Performance Measurement in UK textile & clothing manufacturing SMEs: Regaining the initiative

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Abstract

There is no dispute that forward thinking and innovative SMEs are central to modern economies. However, most SMEs suffer from resource constraints and management weaknesses. Policy makers and business organisations have tried to correct these imbalances mainly through fiscal measures. In general, these measures have not been a great success, either in their ability to attract large numbers of SMEs or to promote new sustainable and innovative SMEs. This limited success is often due to failure to identify and meet the needs of SME's.

The difference between organisational success and failure is often in performance measurement and benchmarking practices. Performance measures are vital to assess the health of an organisation, support managers in their decision making processes, and provide focused direction for operations. They allow an organisation to express its strategic intent and demonstrate how that strategy connects with everyday operations, and thus enabling organisational systems to create essential feedback and learning mechanism to support overall organisational goals and sustainable growth in the face of current business pressures of globalisation and profitability.

Meaningful and effective performance measurement begins with strategic planning, linked to the periodic planning process of performance reviews and best practice (benchmark) implementation. This concept is well appreciated in larger organisation, unlike in SMEs, particularly those in the textile and clothing manufacturing sector. A number of factors must be responsible for the limited or lack of uptake of performance measurement and benchmarking for positioning for competitive advantage gain in this sector. To explore some of these factors, research findings from an examination of ten case study companies in the North West of England is presented.

To explore these factors, research findings from an examination of ten case study companies in the North West of England is presented. The first part of this paper presents the call for review and application of performance measurement in the SMEs sector, particularly those in the UK textile and clothing supply chain. The second part, investigates the significance of the sector in the UK economy, and the third part presents the results from ten case studies carried out analysing business performance in a number of processes including; operations, investments levels and skills and examine some of the issues surrounding performance measurement, and benchmarking, within the manufacturing textile and clothing SMEs in the UK North West. These results suggest that such issues of owner managers ability to adopt and adapt deductive responses to business challenges instead of the current inductive responses which has resulted in their inability to compete against foreign imports needs to be addressed in order for manufacturing companies, particularly those in the textile and clothing sector, to regain the competitive initiative to face global pressures and grow.

Keywords: Competitiveness, growth, Performance Measurement, Supply chain Management, SME

1.0 Introduction

The need for businesses to be competitive and sustain profitability in the face of today's global challenges has never being greater. This is particularly so in the UK textile and clothing sector. Research by government, industry and academia to identify ways of increasing awareness of World-Class performance and promote business excellence through performance measurement, benchmarking and best practice dissemination has recently increased. However, many of these studies have been carried out in larger organisations and often assume that these can be scaled down and applied to small-to-medium enterprises (SMEs). Generally, SMEs have been constrained by niche markets, limited management resources, lack of market intelligence integration into business operations and a lack of long-term strategy. These challenges call for a transformation in the way SMEs' management audit their businesses and/or business processes.

Thus, the challenge is to position performance measurement and benchmarking, from the SME perspective, as a credible and feasible technique and to encourage its appropriate use. This paper is a result from the initial research carried out as part of a PhD programme into the efficacy of performance measurement in textile and clothing SMEs. Its' findings suggests that "credibility" has indeed been established, particularly in larger organisations, but that many barriers (real or perceived) prevent many SMEs from undertaking performance measurement and benchmarking. Management education has a central role to play in adapting the tools and experiences of larger companies to the wider SME audience; to do this requires that performance measurement and benchmarking is put into a simple context that will help managers to see it as more than just another "fad".

1.1 SME Definitions

Definitions of SME vary. In literature and practice, various meanings which apply in different contexts are often used (Storey, 1994; Bolton Committee Report, 1971, EU Report, 2003). As a result of this heterogeneity in the definition of an SME in different sector, it is often necessary to modify the various offerings in definition according to particular sectoral, geographic or other contexts in which the companies in the sector are examined. The implication for research is that researchers are likely to have to continue using their own definitions of small-to-medium enterprises which are appropriate to their particular 'target' group (Storey, 1994). Whilst, this research is not one way or the other focused on the 'grounded' definitions of SMEs as presented in the Bolton Committee Report, 1971, Dti Report 1997; EU Report, 2003, it however, acknowledges the different characteristics represented in these reports and sets its 'target' group of companies in the SME sector as those that employ less than 250 people and with a turnover of not more than £22.8 million. This group account for over 99% of all businesses in the UK (Dti SBS Report, 2004).

2.0 Sector Significance in the UK

The SME sector is estimated to employ 65 percent of the private workforce, accounts for 73 percent of turnover (Dti SBS Report, 2004) and represent 57 per cent of Gross Domestic Product within the UK (Madsing, 1997). SMEs play a particularly important role in areas such as the North West of England that have seen a decline in traditional heavy industry, including those in textile and clothing manufacturing sector. There is no dispute that the SME sector is of considerable importance to the UK economy (The Bolton Committee Report, 1971; Stanworth and Gray, 1991; Dti Report, 1997, and yet very little research into developing specific models/frameworks which allow SMEs to develop their own understanding of sustainable profitability through performance measurement and benchmarking, an avenue to promote competitiveness within the sector, has been carried out.

UK manufacturing in particular, is an important part of the global knowledge-driven economy. However, the decline of Britain's manufacturing sector is not in dispute, Dorgan et al, 2001.

According to Nick Scheele, Chairman, Ford Europe in his report on the Manufacturing 2020 project 2000, the UK has a long history of manufacturing and for many people it has "had its day". However, what is often overlooked is that other sectors in the UK are interlinked with manufacturing and could not exist without it. Many service sectors, such as wholesale and retail distribution, maintenance and after sales, have manufactured goods as their *raison d'être* – and these services contribute further to GDP. Irespective of these views, it is a significant component of the UK economy. Manufacturing is by far the largest single contributor to the global economy accounting for nearly three quarters of the World's trade, Dorgan et el, 2001.

Manufacturing adds to the well-being of the nation by fundamentally affecting employment, wealth creation, international standing and quality of life. Manufacturing generates two-thirds of the value of the UK's exports, directly provides 4.3 million jobs and accounts for 20% of GDP, (M2020 report, 2000).Taking in account the GDP contribution from other sector to which manufacturing contributes as afore mentioned the proportion of GDP that depends on manufacturing is greater than the 20% figure mentioned above. Indeed, in certain regions, the manufacturing sector is the major employer.

Manufacturing in the UK plays a leading role in a number of sectors, such as pharmaceuticals and aerospace, industries where measurement and benchmarking practices are given high priority. There are lessons here that can be tailored to the business operations of most of the 87 per cent of manufacturing SMEs in the UK. In a global manufacturing society, the UK is in direct competition with other countries to be the base for individual companies' operations, both regionally and globally. The profitability of UK manufacturing increasingly depends on high value-added output, so manufacturers are constantly looking to develop and exploit new and specialised knowledge in order to compete in both domestic and global markets.

2.1 Current state of Research Studies

There is a scarcity of studies on issues of performance measures, measurement, management and benchmarking in UK SMEs (Hudson et al 2001, McAdam and Kelly 2002, Yusof et al, 2000), and the issues facing this sector of industry within the textile and clothing manufacturing in particular. A great number of existing studies on performance measurement and benchmarking topics and SMEs assume that large organisation praxis can be scaled down and applied to SMEs (Ghobadian and Gallear, 1996; Hudson et al 2001; Macpherson et al. 2003; Cushion, 1995 and 1996). Whilst, financial measures that inform external stakeholders of how businesses perform are often in place, operational measures if used at all are typically ad hoc. The researchers believe that this is as a result of the lack of most owner-managers knowledge of the application of such measures, within their business contexts. There is therefore, need for studies which allow SMEs to develop their understanding of performance measurement and benchmarking and share best practice across SMEs within the sector

McAdam and Kelly, (2002) purports that the main barriers to growth in the SME sector are as a result of niche markets, limited management resources, limited market intelligence and lack long-term strategy. Compounded with this, the textile and clothing manufacturing SMEs industry also face the additional problems of the industry's distinct adaptive characteristics of:

(i) time frame for the supply chain; the existence of seasons within the year and product changes and adjustments within those seasons leads to a complex balance between lean and agile practices, this often requires businesses to anticipate, detect and respond in a matter of weeks and days, rather than months or years, to order to satisfy demand at a profit; and

(ii) price v value. The UK manufacturing base continues to struggle to differentiate itself from global competition and is therefore forced into price competition rather than value competition.

This highly turbulent and dynamic business environment has called for transformation in the way SMEs in this sector manage and operate their businesses and/or business processes (1st Industry Forum Conference, July 2001). SME's still adopt "*ad hoc* structures", informal procedures, and ineffective organisational mechanisms to address volatile market opportunities. The Obervertory of European SMEs, 2003, argues that informal mechanisms create great flexibility in SME operations. However these are often on short term basis, and without appropriate records/historic data that enable them to analysis their operational trends. As such, these mechanisms do not enable SMEs to pay enough attention to long-term generation and absorption of both technological and organisational re-design of business processes that effectively promotes the integration of business environmental factors into efficient business positioning for competitive advantage gain. In this perspective, performance measurement and benchmarking may be an important approach to fit internal practices of these SMEs to the ever changing business environment (Davenport and Short, 1990 Teece, et al.1990), through the application of improvement tools and techniques (Hammer, 1990 and Davenport, 1993).

In most cases managers within the SMEs sector have asked for quick fix ready made "tools" and "tool kits" (Monkhouse, 1995), but the basic premise is that there are no ready-made "tools", no pre-packaged "techniques", no simple "short cuts" that provide instant solutions to performance measurement or benchmarking problems. The "tool" required for doing performance measurement is something that no performance measurement expert can hand to an organisation. Organisations, particularly, those in the SME sectors need to develop their capability to analytical understanding of their holistic business processes to ascertain areas whose performance they want to measure and the impact of such measures and measurement on their business capacity as a whole for growth and competitiveness.

2.2 Textile and Clothing Manufacturing SMEs: Rationale for this Research

The decline in this sector of industry is even more depressing in comparison to the rest of the UK. 99.76 per cent of the manufacturing in this sector is done by the SMEs. The total turnover from the manufacture of textiles and textile products in the UK fell by 16.0 per cent between 1999 and 2001, in particular the total turnover for the 'manufacture of other wearing apparel and accessories fell by 24.6% in the same period. The government statistic office reported that the share of turnover for the top 20 companies in the textiles and textile product manufacture fell marginally from 11.1% in 1999 to 10.3% in 2001.

In the UK North West particularly, the number of SME Manufacturing businesses fell by 14.7%. The sector in this region also experienced a fall in turnover from £1.08 billion in 2000 to £717 million in 2001. The Gross Value Added (GVA) at basic prices continues to fall from the 1997 peak, by 8.7% (North West Development Agency-NWDA- Report, 2002).

This data from the government statistics office and NWDA report supports the suggestion that the UK textile and clothing sector is in serious and perhaps terminal decline. The sector faces the need to respond quickly to rapidly changing market requirements, dictated by globalisation of competition, fashionable change and customer expectations and demands (Bhamra et al, 1998). Globalisation and competition from low cost producers offer significant challenges to UK companies, these challenges amounted to a balance of trade between import and export of -£8 billion in 2002 (Symons, 2002; BATC, 2002), which needs to be addressed. Some industry observers (Tyler, 2002) would argue that most manufacturing that is carried out in these low cost countries are championed by companies (CMT) with headquarters in the UK. However, the reality is that these companies have not grasped the concepts of extended supply chain and logistics to be able to harness the benefits of more outward looking, market-oriented, and knowledge driven enterprises that has been put upon them, by these new challenges. Current trends throughout Europe include the removal of quotas and tariffs in January, 2005, which is

predicted to be catastrophic for the future of the industry in the UK (2005 T/C Liberalisation Report, 2004).   In response to these challenges businesses/organisations will need to focus on their business performance and operational process management in more holistic manner. Berliner and Brimson (1998) suggest that, "performance measurement is a key factor in ensuring the successful implementation of a company's strategy." Thus, when organisations implement new strategies they need to ensure that the appropriate key performance measures are in place, to identify the degree to which strategies have been achieved, and the efficiency and effectiveness with which business operation processes achieve the overall business goals. At a Drapers Record conference on 'future of the textile and clothing industry in the UK', held in 1999, a speaker suggested that the "brains" of the product delivery process will stay in the home country, but sourcing will be globalised and centred in low labour cost countries. For the UK to succeed in the face of this competition, therefore depends on its ability to retain its current strengths, minimise bureaucracy, and harness manufacturing operations to avoid duplication of work, reducing wasted effort and eliminating non-value added activities (Duff, 1996; Mitskavich, 1996; Soliman 1998), as such, the UK needs to be proactive through effective and efficient performance measurement and management of business processes in harnessing competitiveness in its incumbent economic giant as manufacturing SMEs to get the best out of globalisation (Fawcett, et al. 1997). It is this awareness and tools that needs to be developed within this sector of industry, more so in the textile and clothing manufacturing in the UK.

3.0 Methodology

A critical sample of companies has predominantly been carried out with 10 SME textile and clothing manufacturing manufacturers in the UK North West. However, discussions with other major textile and clothing areas of the country, including Yorkshire and Humber, East and West Midlands indicate that the issues identified are also highly prevalent in these regions.

In order to generate data of appropriate range and depth, a multi-method research approach was adopted. A checklist of questions on performance measurement and benchmarking was devised from an extensive review of literature (Lundberg, 1942; Eisenhardt, 1989). The case study companies randomly selected, with access to them gained as part of a European Research Development Funded (ERDF) project on benchmarking which the researchers conducted in conjunction with the Asian Business Federation (ABF) in the North West. Company documents and archive information were also used as part of the data gathering process and in the analysis.

Each case study was carried out over a three day period with directors, senior managers and key manufacturing personnel interviewed from each company using semi-structured techniques designed in observation with company's processes from goods-in to good-out (and pre-tested) with the intention of gaining uninhibited responses to open ended questions concerning the reasons why PMs are used or not used.

The aim of the interview was to explore (Yin, 1994; Kumar,1999; Denzin;1984; Robson, 1993) in more detail the extent to which performance measurement / benchmarking practices were incorporated as integral part of achieving business performance within the companies operational activities. The prompt list was developed from the original research design and focused on dimensions of organisational context, performance measurement content, the process of measuring performance, and the use of measurement for strategic positioning for competitive advantage gain (Kerlinger, 1986).

The structure of the interview provided a number of themes a priori which were then refined and modified by the researchers in the analysis of data using the statistical package SPSS. The analysis of collected data involved the coding of responses given to identify the main themes arising during the interviews. Given the small population of potential interviewee's and the

researcher's knowledge on performance measurement a formal questionnaire approach was not considered appropriate (Bulmer, 1977; Kerlinger, 1986; Robson, 1993; Burns, 1994). Since the interviews were largely in a semi-structured format, the researcher took advantage of the discretion this method allows to follow up the answers given to the original questions (Eisenhardt, 1989).

The research acknowledges the smallness of the sample size used in this research and that there may be a concern that the interviewee might have focused on one single factor and ignore other important factors. To avoid this problem and to provide some degree of consistency across interviews, the semi-structured interview format adopted was as follows:

- each interview started with a short series of open ended questions
- the responses to these open ended questions were then probed to ensure that the interviewee understood the points being made and to gather specific examples

This approach provided the validity and reliability of data collection and analysis across the research methodology employed.

4.0 Results and Discussion

From the interview questions afore mentioned in section 3 above, responses were codified for data analysis using the SPSS which provided a multivariate analysis of 22 themes of performance criteria. An inter-item (inter-theme) correlation matrix of 22 themes indicated a clear relationships between *strategic direction* of the organisation in question and the *main products* offered; *staff empowerment* and the level of *performance measurement* and the criteria of *production facility layout* and *production capacity planning;* level of *performance measurement* and the logistics of the *production facilities layout; turnover* and the level of operating *capital available* as well as the *level of skills*. Other results includes; the relationships between business growth rate and *awareness of appropriate manufacturing strategy* and production *capacity planning*; *awareness manufacturing strategy* and *production process* utilised and that *production process* and *production capacity planning*, (Kaplan, and Norton, 1992; Karami, 2001; Karami, et al. 2001), to mention but a few.

The inter-item analysis of the 22 themes formed the basis for a factor analysis of 5 principle components (PCs) (table 4.1). The results from the principle factor analysis was again coded into 5 groups as shown in the table below;

Principal Component Factors	% Variance Contribution	
PC1: Performance Management Factor	33.24	
PC2: Experience Factor	21.39	
PC3: Resource Utilisation Factor	16.06	Table 4.1 Areas where effort needs to be concentrated in order to regain the competitive initiative
PC4: Management Capability and Strategy Factor	11.7	
PC5: Capital Availability Factor	8.74	

The aim of the principle factor analysis was to identify areas where most benefits can be achieved. As the results depict, in order for this sector to effectively regain the competitive initiative, stakeholders (including business owner-manager) efforts must be sufficiently directed towards performance management (PC1) which incorporates criteria such as staff

empowerment, implementation of appropriate strategies, capacity and production process planning and the measurement of performance and benchmarking of best practices. Results from PC1, PC2 and PC3 accounts for over 70% of the most important components for growth and business sustainability (Porter, 1985), and a closer examination of the constituent criteria indicates their individual contributions (factor loadings) to the overall. However, current practices on performance measurement and benchmarking in SMEs are limited to typical comparator or benchmarks of financial measures (KSA Report, 1996 and 1998). Whilst the authors are not against the use of financial measures per se, however, they argue that operational measures are often the foundations –the base rock- on which these financial measures are built. This knowledge and understanding needs to be widely dissemination within SMEs, particularly those in traditional industries like the textile and clothing manufacturing. Thus, there is the need to widened the discourse beyond the comparison of performance measurements and include comparative analysis on cultural aspects such as leadership, people management, investment level, available organisation capability to effectively and efficiently define business processes and performance measures, i.e. the capability that ensures the selection, alignment and integration (application and implementation) of such measures to operational processes. Eishenhardt, et al. (1990), and Andel, 1999, both argue that this will be useful to companies' ability to adequately apply benchmarking lessons in business improvement initiatives.

This research also found that there is very limited best practice dissemination amongst textile and clothing manufacturing SMEs. Although the industry has undergone consistent decline since the 1970s, characterised by falling production, a growing trade deficit and massive job losses (Berkeley et al, 1999), some areas have experienced resilience, even growth (Baker, 1996). This has been linked to the emergence of a number of younger entrepreneurs in Britain's Asian communities, who formed new companies taking advantage of low start-up costs, the availability of premises in the inner-city and a pool of cheap labour. However, more recently, they have been under threat as the forces of cheap imports combined with demands of retailers grow in intensity. This research has recognised that SME manufacturers that responded to these threats by shifting from low-value, low quality markets into higher value markets by increasingly harnessing their business environmental factors to actively and/or proactively position their production continue to be the ones that are able to manage these new challenges. But these are few; the research found that they were in the region of one in ten companies. Coupled with this, there is the issue of lack of openness (Gray, 1998) amongst the business communities that prevents the penetration of what is deemed as rival companies from 'catching a glimpse' of the best in class operational practices.

5.0 Conclusion

In analysing the UK textile and clothing manufacturing SMEs, this paper has presented the need for more research into performance measurement and benchmarking practice adoption from SMEs perspective. It calls on industry, government and academia, to support this significant economic contributor and address the lack of development of sustainable, modern management techniques in the sector, how to overcome the widespread reluctance of SME owner-managers to engage in initiatives designed to develop their own management abilities, skills and professionalism, particularly in facing the 21st Century business challenges of globalisation and competitiveness. There is plenty of evidence of importance and industry differences between SMEs and larger organisations that makes it inappropriate to adopt a single approach to this challenge (Storey, 1994; Teece et al.1990; Lefebvre, L. and Lefebvre, E. 1993).

The findings from this research have indicated the importance of performance measurement integration into the management of business processes and it has also identified some of the barriers to the uptake of business performance measurement and benchmarking. The factor loadings of the performance criteria in the correlation matrix and the principal component factors

are a pointer to the need for owner-managers and decision makers in SMEs to harness a holistic approach to measurement and benchmarking to encompass operational processes that culminate in financial ones.

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