believed that the overhaul of the Centre of Continuing Education boosted the community support services. The chart below captures the views of the respondents.

The overhaul of the Community Service & Continuing Education Centre and (CSCEC) has boosted community support services
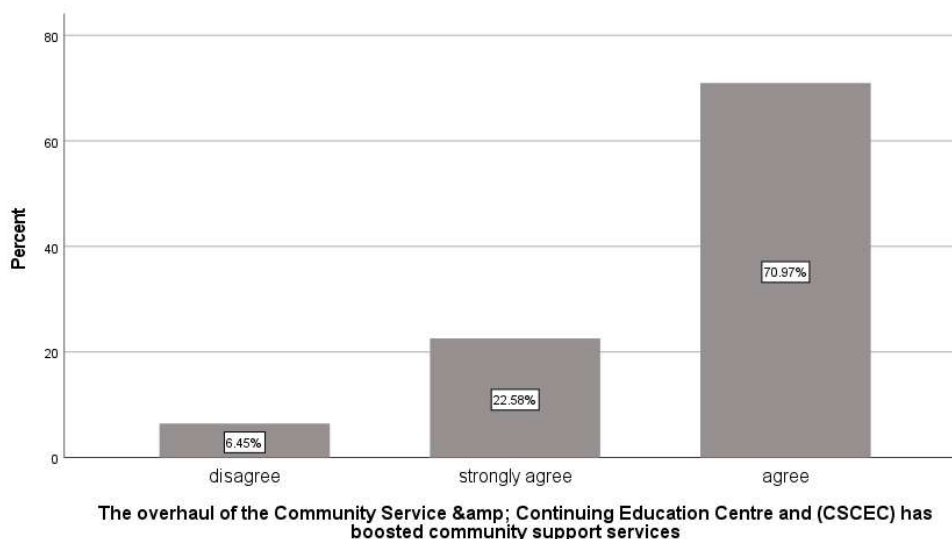
4.3.5 Making structural changes

To fulfil the commitments made regarding structural changes during the initiation phase, findings from data analysis and interviews highlighted the following changes:
- Forming a steering coalition to lead change
- Forming college committees, councils and advisory boards
- Reviewing governance and management and promoting good practices
- Improving communication among colleges and departments
- Reviewing the entity and activities policy
- Reviewing university policies and procedures on a priority basis

- Strengthening the policy management system
- Strengthening risk management
- Reviewing entry standards
- Reviewing academic programmes

During the interviews with the senior management, one of the interviewees said:

> We drafted the first strategy in 2014-19, the first strategic plan. That was when we changed the vision and mission and discussed all those issues and that was the roadmap for the structural change (Individual interview, L.M., July 2021).

Another interviewee added that,

> The hierarchy was developed. They appointed deans and chairs and everything was structured and a research department was created. Then there was a Quality Assurance Department then there were many departments that opened and policies were created to push the change. So, the process started actually with the strategic plan in 2014-2019 (Focus group 3 interview, Oct. 2021).

The OAAA Panel recognized the establishment of a Risk Management Unit at DU to oversee and mitigate risks, as stated in their report:

> DU established a Risk Management Unit (RMU) to integrate risk discussion into strategic deliberations and identify the interrelations of risk factors across activities. The RMU is responsible to identify and assess strategic, compliance, financial, operational, human resources and reputation risks (OAAA ISA Report, June 2017).

An interviewee, however, expressed concern about the human resources systems, which lack specificity, highlighting that,

> The challenges are that our HR systems are not explicit. For example, specific roles are not clearly defined, so you end up doing tasks outside your designated area. This could compromise quality (Individual interview, UI. I., Oct. 2021).

4.3.6 Plan, plan, plan

The sixth process that the university used to implement change and maintain its momentum was thorough planning. This commitment to continuous planning was manifested through the following actions:
- Consulting experts and stakeholders regarding the university's strategic plan
- Reviewing the accomplishment of the strategic and operational plans
- Reviewing the current state of affairs and making modifications
- Monitoring progress through feedback
- Evaluating achievements and planning next SP 2021-2031
- Compiling quarterly and annual reports to monitor progress
- Strengthening risk management
- Ascertaining financial stability

During the interviews, the importance of planning was repeatedly emphasized, as shown in the following statement:

The strategy used was planning, so the university made an action plan and used the ADRI approach to capture all the details across all departments (Focus group 1 interview, Oct. 2021).

Another statement also highlighted the centrality of planning to the change process:

So, given this process the university changed from 0 to 100%. Before there was no planning, there was no guidance (Focus group 3 interview, Oct. 2021).

4.3.7 Mitigating challenges

To ensure that progress is being made, the university took steps to address the challenges that arose during the implementation process. These were as follows:
- monitoring challenges
- spreading awareness regarding change progress
- maintaining communication
- working in teams
- celebrating wins
- recognizing excellent performance

During the interviews with the senior management, an interviewee highlighted one major challenge the university faced and how it was overcome. He said,

The biggest challenge was to get the accreditation. It was a new system in Oman and we were the first university to go for it. So, either you go first and accept the consequences or you be late and wait. So, we took the challenge and worked hard to overcome the challenges and I'm proud to say that we were the first university in Oman to be accredited. (Individual interview, K.H., Apr. 2022).

Another interviewee expressed his experience about the various challenges faced in the following statement:

We faced challenges regarding the quality assurance process which was not clear; challenges with how to improve research, teaching and community services. We made things clear and found solutions to mitigate the challenges. I'm particularly glad about what we did about research. (Individual interview, L. M., July 2021)

Looking at the change from a different perspective, one of the middle management interviewees expressed his opinion about the challenges the instructors faced and how they were mitigated. He said,

One of the biggest challenges was that the instructor has to do research, community service and at the same time teach, in addition to being involved in committees. All these challenges were overcome through cooperation and working together (Focus group 4 interview, Nov. 2021).

Another challenge that was highlighted by interviewees was the lack of professional development in the beginning of change. An interviewee stated that "initially professional development was not a priority, but it was later incorporated into the appraisal scheme called AFAR" (Individual interview, UI. I., Oct. 2021). The interviewee acknowledged that this led to improvements, but suggested that there is room for enhancement.

What follows are the strategies the leadership deployed to implement change

4.3.8 Take risks

DU adopted the strategy of taking risks to drive change. This was evident in the following actions:
- Being the 1st university to venture into national accreditation
- Being the 1st university to venture into international accreditation
- Being the 1st university to start online education during the Covid-19 pandemic
- Striving to establish a prominent position among universities in the Arab World, despite being a relatively young institution.
- Putting significant efforts towards gaining recognition for excellence in teaching and research
- Developing plans to position itself as a renowned research hub for the region
- Implementing a risk management system to provide guidance and mitigate potential challenges.

A senior management interviewee stated that the toughest challenge was to make the bold decision of taking the lead in applying for accreditation. He said,

> The biggest challenge was to get the accreditation. It was a new system in Oman and we were the first university to go for it. So, either you go first and accept the consequences or you be late and wait. So, we took the challenge and worked hard to overcome the challenges (Individual interview, K. H., Apr. 2022).

Another interviewee succinctly captured DU's decision to embark on the venture of participating in the QS World University Ranking, saying:

> DU belongs to the MENA region that includes the Middle East and North Africa, but we still believed that we want to have a distinct place among those universities. So the testing of the waters took place and we decided to go for QS ranking for the Arab Region (Individual interview, J.S., Oct. 2021).

Another instance of risk taking was that DU was the first private university to open its doors to students with disabilities, despite limited resources in this area. This notion was encapsulated in the following statement: "If you look more recently, we are the first university that has a Students with Disability Centre and that was challenging" (Individual interview, Ul. I., Oct. 2021). Interviews also revealed that DU was the first university to go online during the outbreak of COVID-19 pandemic, as captured in the following quote:

> During Coronavirus times, DU was the first university in Oman to go online and there was a challenge that we have to go online within a week's time, which means we have up to 2000 students concurrently connected to Moodle services. During this time, we made a lot of changes. We changed from Windows to Linux. We added many servers, we applied load balance, we put databases on one dedicated server. So, all these changes made us reach this high level (Focus group 10 interview, Dec. 2021).

The establishment of a risk management system driven by a willingness to take risks, was also acknowledged by the OAAA Panel in the following comment:

> DU has recognized the need for risk management across the full range of its activities. A Risk Management Committee (RMC) at institutional level has been established to drive the policy, procedures and implementation. A Risk Management Policy is also developed and implemented. (OAAA ISA Report, June 2017)

4.3.9 Involve & hold responsible

Another strategy that DU employed during the change implementation phase was *involve and hold responsible*. This strategy was demonstrated through:
- adopting an "all hands-on deck" approach
- dividing the self-audit tasks among the staff
- establishing committees and assigning staff accordingly
- appointing heads of task force committees
- assigning responsibility under key performance indicators (KPIs)
- setting minimum requirements for staff performance appraisals
- making research publication mandatory

During the interviews the theme of involvement and accountability emerged consistently. One interviewee highlighted the university's adoption of "the strategy of involvement and partnership", emphasizing its commitment to involving everyone in strategic planning and policy development (Focus group 2 interview, Nov. 2021). In addition, staff surveys revealed that a significant majority (84.4 percent) of the respondents believed that their views on different changes were sought, as illustrated in the chart below.

Faculty views and perceptions on required changes were sought in meetings or via surveys
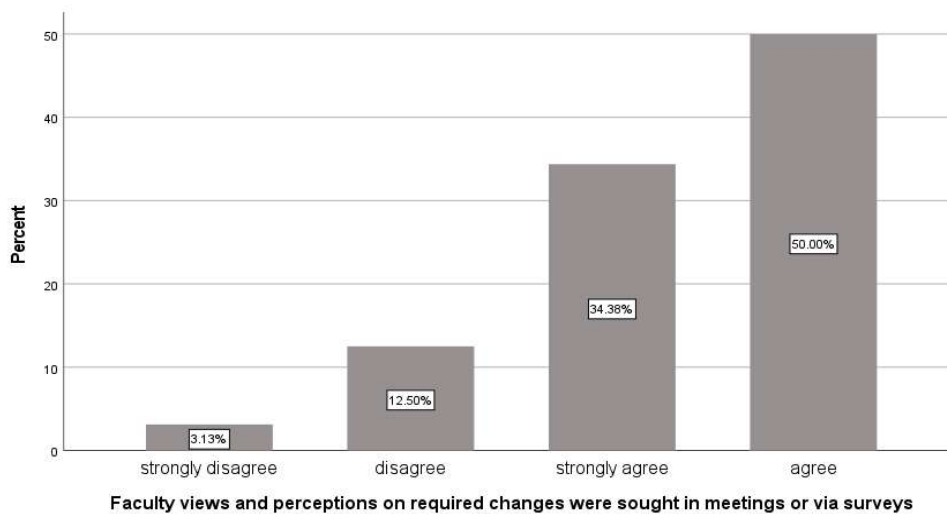
Interviews also showed that both senior and middle management personnel were held responsible for effectively communicating decisions, while the staff members were held responsible for the implementation of policies and decisions.

4.3.10 Monitor, measure & reroute

The third strategy that the leadership employed during the change implementation phase was monitoring, measuring and rerouting. Document analysis and interviews showed that the following measures were taken to execute the strategy:
- inclusion of KPIs in the strategic plan
- inclusion of KPIs in the operational plans
- compilation and submission of quarterly reports
- compilation and submission of annual reports
- conducting comprehensive university-wide surveys twice a year
- analysis of survey data
- data findings helped inform decision making
- evaluating staff performance in teaching, research and community service
- conducting strategic and operational plans interim reviews
- making changes in the plans and implement adaptations accordingly

Looking at DU's governance and management structures, OAAA Panel noticed the effective level of monitoring and commented, saying,

> Governance and Management structures, processes and mechanisms for accountability are appropriate. At governance level, these result in effective setting and monitoring of the HEI's strategic direction as well as leadership and oversight of the HEI's academic, administrative and financial activities (OAAA ISA Report, June 2017).

During the interviews, a senior management interviewee expressed his opinion about collecting data and monitoring, saying:

> I am really glad about the operational plan and how we collect statistics. We have the initial values about every KPI at the beginning and we kept monitoring. That was the real work (Individual interview, M. L., July 2021).

Another senior management interviewee highlighted the importance of conducting weekly monitoring to track the progress of policy implementation, in the following statement:

> There are structures already in place, such as the Academic University Council which meets weekly to monitor the developments and also the QA director who is a member of that council. The council discusses and monitors the proposed policies and their implementation (Individual interview, Elz. A., Oct. 2021).

The OAAA Panel also noticed that DU kept measuring the satisfaction level of its stakeholders and wrote the following:

> DU also monitors the satisfaction levels of academic and non-academic staff with staff support services towards the end of each academic year, using a suitable feedback form (OAAA ISA Report, June 2017).

However, an interviewee expressed some concern about the monitoring and measuring strategy employed by the Quality Assurance Unit, saying:

> We have basically the university strategic and operational plans which have key performance indicators. However, these KPIs lack a precise tracking method for

systematically checking off each point. While the major KPIs have been identified, the tracking system needs improvement to ensure more effective monitoring and evaluation (Individual interview, UI. I., Oct. 2021).

When asked about the metrics that were employed to monitor changes, a senior interviewee responded saying:

> I think this is another area for improvement to create a comprehensive follow-up system ensuring that things are on track. It is important to know why deviations happen and address them proactively. I think a lot of things were left to chance and a lot of things were spontaneous (Individual interview, M. K., Oct. 2021).

4.3.11 Diversify leadership styles

The fourth strategy DU adopted was diversifying leadership styles. Interviews indicated that DU utilized authoritarian, transactional, and participative leadership approaches based on the specific requirements of each situation. Recognizing the challenges faced by DU's leadership, the OAAA Panel stated:

> Interviews with DU staff at all levels through the current organization indicate that the cessation of the agreement with AUB in September 2015 and the loss of key personnel at that time, left a significant vacuum in the governance and management of the University. The Panel is impressed with the DU leadership in rebuilding the management infrastructure and implementing a new phase of institutional development and growth (OAAA ISA Report, June 2017).

During interviews, one of the senior management personnel affirmed the university's adoption of a blended leadership style, highlighting that the participative style was predominant. He stated the following:

> It was a mixed type of leadership in general but if you are asking about one outstanding style of leadership, I would say participative leadership because I think without having engaged and involved everybody the university wouldn't have succeeded at all in making the change (Individual interview, H.T., June 2021).

Another senior management personnel acknowledged juggling the authoritarian with the participative style, but confirmed a greater reliance on the latter. He said:

> We used a little bit of participative leadership in our approach whenever we thought there should be participation and also a little bit of authoritative approach… but it has been 80% participative leadership and that has actually worked for us (Individual interview, J. S., Oct. 2021).

A third senior management interviewee believed that the leadership style was mainly transactional, as can be understood from the following statement:

> I believe that one of the main challenges here was that the type of leadership was transactional, not really transformational, not really as collaborative, as high impact as was required in order to take it to the next level of quality (Individual interview, UI. I., Oct. 2021).

He also added that some leaders at the university adopted a transformational style, saying:

> Certain leaders or managers within specific colleges and foundation have empowered and used the transformational type of leadership or collaborative type of leadership or high-impact leadership in order to ensure that their colleges advance and achieve milestones (Individual interview, Ul. I., Oct. 2021).

4.3.12 Use finances wisely

The last strategy that emerged from document analysis and the interviews was related to the wise use of finances. This was evident in two key aspects: (a) overcoming a substantial deficit inherited from the previous administration and (b) exercising careful and strategic spending. In the following statement, one of the interviewees testified to the astute handling of funds, saying:

> I think the Board of Directors and the Board of Trustees, senior management of the university did plan the finances very well in terms of the rapid changes that happened at the University. I don't think money was an issue, not in research, not in teaching and not in professional development (Individual interview, M. K., Oct. 2021).

An interviewee from the finance department further confirmed that the deficit was cleared through prudent financial management. He commented, saying: "the university is now operating with great ease and with enough liquidity to meet its strategic and operational planning" (Focus group 7 interview, Nov. 2021). Document analysis and interviews also highlighted specific actions that helped improve the financial management, including the following:
- appointing a new finance director
- appointing an internal financial auditor
- introducing changes in financial regulations
- close involvement in budgeting and financial reporting
- participating in financial market meetings
- giving priority to the academic affairs during funds allocation
- implementing cost-cutting measures to eliminate unnecessary expenditures
- introducing flexible monthly and termly fees payment
- generating more revenues via attracting more students

Another interviewee commented on the recognition DU earned as a result of its strong financial performance, saying:

> DU was recognized by the Capital Market Authority for four consecutive years for achieving the best financial performance among organizations having a capital of OMR 5-10 million. The vice chancellor was also recognized for this achievement (Focus Group 7 interview, Nov. 2021).

Data from document analysis also showed that DU increased its budget allocation and allocated more funds towards research, as highlighted by the OAAA Panel:

> DU increased its levels of internal funding, has secured funds from The Research Council (TRC) and increased its budget allocation steadily. In 2015-16, DU allocated OMR 50,000 in its budget for research and in 2018-19 that figure rose to OMR

100,000. The strategic plan shows that DU provide a variety of research funding schemes (OAAA ISA report, June 2017).

Overall, the interviews revealed that the change implementation phase was marked by collaborative synergies, including:

- Pursuance of various niches: engineering niche, research niche and inclusivity niche. While the first niche faced challenges, the other two were successful (Individual interview, UI. I., Oct. 2021).
- Enhancement of research output and setting oneself apart. These two align, contributing not only to academic recognition but overall reputation (Individual interview, J.S., Oct. 2021).
- Gaining multiple accreditations: national, international and positioning oneself in World University Rankings for the Arab Region. These are the culmination of the efforts to establish niches and enhance the institutional research profile (Individual interview, J.S., Oct. 2021).
- Strengthening the academic core involved multidimensional efforts: updating curricula, improving instructional pedagogies, improving academic programmes, and improving support services such as library resources, admission and registration services and student support. (Focus group 3 interview, Oct. 202; OAAA ISA report, Dec. 2018).
- Strengthening ties with the community involved merging community service, expanding activities, and engaging with industry and employers (Focus group 7 interview, 15 Nov. 2021).
- Structural changes involved forming committees, councils and advisory boards, as well as improving governance and management (OAAA ISA report, June 2017).
- Mitigating challenges entailed monitoring, communication, teamwork and celebrating wins (Individual interview, L. M., July 2021).
- Taking risks was evident in taking the lead in seeking accreditation, venturing into online education and participating in international rankings (Individual interview, K. H., Apr. 2022).

4.4 Anchoring change in culture

The fourth research question focuses on examining the interplay between change and the institutional culture, that is how the change has influenced the institutional culture. Overall, the findings from the interviews and surveys showed that the change has influenced the institutional culture, but that change is still evolving and needs more time to be fully ingrained in the culture. The following are some of the findings from surveys:

- 87.6% of the respondents from the staff believe that the new culture is better than the previous one
- 87.5% of the respondents from the staff think that the changes have being anchored in the university culture
- 90.4% of the respondents from students believed that the changes have positively impacted their culture

As to the interviews, a senior management interviewee opined that the new culture highlights the notion of 'let's do things better; let's improve things' (Individual interview,

M. K., Oct. 2021). The same interviewee added that changes need more time to be fully cemented in the culture. He said: "more work needs to be done at the level of students and faculty" (Individual interview, M. K., Oct. 2021). Another interviewee stated the following:

> If we can picture culture in layers, then we have definitely pierced the outer layer and perhaps the second and third layers, but we have not yet reached the innermost core. I'm sure within two to three years by the time of next accreditation, we will reach there (Individual interview, S. R., Apr. 2021).

A third interviewee described the process of change for staff and students as "enculturation". He explained that staff and students had to adapt to the new system by embracing the day-to-day practices and instructional strategies that aligned with The changes.

What follows is a descriptive analysis of the strategy employed to anchor the change in culture and the influence the change has on teaching and learning, research and community service.

4.4.1 Acknowledge, celebrate & empower

One of the strategies that DU drew upon to embed change in culture was to *acknowledge, celebrate and empower.* This strategy was achieved through:
- Recognizing outstanding performance in teaching, research and community service
- establishing an official day for acknowledgements
- sending congratulatory emails to individuals with noteworthy achievements
- arranging meetings with the Vice Chancellor to personally acknowledge outstanding achievers
- promoting high achievers
- giving financial incentives to best achievers
- celebrating good achievements through gatherings and events
- empowering staff and students by promoting a culture of consultation and inclusion

Speaking about the noticeable change in acknowledging outperforming individuals, an interviewee said:

> Previously there were research publication incentives and that's it. You don't see any mention of any achievement on the webpage but for three years now you can see the circulation of emails recognising and celebrating faculty and students' achievements (Focus group 4 interview, Nov. 2021).

During the interviews, some interviewees expressed dissatisfaction with the level of acknowledgement that two outstanding researchers received. They said:

> The university should have given those researchers who are among the 2% best researchers in the world a five-year contract but what happened is that they are given a one-year contract (Focus group 4 interview, Nov. 2021).

As to surveys, 81.3 percent of the respondents from the staff believed that the performance-based incentives have improved the staff's performance and commitment, as illustrated below.

Performance-based incentives have improved faculty performance and commitment
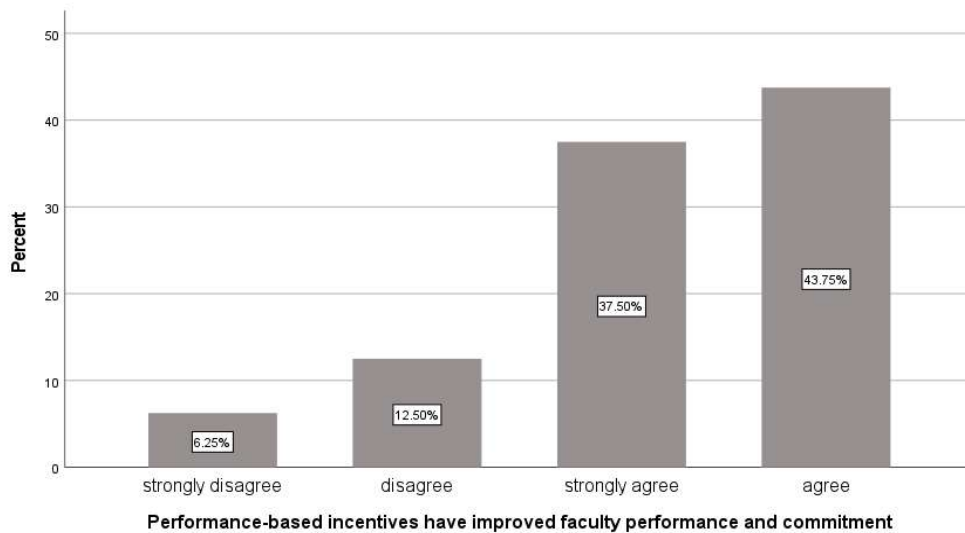
Moreover, the majority of the respondents from students either agree or strongly agree with the university celebrating achievements and honouring its staff, as illustrated below:

The university celebrates achievements and honours faculty
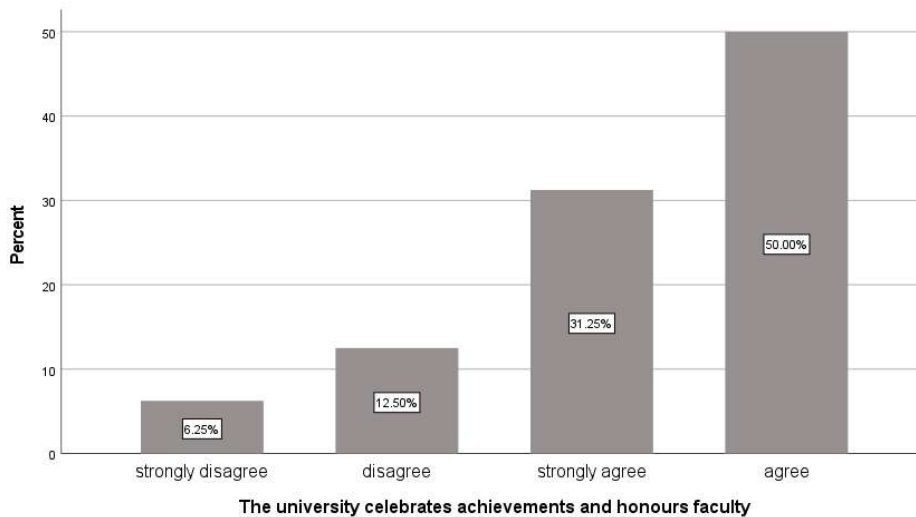
4.4.2 Change influencing teaching and learning

Findings from interviews and document analysis indicated that the influence on teaching and learning was manifested through:

- Increased awareness of the necessity to apply various pedagogical approaches in teaching and learning
- Greater adoption and integration of technology in teaching and learning practices
- Increased emphasis on student-centred teaching

- Increased emphasis on student autonomous learning
- Increased awareness and application of assessment of learning and assessment for learning
- Increased awareness of the need to minimize lecturing
- Increased awareness of incorporating hands-on activities during class
- Increased use of critical thinking and problem-solving strategies in class
- College of Business dedicated the academic year 2019-20 to focusing on the assurance of learning
- Foundation Program introduced flipped learning in 2019
- Foundation Program replaced remedial tutoring with the supplemental instruction model in 2018
- College of Engineering introduced semi-flipped learning in 2020
- A growing number of teachers earned their fellowships from Advance HE, UK
- A significant increase in the number of dedicated professional development targeting the academic staff

During the interviews, an interviewee from the senior management highlighted that "DU aligned its standards in teaching and research with the international standards" (Individual interview, Elz. A., Oct. 2021). Another interviewee stated that the changes in teaching and learning have brought about some transformation in the student culture, though he admitted that there is still a significant distance to cover to realize the desired cultural shift (Focus group 4 interview, Nov. 2021). A third interviewee, however, stated that DU's strong emphasis on research was in a way at the expense of teaching and learning (Individual interview, Ul. I., Oct. 2021). A fourth interviewee talking about assessment highlighted that teachers learned new ways of assessment for learning (Focus group 2 interview, Oct. 2021), adding that classes now entail more discussion, participation and interaction.

A fifth interviewee stressed that in his department the focus of teaching has shifted from imparting knowledge to building student character, highlighting that many of his students became self-employed rather than teachers, as they originally aspired (Focus group 2 interview, Oct. 2021). A sixth interviewee related his experience in seeing more students being engaged in projects, presentations and field trips (Focus group 4 interview, Nov. 2021). Commenting on the approaches used for teaching and learning when visiting classes, the UK-based accreditation agency (ASIC) stated the following:

> The teaching staff used appropriate teaching and learning approaches, effective use of teaching aids and support materials; the students provided very positive feedback on their teachers (ASIC Accreditation Report, 2019).

4.4.3 Change influencing research and publication

Research and publication have experienced a significant impact due to change. Findings from document analysis and interviews have revealed that the culture of research has been heavily influenced by the changes. Reflecting on this shift, the OAAA Panel stated:

> The Panel found research to be of central importance to the University, not only from its institutional status (and associated requirements in the Requirements for Oman's System of Quality Assurance in Higher Education - ROSQA) but also for developing its aim to be a major research-based private university, and

integrating with the community through research of regional importance. Interviews confirmed that this aim is being pursued vigorously by the BoT, BoD, VC and the DVC for Academic Affairs and Research, within their respective remits. (OAAA ISA report, June 2017)

Data from the interviews and document analysis revealed the following achievements resulting from the implemented changes:

- OAAA awarded DU a rating of 3 in research and publication, indicating good status in that area
- ASIC commended DU on its well-structured system for research management
- DU's Research Gate score rose from 209 in 2015 to 1152 in 2019
- In 2021, Stanford University recognized two researchers from DU as being among the top 2% of scientists globally.
- QS World University Ranking awarded DU "high status" in research output for 2021
- QS World University Ranking also ranked DU the 16th university in the Arab world in terms of highest paper publication per staff in 2021
- QS World University Ranking ranked DU the 1st among all private universities in Oman and 16th in the Arab world for publishing the highest number of papers per faculty in 2021
- DU secured the 55th position in the Arab World according to the QS World University Ranking for its extensive international research network.
- In 2020, DU has in its account more than 1700 publications in peer-reviewed journals indexed in prestigious databases
- In 2021, DU academic staff published 96 papers in Scopus, more than 100 papers in Web of Science with impact factor, 60 papers in peer-reviewed journals, all totalling more than 250 papers at an average of 2.1 research papers per faculty, with citation hiking to reach 7.8 per faculty during the same academic year.

During the interviews, an interviewee highlighted the paradigm shift in the culture of research and publication among the staff, stating that "previously the staff were not thinking much about research, but now everyone is saying I have to do research; I have to improve my profile" (Focus group 3 interview, Oct. 2021).

4.4.4 Change influencing community service

In addition to the influences observed in teaching and learning and research and publication, the change has also had an impact on community service initiatives. Data from document analysis revealed that the surveys conducted by the university indicated a significant increase in community satisfaction levels, even surpassing the set target. Interviews and document analysis also showed that the institutionalization of the community service in the institutional culture has gone through the following developments:

- establishing a dedicated strategic and operational plan for community engagement
- establishing industry and community engagement advisory boards

- integrating the Community Service Section into the Continuous Education Centre so as to consolidate efforts and resources
- enhancing and expanding the role of the Community Service Centre
- expanding and diversifying the activities offered by the Continuous Education Centre
- establishing a dedicated Centre for Entrepreneurship aiming at fostering entrepreneurial activities within the community
- incorporating community service as a criterion in the staff annual performance appraisals and promotions
- engaging DU's alumni in community outreach and involvement initiatives
- Providing education and training programs tailored for the broader community

During the interviews, an interviewee from the senior management personnel stated that community engagement has become an integral part of the staff's responsibilities, leading to more visibility of the university within the community (Individual interview, Ul. I., Oct. 2021). Another interviewee highlighted that the frequent engagement with the community has created strong bonds, resulting in various collaborations, which materialized into memoranda of understanding (MOUs), guest lecturers and other forms of mutually beneficial cooperation (Focus group 7 interview, Nov. 2021). A third interviewee from the senior management mentioned his college's active involvement with the community, saying: "last year we conducted over 45 professional development training programs for the community", adding "I think the level of trust in the community towards the university has increased" (Individual interview, M. K., Oct. 2021).

Moreover, during the OAAA Panel's visit to the campus and interviews with various stakeholders, they enumerated the various engagement activities, stating that:

> The S&OP provides for various forms of engagement, including continuing education programs, consultancy services, community education and training programs, and support for community service projects. Community service is also a criterion for faculty appraisal and promotion (OAAA ISA Report, June 2017).

They also noticed the growing level of engagement with the community and wrote that "the panel considers DU's approach to be strong in this area with a range of strategies accommodating elements of good practice" (OAAA ISA Report, June 2017). They added that "the Panel found that DU's community engagement activities have been sustained in a strategic manner, and more initiatives are planned" (OAAA ISA Report, June 2017).

4.5 Conclusion

In conclusion, the findings showed that the change process at DU was initiated, implemented and institutionalized through various change processes and strategies. The initiation phase comprised six key elements: wanting to change, needing to change, laying the groundwork, setting goals, creating urgency, and planning, while ensuring that all involved stakeholders are informed. The desire for change emerged as a significant change incubator, deriving from a strong motivation to improve and evolve. The need for change driven by accreditation, coupled with the establishment of a solid foundation— key appointments and developing a compelling vision— and clear goals, provided a framework for the change process at the university. The

creation of a sense of urgency, coupled with the strategy of informing and involving various stakeholders, was found to be instrumental to the change initiation phase.

Regarding the implementation phase, a total of twelve processes and strategies were identified, highlighting the lengthy and diverse approaches employed at this stage. These included setting oneself apart, strengthening the academic core, enhancing support services, strengthening ties with the community, making structural changes, meticulous planning, mitigating challenges, taking risks, involving and holding stakeholders responsible, monitoring, measuring and adapting, diversifying leadership styles, and utilizing finances wisely. Moreover, the institutionalization of change, or anchoring change in the institutional culture, was found to be still evolving, though there were clear indications evidencing the impact of the change on different cultural aspects, such as teaching and learning, research and publication and community service. The findings revealed that the strategy of 'acknowledging, empowering and involving' was employed to embed change in culture.

Overall, the in-depth investigation of DU's change process demonstrated that DU employed a comprehensive and multifaceted approach to navigate change across three distinct phases: initiation, implementation and institutionalization.

CHAPTER 5: DISCUSSION

5.1 Introduction

Following from the descriptive analysis of the findings presented in Chapter 4, this chapter aims to present an evaluative analysis of those findings, pointing out similarities and differences with the literature discussed in Chapter 2. Where possible, the chapter provides justifications for these convergences and divergences. It is worth reiterating that the study aimed at deepening understanding into organizational change management (OCM) in higher education, particularly in the context of Oman, given that the literature on OC in higher education is lacking in this regard (Bleiklie, 2014; Kezar & Eckel, 2002; Scott, 2015). In particular, the study aimed at identifying the change processes and strategies that a private university in Oman has gone through since 2014. To gain deep understanding of the change intervention, particularly, how the change was managed and the strategies involved, the study posed four main research questions:

i. How was the change process (a) initiated and (b) implemented?
ii. What were the strategies used to initiate, implement and institutionalize change?
iii. How do these strategies align with organizational change theories?
iv. To what extent has the change influenced the institutional culture?

To ensure depth and breadth while answering these questions, the study used a mixed methods approach, availing of the qualitative inquiry through in-depth individual and focus-group interviews with the senior and middle management personnel, respectively, and also of the quantitative inquiry through questionnaires, which sought to distil the viewpoints and perceptions of those affected by change— staff and students.

In alignment with the structure of the Findings chapter, this chapter is divided, alongside the introduction and conclusion, into three main sections, focusing on (a) how the change was initiated, (b) how it was implemented and (c) how it was institutionalized or anchored in culture. The change processes and strategies extracted from the findings are discussed under their respective sections. These processes and strategies are also compared with the literature to highlight convergences and divergences. In this way, the first, second and third research questions are answered in sections one and two (5.2 & 5.3), that is under how the change was initiated and how it was implemented. The fourth research question about the extent to which the change influenced the institutional culture is discussed in the third section of this chapter (5.4), that is how the change was anchored, or institutionalized. For clarity, Table 11 below illustrates the section under which each research question is discussed.

Table 11 Sections under which Research Questions are discussed

Section	Research Questions (RQs)
Section 5.2 & Section 5.3	RQ1: How was the change process (a) initiated and (b) implemented?
	RQ2: What were the strategies used to initiate, implement and institutionalize change?
	RQ3: How do these strategies align with organizational change theories?
Section 5.4	RQ4: To what extent has the change influenced the institutional culture?

5.2 How change was initiated

When a university commits to change, embarks on a rigorous national and international accreditation process, gets accreditation and rises to distinction, the odds are high that the change process was well thought out and that this organizational character is worth exploring to understand the change processes and strategies that Dhofar University (DU) used to initiate change. The findings (Chapter 4, section 4.2) revealed that change at DU was initiated through such processes as (i) wanting to change, (ii) needing to change, (iii) laying the groundwork through key appointments and vision crafting, and (iv) setting goals. In addition, two main strategies were deployed to get the ball of change rolling: (v) create urgency and (vi) plan and make aware (Table 12 below illustrates these processes and strategies). These findings answer the first part of the first research question, that is *how was the change process initiated?* These findings seem, on the whole, to be consistent with the OC literature, as shall be discussed below. Divergent findings, however, will be highlighted and justified. What follows is a discussion of these change initiation processes and strategies, starting with the processes and then the strategies.

Table 12 Summary of the processes & strategies of initiating change

Initiating change
i. Wanting to change
ii. Needing to change
iii. Laying the groundwork
iv. Setting goals
v. Create urgency
vi. Plan & make aware

5.2.1 Wanting to change

This desire for change represented the internal force that initiated the change enterprise at DU. Although the interviewees (e.g. individual interview, L.M., July 2021) differed on who was behind the desire to change, that is the Vice Chancellor or the Board of Trustees, they all concurred that the process of change started with a burning desire to raise the standards, improve teaching and learning, reinforce research output, and strengthen ties with the community, in addition to a desire for being recognized as one of the best universities in Oman and the region. This desire to improve standards and be recognized echoes with the institutional and cultural theories of change in higher education. These theories argue that change is to a large extent driven by a desire to improve the image of the institution (Kezar, 2001). Findings from individual interviews with the senior management and focus group interviews with the middle management (Chapter 4, section 4.2.1) support the claim of these theories, in that one of the main factors that drove change at DU was chasing recognition and

distinction. Similarly, Lewin (1951) and Schein (2004) portray change as a desire to 'destabilize the equilibrium', or 'unfreeze' the existing situation by creating a sense of anxiety among the employees called 'survival anxiety'.

Moreover, the desire to change indicates that change at DU was intentional and not by chance. This intentionality echoes with the planned type of change in the literature, which holds that planned change is a process that "moves from one 'fixed state' to another through a series of pre-planned steps" (Bamford & Forrester, 2003, p.547; cf. Livne-Tarandach & Bartunek, 2009). However, the reality is that even when change is carefully planned, it still entails aspects of unexpected or emergent change, as pointed out by Seo et al. (2004) and Tarandach & Bartunek (2009). In fact, intentional change itself is a dynamic and iterative process, or "disorderly", as suggested by Kezar (2001, 2009). The interviews with the senior management personnel revealed that the change process at DU involved various modifications and adjustments along the way.

What distinguishes DU's "wanting to change" intent from similar intents expressed by sister universities in Oman and beyond is its combination of transparency, inclusivity and resilience. DU's commitment to transparency was evident in its clear and open communication about the vision for change. In addition to insisting that all stakeholders have a stake in shaping the vision (Individual interview, K. H., Apr. 2022), DU clearly articulated the reasons behind "wanting to change", expected outcomes, and the roles of all stakeholders. DU also showed from the beginning a robust commitment to inclusivity and diversity through widespread involvement entailing a wide range of perspectives and backgrounds at the management and operational level (see OAAA ISA Report, June 2017). Moreover, DU's remarkable resilience against formidable challenges surrounding the university was evident. Although it is geographically isolated, being 1000 km away from the capital, DU showed unusual commitment by setting exceptionally high aspirations. Despite its relatively young age, DU made an unequivocal declaration for improvement to all stakeholders, surpassing conventional norms in the educational landscape. While admirable, DU's ambitions entailed significant risks, in view of the numerous challenges it was facing— huge debt (Focus group 7 interview, Nov. 2021), fierce competition to attract students due to remote location, and the imperative to align practices with rigorous international standards.

5.2.2 Needing to change

In addition to the internal factor for change, or the strong desire for improvement and distinction, the interviews with the senior personnel (e.g. Individual interview, L.M., July 2021) revealed that DU's transformation was also catalyzed by an external factor— accreditation. This finding is in line with the evolutionary theory which holds that social entities grow and evolve naturally due to pressure from external forces (Kezar, 2013), in that, change is a reaction to some situational circumstances that exist in the external environment surrounding the organization. In Oman, the Oman Academic Accreditation Authority (OAAA— now renamed to OAAAQA) issued a call to all colleges and universities, including DU, to participate in the national institutional accreditation. Damaj and Chaaban (2014) also highlighted that government legislations and the establishment of an accreditation authority in Oman both acted as an external impetus for change at DU.

Similarly, the literature review highlighted that globalization is one of five major external drivers for change worldwide (McMillan, 2004). This global cosmopolitan trend was epitomized in a fast-growing demand for accountability in higher education all over the world and in Oman. The demand for accountability exercised by the accrediting authorities turned the OAAAQA into a change agent, whose role, according to Nguyen and Ta is to "enhance quality control, accountability and transparency, and quality enhancement" (2018, p. 11). The growing emphasis on accountability has driven HEPs to make significant enhancements in their academic and administrative services (ibid.) and also prompted them to prioritize quality assurance, as highlighted by Komotar (2020). The interviews with the senior management personnel showed that DU, being already in the *wanting to change* mode, coupled with a *needing to change* urge was the first university to apply for accreditation. These mental processes of desiring change and recognizing the necessity for change were influential factors that drove the process of change at DU.

Therefore, to answer the research question about how the change process was initiated, the initial findings showed that a marriage between internal and external factors was instrumental in putting DU on track for change. Although *wanting to change* can be a good reason why universities choose to undertake change, Kotter (1996) argues that creating a need rather than a want to change can help create a more compelling sense of urgency among employees. Similarly, Kezar (2009) argues that one of the main components of successful change is 'rationalizing' change, that is communicating a clear reason why the institution has opted for change. She argues that while a vision gives a sense of direction, rationalizing gives a sense of purpose to that direction (ibid.). Rationalization can understandably maximize support for change and therefore minimize resistance.

5.2.3 Laying the groundwork

Another process that helped DU initiate change is *laying the groundwork*. This finding resonates with one of Kezar's (2001) seventeen principles for successful change. Laying the groundwork for Kezar entails asking three questions about why to change, how to change and what to change. It also involves self-assessment, institutional audits, evaluation of the change initiative and dissecting the institutional culture, among other things. For DU, laying the groundwork was found to be premised on two main elements: making key appointments and developing a vision document called *Horizon 2020*. What follows is a discussion of these two findings.

i.   Making key appointments

The individual interviews (e.g. individual interview, S. R. Apr. 2022) revealed that to pave the way for change, DU made a number of key appointments. The first was the appointment of a new Vice Chancellor (VC) in 2011, with extensive experience and a robust networking ability. The VC's local background, while providing deep knowledge of the educational ecosystem, ensured a nuanced understanding of the university's cultural intricacies. Moreover, the appointment of an expatriate Deputy Vice Chancellor (DVC), a veteran professor with extensive experience in research and management, brought an external perspective, leveraging best practices from global contexts. The synergetic potential of these two leaders, combining local insight and global expertise, played a crucial role in navigating and managing the intricacies of

change throughout the transformative journey. The individual interview with one of the senior management personnel revealed that during the selection, the DVC was asked about his experience in handling accreditation and promoting research. This shows that the Board of Trustees not only had plans to engage in focused change targeting accreditation and academic research, but also to combine local and global expertise.

Moreover, evidence from individual interviews with the senior management shows that the third appointment in 2012 was intended to complement the strategic recruitment of the new VC and DVC. This addition brought the expertise of a seasoned Quality Assurance Director, tasked with not only the oversight of the operational quality at the university, but also the monitoring of the entire accreditation process. The appointment of a QA veteran was intended to further fortify the leadership team, ensuring a comprehensive and strategic approach to change management throughout the transformative journey. The findings from senior management interviewees also revealed that these three key appointments were strengthened by either new appointments in college deans or by tenuring the deans in acting positions. With the senior management in place, the findings showed that a steering committee was formed to spearhead the change process. What was special about the steering committee was its notable diverse composition in terms of specialization and experience. This diversity enabled the committee to bring various perspectives to the table, creating a rich and comprehensive approach to management and decision-making.

It should be highlighted that these findings echo with the change the literature. Kezar (2011) and Keller (2004), for instance, posit that the arrival of a transformational leadership with a futuristic vision and a readiness for change, is an internal factor that holds the potential of bringing about change in colleges and universities. The strategic appointments to senior positions at DU were definitely intended to serve a similar purpose. In addition, Kotter (1996) cannot see change taking place without the creation of a strong steering coalition that is charged with guiding, monitoring and sustaining change. Similarly, Clark (1992, 1998) in his two models stresses the need to have a dedicated team of influential people that can lead the change process. He calls the first one 'personnel core' and the second 'strengthened steering core'. In line with the other scholars, Stouten et al. (2018) believe that one of the key principles for successful planned change is to develop an "effective leadership". It is important to acknowledge that a collaborative type of leadership involving staff in decision making works better for change in academe. In light of this, DU's insistence on establishing diverse and collaborative leadership through new appointments and the formation of a steering coalition has undoubtedly been instrumental in facilitating the path of transformative change.

ii. Developing a shared vision

The other aspect for laying the groundwork for change at DU was the development of a vision. Although this finding may seem to be commonplace, its significance lies not as much in its presence as it is in its potential absence. To explain, Fisher and Tack (1988) argue that without a vision with clear goals, people are left without direction, guidance or objective to achieve. Therefore, engaging in change without a vision is similar to navigating through pitch darkness. As discussed in the literature review, all change models agree that developing and communicating a change vision are as

significant as change itself, though some change models do not seem to have included it as an explicit step or strategy. However, the literature, according to Stouten et al. (20018), is still unclear, and sometimes contradictory, about what makes a compelling vision.

Nevertheless, it is only with a clear and compelling vision that the steering coalition can be able to rally support behind the change vision. Kotter argues that the vision should be sensible, or else the "transformation effort can easily dissolve into a list of confusing and incompatible projects that can take the organization in the wrong direction or nowhere at all" (1996, p. 63). For DU, the surveys showed that the majority of the staff believed that the vision, mission and strategic plans were instrumental in facilitating the path of change. This attests to the clarity of the vision among the staff, especially that the vision, mission, strategic goals and aspirations were encapsulated in a dedicated document called Horizon 2020. This document not only framed DU's ambition for change and recognition, but one that perhaps was regarded as the guiding beacon during the change period.

Interestingly, far from being imposed, DU's vision was the product of shared contribution, where all concerned stakeholders took part in its conceptualization and formulation. This imbued the vision with a sense of inclusivity and collective ownership, which not only helped align the diverse perspectives of various stakeholders but also inculcated a high-level of commitment to its realization. Resonating with the practical values and aspirations of each stakeholder group, the shared vision served as a magnetic force, drawing individuals together and focusing them on a common trajectory. Therefore, what the element of sharedness within the vision did was to inspire, unite and guide the transformative journey, ultimately turning change into a collective and collaborative undertaking.

5.2.4 Setting goals

A fourth layer to initiating change was setting goals. This process seemed to mark the culmination of the preparation-for-change stage, following the expression of a desire for improvement and distinction, spurred by a national call for accreditation, strategic senior appointments, the creation of a steering committee, and the crafting of a shared vision. Findings from focus group interviews (focus group 3 interview, Oct 2021) revealed that DU envisioned seven goals, all designed to embody DU's overarching vision. The aim of the 'goal setting' process is to provide clear direction and targets right from the outset. The importance of this change process aligns with Hartley's (2002) argument that purpose-centred change efforts animate prodigious transformations. Moreover, Stouten et al.'s (2018) principle of "use enabling practices" highlights the significance of setting goals as a change facilitator. The process of setting goals also echoes with the teleological theory of change, which values the development of a vision, a strategic plan, goals and targets, and strategies to execute change.

It is important to highlight that the goal-setting process was an integral part of the extensive development of DU's vision and mission. It involved collaboration with numerous stakeholders, including representatives from the Ministry of Higher Education, industry professionals, alumni, student and community representatives. These stakeholders convened at Hilton Hotel, Salalah, for comprehensive discussions

on the vision, mission and goals (Individual interview, L.M., July 2021). The goals were initially formulated by the senior management team through numerous meetings and subsequently cascaded down to all academic staff for scrutiny and recommendations. Reflecting extensive consultation, the process of goals setting not only engaged a broad and diverse stakeholder base, but also ensured complete alignment with the university's vision and mission. These goals served as guidelines for the university's steering coalition, ensuring the transformative effort remains on target. What follows is a discussion of the seven goals the university crafted during the initiation phase.

i.   Revamping the physical infrastructure,

This goal aimed at providing a physical incubator for DU after years of residing on temporary premises. Although the institutional identity is a deep-seated construct, the spatial and physical identity constitutes certainly an element of that identity. Given the importance of the organization's physical setting, Schein (2004) counts it as part of the visible 'culture iceberg', while Zucker (2009) calls it a physical artifact. Findings from focus group (2) interviews (Chapter 4, section 4.2.4) revealed that relocating to a new campus gave the staff and students positive vibes and a sense of belonging. An interviewee specifically mentioned that "a new identity started on the new premises" (focus group (2) interview, May 2021). Therefore, in addition to providing a modern campus with all sorts of facilities to support the university's activities, the new campus started a new identity, one that dreams of recognition and distinction at the national and regional levels.

ii.   Making structural changes

Another goal that characterized the setting goals change process was basically making structural changes at DU. This meant changing or amending the existing bylaws, policies, procedures, hierarchies and responsibilities at the university. This step was highly needed to, on the one hand, align the university's structural artifacts with the new vision, and, on the other hand, to make changes to meet the standards of the accreditation authority. A senior management interviewee asserted that changing the vision and mission of the university was "the roadmap for structural changes" (Individual interview, M. L., July 2021). In fact, the changes in the HE management system in Oman was spurred by the development of internationally benchmarked accreditation standards and infrastructural policies and frameworks (Carroll et al., 2009).

This finding aligns with the teleological change models which are usually harnessed to implement structural changes. It also aligns with one of Bolman and Deal's leadership frames, that is the structural frame (cf. Bolman and Deal, 2007). Moreover, one of the key concepts that change leaders should consider to make change more convincing, according to Kezar (2009), is structural support. Although the structural aspects may seem to deal with the apparent day-to-day operations and procedures, they subsequently end up cultivating the employees' behaviourial artifacts and values through incremental adjustments in their modes of thinking. It should be admitted, however, that changes in structure are considered in the literature to be more manageable compared to changes in process and attitude (Kezar, 2009; Schein, 2004). Yet, the correlation between structure, process and attitude is strong and they often tend to intersect with one another.

The interviews with the senior and middle management revealed that the structural changes at DU were inevitable to pave the way for further changes in process and attitude. The surveys also confirmed the impact the structural changes had on the day-to-day quality of education and support services.

iii.   Prioritizing research

One of the main goals DU included in its *Horizon 2020* was to become a research hub for all research activities that are important to the region. For that, DU appointed a new DVC for Academic Affairs and Research, established a Research Department, founded a Research Centre for Medicinal Plants, and introduced the teaching-research nexus. It seems that DU's insistence on prioritizing research emanated from its desire to be recognized nationally and regionally among universities of repute. Being a key component for application to QS World University rankings, research became a priority for DU. As a result, DU developed a strategic plan to enhance the research output, revised its research policy, allocated substantive funds for research and included financial incentives for researchers.

In line with Clark's (1998) strategy of 'diversifying the funding base' (being one of five "irreducible minimum" elements for successful change), DU networked with the Research Council— Oman's sole official research funding agency and also leader of the research development in the country— to secure more funds for its research projects. This second-stream source of funding helped DU to secure some much-needed money to enhance its research development. However, being not yet an entrepreneurial university, as described by Clark (1998), DU has not yet been able to steer away from government money that usually comes with standardization— not necessarily innovation. Finally, although prioritizing research for many established universities is normal, for DU, being a relatively young institution, this goal shows the amount of ambition it has for development and improvement.

iv. Upskilling the human resources

Another key goal that DU put on its agenda for growth and development during the change initiation stage was the upskilling of the staff. To achieve this, DU developed a professional development policy, made professional development part of the staff's annual appraisal, and established a Centre for Teaching and Learning tasked with handling professional development. Recently, DU became a member of Advance HE, UK, and urged the staff to pursue self-accreditation through the fellowship schemes. DU also established a Centre for Training and Development for the non-academic staff. The findings showed that the "systematic approach to professional development" (OAAA ISA report, June 2017) was noticed and commended by the accreditation panel during their visit to the university.

Given the importance of this finding, almost all change models and theories touched on the necessity to provide training to the institution's human capital. Boyce (2003) and Webb (2018), for instance, emphasize the criticality of providing continuous organizational learning to ensure successful and sustainable organizational change in colleges and universities. One of the main four principles that guide the scientific theory of change is to make strategic selection of employees and train them to enable them to apply the scientific methods. For Kezar (2001, 2009), interacting with the staff

to develop their mental models and sense-making through training can facilitate change and make it successful.

Keller (2004) added 'rewarding' to his strategy of selecting and training to ensure that the staff are encouraged to shift to the new behavioural and mental models. Lewin (1951), the founding father of organizational change, suggests that employees be allowed enough time for learning and restructuring their thinking. Seeing change as a profound psychological process, Schein (2004) views change as necessarily entailing painful unlearning of old habits and relearning of new cognitive structures. More recently, Stouten et al. (2018), in his evidence-based 10 principles for successful change, include learning and upskilling of employees' capabilities as part of his sixth change principle— 'enabling practices'.

v. Improving graduates

Being the main stakeholders for the university and a reflection of its image and reputation, students took centre stage during the setting goals process. Findings showed that in *Horizon 2020*, DU committed to becoming the "preferred choice" to students and graduates (*Horizon 2020*, p.1). DU also committed to honing its graduates' soft and hard skills to ensure employability. *Horizon 2020* showed that DU aimed to be known for producing entrepreneurs. To that end, a centre for entrepreneurship was established to equip students with entrepreneurial skills and to encourage them to start their own businesses. To support students, DU aimed to continually build the library resources, strengthen the Learning Support Centre, and improve the information and learning technology services.

In his study of the three liberal Arts colleges, Clark (1992) found that one of the key strategies for the success and transformation of these colleges was their focus on aligning the student subculture with the change aims and goals. He argued that without enough support from students the change efforts could be thwarted. In his later change model, Clark (1998) found that a common strategy that the five universities he studied used to make transformations and become entrepreneurial universities was their focus on 'stimulating the academic heartland'; in other words, their focus on innovating their academic programmes and improving the quality of their students.

vi. Strengthening the periphery

The sixth goal that also characterized the initiation change process was strengthening the periphery, or the non-academic departments. It seems that the leadership realized from the beginning the reciprocal relationship between the centre, or academic departments, and the periphery, or support units, and that change cannot be successful and pervasive without effective support from the periphery. To achieve this, DU incorporated strengthening the periphery in the strategic and operational plans. As a result, DU planned to strengthen the learning support centre, improve the information and technology services, expand the activities of the Community Service and Continuing Education Centre, and to foster relationships with the industry and employers.

It seems that DU's goal of *strengthening the periphery* echoes with the literature on OC in higher education. Kezar (2009), for example, contends that ensuring 'structural support', that is funding, staffing and access to information, among other things, is key to the success of the change intervention. Obviously, the structural support Kezar meant falls under the remit of the periphery. One of the five 'elements' for successful institutional transformation that Clark (1998) found common across his five case studies was the periphery, which he called 'expanded development periphery'. He found that the periphery not only played a supportive role within the campus, but also mediated between the academic departments and the outer world to ensure more cooperation, visibility and exposure. Similarly, Keller (2004) found that Elon College harnessed the periphery to 'market oneself' and to ensure financial stability during change. Last but not least, one of Stouten et al.'s (2018) ten principles for successful change is to 'tap the influence of social networking', which depends on the periphery for enactment.

vii. Chasing quality

The last goal that DU set during the preparation for change stage was *chasing quality*. The findings from document analysis showed that DU committed itself to chasing quality in teaching, research and community service and to spending extensively to enhance quality in those areas (*Horizon*, 2020, p.1). For example, DU pledged "to recruit the best, most diverse and innovative faculty and staff from Oman and around the world" (Horizon 2020, P.1). It seems also that the recruitment of a veteran Quality Assurance Director in 2012 was another step in that direction. Talking about the effect of the goal of chasing quality, an interviewee stated that "things are moving actually forward and we have tangible results of adopting quality" (Focus group (3) interview, Oct. 2021).

Although chasing quality does not seem to be explicitly present in most change models, it seems that it is taken for granted, given that change is basically carried out to improve the quality of one's operations and services. However, Keller (2004) found that one of the strategies that transformed Elon College was chasing the 'mantra of excellence and quality everywhere'. During his case study, Keller observed that the leadership injected a culture of quality in everything, starting from high-stakes undertakings such as classroom instruction to seemingly petty operations like answering phone calls.

5.2.5 Create urgency

In addition to tapping such processes as wanting to change, needing to change, laying the groundwork, crafting a clear vision and setting a number of goals in preparation for change, the leadership deployed two strategies to brace the staff and students for the upcoming transformations. These were *creating urgency* and *planning and making aware*. What follows is a discussion of these two strategies.

The individual and focus group interviews showed that the leadership used the *creating urgency* strategy to switch everyone to the change mode. It should be noted however that this strategy does not seem to be popular with change models in higher education, at least as a standalone strategy for change. It is nevertheless quite known in change models in the business sector (cf. Kotter, 1996; Lewin, 1951; Schein, 2004).

The reason for the unpopularity of this strategy in higher education could be that it might lead to excessive stress among the staff (Albach, 2015; Lynch, 2014). It is feared that excessive stress can be counterproductive and may motivate resistance, especially in higher education where power is shared and resistance is not uncommon. However, as universities nowadays are pushed to adopt strategic management, or managerialism (Eastman, 2003; Lynch, 2014; Rodriguez, 2020), the staff's power of resistance seems to have atrophied and so does their resistance to change (Lynch, 2014). It was reported during the interviews that resistance to change was negligible, which could be attributed to the university's adoption of the strategic management style.

Given its importance as a strategy to rally support and switch employees to the change mode, *creating urgency* has been recognized in many change models, though with different appellations. Cameron and Quinn (1999), for instance, called it 'creating readiness'. Kotter (1996) called it 'creating a sense of urgency'. Lewin, who is said to have provided the foundational and conceptual underpinnings of organizational change, named it 'creating anxiety'. Given this, it seems that creating urgency is central to the change initiation stage, though scholars warn that the state of urgency should not be excessive, for fear of stymieing change before it begins (Schein, 2004). At DU, the findings (Chapter 4, section 4.2.5) showed that the state of urgency was channelled towards achieving two main targets: getting accreditation and also boosting the research output. It seems that committing these two goals to paper (Strategic Plan 2014-2019), has fanned the flames of urgency and braced everyone for the change journey. This commitment amounted, according to Schein (2004), to 'disconfirming information' that 'we have to change', which in turn created a sense of anxiety called 'survival anxiety'. For the staff, it was clear that the leadership wanted the university to be put on the map of accreditation and research and that supporting change is the only sure way for survival.

It should also be noted that combining the strategy of creating urgency with what Kezar (2009) calls 'rationalizing' change can not only give legitimacy to change but also rally support behind it. This is because while the state of urgency can create a sense of need, rationalizing change can give purpose to that need. Talking about the power of associating change with purpose, Hartley (2002) argues that 'purpose-centered change efforts animate prodigious transformations.' To ensure a more compelling sense of urgency, Kotter (1996) advises that leaders create a need rather than a want to change. Although Kotter's argument seems logical in a sense, the findings seem to champion the combination of both *wanting to change* and *needing to change*. This combination seems to be stronger because the intended change is born out of an inner desire as well as an external need for change.

5.2.6 Plan & make aware

The second strategy that was deployed during the change initiation process was *plan and make aware.* The planning included the formation of dedicated steering committee, the crafting of a new vision, the development of strategic and operational plans, and the review of the bylaws, policies and procedures. The interviews showed that these undertakings evolved through regular weekly and monthly meetings at the senior level to discuss issues, make decisions and monitor progress. Spreading

awareness was ensured through in-person meetings, gatherings, workshops and the circulation of meeting minutes.

As such, this finding demonstrates a correlation with the planned approach to change management, which depends heavily on planning and communication, among other things (cf. Aladwani, 2001; Anyieni et al., 2013). Likewise, the scientific management theory of change regards the planning and monitoring of the change process as key to the efficacy of the change intervention (Thrupp & Willmott, 2003; Trujillo, 2014). Keller (2004) also found that one of the six strategies that Elon College used to transform was 'addiction to planning', which included setting goals, communicating those goals and monitoring their implementation. Findings from the accreditation report revealed that the panel found evidence that the staff showed "a good awareness of policies" and also "evidence of their implementation" (OAAA ISA Report, June 2017).

Moreover, Kezar (2001) argues that combining planning, assessment and learning with sensemaking, storytelling, metaphors and symbolism makes change more comprehensible and accessible to various stakeholders. Therefore, the strategy of *planning and make aware* in itself does not necessarily make the change process successful, as change is arguably complex and oftentimes elusive to planning, decision-making and strategizing (Bushnell, 2018; Kezar, 2001, 2013). This means that this strategy should not be taken in isolation; rather, it should be combined with other change strategies and processes to give more efficacy to the change process.

This said, it should be noted that this finding is inevitable for planned change, such as the one undertaken by DU. It is also inevitable because developing the required mental models for change starts with awareness and sensemaking. The development of new mental models at the individual and institutional levels also helps create change ownership, which is viewed by Kezar (2001) as a fundamental principle for successful change. Similarly, Kotter (1996) believes that ownership of change starts with the amount of awareness the employees have about the change, especially the benefits it will bring to the individual and the institution simultaneously.

5.2.7 How change was initiated: Concluding remarks

Unlike the OC models in higher education which tend often to identify the change strategies or elements that facilitate change (cf. Clark, 1992, 1998; Keller, 2004), this study delved into a profound investigation of the comprehensive management of change from inception to conclusion. It identified the essential change processes and strategies employed throughout the change intervention. The significance of these findings lies in uncovering the change processes and strategies that correspond to each of the primary phases of the change process: initiation, implementation and institutionalization. Such articulation is often either absent or at the very least implicit in other studies. The examination of DU's approach to change initiation revealed that four primary processes and two strategies were used. Although these are not asserted as the exclusive means of initiating change in HE, they certainly deepened understanding of the potential pathways via which change could unfold in an Arab higher education landscape and also addressed a gap in the literature of OC both in Western and Arab contexts.

The investigation of the initiation of change revealed that the leadership employed four main processes: wanting change, needing change, laying the groundwork and setting goals. Although these processes were all associated with the preparation for change phase, the first two operated at a psychological level while the latter two operated at an operational level. In other words, wanting and needing to change were mental processes driven by a burning desire for change and external pressures, which marked the initial stages of the change initiative. The processes of 'laying the groundwork' and 'setting goals' were the concrete translation of the mental processes of 'wanting' and 'needing' to change. The leadership also resorted to two strategies to initiate change: 'creating urgency' and 'plan and make aware'. These strategies helped set the scene psychologically (urgency) and cognitively (awareness). By furthering understanding of the change processes and strategies inherent to the initiation stage, the study addressed the first segment of the first research question, 'how was change initiated?' and, hence, managed to effectively fulfil its initial objectives

Finally, two distinctive strategies or principles, seem to stand out, holding remarkable significance, specifically to the change initiation process. These are creating urgency and developing a shared vision. While creating urgency finds ample emphasis in the corporate sector (Cameron & Quinn, 1999; Kotter, 1996; Lewin, 1951), it is barely mentioned in the literature on OC in higher education. This discrepancy underscores the significance of this finding, notably for change initiatives in HE, especially due to the tendency of HEPs to exhibit conservatism and resistance towards change. Against this backdrop of conventionalism and resistance, the strategy of creating urgency has a great potential to catalyse action, instigate momentum and overcome resistance. Moreover, while the literature on OC highlights the need for creating a clear, compelling vision (Fullan, 2007; Kotter, 1996; Stouten et al., 2018), this study takes a distinct perspective of stressing the specific significance of developing a shared vision, as advocated by Kezar (2013, 2018). This strategy is critical within the intricate landscape of HE, where various stakeholders holding distinct perspectives and objectives are involved. This insight, though not totally new, reinforces previous studies advocating for the need for a shared vision and also deepens understanding of more effective change management strategies befitting the HE context.

Having shed light on how change was initiated at DU, what follows is a discussion about how change was implemented, exploring the processes and strategies that were employed to bring about transformative change.

5.3 How change was implemented

The findings (Chapter 4, section 4.3) showed that DU sought to implement change through both a relentless *pursuance of recognition* and *maintaining momentum*. Seven change processes and five strategies were employed to gain recognition and to ensure change is brought to fruition, as illustrated in Table 13 below. The change processes were: (a) setting oneself apart, (b) strengthening the academic core, (c) enhancing support service, (d) strengthening ties with the community, (e) making structural changes, (f) plan, plan, plan, and (g) mitigating challenges. The five strategies were (a) take risks, (b) involve and hold responsible, (c) monitor, measure and reroute, (d) diversify leadership style and (e) use finances wisely. The how change was implemented section answers three research questions: how change was implemented (second half of RQ1), the strategies used to implement change (RQ2)

and whether these strategies align with the literature (RQ3). What follows is a discussion of these processes and strategies, highlighting their significance and their alignment or misalignment with the literature.

Table 13 Summary of the processes & strategies of implementing change

Implementing change
i. Setting oneself apart
ii. Strengthen the academic core
iii. Enhance support services
iv. Strengthen ties with the community
v. Making structural changes
vi. Plan, plan, plan
vii. Mitigate challenges
viii. Take risks
ix. Involve & hold responsible
x. Monitor, measure & reroute
xi. Diversify leadership styles
xii. Use finances wisely

5.3.1 Setting oneself apart

The findings from interviews, core documents and surveys (Chapter 4. Section 4.3.1) showed that DU's desire to distinguish itself materialized through the implementation of three processes: (i) establishing a niche, (ii) improving research output and (iii) gaining accreditation. It seems that DU's obsession with setting itself apart emanated from its competitive nature (wanting to change) and from a burning desire to occupy a distinctive position among HEPs in Oman and the region, as stated in its vision. Given the centrality of identity in academia (Clark, 1998), this finding seems to be in congruence with the social-cognitive, cultural and teleological theories of change which highlight the reciprocal connection between the vision and mission, and the institutional identity. For DU, the desire to occupy a distinctive position amongst HEPs has become part and parcel of its institutional identity— a desire that kept fuelling the need for change and improvement.

Moreover, one of Kezar's (2001) 17 principles for successful change in higher education is 'considering the self-image of the institution'— a principle that corresponds to DU's desire to set itself apart. In fact, striving for recognition and the enhancement of self-image among HEPs is considered, according to the institutional and cultural theories of change, one of the main drivers for change (Kezar, 2001). Therefore, it is not unusual that universities make change due to a desire to imitate other universities that enjoy wider recognition and prestige. As revealed by the findings, DU sought to implement change through setting itself apart, or, in other words, through distinguishing itself from other fellow universities. This desire to distinguish itself materialized through the attainment of the following three targets, as is discussed below.

i.   Establishing a niche

One way to set oneself apart from the rest of HEPs in a given country or region is to establish a distinctive niche. Individual interviews with the senior management (Chapter 4, section 4.3.1) showed that DU was keen on finding a niche for that purpose, though the interviews highlighted that the road to finding a niche was dotted with challenges. One of the senior interviewees stated that "[w]e bet on engineering by investing in the workshop, but things did not go as planned" (Individual interview, I. Ul., Oct. 2021). Even though the bet on the engineering niche was not up to the expectations due to shortages in students specializing in engineering, the two-million-Omani-rial engineering workshop continued to be one of the major achievements of the university, as opined by many interviewees.

Determined to find another niche, DU turned to biodiversity and medicinal plants, notably frankincense. DU established a Research Centre with a fully operational scientific laboratory and appointed a veteran professor in pharmacology tasked with experimenting on frankincense for medical purposes. It seems that DU's interest in this field emanated from the fact that Dhofar region (where DU is located) is home to hundreds of medicinal plants of high potency and purity, which if explored and researched can bring along new breakthroughs in the treatment of some tenacious diseases such as brain cancer and tumours. Findings from the individual interviews and surveys confirmed that DU was successful in finding its first distinctive niche in this very specialized research, which earned it a number of patents and breakthroughs in medicine production. Confirming this, one of the interviewees said, "I think we have found our niche in the research of the biodiversity, medicinal plants in which we have invested a lot and we have achieved a lot. (Individual interview, K. H., Apr. 2022).

Still determined on creating a distinctive identity, but this time related to inclusivity, DU explored another niche by deciding to open its doors to students with disabilities. DU established a Unit for Students with Disabilities— the first of its kind amongst private universities in Oman. This distinctive unit caught the attention of the British accreditation agency, ASIC, which honoured the university with an inclusivity award. This recognition acknowledged DU' s efforts to provide educational opportunities for such vulnerable category that often face barriers to higher education in many countries. As intended, this 'noble act of kindness' (as termed by ASIC) earned the university more visibility as well as moral and financial support from the government and private sector.

While the concept of establishing a distinctive niche may not be explicitly present in all change models, it is highlighted by Keller (2004) as one of six strategies that led to the remarkable turnaround and rise to distinction of Elon College. This study underscores the significance of establishing a niche for its efficacy as a catalyst to bring about change and achieve distinction.

ii.   Improving research output

During interviews with senior management personnel, it was disclosed that research at DU was not a priority until a desire to attain recognition and distinguish oneself from other HEPs was born (Individual interview, L.M., July 2021). This was the turning point that triggered the implementation of a number of changes, both structural and infrastructural. The infrastructural changes saw the establishment of a Research

Department, with substantial financial allocations, aiming at boosting research activities among the staff. A research policy was developed, making research, especially paper publication, compulsory for the staff. Moreover, staff appraisal and promotion became largely dependent on research. As transpired from the focus group interviews, two decisions were made to nurture a culture of research at DU. The first was to give incentives to researchers going to international conferences and publishing research papers. The second was to provide regular professional development focusing on improving the staff's research skills.

Both the individual interviews with senior personnel and focus group interviews with the middle management revealed that the financial incentives and the celebration of good researchers in public during the Annual Research Day were instrumental in strengthening the research culture among the staff. This climate led the staff to become competitive and to form research groups to help each other and learn from one another. Therefore, it was through compulsion and competition that the leadership managed to implement change and influence the institutional culture of the staff. A senior management interviewee (Individual interview, UI. I., Oct. 2021) disclosed that the improvement of the staff's research output was driven by pre-meditated plans to enter QS World University Rankings for the Arab region, where one of the indicators for the ranking is the number of publications in Scopus.

It is important to acknowledge that universities can seek various avenues to distinguish themselves, not solely through increasing research output. However, the significance of this findings lies not in the specific outcome itself, but in understanding how a particular institutional culture, research in this case, can be nurtured through such practices as celebration, incentives, competition and even compulsion at times. In fact, according to Schein the creation and management of a certain type of culture is "the only thing of real importance that leaders do" (2004, p.11). This emphasizes the vital role of leaders in shaping and cultivating a desired culture within an institution.

iii.   Gaining accreditation

The third front, perhaps the most important one, at which DU pursued distinction was accreditation. Although it was initially the catalyst for change, accreditation soon turned into a dynamo for ongoing change at the university. Findings from document analysis and individual interviews with senior management (Chapter 4, section 4.3.1, iii) showed that DU was among the very first institutions to apply for institutional accreditation and the first university to get it in 2018. Seeking more recognition, DU applied for international accreditation from ASIC, UK and obtained it in 2019, with 'premier status'. Looking for more improvement not only at the institutional level but at the college level as well, the leadership urged the colleges to seek international accreditation. Interviews with the senior management showed that the College of Engineering applied for the ABET accreditation, the College of Business applied for AASCB accreditation and the College of Arts and Applied Sciences applied for AQAS accreditation. Focusing on individual-level improvements, the leadership decided to join Advance HE, a prestigious organization based in the UK, and urged the staff to pursue self-accreditation through various fellowship schemes. This decision fostered professional development and recognition among the staff.

Having obtained accreditation and made substantial progress across multiple fronts, DU sought to establish a foothold in the rankings among the Arab world universities. DU therefore applied for the QS World University Rankings and secured a placement within the range of 121-130 among Arab world universities in 2021. It later made a significant jump, advancing to the 111-120 position in QS rankings in 2023. It should be noted that embarking on incremental change through accreditation is frequent in higher education. Kezar (2009), for instance, argues that HEPs are nowadays too busy with loads of priorities to be able to see change through. HEPs change via establishing intermediary bodies, creating external levers and forging strong networks, among other things (Kezar, 2001). In the case of DU, the intermediary bodies were the accrediting agencies.

5.3.2 Strengthen the academic core

Another major theme, or change process, that characterized the change implementation stage was the *strengthening of the academic core*. This finding answers the second part of the first question, 'how change was implemented?' Findings from interviews, documents and surveys (Chapter 4, section 4.3.2) showed that the changes DU implemented in this regard ranged from updating the curricula, enhancing the teaching pedagogies, and reviewing the graduate attributes, to strengthening the student learning support, restructuring assessment, improving extra-curricular activities and strengthening academic advising. These changes seem, according to Clark (1992), to be the 'visuals' of the visible changes that DU applied to the academic core.

However, Clark (1992) argues that changes to the 'programme core' must possess an element of distinctiveness in curriculum and teaching to make them more appealing to stakeholders. The innovations in the teaching styles and pedagogies at DU, particularly the implemented of the flipped or semi-flipped learning model and supplemental instruction, seem to embody the element of distinctiveness that Clark talks about. Similarly, what contributed to Elon College's ascension to distinction, according to Keller (2004), was its exceptional investment in student learning that translated into a strong emphasis on active learning, action-oriented pedagogies and an experimental educational approach. The findings from staff and student surveys seem to indicate that the expansion and diversification of the programmes at DU, alongside the emphasis on innovative teaching and learning pedagogies, seem to align with the transformative changes observed at Elon College (Keller, 2004) and the three Liberal Arts Colleges (Clark, 1992). These findings signal a parallel in the pursuit of distinctive educational approaches between DU and the referenced colleges.

5.3.3 Enhance support services

During the implementation stage, DU prioritized strengthening its periphery, notably through the enhancement of support services. The underlying concept here is that colleges and their academic departments cannot carry out all the necessary changes required without assistance from the periphery— support services departments. The academic departments, Clark (1998) argues, do not need the support of a traditional periphery but of a new periphery of non-traditional departments and units. Fleming (2013) described this new periphery as those non-traditional units such as the "continuing and professional education units" as opposed to the usual traditional

support units. Clark argues that these non-traditional units should adopt an entrepreneurial mindset, acting as intermediaries between the academic departments and the outer world so as to increase visibility and consequently gain more support.

Moreover, Keller (2004) highlighted that one of the strategies that facilitated the transformation of Elon College was its adoption of the 'mantra of excellence and quality everywhere', which not only focused on improving the academic departments, but also the support services, such as food services, communication services and even the gardening and maintenance services. In essence, this finding underscores the notion that focusing solely on enhancing the academic core is insufficient in higher education. This is because enhancing the academic core depends heavily on improving the periphery— support service units. DU Strategic Plan 2014-19 documented specific targets related to enhancing support units, signifying that the leadership recognized the importance of the periphery in the enhancement of the academic core.

Moreover, the interviewees reported that the heads of the support services departments were required to develop action plans for improvement. Professional trainings were also provided to the department heads and their teams. As a result, the findings from documents (OAAA ISA Report, June 2017) showed that the support services witnessed some remarkable expansion and improvement. These ranged from a notable increase in the library print and electronic resources, streamlining of the admission and registration services and strengthening of college advisory councils, to the incorporation of entrepreneurship, the improvement of staff and student induction and the strengthening of student placement. There was also a remarkable improvement in the online services to ensure students had a better learning experience. The significant enhancement of the support services was also visible in the increase in the budgetary allocations of the academic and technological support, as reported by interviewees and survey respondents.

5.3.4 Strengthen ties with the community

The fourth change process targeted the community. Being a key player, the community had a big share in DU's strategic and operational plans. The findings from documents (OAAA ISA Report, June 2017) showed that the merging of the community service into the Continuous Education Centre, the strengthening of the relationship with the industry and employers, the strengthening of the university's association with the alumni and the forging of partnerships with other HEPs and professional bodies helped the university expand its outreach and mutual cooperation. The strengthening of the ties with the community and the growing trust were evidenced in the OAAA ISA report and also the staff survey (Chapter 4, Section 4.3.4). DU's vested interest in the community echoes Zelda Gamson's (1999) belief that autonomy and community are two pillars of the HEPs that should not be lost in change.

Moreover, Lynch (2014) believes that networking with the community, civil society and the public sector can safeguard the inherent values of universities against the onset of the ever-growing neoliberal market values. Kezar (2009) also believes that universities change not by simply developing a vision and implementing strategic plans, but by forging strong networks, cooperating with intermediary organizations and creating external levers. A similar notion is also highlighted by Clark (1983) when he

emphasized that one of the unique features of universities is that they are social institutions. He also emphasized that one of the main components of successful change is the 'social core', which basically means cultivating the social leverage to influence change.

Hence, this finding suggests that failing to involve the community during the organizational change may indicate that the change initiative is lacking in scope and effectiveness. Indeed, inclusion and collaboration with the community can lead to more comprehensive and sustainable change, given that this fosters a sense of ownership, shared responsibility and collective commitment to the goals of the institution.

5.3.5 Making structural changes

Being one of seven goals set during the initiation stage, making structural changes was inevitable during the implementation stage to align DU's new vision with the daily operations and procedures. Making structural changes was also needed to formalize and legitimize the transition to the new state of affairs. Findings from document analysis and interviews (Chapter 4, Section 4.3.5) showed that the transition from old to new transactions required reviewing DU's governance and management practices, forming new committees, councils and advisory boards, reviewing and revising the bylaws and policies— even developing new policies, reviewing college entry standards, and adjusting hierarchies and fixing new responsibilities, among other things.

Although this change process (making structural changes) is concerned with the visible 'culture iceberg' according to Schein (2004), it is still needed to transition to a deeper level of change (change in values and assumptions). This shows how mutual and interdependent the relationship between the organizational structure and organizational culture is; in that, cultural change depends on change in the organizational structures (Schein, 2004). This shows the significance of this finding to the change process at DU, given that changing structures is a vital predecessor to a more deep-seated cultural change. It should be noted also that the finding correlates with the teleological models of change, where change is intentional and goal-oriented, just like the change initiative carried out at DU.

Moreover, given the importance of the structural aspect in any change intervention, Bolman and Deal (2007) incorporate the 'structural frame' in their renowned four-frame change model. The structural frame encompasses organizational structure, processes and policies, in their renowned four-frame model of change. In summary, although this change process emphasizes the structural rather than the symbolic aspect of the institution, it remains vital for the employees to engage with the new routines and practices. Through this engagement, 'cultural assumptions' start evolving gradually, aligning themselves with the desired change taking place (Schein, 2004).

5.3.6 Plan, plan, plan

Another change process that DU used to ensure that its change process is successfully implemented is the iterative planning approach. The leadership recognized that change is an ongoing process, not an event, as emphasized by Kezar (2001, 2013) and understood the necessity to regularly review and adapt their plans

to address new challenges and accommodate new developments. The findings from focus group 3 conducted in October 2021 showed that the leadership rallied efforts of the senior and middle management behind continuous planning. This was evident in developing strategies, creating action plans and conducting interim reviews and revisions as deemed necessary. Continuous planning was also evident in consulting with stakeholders and monitoring progress through feedback loops, in evaluating achievements through quarterly and annual reports, and in updating the strategic and operational plans to adjust to evolving circumstances and targets.

The 'plan, plan, plan' finding holds significant importance for universities, especially in the context of planned change, where certain targets, such as accreditation and enhancement of the research output for DU, must be accomplished. In fact, DU managed to meet the required standards for national and international accreditation and to obtain recognition in World University Rankings through the adoption of a change process that viewed planning as an ongoing activity, not a one-time occurrence. Similarly, Keller (2004) identified 'addiction to planning' as one of six strategies that enabled Elon College to overcome its challenges and rise to distinction. However, it is important to note that planning alone does not guarantee successful change because change can often be disorderly and elusive to planning (Kezar, 2001). What truly contributes to successful change is 'the focus on adaptability' as highlighted by Kezar (2001). This involves being open to re-planning, rerouting, accommodating emergent changes and also focusing on small, incremental changes.

Although the teleological theory which believes in a structured approach to change that involves careful planning and design has long been criticized (cf. Buller, 2015; Burnes, 2004; Kanter, Stein & Jick, 1992), the emphasis of DU on intensive planning shows that the teleological theory remains valid, in use and effective in yielding favourable outcomes. The careful investigation of the change process at DU shows that even planned change inherently involves emergent change. This shows that the rigid distinction between planned and emergent change should be revised, in favour of synergetic combination of planned and emergent change.

5.3.7 Mitigate challenges

Another change process that the leadership used to maintain the change momentum during the change implementation stage was mitigating challenges. The findings from individual and focus group interviews (Chapter 4, Section 3.4.7) revealed that the change process at DU was dotted with various challenges. These included navigating a demanding accreditation process, adhering to rigorous quality assurance procedures, dealing with outdated policies, rethinking non-innovative teaching methods, improving the poor research record, and ensuring impactful community services. Interviewees also expressed that the staff felt overwhelmed during change with loads of commitments on top of their primary duty of teaching. To mitigate the feeling of being overwhelmed, the leadership employed various measures such as enhancing communication, spreading awareness, educating the staff, splitting work, and celebrating wins and acknowledging people. However, the interviewees stated that the issue of being overwhelmed with excessive duties and responsibilities continued throughout the change period.

According to Kezar (2009), an effective way of mitigating challenges is to align the change strategies to the institution's climate and culture, ensuring that the change is contextualized to the specific circumstances of the institution. She also suggested harnessing the potential of 'sensemaking' and 'data evidencing' to lower stress and minimize resistance. Data evidencing can indeed be a powerful tool to mitigate challenges due to its ability to show people hard evidence of where change stands. Data evidencing can also help the steering committee to contextualize interventions, track the change trajectory and keep the change focused (Kezar, 2009). The interviews with both the senior and middle management showed that the leadership used surveys to collect data, hence keeping the staff posted about the latest developments. Other ways of mitigating challenges include having "structured dialogues, retreats, concept papers, workshops, action teams, staff development, outside presentations, and cross departmental teams." (Kezar, 2009, p. 6). As transpired during the said interviews, many of Kezar's suggested solutions were tried at DU. Moreover, even Chandler's (2010) four ways of mitigating challenges, i.e. education and communication, participation and involvement, facilitation and support, and negotiation and agreement were also reported to have been tried at different stages of the change process at DU.

Finally, while recognizing that the concept of mitigating challenges is not a recent development in the literature of OC, its emergence as a key finding in this study highlights its intrinsic significance to the context of higher education. It also underscores its pertinence and efficacy across diverse educational contexts, whether Western or Arab world ones. This shows that leaders contemplating change in higher education should not only leverage the potential inherent in the strategy of mitigating challenges, but also adopt a proactive approach to mitigating challenges pre-emptively from the early stages of the change process.

What follows is a discussion of the strategies DU deployed to achieve its goals and objectives and implement change. Five change strategies transpired from the interviews with the senior and middle management. These are 'take risks', 'involve and hold responsible', 'monitor, measure and reroute, 'diversify 'leadership style' and 'use finances wisely'. The discussion about the change strategies DU deployed addresses the second research question— "what were the strategies used to implement change?"

5.3.8 Take risks

Although taking risks is not known to be usual for young institutions, DU nevertheless used it as a strategy to bring about change. The notion of taking risks was visible in two aspects. The first was engaging in big, challenging endeavours and the second was taking the lead (going first and not following others) while attempting these endeavours. As revealed during the interviews, DU was the first university in Oman to venture into lengthy and rigorous national and international accreditation processes. A senior interviewee highlighted the challenges involved in applying for accreditation, saying "[t]he biggest challenge was to get the accreditation. It was a new system in Oman and we were the first university to go for it. So, either you go first and accept the consequences or you be late and wait." (Individual interview, K. H., Apr. 2022).

Another instance of taking risks was the university's decision to apply for QS World University Rankings for the Arab region, competing with well-established universities in the region. An interviewee captured the challenges entailed in competing beyond one's borders and the university's desire to establish a foothold among MENA region universities. He said, "DU belongs to the MENA region that includes the Middle East and North Africa, but we still believed that we want to have a distinct place among those universities." (Individual interview, J.S., Oct. 2021). Moreover, the interviews also revealed that DU was the first private university to establish a Centre for Students with Disabilities and to open the doors for this vulnerable category of students.

It should be noted, however, that, unlike business organizations, HEPs have usually been known for their conservatism, with a notable reluctance for change or risk taking (Caruth & Caruth, 2013; Chandler, 2010; Altbach, 2010). However, unlike the prevalent norm, DU seems to have made notable changes as a result of implementing this strategy, hence its significance. In fact, DU might not have been able to make such transformations without daring to venture into pursuing accreditation, participating in world university rankings and giving opportunities to students with disabilities. These challenging endeavours encouraged, perhaps compelled, the university to make radical alterations to its policies, procedures and even infrastructure.

Although the strategy of risk taking is not present in most change models, Kezar (2001) included it as one of seventeen principles of successful change. She called it "creating a culture of risk and encouraging change in the belief system'. Kezar's insistence on cultivating a culture of risk and on changing the prevalent belief system comes understandably from her belief that without a change in mindset, HEPs will always be reluctant to change. Supporting this, Lewin (1951) and Schein (2004) view change as a profound psychological process that entails painful unlearning of old habits and relearning of cognitive structures of perceptions and feelings. This process of unfreezing the old norms usually results in some kind of learning anxiety that usually prevents employees from accepting change or taking risks.

Finally, despite that the notion of risk taking might be daunting to institutions, this study emphasizes the potential benefits of embracing risk taking within the HE context. It also highlights that risk taking can serve as a catalyst to improve the institution's responsiveness and adaptability. However, it is suggested that HEPs should not merely consider embracing risk taking openly; instead, it is advised that a culture of risk taking is proactively encouraged and supported

5.3.9 Involve & hold responsible

Although shared governance and collective decision making in higher education have sometimes been critiqued for delaying change, research shows that change in loosely coupled systems, or HEPs, can be successful only in the presence of functional shared governance, where all employees are actively involved in the change process (Clark, 1983; Kezar, 2001, Sporn, 1999). Both the individual and focus group interviews showed that the strategy of *involve and hold accountable* was particularly helpful in ascertaining engagement and accountability amongst the middle management and staff. For instance, throughout the accreditation process, the leadership used the technique of 'all hands on deck' to involve everybody and, at the same time, hold them

accountable for the duties and responsibilities assigned to them. The interviews also revealed that the staff's understanding that the university needed to change in order to gain accreditation played a significant role in their willingness to get involved, though some of them expressed that they had no choice but to join in.

In line with this strategy of involvement, Chandler (2010) argues that there are four ways to mitigate resistance in higher education and one of them is 'participation and involvement'. He argues that this strategy, both empowers the staff and makes them responsible for what they are doing. In fact, the significance of this strategy lies in giving the staff professional and personal stake in the success of the institution, which helps to lower their resistance inclinations (ibid.). Similarly, two of Kezar's (2001) seventeen principles of successful change in higher education revolve around the *involve and hold responsible* strategy, though worded differently. These are *promoting participative governance and collective decision making*, and *creating ownership of change at the individual and institutional level.* By the same token, Clark's (1998) notion of replacing the 'I' with the 'we', while ensuring that the steering committee acts proactively, is a clear indication of involvement and togetherness to face the challenges inherent in change. DU seemed to have benefited from this strategy not only by mitigating resistance but also by ensuring that the staff had a vested interest in the success of their efforts and the institution's.

Overall, what is interesting about this finding is the amalgamation of the two seemingly divergent strategies of involvement and accountability, though they were acknowledged separately in the literature. It seems that this combined approach to the involvement of the human capital holds unique potential for driving change within the complex demands of change management in HE.

5.3.10 Monitor, measure & reroute

Another strategy that the findings highlighted as integral to the change implementation process is *monitor, measure and reroute*. Document analysis and the interviews showed that the steering coalition kept monitoring and measuring progress through regular checking of the KPIs embedded in the strategic and operational plans, weekly meetings between department heads and their deans and also deans and the upper management, quarterly and annual reports, staff appraisals, surveys and interim reports. Confirming this, an interviewee said,

> I am really glad about the operational plan and how we collect statistics. We have the initial values about every KPI at the beginning and we kept monitoring. That was the real work (Individual interview, M.L., July 2022).

The findings from the accreditation agency's report and interviews (Chapter 4, Section 3.4.10) evidenced the effective level of monitoring and oversight of the academic, administrative and financial activities. Interviewees also mentioned witnessing the collection of statistics, monitoring of the implementation of new policies and measuring the level of satisfaction of different stakeholders.

This finding seems to align with the change management literature. Kezar (2009), for instance, stresses the need for monitoring, analysing and applying accountability during the implementation stage. She particularly advises using *data evidencing* to contextualize the change intervention, measure where the change is heading and

keep the change process focused. This strategy also aligns with one of Stouten et al.'s (2018) ten fundamental and evidence-based change management principles which they call *assess progress and outcomes*. However, they stress not only assessment but the diversification of assessment so as to ensure a thorough and comprehensive analysis of the progress of change. For instance, assessment can measure how much learning the employees have gained and also the degree to which the new practices are implemented. Moreover, Lewin (1951), the foundational model of planned change, made explicit mention of this strategy in his 'refreeze' stage. He stressed the need to analyze the progress of the change process to find and close gaps and to improve deficiencies. Kotter (1996), on the other hand, touched on assessment of the change process in his seventh step, *consolidating gains*. He recommended identifying and communicating the small gains to consolidate change, make improvements and reassure employees of the success of the intervention.

However, it should be noted that none of the three reviewed HE-based change models made an explicit mention of this strategy, hence the significance of this finding and the need to add it explicitly to the change management models in HE. This is especially important because monitoring and measuring are not done for their own sake but to make necessary and timely corrections and improvements (Wiedner et al., 2017). Some of the improvements can be identifying areas that require training and coaching, learning how best the change process could be improved, safeguarding the change process from antithetical practices, and last but not least, lowering anxiety and reassuring the staff that the change is on target. Although monitoring and measuring have come to be seen as closely associated with the ascension of managerialism within higher education, this study emphasizes their indispensability in ensuring the success of change in academe. The significance of this finding extends beyond the mere incorporation of monitoring and measuring in managing change. Rather, it highlights the critical need to embrace a structured approach to these processes, while giving enough room to adaptability and strategic rerouting, as circumstances evolve.

5.3.11 Diversify leadership styles

The literature on OC shows that leadership plays a fundamental role in the success of any change intervention, given its impact upon people, processes and culture (Porras and Silvers, 1991; Kezar, 2018). Schein (2004) went even further arguing that the ultimate thing leadership can do is to create and manage culture. At DU, the leadership was found to have impacted change tremendously. The findings from the document analysis (OAAA ISA Report, June 2017) showed that the OAAA Panel was impressed with the ability of the leadership to rebuild the management infrastructure and to take the university to another phase of growth and prosperity. On the other hand, the findings from the individual interviews (Individual interview, H.T., June 2021) revealed that DU used a variety of leadership styles, while perhaps leaning more towards the participative type. Some interviewees, however, thought that the leadership was mainly transactional, with instances of participative leadership.

Although the six change models discussed in the literature review highlight the role of leadership in making the change enterprise successful, they do not sufficiently stress the need for employing diverse leadership styles to cater for varying change circumstances. Lewin (1951), the foundational father of OC, for instance, argues that democratic leadership has the ability to influence group performance the best, though

he acknowledges that autocratic and laisser-faire leaderships might hold merit in certain situations. Transformational leadership has oftentimes been highlighted as a crucial approach for successful OC management, particularly within the sphere of higher education (e.g. Alessa, 2021; Meng, 2022). However, this study's finding seems to depart from this conventional conception that transformational leadership is the best driver of change in HE, highlighting that the complexities of the change processes need a broader array of leadership styles. This recognition of the necessity of diverse leadership styles then corroborates the existing literature advocating for the need of both styles for successful change management (e.g. Kezar, 2009, 2013, 2018).

However, institutions navigating change should be warned that merely assuming the leaders' competencies is not sufficient; instead, these competencies should be developed (Schaubroeck et al., 2007). Moreover, it should be noted that change does not require just generic leadership competencies, but specific, change-related skills and capabilities (Anderson & Anderson, 2002). Finally, it is worth noting that there was no distinct evidence signalling that the leadership at DU underwent specific training for managing change, except for the workshops and training sessions focused on accreditation matters.

5.3.12 Use finances wisely

Being a private university, DU has no other financial resources than revenues from private and sponsored students. This limitation necessitates that the leadership uses the finances wisely, especially during the time of change, where, according to Kezar, (2001), the availability of financial resources is crucial to sustain the change intervention. Findings from individual interviews (Individual interview, M. K., Oct. 2021) confirmed that the university governors and senior management planned the finances well, which guaranteed enough liquidity to bear the rising expenditures during the time of change. Findings from document analysis (OAAA ISA Report, June 2017) were also in agreement with the interviews. The OAAA Panel report, for instance, showed that DU increased its internal spending, diversified its research funding schemes, and increased the budget allocated to research dramatically— from 50 000 OMR to 100 000 OMR.

Moreover, the interviews (Chapter 4, Section 4.3.12) showed that the university managed to stabilize financially through such decisions as the appointment of a new finance director and an internal finance auditor, changes in the financial regulations, and the removal of unnecessary expenditures. The wisdom in dealing with the financial aspect was also visible in the introduction of flexible monthly and termly fees payment schemes, aiming at attracting more students and therefore ensuring more financial stability. Overall, the wise finance-related decisions taken by the leadership, as revealed by the focus group (7) interviews, were effective in two ways: (a) clearing a huge deficit left by the former administration and (b) ensuring the university's financial stability. This has left the university with enough liquidity to tackle the change project.

Despite the criticality of the financial resources for the success of change, the strategy of *using the finances wisely* does not seem to appear as a standalone strategy in many change models. Out of the six reviewed change models, only two models mention this strategy explicitly. Keller (2004), for example, found that one of the strategies that Elon College used to transform was 'financial wisdom'. Likewise, Clark (1998)'s one of the

five 'irreducible minimum elements' for successful change in entrepreneurial universities is 'diversified funding base'. The other change models either make no mention or else an embedded mention of the finance strategy. Clark (1992), for instance, touched on the financial aspect in what he calls the 'social core' in his five components of successful change. Part of Clark's 'social core' is the financial support bodies to which the three Liberal Arts Colleges he studied reached to secure financial resources for change.

Finally, this study found that the strategy of using finances wisely was an important factor in making change at DU successful. This could be attributed to the fact that the university is young and with limited sources of revenues and, therefore, in need of financial resourcefulness to cope with the extra expenses exacted by change. Although the literature varies with respect to this strategy, that is either by mentioning it as a standalone or embedded strategy, most, if not all, organizational change scholars acknowledge its centricity and inevitability for change to survive and to come to fruition.

5.3.13 How change was implemented: Concluding remarks

The thorough investigation of how change was implemented in an Arab university context revealed seven change processes and five strategies (see Table 13 above). The significance of this study lies in the thorough exploration of the implementation phase itself, focusing on the specific processes and strategies employed to enact transformation. This approach helped fulfil the aim of the study, which sought to deepen understanding of the potential ways to actually execute change in HE. It also provided valuable insights into the research questions about the strategies utilized to implement change and their alignment or deviation from the existing literature. Unlike previous studies that were preoccupied with the factors that can facilitate change in HE, this study shifts the focus from the 'what' that facilitates change to the 'how' of potentially implementing change; thus, encompassing both the intricacies of change processes and the strategic endeavours to bring about actual transformation.

Seven change processes and strategies emerged as particularly significant during the implementation phase. These are 'creating a niche', 'plan, plan, plan', 'mitigating challenges', 'taking risks', 'involve and hold responsible', 'diversifying leadership styles', and monitor, measure and reroute'. Their importance comes from their pronounced impact on the implementation of the change. As explained above, these processes and strategies demonstrated distinct ability to help DU achieve differentiation and recognition, engage in intensive planning, overcome challenges, provide opportunities for adaptability and responsiveness, forge a unique union between engagement and accountability, harness the potential of both the transactional and transformative approaches to change management, and, lastly, track change and make informed adjustments through structured approach of monitoring, respectively,

5.4 Anchoring change in culture

Changing the organizational culture is understandably a huge and time-consuming undertaking (Meinert, 2012; Schein, 2004). However, change may not be effective unless it penetrates and impacts culture. Consequently, the role of the change agent

is not only to manage changes in the organizational structure and operations, but also to transcend that into managing, perhaps creating, a new organizational culture (Burke & Trahant, 2000; Kotter, 1996; Mead, 2005; Nickols, 2004). As this study seeks to deepen understanding into how change happens in higher education, it is important to look at one of the most fundamental phases of change— anchoring change in culture. This section therefore answers the fourth research question: "To what extent has the change influenced the institutional culture?"

The majority of the surveyed staff believe that the changes have brought about a new culture and that this culture highlights the notion of "let's do things better; let's improve things" (Individual interview, M. K., Oct. 2021). The majority of surveyed students also believe that the changes have influenced them positively. An interviewee pictured the change the university has undergone as 'enculturation'. He said that the staff and students had to adapt to the new system on a daily basis and therefore had to metamorphose gradually. However, some interviewees thought that change is still evolving and that more time is needed for change to be cemented fully into the institutional culture. A senior interviewee said that "we have definitely pierced the outer layer and perhaps the second and third layer, but we have not yet reached the innermost core" (Individual interview, S. R., Apr. 2022).

These findings agree with Schein's (2004) belief that culture is complex and that changing it does not happen overnight. He believes that culture is deep and "points us to phenomena that are below the surface, that are powerful in their impact but invisible and to a considerable degree unconscious" (Schein, 2004, p.8). This explains the seemingly contradictory findings that change has influenced the institutional culture but that change is still evolving. What this means is that change at DU has penetrated the 'artifacts' layer, touched the 'values' layer and is on its way to the 'assumption' layer, or core of the institutional culture— as per Schein's conceptualization of the three-layer, onion-like organizational culture.

What follows is a discussion of the strategy the leadership used to cement change in the institutional culture. This is followed by a discussion of how change has influenced three cultural spheres at DU: the culture of teaching and learning, the culture of research and publication and the culture of community service.

Table 14 Summary of the processes & strategies of anchoring change in culture

Anchoring change in culture
i. Acknowledge, celebrate & empower

5.4.1 Acknowledge, celebrate & empower

Findings from focus group interviews and staff surveys (Chapter 4, Section 4.4.1) showed that DU used one strategy to cement change in its institutional culture, which is *acknowledge, celebrate and empower*. To implement this strategy, the leadership used moral and financial incentives to recognize and celebrate outstanding teachers, researchers and community servers. This celebration happens on the Annual Research Day in the presence of some dignities and the Vice Chancellor of the

university. Interviewees also revealed that, unlike in the past, acknowledgement now happens publicly, either in special gatherings or via the university's official emailing system, where names and pictures of outstanding achievers and an overview of their achievements are circulated. An interviewee said,

> Previously there were research publication incentives and that's it. You don't see any mention of any achievement on the webpage but for three years now you can see the circulation of emails recognising and celebrating faculty and students' achievements, (Focus group 4 interview, Nov. 2021).

The interviewees and survey respondents also acknowledged that the moral and financial incentives encouraged competition and heightened commitment.

Given the significance of this strategy, most change models seem to have touched on it. Kotter (1996), for instance, advises in his eight-step model that short-term wins be celebrated to reassure employees that their efforts are bearing fruit. Lewin (1951) and Schein (2004) believe that positive behaviour should be appreciated and rewarded so as to encourage the employees who are aligning themselves with the change and to encourage the others to follow suit. In his study of the factors behind the transformation of Elon College, Keller (2004) found that the leadership used the strategy of rewarding to incentivize the staff to align with the change. In line with the notion of empowerment, as transpired from the focus group interviews, Stouten et al. (2018) argue that anchoring change in the culture happens through taking the learning process to a deeper level of sophistication while continuing to educate the newcomers.

The significance of this finding lies in its alignment with the contemporary emphasis on the pivotal importance of organizational culture in determining the success of change management endeavours. Interestingly, while the existing literature highlights the unequivocal impact of the human dynamics on the success of the change initiative, the practical implementation of change does not fully reflect that level of significance. While this study recognizes the critical role of the structural and strategic aspects in the facilitation of change, the 'acknowledge, celebrate and empower' strategy underscores that the human dimension in any change effort should take precedence. In short, this strategy champions the reorientation of the change management towards a more human-centric approach, calling for a more nuanced understanding of how acknowledging, celebrating and empowering humans unfold within the institutional culture and affect the success of change initiatives.

5.4.2 Change influencing teaching and learning

According to Schein's (2004) conceptualization of organizational culture as consisting of layers, it is evident that the university's transformational efforts initially targeted the outermost layer, or the "artifacts layer". This was accomplished through an overhaul of the university's vision and mission, policies related to teaching and learning, student attributes and a thorough review of academic programmes (Section 4.4.2). These changes at the artifacts level have impacted the institutional culture, cultivating a more dynamic and student-centric educational environment (Individual interview, Elz. A., Oct. 2021). The heightened awareness of diverse pedagogies among the academic staff and the integration of technology reflected a commitment to accommodate modernized and effective instructional methodologies. Interviewees confirmed that

classes now included more technology, more discussion and more interaction (Focus group 2 interview, Oct. 2021). An interviewee said that in his department teaching had shifted from imparting knowledge to building the students' character, resulting in more graduates being either self-employed or working in different sectors (focus group 2 interview, Oct. 2021). This shift towards character-building clearly signals a shift from a culture viewing education as only knowledge dissemination to another viewing education as character development.

Discussing the impact of professional development at the university on assessment practices, an interviewee confirmed that teachers incorporated assessment for learning in their teaching approaches (Focus group 2 interview, Oct. 2021). This change demonstrated a move away from traditional lecturing and assessment towards more effective and rich learning experiences. Moreover, the interviews also affirmed that teachers shifted their instructional pedagogies and assessment methods to an outcome-based approach. It was highlighted that some departments adopted the flipped learning method and others started with semi-flipped learning while focusing on more hands-on learning experiences. Other departments transitioned from remedial to supplemental instruction. The introduction of innovative models like flipped, semi-flipped learning and supplemental instruction (Individual interview, UI. I., Oct. 2021), along with the dedication of an academic year to the assurance of learning showed the transition of the institution to a new culture that primes adaptability to innovative educational paradigms and ongoing development.

All these transformative changes caught the attention of the accreditation panel, prompting them to say that,

> The teaching staff used appropriate teaching and learning approaches, effective use of teaching aids and support materials; the students provided very positive feedback on their teachers (ASIC Accreditation Report, 2019, p. 10).

The changes in the instructional pedagogies and educational paradigms at DU seem to resonate with Clark's (1992) belief that change should introduce an element of distinctiveness in both curriculum and instruction. Similarly, Keller's (2004) "mantra of excellence and quality everywhere" characterizing the transformations in Elon College goes deep into teaching and learning, particularly impacting curriculum and classroom instruction. Overall, these changes seem to have collectively enhanced the institutional culture, underscoring a holistic and innovative approach to education. The emphasis on student centricity and autonomy seems to have ushered in a new culture that prioritizes student growth and empowerment.

5.4.3 Change influencing research and publication

The findings from individual interviews, focus group interviews (Focus group 3 interview, Oct. 2021) and document analysis (OAAA ISA report, June 2017) showed that there is compelling evidence that the change intervention at DU has heavily influenced the research and publication culture on campus. Interviewees even talked about experiencing a paradigm shift in this regard. For example, the 2020-21 Annual Research Report shows that DU contributed a total of 1700 papers to peer-reviewed journals. DU's ResearchGate score rose from 209 publications in 2015 to 1152 in 2019. Also, in 2021 alone, the staff published 96 research papers in Scopus, more

than 100 papers in Web of Science and 60 papers in peer-reviewed journals. Citations also rose to 7.8 per faculty during the same year (Section 4.4.3).

This growth in publications earned DU the first position in research among private universities in Oman by the Webometrics World Ranking of Universities. QS World University Rankings also awarded DU 'high status' in research for 2021. The improvement in academic publications and citation rates, alongside recognitions underscored the successful cultural transformation towards research prioritization and dissemination. These findings showed that this paradigm shift in the research culture started with a vision spelled out in Horizon 2020, aiming at turning "DU into a research hub for all research activities that are of importance to the region" (Horizon 2020). As a result of this vision, DU developed a research policy, granted financial incentives to researchers, and, most importantly, included research performance in the annual staff appraisal, making research compulsory for the staff.

Although the decision of making research compulsory was received with apprehension and consternation at first, interviewees confessed that this compulsion triggered what Schein (2004) calls 'anxiety survival', urging the staff to make research and publication a priority. Therefore, it was the combination of temptation (incentives) and subtle pressure (connecting contract renewal to appraisal) that not only improved the institutional standing, but also nurtured a culture where research and publication are valued and actively pursued. This paradigm shift in culture has transitioned the academic staff from a mindset where research constituted a negligible priority to one with central priority. The new focus on research has developed in the staff a sense of obligation that necessitated enhancing their individual research profiles through active engagement (Focus group 3 interview, Oct. 2021).

At the institutional level, the cultural shift towards valuing scholarly activities centring on research has not only enhanced the university's research profile, but also facilitated its integration with the community through impactful regional research. Therefore, the creation of a research-centric culture helped promote academic excellence and a dynamic academic community, hence improving the image of the institution and inspiring emulation (refer to Section 2.3.4 regarding Kezar's (2001) seventh change principle: "Beware of image".

5.4.4 Change influencing the community service

The third cultural circle that was found to have been influenced by change at DU is community service. The findings from document analysis (OAAA ISA Report, June 2017) showed that the leadership approached this change in culture strategically. The development of dedicated strategic and operational plans for community engagement showed a shift in the university's organizational culture, prioritizing community involvement and a more inclusive and collaborative approach. Interviews with the senior management and focus groups (Section 4.4.4) revealed that this strategic and operational intent inculcated a sense of responsibility and community-related values in staff and students.

Moreover, merging the Community Service Section into the Continuing Education Centre highlighted a holistic approach to community engagement, enhancing inclusivity and collaboration. This development has evolved the community

engagement into an integral aspect of staff responsibilities, leading to more visibility and stronger rapport with the community (Individual interview, Ul. I., Oct. 2021). This echoes with Kezar's (2009) belief that for change to be successful, universities have to leverage the potential of external networking so as to gain legitimacy through endorsement and support. The establishment of industry and community engagement advisory boards created a culture of openness to external views and expertise. This promoted a better understanding of societal needs and trends.

Moreover, the diversification of activities and educational programmes for the community showed a more inclusive approach to engagement (Focus group 7 interview, Nov. 2021), promoting cultural flexibility and adaptability among staff and students. The involvement of colleges in community-centric activities such as professional development programmes has enhanced the level of trust and partnership between the community and university (Individual interview, M. K., Oct. 2021). The increase in the level of trust has also improved DU's self-image, which Kezar (2001) views as one of the main principles for successful change. The incorporation of the community engagement into the staff appraisals and promotions underscores its significance and portrays its vital role in the institutional culture.

Moreover, engaging the university's alumni in the community outreach initiatives seemed to have reinforced a strong sense of community within and beyond the institution. It also cultivated a sense of belonging and encouraged the alumni to develop a culture of giving back. In addition, the development of a dedicated centre for entrepreneurship enhanced the inculcation of innovation and entrepreneurial spirit among staff and students and within the community. Finally, by commending the university's strategic and sustainable approach to community engagement, the accreditation reports confirm the positive impact of this engagement on the academic environment and the wider institutional culture (OAAA ISA Report, June 2017).

5.4.5 Anchoring change in culture: Concluding remarks

Answering the last research question about the extent to which the change process has influenced the institutional culture has revealed that DU used only one strategy to institutionalize change. Although this may not sound enough to cement change in the institutional culture, the findings from interviews, documents and surveys showed that the influence could be felt in three cultural spheres: teaching and learning, research and publication, and community service.

The individual interviews with the senior management, however, revealed that the culture of research and publication seemed to have benefited the most from the change. This is also supported by the figures that were collected from the Annual Research Reports and the testimonies of the QS World University Rankings. Being oftentimes more agile and flexible in their operations and culture than public institutions, private universities can be more susceptible to change pressures, as advocated by the evolutionary studies (Kezar, 2001). It seems that this flexibility and adaptability trait has paved the way for a remarkable positive impact on the aforementioned three cultural spheres at DU.

However, recognizing the complexity of change and its slow integration into the fabric of the institutional culture, as explained by Schein (2004), a prevailing sentiment

among some interviewees suggests that the change at DU is still evolving and more time is needed to ensure the solidification of the change within the tapestry of the individual and institutional culture. The competitive nature of the higher education landscape and the potential of rapid responsiveness of private universities to external pressures (in this case accreditation), can result in a swift adoption of change initiatives. However, it should be highlighted that change within the cultural dimension requires both time and concerted effort to cement firmly within the fabric of individual and institutional culture.

Finally, during the institutionalization phase, one strategy stood out as notably significant, that is 'acknowledge, celebrate and empower'. While the existing literature has amply focused on the critical role of leadership, communication and engagement for the success of the change intervention, the impact of empowering individuals on the change process is still less pronounced. This insight calls for a more nuanced understanding of how empowerment unfolds and affects the success of not only the institutionalization phase but the entire transformative journey.

5.5 Conclusion and study limitations

Unlike previous case studies which predominantly focused on exploring the factors contributing to the successful change in HE, this study shifted focus towards the actual enactment of change from inception to the ultimate conclusion, notably within an Arab university context. The aim of the study was to deepen understanding of the intricacies of the change management through the examination of the change processes and strategies employed by a private university that underwent transformations and rose to distinction. The study methodically investigated the change processes and strategies across the three phases of initiation, implementation and institutionalization, exploring the diverse implications of the change on the institutional culture.

This study's shift in focus, moving away from the examination of 'what' to the probing of 'how' not only grounded the study in pragmatism, but also yielded practical measures that on the whole constitute a comprehensive framework for implementing OC within higher education. This framework illuminates a clear pathway for executing meaningful change throughout the three critical stages of initiation, implementation and institutionalization, as illustrated in Table 15 below.

Table 15 Change processes and strategies: A framework of change management in HE

Initiating change		Implementing change		Anchoring change
i.	Wanting to change	vii.	Setting oneself apart	xix. Acknowledge, celebrate & empower
ii.	Needing to change	viii.	Strengthen the academic core	
		ix.	Enhance support services	
iii.	Laying the groundwork	x.	Strengthen ties with the community	
iv.	Setting goals	xi.	Making structural changes	
v.	Create urgency	xii.	Plan, plan, plan	
vi.	Plan & make aware	xiii.	Mitigate challenges	
		xiv.	Take risks	
		xv.	Involve & hold responsible	
		xvi.	Monitor, measure & course correct	
		xvii.	Diversify leadership styles	
		xviii.	Use finances wisely	

The framework not only deepens our practical understanding of the diverse change processes and strategies, but also underscores their applicability and effectiveness within the unique landscape of HE. Within this framework, ten principles stand out as particularly significant within the context of higher education. Transcending theoretical conceptualization, the change framework, along with these principles, provide pragmatic signposts for university leaders and decision-makers contemplating to embark on a change journey. The principles' applicability to the higher education context and their alignment with one of the three core change phases give institutions a compass to navigate the complex and challenging terrain of change. Below is a table outlining the ten significant principles of change emerging from this study.

Table 16 Key principles of organizational change management in HE

Initiating change	Implementing change	Anchoring change
i. Creating urgency ii. Developing a shared vision	iii. Plan, plan, plan iv. Mitigate challenges v. Take risks vi. Developing a niche vii. Involve & hold responsible viii. Monitor, measure & reroute ix. Diversify leadership styles	x. Acknowledge, celebrate & empower

It should be noted that the principles extracted from this study diverge from those developed by Kezar (2001) and Stouten et al. (2018) on multiple fronts. First, these principles are specific and action-oriented, having emerged from a thorough investigation of a successful transformative journey within the landscape of HE. They encompass specific actions such as creating urgency, diversifying leadership styles, acknowledging accomplishments, and empowering people. Conversely, Kezar's (2001) principles are more concerned with understanding the higher education environment through a clear emphasis on HE characteristics, coupled with a need to acclimatize change and to conduct an institutional and an environmental assessment. Stouten et al.'s principles, on the other hand, have a broader focus than the immediate concerns of the HE landscape.

Second, another characteristic of this study's principles is their emphasis on inclusivity and human-centricity. This is evidenced in their inclusion of such strategies as involvement, responsibility, celebration and empowerment. This anthropogenic approach to change management throughout initiation, implementation and institutionalization seems to value and prioritize participation at the individual and institutional level. However, while Stouten et al.'s principles clearly demonstrate a comprehensive approach to change, they seem to place emphasis on processes and structures more than the human aspect. As to Kezar (2001), although her principles are definitely comprehensive, they appear to accord relatively less emphasis to the human aspect.

A third emphasis this study's principles highlight is adaptability and innovation in approaching change management. Their emphasis on taking risks, establishing a niche and diversifying leadership styles is a case in point. While Kezar (2001) is clear about adaptability and the need to cultivate a culture of risk taking within HE, Stouten et al. (2018) seem to be more reserved about adaptability and innovation, advocating

the 'promotion of micro-processes and experimentation', that is approaching change cautiously and, importantly, making it piecemeal.

The fourth feature characterizing this study's principles is their emphasis on tracking progress throughout the transformative journey. This feature highlights the invaluable value of the data-driven decision-making and the ensuing strategic adjustment, ensuring effective change management. Kezar's (2001) principles do not seem to explicitly showcase the significance of monitoring, measuring and rerouting. Stouten et al.'s principles seem to give importance to monitoring progress and outcomes as shown in their "Assess Progress & Outcomes", clearly aligning with this particular change principle. In summary, this study's principles offer a more pragmatic, action-based approach to transformative change management, emphasizing human-centric strategies, differentiation, adaptability and data-driven decision making.

Regarding the study's constraints, there are three limitations pertaining to generalizability, survey sample and the researcher's insider perspective. The first limitation stems from the study itself being a single case, which may be claimed to limit the applicability of the findings to other HEPs. However, it is reassuring to know that a single case study can be more rigorous than multiple case studies, provided it offers a comprehensive account of the intricacies surrounding the occurrence of a particular phenomenon, as ardently argued by Ridder (2017). Zucker (2009) also argues that single case study should be viewed as rigorous if it entails five fundamental components: specific research questions, a plan of action, units of analysis aligned with the research questions, a clear connection between the data and the action plan, and metrics to interpret findings. It is worth highlighting that this study entailed the two provisions put forth by Ridder and Zucker, thus limiting the concerns about its generalizability.

Although the surveys were administered to all staff and students, the outcomes reflected the participation of 32 academic staff and 148 students. While this could be viewed as a constraint, it can be reassuring to be reminded that the study is predominantly qualitative, depending primarily on individual and focus group interviews and in-depth analysis of core documents. The quantitative inquiry, encapsulated in surveys, was secondary and meant for validation.

Finally, the researcher's insider role and active participation in the change process could be seen as a limitation in view of the potential bias it might bring along. To counteract this possibility, the researcher took every possible precaution to maintain a high degree of neutrality and objectivity. One of these was adopting a triangulation approach during data collection, ensuring an all-inclusive exploration of various perspectives, with no exclusions; in that, all senior and middle management personnel were interviewed and a diverse range of core documents spanning six years were analysed. Moreover, my role in the research was clarified to all participants and stakeholders prior to data collection through the participation information sheet (PIS). Another precaution was seeking peer review opinion during the translation of surveys into Arabic to ensure accurate translation and clear comprehension of the questions for non-English speakers.

CHAPTER 6: CONCLUSION

6.1 Introduction

Given the limited knowledge and clarity on how organizational change (OC) in higher education (HE) worldwide (Bleiklie, 2014; Kezar & Eckel, 2002; Scott, 2015) and in Oman in particular, can actually be navigated and managed, this in-depth, exploratory case study aimed to address this gap and, therefore, deepen understanding of the intricacies of the OC processes in this sector. To achieve this aim, the study conducted a thorough investigation of a successful change intervention at a private university in Oman. The purpose of the study was to provide insights and knowledge that can help academic institutions navigate and manage the challenges entailed in OC through the identification of the actual change processes and strategies employed to facilitate the transformation. By gaining a better understanding of the change process in its entirety, higher education providers (HEPs) working within similar contexts could potentially enhance their change initiatives, heighten the likelihood of successful outcomes and mitigate potential resistance surfacing throughout the change journey. To unravel the intricate facets of the transformative journey of the university in question, four research questions were used, as follows:

 i. How was the change process (a) initiated and (b) implemented?
 ii. What were the strategies used to initiate, implement and institutionalize change?
 iii. How do these strategies align with organizational change theories?
 iv. To what extent has the change influenced the institutional culture?

This chapter includes seven sections. The first section introduces the chapter, reiterating the research aim and questions, and outlining the sections that make up this chapter. The second section offers a brief summary of the key findings vis-à-vis the research aims and questions. The third section highlights the significance and implications of these findings and their potential impact on the field of study. The fourth section reflects on the research process and the limitations of the study. The fifth section highlights the originality of the study and its contribution to knowledge. The sixth and seventh sections make recommendations for future studies and give a summary of the main points discussed in this chapter, respectively. What follows is a succinct overview of the main findings in this study.

6.2 Key findings of the study: A summary

In order to investigate the transformational journey of a university in Oman that has undertaken to improve its systems, obtain accreditation and distinguish itself as one of the best universities in the country and the region, this study explored four research questions. These questions delved into various aspects of the change process, including change phases, processes, strategies, and the impact of the change on the institutional culture. To ensure a clear summary, the findings are reviewed under their respective research questions.

RQ 1 (1ˢᵗ part): How was the change initiated?

The investigation of how the change process was introduced and set into motion attempted to understand the triggers that prompted change and the individuals that initiated the process, among the other dynamics that constituted the initiation phase. The findings revealed the employment of four main change processes, as follows (Chapter 4, Section 4.2):

i. Wanting to change
ii. Needing to change
iii. Laying the groundwork
iv. Setting goals

The first two processes represented the mental processes the university went through, demonstrating a genuine desire for improvement and excellence in various aspects (Kezar, 2001), coupled with a recognition of the need for change (Kotter, 1996) (Section 5.2.1 & 5.2.2). Both the desire and urgency epitomized the strong interplay between internal factors and external pressure that paved the way for change. The internal factors were fuelled by the university's strong desire for advancement and recognition, while the external factors were a response to the imperative of aligning with the benchmarks set by national and international accreditation.

The second two processes were the actual translation of the first two mental processes (Sections 5.2.3 & 5.2.4). 'Laying the groundwork' was an indispensable process that laid down the operational foundation of the change process at the university. This foundational process started with a number of key appointments at the senior management level to ensure that the change process availed of a strong and influential leadership for management, guidance and influence (Section 4.2.3). The appointments were soon followed by the establishment of a shared vision that spelled out the intended goals behind change, that is the attainment of accreditation, a respectful position in the World University Rankings for the Arab region (Section 4.2.3). Setting goals (Section 4.2.4) was the second foundational process of change at the operational level that managed to guide the change process and provide a sense of direction. These findings show that the change at DU was not an emergent change type, occurring spontaneously or organically within the institution. Instead, they clearly indicate that it was a top-down, orchestrated change that needed much preparation, coordination and resources (cf. Bamford & Forrester, 2003).

RQ 1 (2ⁿᵈ part): How was the change implemented?

The investigation of the implementation of the change at DU revealed that the change initiative was comprehensive, targeting multiple levels and aspects of the institution so as to impact the whole organization. The findings highlighted the employment of seven processes (see *Figure* 11 above), as outlined below.

i. Setting oneself apart
ii. Strengthening the academic core
iii. Enhancing support services
iv. Strengthening ties with the community
v. Making structural changes
vi. Plan, plan, plan
vii. Mitigating challenges

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This comprehensive approach to change indicates the intent of the leadership for a holistic transformation of the institution or what Kezar (2001) calls a second-order change, rather than a piecemeal, surface-level, or first-order, change. This transformation targeted various aspects and dimensions of the institution. One significant finding was the change in the institutional image or identity through differentiation, or 'setting oneself apart', from other sister institutions (cf. Kezar, 2001). This differentiation manifested itself through the establishment of a distinctive niche, the enhancement of research output, the attainment of national and international accreditation, and the positioning of the institution among the best universities in the QS World University Rankings for the Arab region (Section 5.3.1).

Another dimension of the transformation focused on the institutional structures, entailing 'making structural changes' at different levels (Section, 5.3.5). A third key finding that played out at the operational level and therefore helped keep the momentum of change going during the implementation phase was the engagement in thorough planning, or 'plan, plan, plan' (Section 5.3.6), and the mitigation of challenges faced throughout the change journey (Section 5.3.7). Several other changes were also highlighted during the implementation phase, including 'strengthening the academic core' (Section 5.3.2), 'enhancing support services' (Section 5.3.3) and 'strengthening community engagement' (Section 5.3.4).

In summary, the comprehensive change initiative encompassed multiple dimensions, addressing institutional image, structural improvements and operational efficiency. Changes also addressed transformations in the academic core, support services and community outreach.

RQ 2: What strategies were used to carry out change?

The leadership deployed eight change strategies during the entire change process, as outlined below:
  i.   Create urgency
  ii.   Plan and make aware
  iii.   Take risks
  iv.   Involve & hold responsible
  v.   Monitor, measure & reroute
  vi.   Diversify leadership styles
  vii.   Use finances wisely
  viii.   Acknowledge, celebrate & empower

During the change initiation phase, two key strategies stood out (Sections 5.2.5 & 5.2.6). The first was creating urgency, which switched the entire institution into the change mode, permitting the leadership to brace all stakeholders for change and to rally much-needed support. The second strategy of 'plan and make aware' combined planning with communication. The planning part saw the formation of a steering coalition charged with managing and leading the change process and the development of the 2014-19 strategic and operational plans, among other things. The communication part entailed making stakeholders aware of the desire and need for change, and the new vision and goals the university intended to pursue.

During the implementation phase, the leadership deployed five strategies to ensure the facilitation of change at this stage (Sections 5.3.8, 5.3.9, 5.3.10, 5.3.11 & 5.3.12). Findings showed that the university used the strategy of 'taking risks.' The latter was manifested firstly in engaging in challenging endeavours and secondly in taking the lead in a number of initiatives, instead of just following suit. This strategy helped the university explore new opportunities, challenge existing practices and ultimately bring about significant changes. Another key finding was the strategy of 'involve and hold responsible', which highlighted the importance of engaging all stakeholders and fostering a sense of accountability among them (Kezar, 2009). This strategy ensured active participation in and commitment to the change process.

The leadership also took an active role in overseeing the implementation process through the deployment of the strategy of 'monitor, measure and reroute' (Section 5.3.10). This strategy entailed the continuous evaluation and monitoring of progress through feedback mechanisms such as meetings and surveys. These mechanisms helped track progress, detect areas for improvement and make corrective adjustments (Wiedner et al., 2017). Moreover, the study found that the leadership adopted a non-monolithic approach to change. By using different leadership styles (Section 5.3.11), they managed to accommodate diverse perspectives, embrace collaboration and foster collective ownership of the change process. Finally, recognizing the indispensability of financial resources to maintain the change momentum, the university was found to employ the strategy of 'using finances wisely' (Section 5.3.12). This strategy ensured the ongoing flow of the necessary financial allocations and their optimal utilization throughout the change period.

Finally, the institutionalization phase saw the implementation of the strategy of 'acknowledge, celebrate and empower' (Section 5.4.1). This strategy involved recognizing and appreciating the efforts and accomplishments of individuals and teams, aiming at solidifying and reinforcing the desired institutional culture (Kotter, 1996). This acknowledgement and appreciation motivated others to embrace change and continue to work towards the set goals (Schein, 2004).

RQ 3: How do these strategies align to the literature?

Many of the strategies employed in this change initiative align with the established organizational change theories. However, it should be highlighted that some of the deployed strategies depart from the mainstream approaches typically known in higher education. For instance, the strategy of 'creating urgency' is commonly known to be associated with change in the business sector, as described by Kotter (1996), where top-down decision making is more prevalent. Decision-making processes in higher education often involve multiple stakeholders and operate within a shared power system (Kezar, 2013), making creating urgency not palatable, especially if exercised excessively.

The rationale behind the utilization of this business-related strategy in HE could be attributed to the growing adoption of managerialism in HEPs, which involves the application of management principles and strategies to the governance and management of HE (Lynch, 2014). The use of this strategy at DU aimed at enhancing efficiency and responsiveness among various stakeholders to facilitate an effective

navigation of the change process. It is important, however, to recognize that HE has unique characteristics (Kezar, 2001), and contextualizing such a strategy to align with the values and culture of the institution is crucial to overcome resistance.

Another strategy that DU employed to keep the momentum of change going is 'taking risks', though it is more commonly associated with the business sector literature. Although there is a growing recognition for change and innovation within the HE sector, HEPs have traditionally been associated with conventionality and the status quo (Caruth & Caruth, 2013; Chandler, 2010; Altbach, 2010), clearly steering away from risk taking. However, there is a growing recognition within HE of the necessity to adopt risk taking to drive innovation and address the challenges faced by the educational institutions, as highlighted by Kezar (2013, 2018).

The third strategy that seems to deviate somewhat from the prevailing literature on OC is planning in 'plan and make aware'. The strategy of planning, deriving basically from the planned approach to change, involves a systematic and structured approach to change that is founded on planning. It should be noted that the planned approach to change has faced criticism for being rigid and often disconnected from the dynamic nature of change processes (Burnes, 2004; Dawson, 1994; Kanter, Stein & Jick, 1992). However, it seems that the planned approach to change is still popular in the Arab region due to cultural reasons to do with valuing stability and hierarchy, and respect for authority.

Moreover, the strategy of 'using finances wisely' deployed by DU to ensure sustainable fund allocation during the change process, though generally aligns with the literature on OC, is more associated with the new trend of entrepreneurial universities. The latter are institutions that embrace business-like practices that revolve around strategic financial management, prioritizing effective resource allocations guided by careful financial planning to achieve set goals (Clark, 1998). Non-entrepreneurial universities usually have more lenient financial practices that do not depend as heavily on strategic planning and resource allocation.

RQ 4: To what extent has the change influenced the institutional culture?

The findings from the individual interviews with senior management personnel, the focus group interviews with the middle management, and surveys administered to staff and students, all highlighted the impact of the change on the institutional culture at DU (Section 4.4). This impact was manifest in three cultural spheres: teaching and learning, research and publication and community engagement. The interviewees narrated their experiences and observations, evidencing tangible changes within these three spheres. The integration of diverse pedagogies, educational paradigms, and technology, coupled with a strong commitment to the assurance of learning, (Section 4.4.2) reflects the evolvement of a new culture characterized by adaptability, innovation, student-centricity and empowerment.

The impact of the transformations on the research and publication culture was twofold: the individual level and the institution at large (Section 4.4.3). At the individual level, a new culture valuing research and actively pursuing scholarly activities emerged. The new mindset viewed research as a vital priority and as an integral aspect of one's identity. At the institutional level, the growth of the university's research profile

facilitated a profound integration with the larger community. This not only resulted in a more dynamic research community but also improved the institution's image, inspiring admiration and emulation.

As to community engagement, the changes in the strategic and operational intent in this regard (Section 4.4.4) instilled a sense of responsibility and communal values in staff and students. The incorporation of community engagement in the staff appraisals and promotions highlighted its fundamental role in the institutional culture. Moreover, making community engagement as an integral component of the staff's responsibilities resulted in heightened commitment and enhanced the relationship with the community. The diversification of activities and educational programmes for the community promoted inclusivity and flexibility among staff and students.

However, despite the impact of the transformations on the three cultural spheres, it is worth noting that some interviewees still think that the change is still evolving and needs more time to be fully embedded within the institutional culture. This highlights the complexity of the institutional culture, emphasizing the need for further research to evaluate the long-term impact and sustainability of the cultural changes on the institution.

6.3 Discussing the significance and implications of the research findings

The core significance of the findings lies in the explicit and actionable framework derived from this comprehensive, in-depth case study (refer to *Table* 15). This framework meticulously articulates the diverse change processes and strategies, illustrating a vivid depiction of how they were effectively managed throughout the transformative journey. Several notable findings within this framework hold significance either for the literature or for other HEPs functioning in similar circumstances. What follows is a table illustrating these ten findings, followed by a brief elaboration of each of them.

Table 17 Key 10 findings within the emergent framework of OC at DU

Key 10 Principles of Change
i.   Creating urgency
ii.   Developing a shared vision
iii. Plan, plan, plan
iv.   Mitigate challenges
v.   Take risks
vi.   Establish a niche
vii. Involve & hold responsible
viii. Monitor, measure & reroute
ix.   Diversify leadership styles
x.   Acknowledge, celebrate & empower

i.   Creating urgency

The study highlights the significance of creating a sense of urgency in initiating change in higher education. This is because of its ability to mobilize stakeholders, rally support and switch the staff into the change mode. The study concludes that urgency can be created through expressing both a desire and a necessity for change, though Kotter

(1996) argues that the latter is more compelling. It should be clear tough that the mere notion of wanting to change does not create urgency. Therefore, understanding that change is not only desirable but necessary for the survival and growth of individuals and the institution can help mitigate resistance and mobilize stakeholders to be more receptive to change.

The significance of creating urgency also lies in providing a fertile ground for what Kezar (2001) deems a key principle for successful change, that is 'creating ownership' for the change. The study shows that creating urgency occurs when engaging various stakeholders, highlighting the necessity of change and its value for the individual and institution and fostering a sense of ownership for the change. Finally, although creating urgency is typically more aligned with the business sector (e.g. Kotter, 1996), the investigation of the case study at hand revealed that this strategy holds equal significance in the landscape of higher education.

ii. Developing a shared vision

Although creating a clear, compelling vision in the literature of OC is common (Fullan, 2007; Kotter, 1996, Stouten et al. 2018), this study underscores the significance of creating a *shared* vision specifically within the context of higher education, thus aligning with the works of Kezar (2013, 2018) and Senge (1990). It is common practice for leaders to develop a clear, personal vision, but one that does not usually translate into a share vision among the concerned stakeholders. Therefore, developing a shared vision in the beginning of the change initiative aligns efforts of all stakeholders towards the main goal of the institution, improves coordination and reduces resistance.

iii. Plan, plan, plan

Although planned change based on the teleological theory of change was under criticism, particularly in the late eighties (Burnes, 2004; Kanter, Stein and Jick, 1992), it is worth noting that many change initiatives still operate within the planned change approach. This case study revealed that change at DU was planned, with strong emphasis on planning and goal setting. The latter were crucial in providing a strategic framework for change, enabling the leaders to have a clear vision of where the institution was heading. Therefore, it is important to acknowledge that while it is true that change is not static or linear, and not always unfolds according to the plan, the teleological approach to change remains valid and capable of yielding positive outcomes.

Planning and goal setting enable institutions going through change to align efforts with a clear direction, make collective decision making based on the vision and plans, allocate resources accordingly and prioritize initiatives. However, it is important also to note that the change process at DU involved modifications and adjustments along the way, highlighting that even planned change includes elements of emergent change. Therefore, the distinct separation between planned and emergent change in the literature may need to be revised, in favour of acknowledging that change is not either planned or emergent, but a combination of both, as argued by Tarandach and Bartunek (2009).

iv. Promoting risk taking

Although HEPs are not usually known for taking risks (Crow, 2008), this study concluded that taking risks can create opportunities for successful change in higher education. In fact, embracing the strategy of risk taking enabled DU to become more agile and responsive to external forces— accreditation, forcing it to adapt to emerging needs and to level up to stakeholder expectations. Therefore, this finding implies that HEPs should not only be more willing to take risks to adjust to the changing academic landscape but should perhaps foster a culture of risk taking within the institution, as suggested by Kezar (2001, 2009, 2013). The culture of risk taking can undoubtedly encourage the staff to alter their belief system and to accept change.

v. Establishing a niche

The literature on OC shows that one of the key principles for successful change in higher education is striving for recognition and self-image (Kezar, 2001). Indeed, the significance of differentiation and strategic positing for higher education providers in today's highly competitive environment cannot be overstated because of its ability to attract students, build reputation and drive success (Keller, 2004). This case study seems to underscore that establishing a unique niche can help the institution attain recognition and rise to distinction. Although establishing a niche is not widely recognized as a strategy for change in the literature on OC in higher education, this study highlights that this strategy can help the institution to concentrate on specific areas of expertise or emerging needs in the sector to ensure that it remains relevant and responsive to the changing circumstances and stakeholder demands.

vi. Diversifying leadership styles

Another notable finding within the framework derived from this case study is the diversification of the leadership styles. The study showed that DU used a combination of both transactional (top-down) and participative (bottom-up) approaches, according to the circumstances. The significance of this finding lies in acknowledging that leadership is not a one-size-fits-all approach and that adopting a flexible and adaptive style suits the changing circumstances and the unpredictable nature of change. This finding, though derived from a case study in a different context, i.e. the Omani context, confirms previous studies highlighting that change needs both transactional and transformational leadership, as believed by Kezar (2009, 2018).

Transactional leadership can perhaps be best in providing structure and accountability through its focus on setting goals, providing clear expectations and responsibilities, and offering rewards based on adherence and good performance. On the other hand, participative leadership helps cultivate a sense of empowerment, engagement and ownership through its emphasis on staff involvement, collaboration and shared decision-making. Finally, capitalizing on the benefits of each of these two approaches can help the institution navigate complex challenges effectively and maximize the potential of the human resources during change.

vii. Involve and hold responsible

The significance of this finding lies in its combination of engagement and accountability, thus leveraging the strengths of both the transactional and participative leadership approaches to change management. This combination can be said to

address the criticism levelled at the endorsement of shared governance and collective decision-making in higher education for potentially causing delays in the implementation of change. The potential implication of this finding for an institution undergoing change is that while involvement enhances motivation and satisfaction among stakeholders (Clark, 1983; Kezar, 2001, Sporn, 1999), accountability can increase efficiency and productivity. Hence, this combination can help maintain the momentum of change.

viii.   Mitigate challenges

While the strategy of mitigating challenges during change implementation in higher education is known in the literature (Chandler, 2010; Kezar, 2009), its emergence as a key finding in this case study shows its relevance and effectiveness in diverse settings. This emphasizes its universal importance for any change intervention, especially in higher education, where change is known to be slow. Moreover, this finding underscores the need to customize change management strategies to the unique circumstances, not only of the institution, but also the culture and region (Kezar, 2001, 2013). The implications of this finding for the change leaders are many. One of these is recognizing that there is no change without challenges, hence the need to adopt a proactive approach to play down these challenges. Another implication is to consider the unique context of the change initiative, cultural norms, and power dynamics of the institution and region. These considerations can help change leaders to devise suitable strategies that align with the specific context where the change initiative is taking place.

ix.   Monitor, measure and reroute

This finding seems to align with the change management literature (Anderson & Anderson, 2001; Kezar, 2009), though it is not acknowledged as a strategy in the three renowned case studies reviewed in the Literature chapter, by Clark (1992, 1998) and Keller (2004). This is perhaps because the notions of monitoring and measuring are more associated with the business sector than higher education, though the onset of the ever-growing neoliberal market values on higher education can hardly be denied, as highlighted by Lynch (2014). Despite the business-related origin of this strategy, its significance lies in recognizing that the effective monitoring and measuring of the change intervention are vital for its success.

One of the implications of this finding is to recognize the need to incorporate a feedback loop during change management. Another implication is to emphasize the need for adaptability and flexibility, in that institutions need to be responsive and adaptive to emerging issues, which may necessitate rerouting to ensure that the institution remains faithful to its goals and objectives. Moreover, the finding highlights the indispensability of data-driven decision-making for the success of change management. This helps the change leaders to make decisions based on evidence, not assumptions and intuitions.

x.   Acknowledge, celebrate & empower

Although the literature recognizes the significance of leadership, communication and engagement to change management, it does less so with acknowledging, celebrating and empowering, at least explicitly. This emphasizes the significance of this finding, especially in highlighting the need to regard the human resources not as mere

recipients of change, but as active contributors to the success or failure of the change intervention. The finding also echoes with the growing recognition of the role of organizational culture in change management (Schein, 2004). This highlights that change leaders should create an environment where individuals feel not only safe, but also valued, respected and empowered.

It is important to highlight that while the structural and strategic aspects of the change process are crucial to the success of the change initiative, the human aspect is even more so (Schein, 2004). This calls for a deeper investigation and better understanding of how the human dynamics unfold in change management, necessitating a new holistic approach to change centred on the human element, notably with regard to the emotional and psychological dimensions.

6.4 Reflecting on the research process and limitations

Reflecting on the research process, particularly with regard to research design and methodology, a number of strengths and limitations stands out. As to strengths, this study employed a mixed methods approach combining the qualitative and quantitative inquiry, thus managing to tap into various different views and perspectives either through in-depth face-to-face interviews with all senior management personnel and all middle management personnel, or through online surveys targeting two key stakeholders, staff and students. This method facilitated the collection of thorough and comprehensive data from individuals with first-hand experience of the six-year long change process.

In addition, the qualitative approach entailed the perusal of several core documents that included valuable data about different aspects of the change process. These documents included the vision and mission document, named *Horizon 2020,* the strategic plan, the operational plans for all four colleges, the accreditation reports, the university council minutes and annual achievement reports of each college. These core documents were invaluable because they included specific details that the individual interviewees were unable to recall on the spur of the moment, such as precise dates, numerical data, percentages, names of individuals, strategic decisions, specific events, among others.

Another strength is related to data collection (Section 3.5). It is evident that shallow questions yield superficial responses. Given that the researcher is not only an insider that witnessed the entire change process from inception, but he was also part of the senior management at the University, the interview questions were incisive, direct and probing, prompting the interviewees to provide deep and detailed responses. These comprehensive interview questions and the depth of the discussions were captured by numerous interviewees who commended the thoroughness of the questions and depth of the ensuing discussions (Section, 1.7).

On the other hand, several challenges and limitations were encountered, including generalizability, survey sample, data collection and being an insider. Regarding generalizability, it should be acknowledged that this study is a single case study, which may limit the direct applicability of the findings to other HEPs, especially in Western contexts due to potential cultural differences between East and West. That said, Ridder (2017) contends that a single case study can be more rigorous than multiple

case studies, offering therefore valuable implications for generalizability, on condition that it provides a detailed description and analysis of how and why a particular phenomenon happened. Similarly, Zucker (2009) argues that a single case study should be viewed as rigorous if it entails five key components: specific research questions, a plan of action, units of analysis aligned with the research questions, a clear connection between the data and the action plan, and metrics to interpret findings. It is noteworthy to mention that this study included all these components, hence downplaying the limitation and enhancing validity and reliability.

Regarding survey participation, the response rate may appear relatively small, with 32 academic staff out of 150 completing the surveys, constituting more than 20% of the entire population. Additionally, 148 students completed the surveys. While these figures can be deemed a limitation, it is reassuring to emphasize that this study adopted a predominantly qualitative approach, prioritizing in-depth individual and focus group interviews and extensive analysis of a great deal of core documents, rather than focusing on quantity and numerical patterns (see Doyle et al., 2009, on the objectivity and subjectivity issue of the constructivist approach). However, it should be highlighted that depending exclusively on a purely qualitative study, though offering depth and insight, could have left a significant component of the university unengaged. This is due to the logistical challenges of conducting numerous interviews within the ranks of a sizable population.

While the surveys were intended for broader participation, the ramifications of the coronavirus pandemic impeded that goal. The surge in requests for survey completion during the surveys distribution period resulted in survey fatigue among staff and students, ultimately leading to widespread abstention. Nevertheless, what made the survey data truly representative was that participation came from all four colleges, making comprehensive coverage of all staff and student population. Hence, although the sample size was relatively small, the sample source and sample frame were reassuring, contributing to the validity of the study. Moreover, the qualitative segment of the study covered the entire senior and middle management population, ensuring 100 percent representation. In addition, to ensure the validity of the study, rigorous data collection techniques (refer to Section 3.8) were employed. The framework analysis method was also employed to ensure systematicity of data analysis and to minimize bias.

There were also challenges with data collection. Some of these were related to individual being too busy to conduct interviews, concerns about audio recording and a few participants preferring individual interviews over focus group ones. For instance, the researcher chased the Vice Chancellor for more than four months due to his busy schedules and being out of town sometimes. These challenges highlight the difficulty of coordinating and securing interview slots with the senior personnel due to demanding responsibilities and limited availability. The importance of interviewing these key individuals was such that the researcher demonstrated patience, making repeated requests while promising that the interviews would be concise and engaging. This was made possible by devising thought-provoking questions addressing everybody's unique involvement and contributions in the change process. As a result, the participants felt at ease sharing their personal engagement and contribution.

The last limitation is associated with the researcher himself being an insider and part of the change process (Section 3.4). Although being an insider was highlighted as an asset for the study, it also introduced the possibility of potential bias and subjectivity. To mitigate the likelihood of bias and subjectivity, the researcher took every precaution to remain as neural and objective as humanly possible. One of these was using triangulation when collecting data, ensuring the consideration of multiple perspective. Data collection included interviews with senior and middle management (no exclusion), staff and student surveys (open to all), analysis of many core documents (not just one or two) over a period of six years. Another precaution was the clarification of my role in this research to all participants and stakeholders through the participant information sheet (PIS) and also addressing any concerns raised by the participants prior to their involvement. A third precaution was seeking peer review, where the researcher consulted a colleague specialized in translation to review his translation and therefore ascertain an accurate translation of some of the surveys (meant for non-English speakers).

6.5 Highlighting originality and contribution to knowledge

This section sheds light on the study's originality followed by the main contribution to knowledge. First, the study displays originality in focus, context and perspective. As to focus, unlike previous studies that centred on investigating *what* makes change successful (cf. Gornitzka & Maassen, 2000; Kezar, 2001, 2013, 2018; Phelps 2019; Storberg-Walker & Torraco, 2004; Vlachopoulos, 2021), this study took a distinct approach. This approach shifted attention, focusing on understanding how change can actually and effectively be managed and executed in the context of HE. This shift in focus from the examination of 'what' to the exploration of 'how' grounded the study in pragmatism, providing actionable measures that collectively form a comprehensive framework for effecting OC in HE.

In terms of context, the study's special setting of the Arab world context, adds a layer of novelty and relevance to the originality of the study. The dearth of research and case studies on OC in HE in the Arab world, especially in terms of navigating and executing change, represents a notable gap. The study then emerged as a pioneering endeavour aimed at bridging this gap in research. It delved into an in-depth investigation of effective change navigation and management, focusing on the identification of the processes and strategies employed by the university throughout its transformative journey towards distinction and prominence. Interestingly, this study represents a ground-breaking case study, the first of its kind in the Arab world, blazing a trail for future research in this critical domain and underrepresented region.

As for perspective, the originality of this study is also evident in its utilization of an emic, or insider, perspective to unravel a successful narrative of a university's impactful transformative initiative. The insider perspective provided a distinct vantage point that allowed a nuanced understanding of the intricacies of the change processes and their implications on the institutional culture. This insider perspective not only enhanced the authenticity of the findings but also enriched the broader academic discussion by providing a unique and perceptive viewpoint to comprehend the dynamics of OC in an Arab university.

Second, this study makes significant contribution to the field of OC in higher education. The comprehensive framework of OC that emerged from this study has illuminated a path forward for executing meaningful change in academe throughout the crucial phases of initiation, implementation and institutionalization (refer to Table 15 in the Discussion Chapter). In addition to unravelling the intricate tapestry of change processes and strategies, this framework also highlights their applicability and efficacy within the unique context of higher education. Ten strategies, or principles— as OC scholars like to call them— stand out as particularly significant within the realm of higher education. Far from being theoretical, these principles represent practical guideposts for leaders and decision-makers who wish to embark on transformative journeys. Their relevance to the various change phases and pertinence to the higher education landscape give institutions a roadmap to navigate the intricate and oftentimes challenging terrain of change. What follows is a table illustrating the ten principles along with their distinct contributions to the advancement of knowledge.

Table 18 Key Findings & their contribution to knowledge

#	Change principles	Contribution to knowledge
i	Creating urgency	Whereas previous studies within the business sector highlight creating urgency through underscoring the need for change (Cameron & Quinn, 1999; Kotter, 1996; Lewin, 1951), studies on OC in HE often overlook this principle (cf. Clark, 1992, 1998; Keller, 2004). This study, however, emphasizes not only the significance of this principle as a catalyst for change in the context of higher education, but also the necessity of leveraging both an earnest desire and a genuine need for change while creating urgency.
ii	Creating a shared vision	While the literature on OC commonly champions the creation of a clear, compelling vision (Fullan, 2007; Kotter, 1996; Stouten et al., 2018), this study's contribution lies in underscoring the specific importance of generating a *shared* vision. This finding confirms Kezar's (2013, 2018) research in this regard. This principle is especially important in the context of HE, as it serves as a unifying force that aligns the diverse interests and perspectives of stakeholders. This nuanced perspective deepens understanding of the change dynamics and provides a pragmatic approach for leaders to navigate change while harnessing the collective strength of the various stakeholders.
iii	Plan, plan, plan	The study concludes that although the teleological theory of change has long been criticized, it is still valid, in use in HE and capable of yielding positive results. It also concludes that even planned change involves modifications and adjustments. This finding clearly calls the distinction between planned and emergent change into question. Therefore, the contribution to knowledge here is underscoring the imperative of desisting from recognizing change as either planned or emerged, but a combination of both simultaneously— an issue that has been underresearched.
iv	Promote risk taking	The strategy of risk taking is more commonly known in the business sector. This study, however, reveals that risk-taking presents opportunities for adaptability and responsiveness. It is suggested that HEPs should not only exhibit greater willingness to take risks but also nurture a culture of risk-taking. This finding confirms Kezar's (2018)

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		research in this regard. However, while there is limited research on the necessity of risk-taking in HE, its practical implementation is not tangible in practice.
v	Establishing a niche	The significance of differentiation and strategic positioning for HEPs cannot be overstated. This study highlights the significance of establishing a niche in helping the institution to achieve differentiation and recognition by concentrating on specific areas of expertise or emerging needs, ensuring that the institution remains relevant and responsive. Establishing a niche has not conventionally been known as a strategy of OC in HE, except in Keller (2004). This finding then confirms Keller's research, thereby validating that 'establishing a niche' can indeed be a change principle worthy of attention.
vi	Diversifying leadership styles	The contribution to knowledge here lies in the study's departure from the conventional conception that transformational leadership is the sole driver of change in HE, confirming that a balanced approach that combines both transactional and transformative leadership is essential within the HE context. This notion corroborates Kezar's (2013, 2018) discussion regarding effective leadership and change management in HE.
vii	Involve & hold responsible	While the individual concepts of involvement and accountability have been acknowledged separately, this study confirms their combined potency as a transformative strategy. The study underscores their synergetic effect for OCM in higher education. This combination also serves to mitigate the criticism levelled at shared governance and collective decision-making in HE, which is claimed to impede the timely execution of change. This combination also harmonizes the two seemingly contrasting strategies of involvement and accountability, highlighting their joint potential for effective transformation in HE.
viii	Mitigate challenges	While the concept of mitigating challenges is not novel in the literature of OC, the recognition of this study of its centrality underscores its inherent significance, especially in the complex landscape of HE, known for its slower pace of transformation. The emergence of this principle as a key finding in this case study amplifies its pertinence and efficacy across diverse contexts – Western or Arab world ones alike. This emphasizes the imperative of adopting a proactive approach to mitigating challenges, while considering tailoring the change management strategies not only to the unique characteristics of the institution but also to the overall prevailing cultural and political power dynamics.
ix	Monitor, measure & reroute	The contribution to knowledge of this principle lies in its recognition of the evolving importance of monitoring and measuring in HE, especially within the ever-growing influence of managerialism in the management of HE. The principle underscores the indispensability of monitoring and measuring for successful change in the context of HE, while accentuating the need for a structured approach for tracking progress and making informed adjustments that align with the overarching goals. The principle also emphasizes that rerouting is strategic even with planned change, as was the case for the university in question.
x	Acknowledge, celebrate & empower	This principle aligns with the contemporary focus on the centrality of organizational culture in change

management, highlighting the inherent complexity of the human dynamics within the change processes. While the existing literature recognizes the pivotal role of leadership, communication and engagement for the success of change, the importance of empowering individuals (bottom-up processes and proactivity) is less pronounced. The contribution also lies in the recognition that while the strategic, structural and procedural aspects are significant in the facilitation of change, the human dimension takes precedence. This calls for a more nuanced understanding of how the human interactions unfold and affect the success of change initiatives. In sum, this principle champions the reorientation of change management towards a more human-centric approach.

6.6 Recommendations for further research

Based on the findings and the limitations of this study, several recommendations can be suggested as potential avenues for future studies. The study revealed that the change initiative has had a notable impact on the individual and institutional culture, though some interviewees believed that the change process is still evolving and needs more time to be fully embedded in the culture. Conducting a longitudinal study to assess the sustainability and long-term effect of the change intervention at DU would shed light on the effectiveness as well as barriers associated with change in higher education in an Arab context. Second, researchers may engage in cross-cultural comparative studies, exploring how change management strategies may differ in academia across diverse cultural contexts. This has the potential to identify culturally-specific factors and strategies that can influence change management effectiveness.

To overcome the limitation of the sample size and ensure a broader representation, future studies can extend the range of participants to include larger numbers of staff and students and also additional stakeholders such as alumni and external partners who were involved in the change process. Widening the range of participants, with diverse perspectives, can contribute to a more robust and nuanced understanding of the change intervention, hence enhancing the overall validity and generalizability of the findings. Moreover, this research can be extended through the engagement in longitudinal studies on the same or different higher education providers to assess the sustainability of transformative changes and their evolution over time.

Finally, given the unique context of the study, future studies can build on the current framework by further refining and validating it through empirical studies in different higher education settings. This refinement and validation will ensure its applicability and effectiveness. Finally, by addressing such recommendations in future research, researchers can further deepen understanding of organizational change in higher education and develop more effective change management practices that can benefit higher education in the Arab world and beyond.

6.7 Concluding remarks

In conclusion, this chapter captures the culmination of an explorative journey through the intricacies of change management and the implications of the change processes on the institutional culture of a young Arab university that adeptly navigated transformations and rose to distinction. This investigative journey unravelled a

coherent tapestry of insights that have deepened understanding of the actual navigation and execution of change within the landscape of higher education. These insights formed a potential organizational change framework, detailing the navigation of change within the highly challenging terrain of higher education during the initiation, implementation and institutionalization phases. The ten principles or strategies of change that hold special significance within the comprehensive framework of organizational change constitute a guidepost for institutions endeavouring to navigate change meaningfully and successfully.

In addition to these ten principles of change and their notable contribution to knowledge, the study holds significance and displays originality in focus, context and perspective. The shift in focus from what makes change successful to how change can actually be implemented grounds the study in pragmatism, providing actionable measures of navigating change in its three pivotal phases. Moreover, the Arab world context within which this study operated not only added a layer of originality but also bridged a notable gap due to the paucity of research in organizational change in higher education. Lastly, the researcher's emic perspective provided a distinct vantage point, enriching the discussion, enhancing the authenticity of a transformational narrative and providing nuanced understanding of the complexities of change management throughout the transformative journey.

Recognizing that every journey has its own downsides, this chapter offers a frank contemplation of the change process and study limitations. Envisioning future avenues for research in the field, a few potential pathways of research have been recommended. Finally, as the winds of transformation sweep through the ever-evolving landscape of higher education, challenging HEPs to reimagine their paradigms and embrace novel approaches, it is hoped that the insights uncovered herein will serve as a compass that guide HEPs towards a future enlightened by the promise of progress, innovation and positive transformation.

APPENDIX A: Ethics Reviewers Approval Letter

University of Sunderland

Downloaded: 19/05/2021
Approved: 19/05/2021

Faical Ben Khalifa
School of Education
Programme: PhD

Dear Faical

PROJECT TITLE: Change Strategies and Culture in Higher Education: a Case Study of Organizational change **APPLICATION:** Reference Number 009166

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 19/05/2021 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 009166 (form submission date: 18/05/2021);
- (expected project end date:
- 05/12/2022).
- Participant information sheet 1015801 version 1 (18/05/2021).
- Participant information sheet 1015680 version 2 (18/05/2021).
- Participant information sheet 1015681 version 2 (18/05/2021).
- Participant information sheet 1015682 version 2 (18/05/2021).
- Participant information sheet 1015683 version 2 (18/05/2021).
- Participant consent form 1015686 version 1 (05/05/2021).
- Participant consent form 1015685 version 1 (05/05/2021).

Participant consent form 1015799 version 1 (18/05/2021).
Participant consent form 1015679 version 3
(05/05/2021). Participant consent form 1015684
version 1 (05/05/2021).

If during the course of the project you need to deviate significantly from the above-approved documentation please email ethics.review@sunderland.ac.uk

For more information please visit: https://www.sunderland.ac.uk/research/governance/researchethics/

Yours sincerely

Veronique Laniel
Ethics Administrator
University of Sunderland

APPENDIX B: Gatekeeper's Approval

16 May 2021

Prof. Hassan Kashoob
Vice Chancellor of Dhofar University
PO Box 2509
Salalah 211
Oman

Subject: Requesting Permission to conduct research on Dhofar University

Dear Prof. Kashoob,

I am writing to request your permission to conduct research on Dhofar University as a case study. Currently, I am In my third year pursuing a PhD at the University of Sunderland, UK, My thesis is titled Change Strategies and Culture in Higher Education: A Case Study of Organization Change, This research is under the supervision of Dr. Maddalena Taras and Prof, Ian Neal.

The study seeks to examine how the transformations in the university have been initiated, implemented and institutionalized and the extent to which the institutional culture has influenced and been influenced by change. The study aims also to develop a contextualized framework of change for higher education institutions in the Arab World to help them seek and accomplish change and be more competitive. The study uses a mixed methods approach with primacy given to the qualitative inquiry.

The qualitative inquiry draws on individual one-on-one interviews with the senior management: VC, DVC, deans and QA Director, It also engages the middle management in focus group interviews, i.e. heads of academic and non-academic departments. The study also uses online surveys to seek the views and perceptions of faculty and students. It should be highlighted that participation is voluntary and that participants reserve the right to withdraw within two weeks from the date of the interviews. As to surveys, completion of the questionnaire implies informed consent on their part. Moreover, the study examines core documents: strategic and operational plans, annual reports, university academic council minutes, accomplishment and accreditation reports, and budget books.

The interviews are expected to be conducted physically over the last week of May and the month of June 2021 if the coronavirus situation allows. If not, interview will be conducted online, Participants will be asked for permission to record the interviews,
Your approval of this study will be greatly appreciated.

Sincerely,

Faical Ben Khalifa
PhD student
Approved by Prof Hassan Kashoob   Signature
Vice Chancellor of Dhofar University

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APPENDIX C: DU Research Board Approval

Department of Research
Vision for the future

Dear Mr. Faicel Khalifa,

Subject: Approval of your Request for Distribution of Questionnaire (DU-AY-20-21QUES-017)

Date: June 6th, 2021

I am pleased to inform you that your request for the distribution of questionnaire and to conduct interviews to support your research related to "Change Strategies and Culture in Higher Education: a Case Study of Organizational change" has been approved.

We wish you ever continuing successful contributions to research here at DU.

Please note that the Department of Research will facilitate the distribution of questionnaires only.

Thank you.

Best wishes,
Sarah Iqbal
Department of Research
Dhofar University, PO Box 2509, 211 Salalah
Sultanate of Oman
Tel: +968 23237491

APPENDIX D: Participation Information Sheet

<u>**Participant Information Sheet (PIS)**</u>
<u>**Senior Management**</u>

Study Title
Change Strategies and Culture in Higher Education: a Case Study of Organizational change

What is the purpose of the study?
This research focuses on examining how the change was initiated, implemented and institutionalized and the extent to which the institutional culture has influenced and been influenced by change. The mixed methods approach premised on the embedded design is used to collect data. The framework analysis method is drawn upon to analyze data and draw conclusions.

Why have I been approached?
You have been approached because you are part of the senior management of the university— seen as the catalyst of the change enterprise.

Do I have to take part?
No, participation is voluntary. It is up to you to decide if you would like to participate to help me with my project. Once you understand the following information, you will then be asked to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason and if you do so all data collected from you will be destroyed.

What will happen to me if I take part?
You are being asked to participate in an interview with me, the researcher. The *interview* will take approximately *60* minutes to complete. Participation will not impinge upon your normal duties as VC/DVC/dean/QA director and can be conducted in a place (within the school) and at a time convenient to us both. The information you provide will be confidential and you will remain anonymous throughout the study. The data will be stored on a password protected computer and will be securely disposed of at the end of the research project once my thesis has been marked successfully, by being electronically erased.

What are the possible benefits of taking part?
Your involvement in participating in interviews will contribute to a critical analysis and valuable insights into how organizational change has been initiated, implemented and institutionalized at the university as well as the extent to which the institutional culture has influenced and been influenced by change. The outcomes of this study will help the researcher to develop a framework of organizational change for higher education institutes in Oman and the Arab World.

What are the possible disadvantages and risks of taking part?
There are no perceived disadvantages and risks associated with taking part in the study.
Participating within the study will take some of your time but should not interfere with your normal managerial role. The interview will involve between half an hour to an hour.

What will happen to me if I take part?
The information you provide will be kept confidential (i.e. will not be passed to others) and you will remain anonymous (i.e. individuals and organizations will not be identified) throughout the study. Your involvement will contribute to the data collection, analysis of findings, and conclusions of the study. Your participation will not impinge upon your normal duties as VC/DVC/dean/QA Director, and

the interviews will be conducted in a place on campus and at a time convenient to us both.

Will my taking part in this study be kept confidential?
Yes. Any data collected from *the interview* may be used in the final research thesis but all names and other identifiable information will be changed to pseudonyms or edited out to ensure anonymity wherever possible.

Who is organizing and funding the research?
The research is organized by myself as a final year student at the University of Sunderland on the PhD Education programme. This project is not externally funded.

Who has reviewed the study?
The University of Sunderland Research Ethics Committee has reviewed and approved the study.

Contact for further information
Student's name: Faical Ben Khalifa
Email: bh50qp@research.sunderland.ac.uk
Supervisor: Dr. Maddalena Taras
Email: maddalena.taras@sunderland.ac.uk
Phone: 0044 0191 515 2910
Chairperson of the University of Sunderland Research Ethics Committee: Dr John Fulton
Email: john.fulton@sunderland.ac.uk
Phone: 0044 0191 515 2529

Participant Information Sheet (PIS)
Middle management

Study Title
Change Strategies and Culture in Higher Education: a Case Study of Organizational change

What is the purpose of the study?
This research focuses on examining how the change was initiated, implemented and institutionalized and the extent to which the institutional culture has influenced and been influenced by change. The mixed methods approach premised on the embedded design is used to collect data. The framework analysis method is drawn upon to analyze data and draw conclusions.

Why have I been approached?
You have been approached because you are part of the middle management of the university who have been tasked with the communication and implementation of the changes. It is also because you have headed faculty and students who have been affected by the changes and you will be in a position to discuss the cultural implications that have resulted from the changes.

Do I have to take part?
No, participation is voluntary. It is up to you to decide if you would like to participate to help me with my project. Once you understand the following information, you will then be asked to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason and if you do so all data collected from you will be destroyed.

What will happen to me if I take part?
You are being asked to participate in a focus group interview with me, the researcher. The interview will take approximately 60 minutes to complete. Participation will not impinge upon your normal

duties as head of department and can be conducted in a place (within the school) and at a time convenient to us both. The information you provide will be confidential and you will remain anonymous throughout the study. The data will be stored on a password protected computer and will be securely disposed of at the end of the research project once my thesis has been marked successfully, by being electronically erased.

What are the possible benefits of taking part?
Your involvement in participating in interviews will contribute to a critical analysis and valuable insights into how organizational change has been initiated, implemented and institutionalized at the university as well as the extent to which the institutional culture has influenced and been influenced by change. The outcomes of this study will help the researcher to develop a framework of organizational change for higher education institutes in Oman and the Arab World.

What are the possible disadvantages and risks of taking part?
There are no perceived disadvantages and risks associated with taking part in the study. Participating within the study will take some of your time but should not interfere with your normal head of department role. The interview will involve between half an hour to an hour.

What will happen to me if I take part?
The information you provide will be kept confidential (i.e. will not be passed to others) and you will remain anonymous (i.e. individuals and organizations will not be identified) throughout the study. Your involvement will contribute to the data collection, analysis of findings, and conclusions of the study. Your participation will not impinge upon your normal duties as head of department, and the interviews will be conducted in a place on campus and at a time convenient to us both.

Will my taking part in this study be kept confidential?
Yes. Any data collected from *the* interview may be used in the final research thesis but all names and other identifiable information will be changed to pseudonyms or edited out to ensure anonymity.

Who is organizing and funding the research?
The research is organized by myself as a final year student at the University of Sunderland on the PhD Education programme. This project is not externally funded.

Who has reviewed the study?
The University of Sunderland Research Ethics Committee has reviewed and approved the study.

Contact for further information
Student's name: Faical Ben Khalifa
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Phone: 0044 0191 515 2910
Chairperson of the University of Sunderland Research Ethics Committee: Dr John Fulton
Email: john.fulton@sunderland.ac.uk
Phone: 0044 0191 515 2529

Participant Information Sheet (PIS)
Students

Study Title
Change Strategies and Culture in Higher Education: a Case Study of Organizational change

What is the purpose of the study?
This research focuses on examining how the change in the university was initiated, implemented and institutionalized and the extent to which the institutional culture has influenced and been influenced by change. The mixed methods approach premised on the embedded design is used to collect data. The framework analysis method is drawn upon to analyze data and draw conclusions.

Why have I been approached?
You have been approached because you are one of the main stakeholders that have been involved in and affected by change. Your feedback is expected to give some valuable insights on the change process and its outcomes.

Do I have to take part?
No, participation is voluntary. It is up to you to decide if you would like to participate to help me with my project. Completion of the online questionnaire implies Informed Consent on your part.

What will happen to me if I take part?
You will be sent an online questionnaire to fill in. The questionnaire is anonymous and there is no way that your name will be identified. The data will be stored on a password-protected computer and will be securely disposed of at the end of the research project once my thesis has been marked successfully, by being electronically erased.

What are the possible benefits of taking part?
Your involvement in participating in the survey will contribute to a critical analysis and valuable insights into how organizational change has been initiated, implemented and institutionalized at the university as well as the extent to which the institutional culture has influenced and been influenced by change. The outcomes of this study will help the researcher to develop a framework of organizational change for higher education institutes in Oman and the Arab World.

What are the possible disadvantages and risks of taking part?
There are no perceived disadvantages and risks associated with taking part in the study. Participating within the study will take some of your time but should not interfere with your normal duties as a student. The questionnaire may take up to 30 minutes to finish.

Will my taking part in this study be kept confidential?
Yes. Being anonymous, the questionnaire includes nothing that may lead to you being identified in any way possible. Data will be used in the final research thesis.

Who is organizing and funding the research?
The research is organized by myself as a final year student at the University of Sunderland on the PhD Education programme. This project is not externally funded.

Who has reviewed the study?
The University of Sunderland Research Ethics Committee has reviewed and approved the study.

Contact for further information

Student's name: Faical Ben Khalifa
Email: bh50qp@research.sunderland.ac.uk
Supervisor: Dr. Maddalena Taras
Email: maddalena.taras@sunderland.ac.uk
Phone: 0044 0191 515 2910
Chairperson of the University of Sunderland Research Ethics Committee: Dr John Fulton
Email: john.fulton@sunderland.ac.uk
Phone: 0044 0191 515 2529

APPENDIX E: Consent Forms

<u>Consent Form</u>
<u>Senior Management</u>

Study title: Change Strategies and Culture in Higher Education: a Case Study of Organizational change

- I have read and understood the attached study information and, by signing below, I consent to participate in an interview for this study

- I understand that I have the right to withdraw from the interview without giving a reason at any time and that if I do so all data collected from me will be destroyed immediately

- I am content that the interview will be audio recorded

- I understand that all the information from the interview recording will be kept anonymous and safely

- I understand that extracts of the interview may anonymously be quoted in any reports or publications resulting from the research

- I understand that all data collected throughout the study will be destroyed as soon as the project has been successfully marked by the University of Sunderland.

- Please feel free to ask me any questions you would like about the project before you sign the consent form.

Signed:
Print name:
Date:
Researcher's name: Faiçal Ben Khalifa
Researcher's signature

Consent Form
Heads of Academic Departments

Study title: Change Strategies and Culture in Higher Education: a Case Study of
Organizational change

- I have read and understood the attached study information and, by signing below, I
consent to participate in an interview for this study

- I understand that I have the right to withdraw from the interview without giving a
reason at any time and that if I do so all data collected from me will be destroyed
immediately

- I am content that the interview will be audio recorded

- I understand that all the information from the interview recording will be kept
anonymous and safely

- I understand that extracts of the interview may anonymously be quoted in any reports
or publications resulting from the research

- I understand that all data collected throughout the study will be destroyed as soon as
the project has been successfully marked by the University of Sunderland.

- Please feel free to ask me any questions you would like about the project before you
sign the consent form.

Signed:
Print name:
Date:
Researcher's name: Faiçal Ben Khalifa
Researcher's signature

Consent Form
Heads of Non-Academic Departments

Study title: Change Strategies and Culture in Higher Education: a Case Study of Organizational change

- I have read and understood the attached study information and, by signing below, I consent to participate in an interview for this study

- I understand that I have the right to withdraw from the interview without giving a reason at any time and that if I do so all data collected from me will be destroyed immediately

- I am happy that the interview will be audio recorded

- I understand that all the information from the interview recording will be kept anonymous and safely

- I understand that extracts of the interview may anonymously be quoted in any reports or publications resulting from the research

- I understand that all data collected throughout the study will be destroyed as soon as the project has been successfully marked by the University of Sunderland.

- Please feel free to ask me any questions you would like about the project before you sign the consent form.

Signed:
Print name:
Date:
Researcher's name: Faiçal Ben Khalifa
Researcher's signature

APPENDIX F: DU's Chronological History, Events & Accomplishments

YEAR	DU's CHRONOLOGICAL HISTORY, EVENTS & ACCOMPLISHMENTS
2004	DU started its operations on the premises of the National College of Science & Technology
2004	DU started with 3 small colleges and Foundation Program, with around 1500 students and 25 academic programs
2004	DU was affiliated to American University of Beirut (AUB) to receive academic and administrative support
2007	DU engaged in a self-study quality audit under the auspices of the then Oman Accreditation Council (OAC)
2008	Establishment of the Centre for Teaching and Learning (CTL)
2009	OAAA panel of external reviewers visited DU
2010	DU became self-dependent after the cessation of its affiliation with AUB
2010	OAAA published DU's Quality Audit Report
2010	Relocation to a new state of the art campus stretching over 4500 square metres
2011	Appointment of a new Vice Chancellor
2011	Appointment of a new Deputy Vice Chancellor
2011	Establishment of a Quality Assurance Unit
2012	Appointment of a Director for Quality Assurance
2012	DU started working on the audit panel's recommendations and affirmations
2012	Formation of the Academic University Council, serving as a change leading coalition
2013	Preparation of the university's 2nd Self-study Quality Audit
2014	Establishment of the Centre of Entrepreneurship at the university
2014	Introduction of a mandatory entrepreneurship course
2015	Initiation of a process of regularly reviewing and updating its regulatory policies
2016	Submission of the Institutional Standards Assessment Report to OAAA
2017	Review of DU's Strategic Plan, which resulted in an update of the Operational Plans
2017	A comprehensive review of the curricula was conducted, leading to a comprehensive update to ensure relevance and alignment with evolving educational standards and market trends
2018	DU obtained national accreditation from OAAAQA, Oman
2018	CCBA dean was nominated by the AACSB in the dean's Middle East and North Africa Council
2018	DU Received its Foundation Program's Quality Audit Report, that included the highest number of commendations of all other FP reports till date
2018	Opening of a new college— College of Law
2018	Foundation Program (FP) established a Supplemental Instruction Unit for student academic support
2018	CTL expanded its scope, prioritizing dedicated professional development of all academic staff
2019	FP adopted the flipped learning approach across its three departments
2019	College of Engineering adopted the semi-flipped learning approach
2019	DU achieved international accreditation by ASIC, UK
2019	DU became a member of EJAAD, a new platform created by the Research Council (TRC), linking colleges and universities with the industry
2019	DU secured 2nd position in Research and publication among all private universities in Oman, with Research Gate (RG) recording over 1149 publications
2019	CCBA acquired the silver partnership of the famed ACCA professional program in accounting, with CCBA becoming an exam centre of ACCA
2019	Engineering students won 1st place in Omantel & Ericsson 5G Technology Competition
2020	DU joined Advance HE, UK and an growing number of staff started earning their fellowships
2021	DU comprises four colleges encompassing 18 departments and offering a total of 57 academic programmes. It also has a total of 12000 alumni and around 5500 students.
2021	FP held its 1st International conference
2021	Centre for students with disabilities was opened, highlighting diversity and inclusion
2021	Staff members from College of Engineering won National Research Award in Information and Communication Technology (ICT)

2021	Two members of DU's academic staff were recognized in Stanford University List of the world's top 2% scientists
2021	DU was awarded 14 research grants under the Block Funding Programme by Ministry of HE, Research and Innovation worth OMR 145, 610.
2021	QS for the Arab World University Rankings ranked DU among 121-130
2022	DU was ranked among 121-140 by Times Higher Education for the Arab University Rankings 2022
2022	DU established an Office for International Cooperation (OIC)
2022	DU established the Centre for Training and Development of Human Resources (previously it was not a centre)
2023	QS for the Arab World University Rankings ranked DU among 111-120
2023	AQAS granted institutional accreditation to the College of Arts and Applied Sciences and program accreditation to BA in English Language
2024	DU advanced to the rank of 81-90 according to QS for the Arab World University Rankings

APPENDIX G: Interview Questions

Interview Guide
Senior Management

This interview guide serves to direct the researcher during the semi-structured one-to-one interviews with the senior management of the university.
Instructions:
- Thank the interviewee for his or her time
- Explain nature of the study and purpose of the interview
- Request permission for recording the interview
- Give consent form for signature
- Indicate time of the interview: about one hour
- Ask if the interviewee is ready to start the interview
- Ask if the interviewee has any questions before start

Inform the interviewee that you will need to ask some background questions about him or her. These will be followed by broad questions and then pointed questions to seek his or her opinion on different aspects of the change process.

Background questions

- How long have you been at DU?
- What is your current position?
- What previous roles have you taken?
- Do you have anything to say before we start?

Broad questions
- DU is the 1st university to gain national and international accreditation in Oman. It is ranked among 121 best universities in the Arab World in 2021, among other awards and recognitions. Where does DU position itself in the ecosystem of higher education nationally and regionally now?
- What changes has the university gone through?
- Was the institutional change intentional or by chance? How?
- What were the main challenges the university faced during the change process?
- Do you think the establishment of a Quality Assurance Unit played a role in the change process? Explain.
- What metrics did the leadership use to ensure change is on track?
- To what extent have the changes improved the quality of education and services?

Pointed questions
- How has the change process been (a) initiated and (b) implemented?
- How was the strategic direction cascaded down and throughout the university?
- How important were the university's vision, mission and strategic planning in relation to change?
- What were the strategies used to (a) start and (b) advance change?
- Was there a guiding coalition to lead change? (Kotter, 1996)
- What type of leadership you think guided the change process?
- What were the changes to the university's physical assets and facilities?
- How did that improve the quality of education?
- Has research improved? How?
- Has there been any new and innovative programmes? (Clark, 1992)
- Has there been a distinctive niche? (Keller, 2004)

- Has the technological infrastructure of the university improved?
- Was professional development for faculty and staff a priority? How?
- How did that impact the quality of education and general services?
- Were the spending trends aligned with the change processes? How?
- How has the university impacted the community?
- Were faculty and students supportive of the changes made?
- Has the institutional culture (faculty & students) influenced the change process? How?
- Have the changes been anchored in the university culture? (Kotter, 1996; Schein, 2004)
- How different is the current institutional culture from the past?
- Were short-term wins celebrated? (Kotter, 1996)
- Were gains consolidated? (Kotter, 1996)
- Do you think faculty and students defend the 'new version' of their university? Explain.
- Do you have any final thoughts?

Interview Guide in Arabic
Senior Management

أسئلة عن خلفية المتحدث إليه

-منذ متى وانت في الجامعة؟
-ما هو منصبك الحالي؟
-ما المناصب و الأدوار السابقة التي قمت بها؟
-هل لديك أي تعليق قبل أن نبدأ المقابلة؟

أسئلة عامة

-جامعة ظفار هي أول جامعة تحصل على الاعتماد الوطني والدولي في عمان إضافة إلى تصنيفها من بين 121 أفضل جامعة في العالم العربي في عام 2021 ، إلى جانب إشادات أخرى. أين تتموقع الجامعة في النظام البيئي للتعليم العالي على الصعيدين الوطني والإقليمي الآن؟
-ما هي التغييرات التي مرت بها الجامعة؟
-هل التغييرات التي مرت بها الجامعة كانت مقصودة أم مصادفة ؟كيف ذلك؟
-ما هي أبرز التحديات التي واجهتها الجامعة خلال عملية التغيير؟
-هل تعتقد أن إنشاء قسم ضمان الجودة في الجامعة لعب دورًا في عملية التغيير؟ هلا شرحت لنا ذلك.
- برأيك ما هي المقاييس التي استخدمتها القيادة لضمان أن التغيير يسير على الطريق الصحيح؟
-إلى أي مدى أدت التغييرات إلى تحسين جودة التعليم والخدمات؟

أسئلة محددة

-كيف بدأت عملية التغيير وكيف نُفذت؟
-كيف تم تمرير الرؤية الإستراتيجية إلى القيادات و من ثم إلى مختلف موظفي الجامعة ؟
-ما مدى أهمية و دور رؤية الجامعة ورسالتها والتخطيط الاستراتيجي فيما يتعلق بالتغيير؟
-ما هي الاستراتيجيات المستخدمة من أجل (أ) البدء في التغيير (ب) و الإستمرار فيه؟
-هل تم تشكيل لجنة قيادة لغضطلاع بدور قيادة و تحريك التغيير؟ (كوتر ، 1996)
-ما نوع القيادة التي تعتقد تم تبنيها في عملية التغيير؟
-ما هي التغييرات التي طرأت على الأصول المادية للجامعة ومرافقها؟
-كيف أدى ذلك إلى تحسين جودة التعليم؟
-هل تحسن البحث العلمي؟ كيف ذلك؟
-هل تم إدراج برامج جديدة ومبتكرة؟ (كلارك ، 1992)
-هل ركزت الجامعة على حيز معين يضمن لها التفرد؟ (كيلر ، 2004)
-هل تحسنت البنية التحتية للتكنولوجية في الجامعة؟
-هل كان التطوير المهني لأعضاء هيئة التدريس والموظفين من الأولويات؟ كيف ذلك؟
-كيف أثر ذلك على جودة التعليم والخدمات العامة؟
-هل كان الإنفاق المالي متوافق مع عمليات التغيير؟ كيف ذلك؟
-كيف أثرت الجامعة على المجتمع؟
-هل قام أعضاء هيئة التدريس والطلبة بدعم التغييرات التي تمت؟
-هل أثرت الثقافة المؤسسية (أعضاء هيئة التدريس والطلاب) على عملية التغيير؟ كيف ذلك؟
-هل تم ترسيخ التغييرات في ثقافة الجامعة؟ (كوتر ، 1996 ؛ شين ، 2004)
-ما مدى اختلاف الثقافة المؤسسية الحالية عن الماضي؟
-هل تم الاحتفال بالمكاسب قصيرة المدى؟ (كوتر ، 1996)
-هل تم تعزيز المكاسب؟ (كوتر ، 1996)
-هل تعتقد أن أعضاء هيئة التدريس الطلبة يناصرون الجامعة في "نسختها الجديدة"؟ اشرح لنا ذلك.
-هل لديك أي أفكار أخرى؟

Focus Group interview
Heads of Academic Departments

This focus group interview guide serves to direct the researcher during the semi-structured interviews with the heads of the academic departments.
Instructions:
- Thank the interviewees for their time
- Explain nature of the study and purpose of the interview
- Request permission for recording the interview
- Give consent forms for signature
- Indicate time of the interview (about 1 hour)
- Ask if the interviewees are ready to start the interview
- Ask if the interviewees have any questions before start

Inform the interviewees that I will need to ask some background questions about them. These will be followed by broad questions and then pointed questions to seek their opinions on different aspects of the change process.

Background questions

Ask them to introduce themselves briefly as follows:
- Their tenure at the university
- Current position
- Previous roles/positions

Guiding questions

- What changes have you witnessed while at DU?
- What were the specific changes that took place in your departments or colleges?
- How do you think the changes in general were initiated? What about those in your departments?
- Were you and your teams involved in the development of some of those changes? How?
- What were the strategies used to (a) create and (b) implement those changes?
- What were the main challenges you and your faculty faced?
- How have you overcome those challenges?
- Have faculty and students been supportive during the change process? How?
- Has the institutional culture (faculty & students) influenced the changes that took place in your department? How?
- Have the changes impacted how things were done in your departments? How? (Schein, 2004)
- Has a new culture emerged as a result of the changes? Explain how? (Schein, 2004)
- To what extent have the changes impacted the quality of education and services in your departments or college?
- What do you think in particular impacted the quality of education?
- How helpful were the regular professional development sessions in the last two years?
- Do you think the teaching-research nexus improved students' learning experience? How?
- Do you think faculty achievements have been recognized? How?
- Have achievements and wins been celebrated by the university or at your level? (Kotter, 1996)
- Do you think the gains from the change have been consolidated? (Kotter, 1996)
- Have the changes been anchored in the culture of your department/college? (Kotter, 1996)
- Do you think faculty and students would defend the 'new version' of their university?
- Do you have any final thoughts?

<u>**Focus Group interview**</u>

<u>**Heads of non-academic departments**</u>

This focus group interview guide serves to direct the researcher during the semi-structured interviews with the heads of the non-academic departments.

Instructions:
- Thank the interviewees for their time
- Explain nature of the study and purpose of the interview
- Request permission for recording the interview
- Give consent forms for signature
- Indicate time of the interview (about 1 hour)
- Ask if the interviewees are ready to start the interview
- Ask if the interviewees have any questions before start

Inform the interviewees that I will need to ask some background questions about them. These will be followed by broad questions and then pointed questions to seek their opinion on different aspects of the change process.

Background questions

Ask them to introduce themselves briefly as follows:
- Their tenure at the university
- Current position
- Previous roles/positions

Guiding questions

- What changes have you witnessed while at DU?
- What were the specific changes that took place in your departments?
- How have the changes in your departments been (a) initiated and (b) implemented?
- Were you and your teams involved in the development of some of those changes? How?
- What were the strategies used to create and implement those changes?
- What were the main challenges you and your staff faced?
- How have you overcome those challenges?
- Have the changes impacted how things are done in your departments? How? (Schein, 2004)
- Has a new culture emerged as a result of the changes? Explain how? (Schein, 2004)
- To what extent have the changes impacted the quality of services in your departments?
- What do you think in particular impacted the quality of services?
- How helpful was the regular staff capacity development in the last two years?
- Do you think the changes improved students' learning experiences? How?
- Have your staff been supportive during the change process? How?
- Do you think staff achievements have been recognized? How?
- Have achievements and wins been celebrated by the university or at your level? (Kotter, 1996)
- Do you think the gains from the change have been consolidated? (Kotter, 1996)
- Have the changes been anchored in the culture of your department? (Kotter, 1996)
- Do you think staff and students would defend the 'new version' of their university?
- Do you have any final thoughts?

APPENDIX H: Survey Questions

Survey Questions_ Faculty

You are requested to complete this survey as part of a PhD research project conducted by Faiçal Ben Khalifa. The research project is titled *Change Strategies and Culture in Higher Education: A case Study of Organizational Change*. You are requested to participate in this because you have been part of the transformations Dhofar University has gone through. Your completion of the survey is voluntary. However, this survey is designed to be anonymous, in that, your responses will not identify who you are. By completing and submitting the survey, you are giving your consent to me to use your answers in this research. Please contact me via bh50qp@research.sunderland.ac.uk or the supervisor via maddalena.taras@sunderland.ac.uk if you have any questions or concerns about your rights as a participant. The survey follows the 4-point Likert Scale. You are asked to respond by ticking the option you think best fits the statement given. The survey may take 20-25 minutes to complete. Thank you for your cooperation to complete this scholarly research.

<div dir="rtl">

التوطئة

يرجى تعبئة هذا الإستبيان كجزء من مشروع بحث لنيل درجة الدكتوراه والذي يجريه الباحث فيصل بن خليفة بعنوان استراتيجيات التغيير والثقافة في التعليم العالي: دراسة حالة للتغيير التنظيمي، و لقد تم التواصل معك على اعتبار أنك كنت جزءًا من التحولات التي مرت بها جامعة ظفار، و تعتبر المشاركة في الإستبيان طوعية مع العلم أن هذا الإستبيان صمم لتكون هوية المشاركين نغير معلنة، و تعتبر تعبئة الإستبيان إقرارا بالموافقة على استخدام البيانات المحصلة لغرض هذا البحث. و في حال وجود أي استفسار بخصوص حقوقك كمشارك الرجاء الإتصال بي من خلال bh50qp@research.sunderland.ac.uk أو بالمشرف على الدكتوراه عبر maddalena.taras@sunderland.ac.uk و يستند الإستبيان إلى مقياس ليكرت ذي الأربعة نقاط. يرجى منك تعبئة الإستبيان بتحديد الخيار المناسب لديك مع العلم أن التعبئة قد تستغرق من 20 إلى 25 دقيقة من وقتك. شاكرين لكم حسن تعاونكم لغرض البحث العلمي.

</div>

1	The relocation to a modern campus with well-equipped learning spaces and facilities has helped improve the learning experiences of students. <div dir="rtl">ساعد الانتقال إلى حرم جامعي حديث ومجهز بفضاءات ومرافق تعليمية حديثة في تحسين الخبرة التحصيلية لدى الطلبة.</div>
2	The vision, mission and strategic planning were instrumental in the development of the university. <div dir="rtl">إستفادت الجامعة من الرؤية والرسالة والتخطيط الاستراتيجي لإحداث التغيير.</div>
3	The pursuing of national and international accreditation was a catalyst for change. <div dir="rtl">كان السعي وراء الاعتماد الوطني والدولي حافزًا للتغيير</div>
4	The establishment of modern, well-equipped laboratories has provided students with required practicum experience. <div dir="rtl">أدى إنشاء مختبرات حديثة ومجهزة تجهيزًا جيدًا إلى تزويد الطلبة بالخبرة العملية المطلوبة</div>
5	The establishment of a high-tech engineering workshop has provided students with technical hands-on experimentation <div dir="rtl">أدى إنشاء ورشة الهندسة عالية التقنية إلى تزويد الطلبة بالتجربة الفنية والعملية.</div>
6	The establishment of a Learning Support Centre (LSC) has supported the development of students' educational needs <div dir="rtl">عزز إنشاء "مركز دعم التعلم" (LSC) حاجة الطلبة لتطوير تحصيلهم المعرفي</div>
7	The establishment of a Research Centre, along with research incentives has enhanced research productivity and growth <div dir="rtl">أدى إنشاء مركز البحث العلمي بالإضافة إلى الحوافز البحثية إلى تعزيز إنتاجية البحث ونموه</div>
8	The establishment of the Frankincense, Medicinal Plants and Biodiversity Centre boosted research and experimentation on local plants <div dir="rtl">عزز إنشاء مركز اللبان والنباتات الطبية والتنوع البيولوجي البحوث والتجارب على النباتات المحلية</div>

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9	The opening of a Centre for Students with Disabilities has helped improve the educational experience for students with special needs ساعد افتتاح مركز للطلاب ذوي الإعاقة في تحسين التجربة التعليمية للطلبة ذوي الاحتياجات الخاصة
10	The establishment of a Quality Assurance Unit has played a key role in the development of the university لعب إنشاء وحدة ضمان الجودة دورًا رئيسيًا في تطوير الجامعة
11	The university's information technology infrastructure has recently seen a remarkable improvement شهدت البنية التحتية لتكنولوجيا المعلومات بالجامعة مؤخرًا تحسنًا ملحوظًا
12	The increase in the library print and electronic resources has enriched students' learning experience أدت الزيادة في موارد المكتبة المطبوعة والإلكترونية إلى إثراء عملية التحصيل لدى الطلبة
13	The regular and constant review of the university policies and practices has helped improve the quality of education and services ساعدت المراجعة المنتظمة والمستمرة لسياسات الجامعة وممارساتها على تحسين جودة التعليم والخدمات
14	The expansion and diversification of the academic programs has helped meet marketplace needs ساعدت زيادة البرامج الأكاديمية وتنويعها في تلبية احتياجات السوق
15	The regular review of the offered programs has made them current, relevant and of international level المراجعة المنتظمة لمناهج التدريس جعلت منها مناهجا حديثة ومحدثة ومتسقة مع المناهج الدولية
16	Student support services have seen a significant improvement over the last few years شهدت خدمات دعم الطلبة تحسنًا كبيرًا خلال السنوات الأخيرة
17	The launching of the teaching-research nexus has improved students' learning experiences أدى إطلاق مبادرة الربط بين التدريس والبحث العلمي إلى تحسين عملية التحصيل لدى الطلبة
18	Performance-based incentives have improved faculty performance and commitment أدت الحوافز المرتبطة بالأداء إلى تحسين أداء أعضاء هيئة التدريس وتعزيز التزامهم
19	The recruitment of faculty with international experience has enriched the educational experiences of students لقد أدى توظيف أعضاء هيئة التدريس من ذوي الخبرة الدولية إلى إثراء عملية التحصيل لدى الطلبة
20	The quality of education has been improving for the last five years إستمرت جودة التعليم في التحسن في السنوات الخمسة الأخيرة
21	The restructuring of curricula in the Foundation Program has helped make students degree-ready ساعدت إعادة هيكلة المناهج في البرنامج التأسيسي في تعزيز جاهزية الطلبة لدخول الإختصاص
22	The recent implementation of the flipped learning approach in the Foundation Program has improved learner autonomy أدى تطبيق البرنامج التأسيسي لنظرية الفصل الدراسي المعكوس إلى تحسين الإستقلالية لدى المتعلم
23	The implementation of the Supplemental Instruction Model (Muraje'a) in the Foundation program has helped improve students learning experiences ساعد تطبيق نموذج التعليم التكميلي في البرنامج التأسيسي على تحسين عملية التحصيل لدى الطلبة (Muraje'a)
24	The frequent, centralized professional development opportunities have helped upskill faculty and improve their performance ساعدت فرص الإنماء المهني المتكررة والمركزية في رفع مهارات أعضاء هيئة التدريس وتحسين أدائهم
25	The overhaul of the Continuing Education Centre and Community Service (CECCS) has boosted community support services أدى إصلاح مركز التعليم المستمر وخدمة المجتمع إلى تعزيز خدمات دعم المجتمع
26	The liaison between the university's engineering workshop and the local industry has helped support the industrial community ساعد التنسيق بين ورشة الهندسة في الجامعة وورش الصناعة المحلية في دعم الصناعة في المنطقة
27	The launching of evening programs have given working professionals an opportunity to develop their careers لقد أتاح إطلاق البرامج المسائية للموظفين العاملين فرص تطوير مستقبلهم الوظيفي
28	The opening of the College of Law has widened career options for students أدى افتتاح كلية القانون إلى توسيع الخيارات الوظيفية للطلبة

29	The changes that have taken place at the university have improved the quality of education and services أدت التغييرات التي حدثت في الجامعة إلى تحسين جودة التعليم والخدمات
30	Faculty views and perceptions on required changes were sought in meetings or via surveys تم سبر آراء أعضاء هيئة التدريس وتصوراتهم حول التغييرات المرجوة من خلال الاجتماعات أو عبر الاستطلاعات
31	The university celebrates achievements and honours faculty تحتفل الجامعة بالإنجازات وتكرم أعضاء هيئة التدريس
32	The university's strive for accreditation has raised the quality of education and services أدى سعي الجامعة للحصول على الاعتماد إلى رفع جودة التعليم والخدمات
33	Faculty have been supportive of the changes made لقد دعمت هيئة التدريس التغييرات التي تم تنفيذها
34	The changes have been anchored in the university's institutional culture تم ترسيخ التغييرات في الثقافة المؤسسية للجامعة
35	The university's current institutional culture is better than the past one الثقافة المؤسسية الحالية للجامعة أفضل من سابقتها
36	Faculty support the 'new version' of their university يدعم أعضاء هيئة التدريس"النسخة الجديدة" لجامعتهم

The 4-point Likert Scale are as follows:
- o Strongly disagree
- o Disagree
- o Strongly agree
- o Agree

Survey Questions_ Students

Preamble

You are requested to complete this survey as part of a PhD research project conducted by Faiçal Ben Khalifa. The research project is titled *Change Strategies and Culture in Higher Education: A case Study of Organizational Change*. You are requested to participate in this because you have been part of the transformations Dhofar University has gone through. Your completion of the survey is voluntary. However, this survey is designed to be anonymous, in that, your responses will not identify who you are. By completing and submitting the survey, you are giving your consent to me to use your answers in this research. Please contact me via bh50qp@research.sunderland.ac.uk or the supervisor via maddalena.taras@sunderland.ac.uk if you have any questions or concerns about your rights as a participant. The survey follows the 4-point Likert Scale. You are asked to respond by ticking the option you think best fits the statement given. The survey may take 20-25 minutes to complete. Thank you for your cooperation to complete this scholarly research.

التوطئة

يرجى تعبئة هذا الإستبيان كجزء من مشروع بحث لنيل درجة الدكتوراه والذي يجريه الباحث فيصل بن خليفة بعنوان استراتيجيات التغيير والثقافة في التعليم العالي: دراسة حالة للتغيير التنظيمي، و لقد تم التواصل معك على اعتبار أنك كنت جزءًا من التحولات التي مرت بها جامعة ظفار، و تعتبر المشاركة في الإستبيان طوعية مع العلم أن هذا الإستبيان صمم لتكون هوية المشاركين نغير معلنة، و تعتبر تعبئة الإستبيان إقرارا بالموافقة على استخدام البيانات المحصلة لغرض هذا البحث، و في حال وجود أي استفسار بخصوص حقوقك كمشارك الرجاء الإتصال بي من خلال bh50qp@research.sunderland.ac.uk أو بالمشرف على الدكتوراه عبر maddalena.taras@sunderland.ac.uk و يستند الإستبيان إلى مقياس ليكرت ذي الأربعة نقاط. يرجى منك تعبئة الإستبيان بتحديد الخيار المناسب لديك مع العلم أن التعبئة قد تستغرق من 20 إلى 25 دقيقة من وقتك. شاكرين لكم حسن تعاونكم لغرض البحث العلمي.

1	The relocation to a modern campus with well-equipped learning spaces and facilities has helped improve the learning experiences of students. ساعد الانتقال إلى حرم جامعي حديث ومجهز بفضاءات ومرافق تعليمية حديثة في تحسين الخبرة التحصيلية لدى الطلبة.
2	The establishment of modern, well-equipped laboratories has provided students with required practicum experience أدى إنشاء مختبرات حديثة ومجهزة تجهيزًا جيدًا إلى تزويد الطلبة بالخبرة العملية المطلوب
3	The establishment of a high-tech engineering workshop has provided students with technical hands-on experimentation أدى إنشاء ورشة عمل هندسية عالية التقنية إلى تزويد الطلبة بالتجربة الفنية والعملية
4	The opening of a Centre for Students with Disabilities has helped improve the educational experience for students with special needs ساعد افتتاح مركز للطلاب ذوي الإعاقة في تحسين التجربة التعليمية للطلبة ذوي الاحتياجات الخاصة
5	The opening of the Supplemental Instruction (Muraje'a) Unit for foundation students supports their educational experiences دعم افتتاح وحدة التعليم التكميلي (مراجعة) لطلبة التأسيسي خبراتهم التحصيلية
6	The university's information technology infrastructure has recently seen a remarkable improvement شهدت البنية التحتية لتكنولوجيا المعلومات بالجامعة مؤخرًا تحسنًا ملحوظًا
7	The increase in the library print and electronic resources has enriched students' learning experience أدت الزيادة في موارد المكتبة المطبوعة والإلكترونية إلى إثراء عملية التحصيل لدى الطلبة
8	The expansion of hostel buildings, with better catering, sporting and recreational facilities, has accommodated more students and improved their university life experience أدى توسيع مبنى سكن الطالبات وتحسين مرافق تقديم الطعام والرياضة والترفيه إلى استيعاب المزيد من الطالبات وتحسين تجربتهن الجامعية
9	The university policies are reviewed regularly to ensure they are consistent and effective تتم مراجعة سياسات الجامعة بانتظام للتأكد من أنها متسقة وفعالة
10	The offered programs at the university are of international standards البرامج المقدمة في الجامعة ذات معايير دولية

11	The expansion and diversification of the academic programs has helped meet marketplace needs ساعدت زيادة البرامج الأكاديمية وتنويعها في تلبية احتياجات السوق
12	The academic support services have improved over the last few years تحسنت خدمات الدعم الأكاديمي خلال السنوات الأخيرة
13	The establishment of a Learning Support Centre (LSC) has supported the development of students' عزز إنشاء "مركز دعم التعلم" حاجة الطلبة إلى تطوير المستوى التحصيلي لديهم educational needs (LSC)
14	The launching of the teaching-research nexus has improved students' learning experiences أدى إطلاق مبادرة الربط بين التدريس والبحث العلمي إلى تحسين عملية التحصيل لدى الطلبة
15	The existence of an academic staff with international experience has enriched the educational أدى وجود طاقم أكاديمي يتمتع بخبرة دولية إلى إثراء عملية التحصيل لدى الطلبة experiences of students
16	The quality of education has been improving for the last five years إستمرت جودة التعليم في التحسن في السنوات الخمسة الأخيرة
17	The restructuring of curricula in the Foundation Program has helped make students degree- ساعدت إعادة هيكلة المناهج في البرنامج التأسيسي في تعزيز جاهزية الطلبة لدخول الإختصاصready
18	The recent adoption of the flipped learning approach in the Foundation Program has improved learner أدى تبني البرنامج التأسيسي لنظرية الفصل الدراسي المعكوس إلى تحسين الإستقلالية لدى المتعلمautonomy
19	Student support services have seen a significant improvement over the last few years شهدت خدمات دعم الطلاب تحسنًا كبيرًا خلال السنوات الأخيرة
20	Feedback collected from students has improved the academic and general support services أدت بيانات الإستبيانات التي تم جمعها من الطلبة إلى تحسين الخدمات الأكاديمية و خدمات الدعم العامة
21	The university's Student Advisory Council has given students a voice in student-related affairs لقد منح المجلس الاستشاري الطلابي صوتا للطالب للمشاركة في القرارات التي تهم الطلبة
22	The presence of student representatives in the Foundation Program has empowered students and أسهم وجود ممثلين عن الطلبة في البرنامج التأسيسي إلى تمكين الطلبة و الإستماع إلى آرائهم. given them voice
23	The career and employment services have helped boost graduates' employability ساعدت خدمات التوظيف التي تقدمها الجامعة في تعزيز التوظيف لدى الخريجين
24	The social, cultural and recreational activities provided by the university have seen an increase over شهدت الأنشطة الاجتماعية والثقافية والترفيهية التي تقدمها الجامعة زيادة خلال السنوات الأخيرةthe last few years
25	The university has increased its safety and security measures over the last few years زادت الجامعة من تدابير السلامة والأمن في السنوات الأخيرة
26	The introduction of the entrepreneurship course has equipped students with entrepreneurial skills and لقد ساعد إطلاق مادة ريادة الأعمال الطلبة في تحسين مهاراتهم في initiated the idea of family-owned businesses تنظيم المشاريع وبدء فكرة الشركات المملوكة للعائلات
27	The launching of evening programs have given working professionals an opportunity to develop their لقد أتاح إطلاق البرامج المسائية للموظفين العاملين فرص تطوير مستقبلهم الوظيفيcareers
28	The opening of the College of Law has widened career options for students أدى افتتاح كلية القانون إلى توسيع الخيارات الوظيفية للطلبة
29	The university has worked on the enhancement of the quality of its graduates لقد عملت الجامعة على تحسين جودة خريجيها
30	The gradual changes in the university have positively impacted student institutional culture أثرت التغييرات التدريجية في الجامعة بشكل إيجابي على ثقافة الطلبة المؤسسية
31	Students have been given the opportunity to meet with the Vice Chancellor to discuss matters and تم منح الطلبة الفرصة للقاء رئيس الجامعة لمناقشة الأمور والتعبير عن آرائهمvoice opinion
32	The change process at the university was smooth, gradual and effective كانت عملية التغيير في الجامعة سلسة وتدريجية وفعالة
33	The university celebrates the achievements of its students and graduates تحتفل الجامعة بإنجازات طلابها وخريجيها
34	Students are proud of the 'new version' of the university يفخر الطلبة بـ "النسخة الجديدة" لجامعتهم

The 4-point Likert Scale are as follows:
- o   Strongly disagree
- o   Disagree
- o   Strongly agree
- o   Agree

APPENDIX I: Interview Transcriptions_ Sample from Senior Management

Interview Transcription
With
a member of the senior management personnel
Date 12.10.2021
Place: Their office @ DU

Interviewer: So Dr J. thank you very much for accepting to do the interview for my PhD research. Basically, I have three types of questions: background questions for you to know more about who you are and some broad questions and then we'll go to some pointed questions. So let's start. My first question is how long have you been at DU?

interviewee: I've been now for almost 14 years at DU.

Interviewer: and what position do you have currently?

Interviewee: I am the Acting Deputy Vice Chancellor.

Interviewer: and what about previous roles at University?

Interviewee: I've been the Dean for the College of Business from 2012 up to the present time and before that once I joined after one year I became Chair of the Department of Finance and after one more year I became Assistant Dean and after one more year I became the Acting Dean and after one more year I became the Dean. So it was very very quick succession and progress.

Interviewer: Do you have any concerns or questions before we start?

Interviewee: No, please go ahead.

Interviewer: My first question is as you know DU is the first university to gain national and international accreditation in Oman and as you know it is ranked among 121 universities in the Arab World ranking so that's a big achievement, so my question is where does DU position itself in the ecosystem of Higher Education nationally and regionally now?

Interviewee: Actually, in my opinion DU is already on the ecosystem of the national universities. So among the national universities we are now quite well-known. We are doing very well in the academics part, in the accreditation process, in the research part; we are the top three universities if you just look at the private universities in Oman. We are in the top 2 and in some cases we are number one also, so we have already got to that level. The second level is to go with a lot of dominance or some kind of distinctively in the region. The region for us is defined as the MENA region so it includes the GCC but also includes the other MENA region countries the Middle East and North Africa region and we'll see that we can make a distinct place for us within those universities so this is why the testing of the waters is done where we said ok let's go for QS ranking starting with the Arab ranking; number 121 we got. This is a testimony that we do have standing as far as the Arab region is concerned so we need to build upon it and you have to ensure that in the next five years we are quite known; I wouldn't say well-known as far as the university is concerned. Coming back to another 10 more years as per the Oman vision 2040, which you are always aware of, at least three universities need to be among the top 300 QS World ranking universities. So we are also aspiring why not we should be one of them in Oman. Currently, Sultan Qaboos University is there so the competition is very wide open for us so we are aspiring for that.

Interviewer: Broadly speaking, what were the changes that DU has gone through during 2014-2021?

Interviewee: I think during the last decade almost the University has gone up in terms of all the three pillars that the University has defined itself for: the Academics whereby we have pursued the accreditation, why we pursued accreditation, with the sole objective of trying to see that we are on international standards of assurance of learning so is the learning taking place is there graduate produce good the quality is improving or not, the curriculums are revised; do they have objectives they have outcomes we are working on those objectives and outcomes and if this is going to happen it will take some time of sustained effort to come to that level. So I think by getting the institutional accreditation, individual program accreditation which are ongoing in other colleges are in that particular direction to do that. Secondly, the people who teach, the faculty resources now the

effort has been made to ensure the faculty also are up to the international standards this is why we're pushing and motivating our faculty why not they go for their own individual accreditation through the advance higher education academy in the UK which is a very well-known world level higher education Academy doing accreditation. Its accreditation is very much accepted all over Europe so if that can be done for our faculty why not and we are in the process now almost reaching 10% with 20 faculty members already got it and another 20 will be in the offing. So in the next five years I see that maybe 50% of faculty will be having this advance HE certification. So the Academics one side on the graduate the other side on the faculty is very well taken care of. Second, research, being a young University, you cannot expect research but slowly slowly we tried to make this research culture in the university. The University is steadily being in progress on the part of how research can be sustained and motivated, resources can be provided we are already doing that. The research budget has been instituted; we do have a department of research. We started to give incentives to the faculty to see if faculty could find some time for doing research. 7.10 5:30 now our position of research is quite good up to the international standard; around two papers for faculty member was the achievement of the last academic year that up to the international standards some of these International benchmarks. Usually in research areas they require one paper in two years. We are achieving two papers in one year and talking about papers the quality is much taken into account. So we have a well-defined system which is okay. Things which are acceptable are they must be in Scopus, they must be Web of Science, they must have impact factor. We have publications in the Arabic language 7.54 We have a journal list where they have been published. Ethics is very much adhered to but still we are in a take-off stage. I think in the coming times more research will come and the university will have the treasure research papers which a leading University which is aspiring to be known regionally should actually pursue and given the fact that you are a small University and a university with less number of faculty I think that is something which is very very good. Thirdly, about the reach and engagement of the community and industry given the limited resources limited range we are trying our level best to reach out to them, if you can do one of those initiatives which we have started last year and which has seen the light of the day starting the unit for students with disabilities it's something that is very very big achievement that it is done. In the offing in the research centre I have already proposed to the senior management last year and it is under consideration is to set up a gender Centre for gender studies which will make studies a hub particularly females could be accommodated as well because the number of females coming to university is steadily increasing. Issues with them in respect to the parity in pay, parity of work, the work balance. These are issues that are supposed to be done and the whole organisation needs to change according to the new dynamics and balances which are going to come in the future.

Interviewer: Dr J. when we think of the change that Dhofar University has gone through, do you think that was intentional or not?

Interviewee: Change basically is of two types according to what I understand. One is that the change happens because of the dynamics of the environment; the environment changes so you have to change you have no option and the other is that you believe in change because change is the only thing that is permanent, so you keep on making the changes in accordance to what is required. These changes are required because you need to make progress you need to think in a visionary manner and you have that kind of vision to be able to achieve the change will needs to be brought. We have been able to do both, as the dynamics kept on changing we changed and then we also had an intentional change in the organisational so that these changes can lead to the desired results That we intend. Up till now we have come to the conclusion that most of the change would have basically been effected over a period of the last 10 years have been so so positive.

Interviewer: Whenever we talk about change especially at the university level we talk about challenges. Briefly, what are the main challenges the university have feast over the years?

Interviewee: The most important element of the change is that you have to take all the stakeholders on board and that it is the biggest challenge because not all stakeholders will believe in the particular change. Many of the stakeholders will then come up with a lot of resistance. Resistance could somehow be very demotivating and then can be like a spanner in the wheel in the progress you are looking at. So from that perspective we had so many challenges, challenges in terms of the top decision-making body, the Board of Trustees to put them on the change. Change we want to bring but the government of Oman on the policy-making thought that these changes are not necessary to be done at this time because it is something that has to come in the offing maybe not ready for the change. At the micro-level, there was resistance for the idea of change. Some stakeholders such as faculty and students did not seem to be accepting the changes we were planning to do. People might

not understand your changes and the biggest challenge is to convince them and that is what is the most difficult task. Sometimes it might take a very long period of time to be able to that people have this change. I remember when we came here, the first change was all the females used to cover their faces then we said no you have to come up and open up your face in spite of the fact that the government has already decreed it but it was not implemented. Bringing that change was trying to see that the wrath of the community you will come only University but then this was necessary because if you want to have female education developed therefore that change was necessary. Similarly, in terms of the faculty members we made changes. Once you say that research will be an integral part process here again there was a lot of resistance. People started to talk about it in policy-making, in promotions, we said now research will be a component, it was resisted like anything by most of the faculty members. Many of them did not like it. There was a time when the challenge was to retain faculty because it was thought it's too much oppressive in terms of expectations on the faculty. So the challenges keep on going on. The last and most important challenge in change for private universities is the financial sustainability that always comes in the front. To bring change requires money, so you find resistance coming from the top of the university. The latest one we will say that we would like to become more digital in approach we faced a lot of resistance and it is still continuing. Again, one of those challenges is the financial constraints that you have in order to be able to usher in the complete digitalization of the university. Change always brings that resistance.

Interviewer: Do you think the establishment of the Quality Assurance Unit has played a key role in the processing of the change?

Interviewee: I think that they were the harbingers of change. They are those who have initiated the change. Once the QAD was formed and Quality Assurance department was set up they look charge of various areas, all weaknesses, identified them found out what are those Achilles' heel that you have in the university and then how we can find a solution. That was the brainstorming session that we did, then taking the top administration on board bringing policies trying to see that everything is well regulated. Regulated things make things very very easy very transparent fair and therefore you will find a lot of changes been ushered in. Again, the changes have seen a lot of resistance but they (QAU) are at the core of all the changes that have happened.

Interviewer: One last broad question, to what extent do you think the changes that the University has gone through have improved the quality of education at the University?

Interviewee: I think these changes that we have brought to a larger extent has its effect on the quality of education we want to give, for example, changes in the foundation programme itself in terms of the curriculum, raising the standards of the curriculum, ensuring that the people who exit the English program achieve better and higher IELTS score. I think these changes has a positive effect. Things are becoming much more better, people were well more versed. Once students go the colleges you have made lots of changes in the curriculum there to see and fortify the study skills, the cognitive skills, the general skills and of course knowledge domain is always the most important domain in education so I'm not going to talk about that ; that itself is the heart of things, but those changes have brought a lot of betterment in terms of quality the programs you are introducing not only that the introduction of the higher level of programs for example Masters and PhD is nothing but creating the knowledge not only imparting knowledge but the creation of knowledge also will be a part so we have people who will create knowledge but I think research and PhD they will make great impact on society.

Interviewer: Now we gonna be moving to specific pointed questions, so my questions about how the change at the University has been initiated? How was it started? What was the mechanism of starting the change? Where did it come from? And then how was it implemented?

Interviewee: see to be very frank in DU change was triggered by the accreditation process that the university actually went through so we have self-study report coming down in the year 2009-10 which was on the basis of what are those things that we need to do and second is about the change in leadership. The leadership changed and once we have a dynamic leader the vice chancellor who then started to see that these changes need to be ushered in so there was somebody who believes in that and that moment most of the higher education institutions in Oman shied away from OAAA national accreditation because it was not compulsory, it was okay your turn will come, it's very very funny faces but we opted to go first. We are the only institution which actually applied and said ok we will adhere to the standards so for that we need to revamp. The whole idea behind going for accreditation was to let us know our strengths and weaknesses. Everything you try to compare with benchmark and want to compare the benchmark you say are you below or above. Being a young University naturally everything was not up to the mark so this was a golden chance to see when and

where we can make changes and therefore it was ushered in administration triggered by the self-study but actually taken forward by the administration. If the administration shied away we would be like any other institution for example Nizwa University or any other higher education institution which are still languishing with OAAA institutional accreditation and not going for any accreditation and they would be doing it later on. Then the process which we started in 2011 onwards within the next five years we made all thorough changes we went across we found a lot hiccups with the accreditation agency not giving us accreditation putting question marks on certain areas and then we visited them in 2018 so that almost 7 years that we put in to be able to bring those changes so that you are at then minimal level of benchmarking which was just required. This requires a lot of visionary leadership which was there if the leadership would not have wanted this would have never happened.

Interviewer: any role that the board of trustees has played in terms of the initiation?

Interviewee: I think the board of trustees which actually pushed it, not the Vice Chancellor it's the Board of Trustee which actually pushed and they were so much particular about bringing this kind of change to the University therefore it was initiated in that time and once it was initiated at that time it worked well for us. If the Board of Trustees were not on board and did not initiate it even the top management would not have been able to initiated it.

Interviewer: And in terms of the implementation, how was the change implemented?

Interviewee: The change is implemented; once we brought these changes, we were cautious about the fact that these changes have to be gradual. They cannot be organised and you are very sure that if change is to be very effective it needs that everybody is on the same page which means that you have to fight to convince people to do away with resistance that is there from all stakeholders, so that's not an easy job; you have to go ahead and convince them, take them on board, see and ensure they are part of the entire process because sometimes it happens that you want to usher in an organisational change and the change is very drastic it leads to organisational conflict rather than change so we have to avoid those conflicts at all cost. You should be very cautious taking them on board seeing telling them and convincing them this is something good. Some were convinced, some were not convinced but at the end of the day all of them who are with us that actually the system worked and therefore from that perspective very good job ensuring that stakeholders were with us and therefore change became effective otherwise you are not sure about the change and the change is not effective.

Interviewer: Just to get more into some specificity how was the strategic direction cascaded down to the college level, down to the academic departments and admin departments and down to the lower level?

Interviewee: The strategic intent was very much made clear as I just mentioned before that everybody was taken on board. I will try to convince people and once the condition has come and people are there at least two people have become useful at least people have become not negative to the changes. I'm not saying positive; just not negative, but neutral which you say going by the tide or going by the flow people who have done with that kind of group who are ready to go with the flow so those changes were then after then by trying to see that we have documented strategic plan for 5 years. It percolates down, trickled down, to the academic departments. We have strategic plan to reach college for each units; there is an Operation Plan which looks after the accomplishments of the strategic plan on an annual basis so the annual operation plan was also formulated and people where given the KPIs which are achievable not those which are very very high and difficult to achieve, so I am asking somebody ok if you are able to produce one research paper example in one year this is what we expect from you but is not compulsory if you are able to do you will get a particular incentive, but if you don't do it's fine. We are not forcing that and slowly and slowly people started to bite the bullet, understood the efficacy, understood the benefits that would come from this changes and once they understood the benefits there is no need to drive the changes; they will then themselves drive the change so we had a very well managed system of the strategic intent driven into the strategic plans driven by the operational plan and the strategic plans of various units and therefore it's the bottom-up approach which actually started to work for us.

Interviewer: I like to ask about strategies. Would you like to name some strategies the university used to start and keep pushing for the change to happen?

Interviewee:**27.05** Well, the university used various kind of strategies to be able to do but most of the strategies were just two kinds: the push and pull strategy. The push strategy in some areas you have to push people to be able to do a particular job and with some of them we are using the pull strategy in order for the system to work; in other terms, we call them the stick and carrot policy so we give you a carrot if you are doing it and if you are not doing it use the stick policy and usually do not use the

former we use the pull policy in trying to ensure that whatever strategies there do not remain on paper; they become implemented so it could be in terms of the annual performance appraisal; it could be in terms of this student feedback; it could be in terms of the assessment process and the assurance of learning, but having said that change requires that you have to do a lot of handholding exercise so bringing in change requires that you have to take them in confidence, provide them with every resource required, provide them with the orientations, provide inductions, to provide them with also help to be able to understand; only then they would really get convinced and once the conviction will come therefore running that strategy and achieving it becomes easy. If you try to push something and just shove it down the throat it's not going to work so we are dealing with people in an educational institution and definitely this kind of strategy we have followed and we have been very successful in ensuring that this is really achieved.

Interviewer: John Kotter, one of the scholars who talks much about higher education change is talking about a pillar for the change to happen which is the existence of a guiding coalition. In Dhofar University, who would you name the real guiding coalition towards making the change and advancing the change all through the journey?

Interviewee: all throughout the journey previously it was an informal manner and also formal manner it is the university academic committee comprising of the deans, the QAD and the academic support service people. It was basically looking at how to change, the change we have to bring across, what are the pros and the cons of the change that will come and people were critical. There was a lot of argumentation to find out the best solution to be able to ensure that the strategy could be achieved; this works very well for us in the last 7 or 8 years doing this in an informal manner. Now we are doing it in a formal manner. This think tank has got through for example if the dean is convinced as a leader that he can bring the change then he can only percolate it to the next level to the chairs and then the chairs down to the faculty members and that kind of chain effort can help us to do that, but if the top leader himself is not convinced about it or he is resistant so his resistance would have come from the top unit commander or leader or admin then the strategy cannot be implemented.

Interviewer: So as you call it a think-thank was the University Academic Council.

Interviewee: Yes, the university academic committee or UAC.

Interviewer: Over the discussion you talked about the guiding leadership that guided the University change. What kind of leadership do you think guided I am talking about the type of leadership that really guided the university all through the journey. Would you say like it is authoritative, democratic, participative kind of leadership? What kind of leadership has led the train of change at University?

Interviewee: 32.02 I think it's you know once you want to bring along change of course the best leadership style is participative. We used a little bit of participative leadership in our approach whenever we thought there is participation of course; we brought in a lot of participation and listening to complete democratic system but sometimes there is something that you are convinced of but then people are not ready to accept it because they don't know the advantage of the particular change that might come so you have to go for a little bit of more authoritative approach you know to ensure that at least that is accepted and then the change once it is effected it is met with a lot of resistance but then the fruits of those changes once people know about it they get convinced because sometimes they are not able to actually visualise, understand and perceive because there is a certain section of stakeholders that live in a utopian kind of environment so they feel that that environment is the be-all and end-all and therefore if you want to usher in change they would say why you want to rock the boat, so sometimes we have to use what is called a little bit of authoritative but it has been like 80% participative leadership style that has actually worked.

Interviewer: What were the changes with regard to the physical Assets and facilities?

Interviewee: 33.57 I think these changes once we brought in we were very lucky that there was no need to make a lot of physical changes in the infrastructure we were blessed by the fact that once we decided to bring in this change we got into a new campus in 2011 we got transferred to the campus, so everything was brand-new; the capacity is much more than what we require at that time and everything was in abundance there was no thinking how you have to increase the capacity. The only challenge was how to bring in sustainability of maintenance; the change was very positive because once infrastructure change and you come down into a new system people have that feeling of elation and conviction so that also an amount of positive vibe from all across the stakeholders, be it faculty be it the students, be it classrooms and new projectors, new technology, a bigger campus , no more a small temporary campus is there. It does play a very very very very important role 35.14 and once they get excited and infrastructure is there, you start thinking about what could be the new rules and regulations that you have to do. It's like for example I have two children so very much observing them

all the time the rules are very much effective if you did anything wrong but then I need to be the house which has three or four bedrooms and on my kids I want to give them separate rooms. I will not be there with them all the time so if they are there in the rooms what rules and regulations they need to follow. I have to then sit with them and tell them these are the rules, what time you have to enter, what you have to do in your room, when you have to open television, when you to have to use the Wi-Fi. All those kinds of rules and regulations you have to then place it, which was not there previously once you were there in a studio apartment. This what happened with the campus, when the campus came, it itself was a medium of change so it ushered change in an auto-fashion. Many new systems we have to bring in therefore there was an enthusiasm to do that, so the change has already happened now you have to accept the change and make it more wonderful for you so it helped us a lot.

Interviewer: How has the improvement of the infrastructure helped the quality of education at the university?

Interviewee: Oh it had a very very very big impact as I just mentioned most of the educational resources became in abundance for example we have bigger labs, much more better classrooms we have cafeterias we have playing areas, we have restrooms we have space for students to move from one place to another and the very important aspect, the feeling of being on a campus 37.20 that helped give you elation and therefore change becomes much more easy so you have to out in those protocols which were not there before so people started adhering to the protocols itself.

Interviewer: Along the journey, DU has made lots of changes particularly about research. How has the university planned to improve research?

Interviewee: We have started the research process long time ago in 2015 we say okay we need to do something on research we have to work on research and why in 2015 because by 2015 we have a couple of master programs where research is very much needed and therefore we started to look at how research can be improved among the faculty members

so we started hiring people with good research credentials. Those who are with us at the time but did not have a good research acumen or temper we tried to give them all sorts of support help and orientations incentives to be able to do research and we saw that this particular change which was ushered in 38.49 was very well taken up by the faculty members because it was something which was very much voluntary and from that voluntary system we kept on working and working for the next five days from 2015 to 2020. In 2020, we made research compulsory and once we made it compulsory we changed the expectations of what we need from our faculty and we also changed the level of expectations in terms of the ethical standards, in terms of the levels of the journals to publish the kind of impact factors of the journals so we went through those different kinds of yardsticks that are there all across the world Journals, ABC journals, QN2 journals, Scopus, Web of Science, impact factors, all those kinds. People started to realise now that any person who has not done research at all from 2015 till 2020 was given the chance to produce something, publish in any journal be it of any value or not, at least taste what it is the meaning of research. Once people have published 2 or 3 papers they themselves realize this is not up to the mark we need to go one notch up we have to raise our own benchmarks and that became easy as it was gradual it was easy to implement and achieve. If in 2015 we said okay we are going to do research we don't need research just A category journal of Q1 journals in that case nobody would have taken up that because it would be too onerous task.

Interviewer: Clark, another scholar of organisational change at the university level is talking about the necessity of bringing in new and innovative programs to attract more students. Did DU bring in new and innovative programs as part of its change process?

Interviewee: Yeah, it did take place like any other HEI, not only DU. We did the same like any other higher education institution should do going by the dynamics of changes that are there in the environment in the employment market what kind of graduates are needed and accordingly you need to bring in changes into what kind of programs you do, so there will be some traditional programs that you might have and suddenly you find another change which is taking place so you have to make that change in the program so you have to bring in a lot of innovations, new programs to get to those needs and you have been doing it continuously. All programs are revised in the cycle of 5 years which means nothing but once we said revision of the current programs the program needs to absorb the dynamics of environment, bringing in more innovations and changes so that the program is sustainable and valuable throughout its implementation and has and efficacy of the end of the day.

Interviewer: Any particular program that you think has brought and added value to the existing line-up of programs at the University?

Interviewee: Well one example is the Foundation Program itself. The Foundation Program has gone throughout the cycle of change. The Foundation Program was offered in 2008 and 2009 same programs offered in 2011 and in 2015 and we have ushered in new changes in 2018. The efficacy of the programs. The programs remain the same; it is still the same program which is required as per the requirement of the dynamics the environment still it has done changes in terms of the graduates are the students which are recruited to the program of course once we talk about diploma program the bachelor program the Ministry's programs were introduced new innovations by brought in new and specific specialisations of pathway were suggested and innovated. The basic change that I can feel if you ask me in one word was from the traditional chalk-and-talk delivered programs that we used to have in 2011 to now more or less moving towards experiential learning. Today we are talking about a lot of students centric-teaching we are talking about practicality of education we are talking about concepts like flipped classroom we are talking about concepts like on entrepreneurship training. We introduced evening programs for working professionals which were not there at that time here. The curriculum was tried to be tweaked or changed in accordance with the maturity of the students. They are very mature students as compared to the students in the regular programs coming from the A level which we call Thanawiya. So these innovations have been sustainable.

Interviewer: Keller, another scholar of change talks about the need to have a distinctive niche in order to make your changes visible. What kind of niche DU created all over the years?

Interviewee: DU's basic niche that I can identify is about the fact that we have been able to increase the quality of the programmes which became more practical with the same amount of fees that used to be there before so the affordability factor was never compromised. So, the fees which were charged are still charged now. We tried to support the students in their learning endeavours and initiatives by offering the entire dorms and hostels free of charge. So, females can come over and study they have a lot of cultural taboos and issues and concerns which term is kind of a problem into seeking higher education. So, we tried to facilitate the same so they are also a part of this whole change.

Interviewer: Do you think the Students with Disabilities Unit is a kind of a niche in the making that would be very promising in the future?

Interviewee: Yes of course it could be a niche in the future but it's very difficult to define that as niche. It's an initiative, it's a niche at the present but in the future, it might not be a niche because others might actually open up and you but we will basically try to create a niche in terms of the quality of the graduates and their research factor we are trying to forge.

Interviewer: Coming to the technological infrastructure, how did the technological infrastructure improve at DU?

Interviewee: Technological infrastructure improved a lot but not up to the level which should be to become a regional powerhouse. We are still a little bit much below what we require but then this is something very very important for us to do.

Interviewer: another question about professional development, was professional development of all faculty and staff a priority in this strategic planning of the university?

Interviewee: yes of course (emphatic) It is one of the most important strategic intent that we have and because of that we have established a Centre for Teaching and Learning and you have not only for the development of the faculty but also for the development of the students so the Learning support Centre. So the centre for teaching and learning has been working since 2004. It has been doing a great job. The basic goal remains that we keep on making up gradations in the knowledge level, skill level of the faculty, keep them fully updated, bring peoples, bring peers to talk about what's happening in the world so that people are aware, given that Dhofar itself is kind of a
remote place from the balances of the academic hub; so from that perspective we need to upgrade faculty and the CTL has done a commendable job up till now.

Interviewer: Do you think that has impacted the quality of education?

Interviewee: It has surely impacted the quality of teaching; it has impacted the pedagogical tools; it has impacted the approach; it has made people understand what is the meaning of student-centric approach. It has also a great platform for sharing best practices.

Interviewer: coming to the financial level 49.44 do you think the spending trends have gone hand in hand with the changes the university was aiming at?

Interviewee: the financial expenses have actually increased. We have continued to make more investments, more expenditures into the different things for example during this particular period of time we spend a lot of money on trying to build the engineering workshop and that was something which was very very imperative, necessary for the engineering specialisation that they do have to

have practicality in education we talked about. Spending sizeable amount of money which was not there before so expenditure has risen with the intention for every change your brought in, we have been careful to see that the allocation of all the budget take place so is supported by the finance. As I told you in the very beginning there are two important factors, one is the intent and one is the finance which is needed to do the change so that was very much needed for this aspect of what was happening.

Interviewer: Whenever we talk about change we talk about impact, how did Dhofar University impact the community?

Interviewee: Well Dhofar University (thinking) once it was established had only 700-800 students and it rose in 2011 to 1600 but from 2011 to 2021 the last decade of change that we brought in we have seen students rising from 1600 to almost touching 5500 in average in many years it is almost like 3 to 4 times the number of students. Also, the number of programs that we started was around 11. Today we are having 57 programs, a staggering 11 master programs never used to exist before not only that we are in the process of trying to get it to all other higher education institutions in the region who do not offer higher education options for the next level for example Masters and PHD. So now all the students are there and also getting attracted. We have also been a little successful trying to attract international students around 5% students are international students. This is quite low still and we have to work on it and see if we can attract more of them in the coming years.

Interviewer: Another question about the institutional culture, have the changes been anchored in the culture of the university and if yes how?

Interviewee: all the changes have very well got embedded in the culture of Dhofar University. The Dhofar region to which our university belongs has a very typical culture which is very much difference from the culture of the entire country it has its own distinct taste and flavour. For Dhofar University being here in the same region it's nothing but an offshoot of the same culture. Initially we had only students from the region itself so the culture which is in Dhofar is very much the culture of DU too. But as the journey went on and we found that the changes need to be brought in we integrated students from the north part of the Oman too and we also welcomed international students. We already have a myriad of nationalities as far as faculty members are concerned so they brought in different kind of cultures and therefore this has let the fact the culture of the university is now more and more global every culture has to offer something good so once you mix up with colleagues and rub shoulders with them you learn their best practices which could be a product of their own culture. You start learning the best practices and you live a culture truly International and unique in its own. Dhofar University culture has become quite unique.

Interviewer: do you think the institutional culture of the University has really changed and DU has a new culture that is different from the past?

Interviewee: Yeah, you can say that the culture of Dhofar University has got a transformed culture. I do not say a new culture but it's a more transformed culture more of a culture which has global ingredients because of the change because you are going to bring in benchmarks from different parts of the world and therefore you are we know why trying to imbibe to inject their own culture so for example that the Dhofar culture American culture but you been following the American model of education and therefore the culture is very much American which is put into the different culture to find some kind of mix and you have some people who are coming from the offshoot of the British culture so you find that the culture of the university nothing but mix the kind of culture that we have been in but yes I do not say that this is a very unique culture but I would say that this is very much International very much global in its approach and things broad minded. There is a lot of flexibility lots of adherence to things so on one side we are liberal, on the other side but also conservative approaches and therefore this is a very good mix of culture.   Once it comes to religious practices we are very much conservative on the other hand was very liberal because we do acknowledge the other faiths so we give them equal respect which is in the system. We have embraced the culture of Oman which is on its own very very inspirational and you are into working cultures of the m-time and the t-time as we call it. The m-time are those who do not value lot of time and the t-time are those who value a lot of time so we have that mix of culture and that has evolved into the fact that people start to learn, go and work and see things.

Interviewer: Would you say that DU's institutional culture in 2021 is different from its counterpart in the past?

Interviewee: Oh definitely (emphatic) from 2011 to 2021 the culture has gone through what I call it a sea of change. There is a big change that one can see in terms of its approach that used be there in

2011. Now there is a change in the culture among students among faculty. The approach is quite liberal 59.30

Interviewer: Just a couple more questions, thank you very much for your time, I know you are busy. John Kotter talks about celebrating short- and long-term wins. Do you think Dhofar University has celebrated its wins?

Interviewee: Well specifically we have not celebrated wins or gains until now. I mean we have acknowledged them but not really celebrated them. I think all stakeholders acknowledge it but if you go by the strict sense of the word of the meaning of the word celebrate, celebration has not taken place per say, but there is an acknowledgement. In 2011 and 2012 I have never seen the people celebrating Oman's Women's Day; this was something which was unheard of. Today in 2021 change has been affected and institution itself Dhofar university is not celebrating the Oman Women's Day. Take another example in 2011 if you go and greet a female Omani colleague you might find that she is not very very receptive to the idea of how you going and greeting or congratulation her on the Omani women's Day, but today it is very much acceptable. They would actually appreciate and like it if you go. I am sure that in another five years if you don't go they will not like it so the change is there is coming is being acknowledged but it's not celebrated.

Interviewer: Did the University consolidate the gains of the changes made?

Interviewee: The answer to the question is yes and no, both are there from my own personal perspective. One I say what have consolidated the gains there is no going back yes we have done extensive policy making extensive rules and regulations extensive transparency if it is brought and followed in letter and spirit it means that there is no going back now. People have already been adapted to the change and have already accepted the change therefore there is no going back nobody is looking at the old rules and regulations things happening; change has been already usher in. "No" in the sense that the gains that we have made out of the change really phenomenal they are really path-breaking even I will try to categorise into path-breaking changes but they need to be publicised, advertised and once we publicise them advertise them we get a lot of accolades and we get appreciation and accolades and appreciations act as a catalyst to further consolidate your conviction into those changes and it thwarts you from going back because now you only get at that level So if you make a change for example you make change in a certain curriculum and then you said ok I am going to have assessment harder and much more tougher as perceived by the stakeholders but you are usher in the change and they start doing it and then they adapt to that and once they adapt to it and you celebrate it you say oh it's done so at that moment people will start realising that it is something which is very very important the same cases may be very much averse to the social media accounts like Facebook Twitter and Instagram and things like that But now it's very much celebrated if someone asked you ok can you give me a twitter account and this has never more than I use it it looks very odd, so many people will actually stay back with the changes once they are celebrated more.

Interviewer: a final question, in your own opinion, would the faculty and students defend the new version of Dhofar University?

Interviewee: I think 100% they would defend (emphatic) the change. The change has brought a lot of positivity; change is for the benefit of the students the benefit of the faculty members and I think because of these changes we are able to attract much more better faculty from far areas. One decade ago, it was so much difficult to actually do that. People are now aspiring that they get an employment here because of Dhofar University supports a lot of changes.

If I talk to a lot of alumni, I find that those are very very positive about the new change

They say okay why those changes were not there when we were here.

Interviewer: Thank you Dr J. for your time.

APPENDIX J: Interview Transcriptions_ Sample from Middle Management

INTERVIEW TRANSCRIPT
FOCUS GROUP 3

Chairs of One of DU's Four Colleges
Dr. Z. B.
Dr. M. K.
Dr. T. A.
Dr. M. S.
Dr. M. A.

Date 28.10.2021 at 2pm
Place: College Meeting Room

Interviewer: So thank you very much for accepting to interview today. My first question to everybody is what are the changes that you witnessed at the University during your tenure at the college level or at the department level department?

Interviewee Dr. M., if you talk about changes that started in 2014, it started with quality assurance programs. We were more interested in getting accreditation so we went through the changes in the policies, changes in the format, and changes in assessment. The University started building change from 2014. Before the formats were there but we were following some other university. The change was that DU started following its own policies, its own formats and they stopped being dependent on any other University, so I witnessed changes with regard to pushing for research. The hierarchy was developed. They appointed deans and chairs and everything was structured and a department was created for research. That was not there before. The research department towards taking care of the research activities then there was a quality assurance department then there were many departments that opened and policies were created to push a change so the process started actually with the strategic plan in 2014 until 2019 it was a 5 years for strategic plan to meet those strategies and those targets and then an operational plan was developed to see whether the Operation plan was working. They fixed some targets to see if those objectives were covered or not covered so given this process the University has changed from 0 to 100%. Before there was no planning there was no guidance. Now there is a strategic plan so everyone can so if there is a change in management if there is a change in the chair for example so he knows what is the strategy what are the policies so there is a very clear plan so the strategic plan the operational plan was developed and then the policies were developed and then we started building the documents as evidence that we are trying to achieve this and that and then we started working on teaching and learning processes and we tried benchmarking with different universities to improve the programs and to create awareness and strengthen the research at the University by telling the faculty about the research publication and research quality the research was motivated it was incentivised. The faculty were motivated to publish and to do research activities. Now the research profile is very good at the University whether in indexed journals or whether peer-reviewed journals, research gate, Google scholar. There is a very very big change within teaching and learning, big change in where the University is working Big change in research but also to promote community service, committees were founded. Every month there was an awareness to faculty to approach the community go and interact with the community or bring somebody from the community to the University. So this created a bond between the University and the community 4.20

Interviewee Dr Z., I think many changes have been implemented in the University the organisational structure is very clear; policies talk about the assurance of the teaching and learning and how to focus on the quality of students who would be graduates. One of the changes in my department is to create new programs like master programs in accounting and we were also encouraged to change the POS; dramatic changes have been made to the POS to meet the needs of the companies and the industrial sector. In terms of research in terms of recruitment the terms became very clear 1014; the selection of the faculty and recruitment of the faculty members was not like now. Now there are clear criteria and clear policies. Even the qualifications should be available in the recruits; the diversity of the faculty

members in terms of research there is a dramatic change 13 of the very few papers have been published and then the research policy has been developed year after year. The result is that many faculty members are publishing. Now the quality of research has been improved so faculty members are now publishing some books and papers in the well-known journals. Some of the faculty are part of editorial boards. Because of the culture here, he has worked on the culture of the faculty in terms of research. The research department has been created. The community service before 2014 did not have a significant impact in serving the community; Whereas now the University has a very good road with helping the community for engagement and committees which were created. Faculty members are doing field trips to their students. Also there are guest lectures. I think there are very big and significant changes so before there were no regular student activities but now we organise every semester we organise student activities Yeah so it is a part of their academic achievement. All the changes I think are positive changes.

Interviewer: Dr T., do you have something to add?

Interviewee: Actually, I wanted to reconfirm what has been said and add a few things. Both at the college and department level we can see change in terms of orientation. The University is now pushing more towards research activities; I think they have succeeded to some extent by creating a culture of research and orientation towards recent research. At the department level we have would witnessed some changes in terms of structure. The department has been split into two. Before we used to have a marketing and management department together. Now they are split into two separate departments. Also, I witnessed some kind of community engagement services in the students. The human resource area there is a will to maintain diversity. This has been introduced at the level of the college.

Interviewer: Dr M., would you like to add something.

Interviewee: As a witness from inside and outside I found that the main change was accreditation. The University has applied for the OAAA accreditation and also ASIC accreditation and the colleges have to comply to the many rules and regulations according to the standards of the accreditation. This drove us to change everything. Before we used to have the rules and regulations of the American University of Beirut. When we applied for the accreditation we had to comply to the to the rules and regulations Now we are in the process of having accreditation from AACSB and we have to change many things in order to get it. And also the year performance appraisal system that we have here it's called AFAR. It is divided into 3 sections. The first for research, the other for teaching and the third one is for community service. In order to be able to continue here you have to be able to satisfy some criteria, so you have to change yourself which means you have to increase your publication, you have to change your teaching efficiency or quality and also you have to serve the community as well. So this is the big drive for change you have to change or you are left behind.

Interviewer: What were the strategies that really started and initiated change?

Interviewee: Dr Z., Dhofar University established a strategic plan 2014-19; now the university is getting ready its new strategic plan 2021-31. The strategies have given guidelines to make dramatic changes in all aspects in terms of research, teaching and learning and community service. The Strategic Plan and Operation Plan have clear objectives of for example how to improve teaching and learning how the faculty have to achieve those at the college level and at the department level so all the college and department faculty where involved in the preparation of these strategies. Just an example today we have a meeting to work on the objectives of the new strategic plan and what actions would be involved and who would be responsible so that these objectives would be achieved. I think this is a scientific method that was adopted by the University.

Interviewer: Dr M., how were the strategies implemented at the department level?

Interviewee: The University made strategic plan in 2014. The strategic plan was broken down into goals. Based on those goals in the strategic an operational plan was created and circulated to the colleges to have their own action plans. So the departments are trying to achieve those action plans. The university has planned that the strategic plan and operational plan become objectives and all the faculty members achieve those objectives so that everyone has become responsible. This is very important So the department level was trying to meet the targets and contribute at the first level So every department was thinking of how to arrange the guest lectures for example and how to meet the research targets and how to meet diversity of faculty. So there is a lot of change and every department has contributed for example in our department we have faculty from different nationalities and also research has improved according to the plan. We have to meet some targets so this action plan was pushing us. It came down to us and then goes back to the University and the result of the strategic plan is to achieve the OAAA accreditation so I think this strategic plan is the actual foundation of change because from that plan we started working and we started meeting all the criteria made by the OAAA and now AACSB accreditation. Also Accreditation and ranking started from the strategic plan. This has changed the culture of the University. We started moving in the right direction. Other

universities were moving. For me accreditation is nothing but benchmarking the University with other universities. The inside should not be separate and different from what is happening in other universities like in India and universities across the world so those criteria and standards are applied and we found very good results to try to achieve was very good.

Interviewer: Dr T., whenever we talk about changes we talk about challenges. What were the challenges that took place at your department?

Interviewee: Always there are challenges of course but at the department level, maybe the culture was a challenge. When change was introduced, some people resisted it because of wanting to keep the old culture and because accepting a new culture is difficult for them. Number two, sometimes there was some sort of pressure to introduce the change; people suffered from too much pressure to cope with all these changes especially the standards and accreditation program. They have actually stressed people but have succeeded. But the most important challenge was the culture and also the pressure because we have to meet deadlines

Interviewer: Dr M., would you like to shed some light with regard to the challenges that happened at the college level or the department level?

Interviewee: One of the challenges is that students are shifting to programs which are in Arabic. Students prefer to shift to Arabic programs and we try to convince them for example to have this new program in logistics and supply chain where there are many job opportunities in the market for them especially in the airport, in seaports and in warehouses and also in marketing; for example, if you look at the marketing specialisation in America you find that it is number one. Any business calls but here unfortunately our students they have bad perceptions about marketing for example they think that if you go for marketing specialisation you become a salesman for example and you have to take a bag to go from one place to another to sell whatever product or service you have. You try very hard to change this perception so this is one challenge for us so this is why we asked for your permission to come to the foundation program to change students' perception on certain specialisations because our students are not aware of what is good for them because there is plenty of job opportunities in the market so marketing has opportunities from a salesman to higher positions.

Interviewer: Dr Z., do you think faculty and students were supportive enough during the change journey of over 7 years now?

Interviewee: I think so they are supportive always but they are involved in many activities many committees, many activities so they are overburdened. Because of the load in teaching and the load of research sometimes they are not enthusiastic because they don't have time really. Today for example in this college there five meetings in five different committees and the majority of faculty are involved in this so they don't find time for research. When it comes to students they would rather be comfortable and then get good marks. Students sometimes have wrong perceptions like thinking that accounting is heavily involved in mathematics and to think that accounting is very difficult just like math So this is why we requested you to meet them to explain things for them then to explain them the nature of accounting and to explain the opportunity for them in the field of accounting So for the students of use pressure they are supportive but in the beginning they were not. The only problem with the faculty is that there are time constraints. The nature of the students is to get things easily and take part of the cake easily.

Interviewer: Dr I. as you know change is a two-way track, so my question is whether the institutional culture has influenced changes or changes themselves have impacted upon the institutional culture?

Interviewee: In the case of the University, here the University has influenced faculty for example but as one the faculty I was lazy and was pushed and we have been forced to do this task and it was related to the appraisal policy. The institution is pressurising us the institution is influencing us to improve. Policies are pressurising us the policies are to the benefits of the faculty and students like for example there are some targets for the faculty members This you will be there in the upcoming years So those who achieve the targets they are in very good positions. Now either they are promoted or shifted to other universities so actually the institutional culture is influencing the faculty and we saw some good change in the faculty members as well as students.

Interviewer: Dr T., to what extent have the changes impacted the quality of education at your level?

Interviewee: The pressure on the faculty and the approach of pushing has produced good instructors who can reach up to the level, have produced very good research and have participated in conferences. I think unless there was pressure from the university we could not have achieved this to this level. At the students' level they were slow but the instructors understand that and they have to push the students. Students are changing and I think their education level is improving. Yes, there are many other factors which have led to that but I think these changes have an impact in that direction.

Interviewer: Dr M., would you like to think of 1 or 2 things which really and particularly impacted the quality of education at your level?

Interviewee: I think the pressure put on us from the administration in order to do research and to be evaluated according to our research record enhances our knowledge our tools and our methods that can be used also to teach our students for example introducing case studies for our students; this is a good method that we were not used to do before So now we are giving our students case studies and try to discuss it with them and give them some sort of assignment as well that enhances their knowledge has a good and positive impact on them.

Interviewee: Dr T., I would like to add one particular thing that is commitment from the top management of the University level and other college level to go ahead whatever the difficulties. This commitment actually reflected on the staff.

Interviewer: Dr Z., was the professional development a priority for the University?

Interviewee: 31.20 I think so. CTL has obliged many workshops regarding professional development. Many faculty members are attending the majority of these workshops. These workshops are really beneficial; they give additional knowledge and this reflects on their career and their development. The other thing is that the University is giving support to faculty to go and participate in conferences that was before Corona. Also there are some workshops that are organised in Muscat and funded by the University. But we hope for more professional developments with budgets to give opportunities in different fields.

Interviewer: Dr I., has the initiative of teaching-learning nexus improved students learning Experience?

Interviewee: It has been introduced but it has not been effectively implemented; like we are trying to put in the call in the course syllabus, this is the course and this is the research but we are not trying actually to teach them; It's still ineffective, still at the very initial stage. Professional development the University has a very good system How really the University is trying to realize the needs of the faculty. AFAR tries to pinpoint the areas for improvement so based on the feedback in the AFAR the college communicates with the centre and based on that the CTL organises professional development activities. The overall development of the faculty, this is actually contributing to the professional development of the faculty at the University level.

Interviewer: And how effective it is?

Interviewee: I think if there is a problem in teaching or teaching style, a workshop is done in this regard and the faculty will understand the weakness and here the faculty would know how to improve on this area so he would learn from the workshop and try to implement in class so I think it is effective. I think there are changes taking place at the level faculty; they are improving; they are learning; they are adopting to those tools and techniques.

Interviewer: have the University recognised the achievements of the faculty numbers?

Interviewee: I think yes because University organises a research day. Good papers and good participation in research are given incentives and the faculty's achievements are celebrated by giving them certificates. Also, emails are received from the CTL in recognition of achievements related to quality assurance or accreditation stating that your participation was very essential.

Interviewee: Dr T., I think there is some appreciation from the University and there are some financial incentives provided to the faculty members; In addition to that faculty achieved good scores in AFAR, they are given a two-year contract so this is some sort of recognition for the achievement and I think it's working well.

Interviewer: Do you think the University has consolidated its gains, changes and achievements?

Interviewee: Dr I., the University has made policies for faculty to a follow and these policies are reviewed every 2 years just to make improvement not to go back so if it is teaching and learning faculty have to refer to this policy. So everyone follows the same whether within the University or among faculty and this has now become a culture. This is one of the decisions that the University has made to ensure that it is consolidated in the department, within the college and within the University and the policies apply across University.

Interviewer: Dr M., do you have the same opinion, have the changes gone into the culture of the University so as to bring a new culture?

Interviewee: Yes, they promote good culture here we have equal opportunities and we have diversity at the college level and going back to recognition if you can publish new paper you can claim incentives for example if it is in Scopus or Web of science you can get 200 OMR and if you are the first author you can get 300 OMR and going back to promoting the culture of collaboration the University and the college signed a number of MOUs with local and International universities. Those MOUs need to be activated more so that we can have a research collaboration and we can have exchange of faculty and students as well. It is also an important point to have international students at the University so our students when they share knowledge with the international students they would broaden their knowledge and they would be learning better and would have more experience and also if we can

exchange students with the other Universities this will have them experience a different culture and this will definitely be reflected positively on our students as well.

Interviewer: 41.54 Do you think faculty and students would defend the new version of the Dhofar University?

Interviewee: Dr Z., I think from the faculty's point of view they would defended it but I observed that students may not be very satisfied. Students are graduating from here; they are taking certificates but at the end of the day they keep criticising They are not satisfied but all in all faculty members are Satisfied.

Interviewee: Dr M., This is a new University; now we are less than 20 years old and this is related to the culture as well, culture of the community not University but I think by the time things will be changing. You know we have a new administration here a VC who has great experience who would make a lot of changes and that will be reflected positively on the quality of the University; the university will be better and the students will themselves defend the University as we are defending it right now.

Interviewee: Dr I. I partially agree with Dr Zarouq; what students say are just words but if we judge them by their action, students are studying the foundation program, then they go to the college and then finish their diploma. If there is a real problem, students will go and have adoptions because there are other options but they don't; they come back to the same University and finish from the same University. They finish the diploma then even their masters So the students' action is showing that they are satisfied. From the foundation to the masters we are talking about 7 years and students remain in the University for 7 years that's an evidence that they like this University. Regarding faculty, I am one of the faculty and I answered all the questions positively so this means that I'm defending the University. As a person myself I have been developing along with the University. When I came to the University I was nothing so the University is developing and the faculty and staff are developing as well.

Interviewee: Dr T., I just want to comment about the last question, the faculty have acquired things and this has become part of the day-to-day practice. Till now we could not reflect this on the students and this is what we need to work on.

Interviewee: Dr M., Students are students; they are always complaining; I meant students from Sultan Qaboos University and from the College of Technology they are also complaining; if you put some pressure on students they keep complaining. They want everything easy and if you don't make everything easy, they start complaining.

Support Units Team

MR A. A.
MR M. K.
MR A. B. O.

DATE: 10.11.2021 @ 1PM
PLACE: LIBRARY MEETING ROOM

Interviewer: Salam alaikom and thank you for accepting to interview today. Mr A., please introduce yourself and tell us about your current and previous positions.
Interviewee: My name is A. B. A. I have been at the University since its inception in 2004. Previously I worked at the National College which was the predecessor of Dhofar University. I worked also as a lawyer and also worked in the Ministry of Education as Deputy Director of Education affairs. I also worked in the division of planning. I worked in the Ministry of Transportation. I was also in the college of teacher preparation as an assistant to the Director of the college.
Interviewer: same question Mr A.
Interviewee: A. A. I'm Director of the library. I started with the inception of the University in 2004. I was in the National College as an assistant to the librarian. I worked as a librarian from 2004 to 2009. Then from 2009 to 2011 as acting Director of the library. Then from 2011 till present Director of the library.
Interviewer: Mr M., same questions.
Interviewee: 2.42 M. K. I started my career in the University library since 2005 as an assistant librarian. Then I became assistant to the Director of the library. Then assistant to the HR director and now the HR director.
Interviewer: Mr, A. what were the changes that took place in your department?
Interviewee: The University was established on clear structural grounds, with flexibility to keep abreast with the latest development. In our division we have a department for general services, another for transportation and another for the store. The services department includes sections like health insurance, assets insurance, insurance for finances. There is no special development for these department because the university was well established from the beginning.
Interviewer: Mr M., any changes worth mentioning in your HR department?
Interviewee: The HR department started as the department of Staff Affairs in the department of the administration and finance. When the University expanded, the HR division split away from the division of the administration and finance. The second change was the addition of a training department to the HR. Now we have a department for recruitment and training, a department of staff Affairs, and a department of transaction clearance.
Interviewer: Mr A., any changes that have affected the library?
Interviewee: since 2014 we have had an electronic library management system, the RFI system against book, we have an international book.classification system. We have a sound system, CCTV cameras. In 2014 we had 50 computers in more than one lab in the library. We have around 600 seats for students. We had 20000 printed books and 130 000 e- books. We had more than 2000 e journals, more than 75000 e- theses. In 2021, we have more than 38500 printed books, 430000 ebooks, more than 65000 ejournals more than 128000 theses. We keep adding new databases annually. These improvements are in line with the University drive for quality assurance and development.
Interviewer: how did the changes initiate? Was that a decision from the department or from the upper management?
Interviewee: both ways. Some changes came from the upper management and some through suggestions from ourselves in continuous meetings between the upper management and the library in line with the University vision and strategic plan.
Interviewer: Mr M., you mentioned two or three changes, who initiated them?
Interviewee: 10.09 Change took place out of a need brought about by the University expansion, increase in employees, and in majors, there was a need to have an independent HR department

away from the department of the administration and financial affairs. The HR became a standalone division headed by a director, and manned by a line-up of employees.

Interviewer: who initiated the decision of having an independent HR?

Interviewee: The decision came from the VC in consultation with a committee and then approval is sought from the BOT. This organizational structure of the University will be amended accordingly.

Interviewer: Mr A., what were the strategies the University used to make changes in non-academic departments?

Interviewee: The University puts emphasis on insurance and also the security. The CCTV cameras are placed in key areas to ensure the safety and security of all critical areas. The CCTV footage is not accessible except with permission from the VC. The University aims to provide health insurance for all employees. However, as of now only expats are insured because Omani are covered by the government health insurance system.

Interviewer: Has the store department remained the same or saw some changes?

Interviewee: One change about the stores is that they have become an independent location that observes hygienic and safety requirements.

Interviewer: Mr A., what were the main challenges that the library faced during the change phase.

Interviewee: The changes were many. One of which is the location of the University 1000km away from the capital. Most of the providers are based in the capital Muscat. Also, the shortage in employees. Also, the difficulty in importing the books given the distance and the paucity of specialised companies in the governorate.

Interviewer: Mr M., are there any challenges in your department with regard to staffing, etc.?

Interviewee: I think the most important challenge the University is facing is the recruitment and retention of the well qualified staff and also the lack of good schools for their children. However, new schools have opened and the University has some relation with one of the recently opened international schools.

There was also challenges regarding the policies. There were no policies specific to human resources. So, we had to adjust the policies and regulations.

Interviewer: how did your department overcome those challenges? 18.39

Interviewee: Regarding the policies, they have been reviewed and amended according to the new structures. As to procedures, a roles and responsibilities manual has been prepared at the University level. All procedures related to each and every division have been updated.

Interviewer: Mr A., how did you overcome the challenges you mentioned?

Interviewee: we worked harder starting with the most important priorities and through discussions and meetings to find alternative ways.

Interviewer: to what extent have the changes you mentioned influenced the quality of learning at the University?

Interviewee: No doubt that the academic and administrative support services are tied up. Providing suitable teaching and learning materials in a timely manner support the educational process. Also providing all necessary requirements in coordination with the purchase department, which is administered to colleges as per their requirements; also coordination with the computer division and technical affairs, all this coordination ensures a strong infrastructure that meets the educational needs of the student population. Also, coordinating the purchase of the library books. All these helps ensure the smoothness of educational process. Also, the provision of the health insurance and security on campus help create a healthy and sound work environment. This help the University to produce good quality of graduates.

Interviewer: Mr M., have the changes you mentioned improved the quality of teaching and learning?

Interviewee: Yes, the changes influenced the quality positively in terms hiring high calibre teaching staff, clearing transactions in a timely manner, improving staff retention rates, improving the skillset of the staff through professional development.

Interviewer: is there any specific change that has especially influenced the educational services?

Interviewee: The most distinguished change is the increase in the educational resources, be it print or electronic resources. This is evidenced by an increase in the numbers of book borrowers from among the staff and students.

Interviewer: Mr A., has the University prioritised professional development of its non-academic staff?

Interviewee: The University has a centre for teaching and learning which provided PDs for all university personnel including the ones in my department. Also, the HR division have a department for staff development. I think things are moving very well for all staff. Also, if the employee finds an

opportunity for professional development outside Salalah or even outside Oman, we help them to attend.

Interviewer: Have the HR staff availed of the PD opportunities?

Interviewee: Similar to other employees in the University, the HR employees have available of PDs. We have a capabilities development department that coordinates with the CSCEC and
with capabilities development team in place for two years now. The team gets ready an annual PD plan, with budgeting provisions and it is implemented in line with the requirements of the college deans or directors of divisions. Also, every employee is entitled to studying in the University at 50% reduction.

Interviewer: has the professional development created a new professional culture among the staff?

Interviewee: The staff are now seeking to get higher degrees to improve their financial status, so this has created some kind of competitiveness among them.

Interviewer: Mr A., has the staff in the library been given special trainings and development programs?

Interviewee: Yes, this happens annually in coordination with the HR division. Some of the trainings were face to face and some were on life.

Interviewer: change always needs to be reinforced. Have the changes you mentioned been cemented and reinforced?

Interviewee: All the changes have been done through written decisions from the University Council, such as the changes related to the infrastructures, organizational structures and policies. All these are written and communicated to all staff. It is binding to adhere to these policies.

Interviewer: Mr, A., have the changes been consolidated? Has a new culture emerged?

Interviewee: 29.54 indeed, a new culture has emerged in the departments and the departments are keen on maintaining this new culture. This is due to the policies, regulations, trainings, seminars and meetings which has created some kind of ownership among the staff. I think this culture is really very good.

Interviewer: Mr A., no doubt the library has contributed much to enrich the experience of both staff and students. To what extent has the University celebrated these achievements and recognised the staff?

Interviewee: Yes, for sure. This is manifested in the promotion of the employee once they have completed a higher degree and also the adjustment of their salaries accordingly. The University has also recognised the achievements of the employees sometimes in writing.

Interviewer: Mr M., how the HR Division enjoyed recognition from the upper management?

Interviewee: sure, there is recognition from the management not only to the HR but other supporting Divisions. Also, the incentives have been distributed to non-academics on the same footing as the academics.

Interviewer: Mr A., do you think the non-academic staff and students are satisfied with the new version of the University?

Interviewee: In my opinion, the level of satisfaction is very good. Of course, we have to strive for more improvement.

Interviewer: Mr A., same question.

Interviewee: I think they are well satisfied with the library services and all educational materials provided fir the newly introduced specializations. We are also satisfied and we do look to more improvements.

Interviewer: Mr M., same question.

Interviewee: I think there is a great deal of satisfaction but we hope for the better.

Interviewer: Thank you very much for your time.

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