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A Dog's Brexit for UK Food Manufactures, in terms of Food Safety Culture

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Abstract

The UK's political toxicity, miscommunication and lack of progress associated with Brexit, has united both the leavers and the retainer camps, in the sense that they urgently require clarity and confidence concerning the government's negotiation strategy. This paper critically discusses current Brexit progress and its effects on UK food manufacturers in terms of their food safety cultural compliance. A mixed method approach was adopted via four focus groups populated with 20 senior/middle managers from 10 UK food manufacturers. The data extracted reflects food manufacturers' nervousness about Post Brexit, areas of food safety cultural best practice and its current challenges. The paper concludes with four key themes for consideration which food manufacturers are encouraged to reflect upon and in doing so, provides a valuable contribution to community of practice in food manufacturing.

Keywords: Brexit, Food culture, Food safety management, Communications, Motivation

Introduction

A play on the words of Winston Churchill (1949) 'Russia is a riddle wrapped in a mystery, inside an enigma, can be aptly applied to Brexit'. The former British Prime Minister David Cameron's folly to accurately calibrate public opinion, in naively forcing the Brexit vote, backfired in a narrow 52% vote to leave. Less than twenty-four hours later, upon hearing the Brexit vote, Cameron's response was to resign his Prime Ministers role. His actions were in essence, to pull up his drawbridge and fill the moat. He clearly wished to disassociate himself from the Brexit hot potato and promptly handed the Brexit baton onto Teresa May who actually voted to remain, hence, the enigma.

Navigating the United Kingdom though uncharted Brexit waters has been fraught with concern over the inability to provide strong leadership, clarity and progress. As a consequence, this has fueled unease about the UK economy post Brexit. The Governor of the Bank of England stated that monetary policy cannot prevent the weaker real income growth likely to accompany the transition to new trading arrangements with the EU [1]. The International Monetary Fund is also anxious about the economic unknowns by stating Britain's vote to leave the EU is already damaging the UK economy [2]. The president of the United States has also expressed concern stating that he would have negotiated Brexit with a "different" and "tougher" attitude to Theresa May [3]. Such comments have regenerated Conservative party whispers of a potential leadership challenge and more vocal bickering about the pending divorce bill of potentially 84 billion sterling pounds [4]. The opposition parties are out flanking the conservatives at the apparent lack of preparedness and

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strategic direction [5]. Public opinion in the main, is that the government is on the back foot and against the ropes. Hence, the former Greek finance minister Yanis Varoufakis aptly described the UK's current Brexit negotiation strategy as a dog's breakfast [6].

Either good fortune or pressure imposed by the Irish Government and the 26 member states, has ensured that there will be an open UK and Irish boarder. Such an agreement under Article 50 of the Treaty on European Union (TEU) on the UK's orderly withdrawal from the Union, formed part of the so called 'stage one of negotiations', namely; protecting the rights of Union citizens in the UK and UK citizens in the Union, the framework for addressing the unique circumstances in Northern Ireland and the financial settlement [7].

The Chief Executive of Dairy UK expressed much relief that progress has been made on these important issues, so that the all-important talks on trade can commence [8]. The Director General for the Federation of Food and Drinks indicated that time remains desperately short and called for swift progress not only on future trade relations between the UK and EU but most importantly on the detail of a transition period. This is critical in order to maintain the status quo, so businesses have the certainty they so desperately need [9].

Literature Review

E-day, March 19th 2019 in which Article 50 is concluded and the UK will have a maximum transition period up to December 31st 2020 to leave the EU. The EU's chief negotiator Michel Barnier stated that 'if we want an orderly agreement, time is pressing', highlighting the need for the UK to make progress as he could not negotiate with himself [10]. In 2017, The Irish Prime Minister Leo Varadkarutilized a previously quoted metaphor by the EU's Chief Negotiator, stating that the 'clock is ticking on the Brexit talks' to further emphasize that time was indeed running out [11]. To put this time frame into perspective, the UK must independently complete negotiations with 168 countries to replicate or roll over more than 750 international trade or aviation agreements before a Brexit transition period begins [12]. However, in the UK, political bickering is doing little to suppress business worries about the UK's economic future. The UK Energy Minister Claire Perry said hard Brexit supporters were 'swivel-eyed' and hell-bent on 'wrecking the economy' [13]. However, the government's stance on Brexit is looking very much like a unicorn, glimpsed, rumored but never actually seen and suspiciously shy. The arch-retainer, Tony Blair described Brexit as a 'self-harming act' and that the UK should remain firmly in the EU [14].

The food and drinks sector is a key player in the UK economy, contributing over £28bn a year. It is the UK's largest remaining manufacturing sector and is larger than both the car and aerospace industries combined, accounting for 13% of national employment. Europe is its most significant export market. Furthermore, UK farmers are heavily dependent upon EU subsidies, which equate to 55% of all UK farm income. Given that the UK only produces approximately half of what we eat; it is dependent on European imports for a quarter of our consumption. In addition, food manufacturing has become heavily dependent on European migrant workers, so much so, that without them it could collapse [15].

The UKs food manufacturers are very much in tune to the shrinking window of opportunity, and are nervous about whether the negotiations will result in a hard or soft Brexit. A hard Brexit would be void of an EU agreement, thus, having to rely on the World Trade Organizations (WTO) protocols. Under a no deal scenario, it is estimated national income would be 8% lower [16]. Alternatively, and a much preferred option of the retainers, is a soft Brexit, in which the UK would continue having EU access via membership of the European Economic Area [17]. Studies by the National Institute for Economic and Social Research suggest that leaving the single market could lead to a long-term reduction in total UK trade with Europe of between 22% and 30%, unless the UK negotiates a free trade deal currently adopted [18].

The top three challenges facing food manufactures is firstly the ability to secure vital ingredients. An academic report stated that the government is "sleep walking" into a post-Brexit future of insecure, unsafe and increasingly expensive food supplies, and has little idea how it will replace decades of EU regulation on the issue [19,20]. stated that as the UK will potentially be able to operate outside the regulatory standards imposed by the EU this might allow the import of previously banned foodstuffs, such as chlorinated chicken. This might prove to be cheaper, but there are likely risks to business from food processors in the supply chain operating to lower food safety levels than those currently met through EU regs) [20]. also stated that if the UK and EU did not strike a free trade deal, then tariffs are likely to be imposed on EU imports as zero free tariffs would become problematic if the option isn't extended to other WTO members. Secondly, EU tariffs will result in costlier transactions with key export markets. They would serve to push up the price of UK exports, rendering them instantly less competitive in local markets, thus, damaging the British economy [21]. Thirdly, the availability of labour is still an unknown. The Environment, Food and Rural Affairs Select Committee commissioned a paper called '*Feeding the Nation: Labour Constraints (2015)'*. The document reported that approximately 20% of all employees in British agriculture come from abroad and 63% of all staff employed by members of the British Meat Processors Association are not from the UK. Furthermore, around 400,000 people work in food manufacturing and more than 30% of those are none UK citizens. Hence, if free movement of labour stops, the British food industries labour problem is in danger of becoming a crisis [22].

Food manufacturers have an enormous responsibility to ensure both the safety of the staff members making food products, and of those consuming them. In 2016/17, the Food Standards Agency (FSA) and Food Standards Scotland (FSS) were notified and investigated 2,265 incidents. This is higher than in previous years, with 698 more incidents reported in 2016/17 than in 2013/14. Overall, the frequency of reported incidents has increased over the last nine

years. The five largest contributors to the total number of recorded incidents in 2016/17 were 15% not determined/ other sources. Of which, 83% of the 331 'Not determined/ other incidents' related to clandestine entrants, i. e. a person who hides in a vehicle as it enters the United Kingdom with the aim of avoiding immigration controls. Hence, their presence within freight vehicles, creates a potential risk of contamination of incoming food loads. Pathogenic microorganism's incidents related to 14% suspected or actual contamination by harmful bacteria, viruses or fungi. 45% of the pathogenic microorganism's incidents related to Salmonella and the number of Salmonella- related incidents has increased from 99 in 2013/14 to 139 in 2016/17. Residues of veterinary medicinal products accounted for 9% and most of these incidents originate from the long-standing Statutory Surveillance Programme of residues of veterinary medicines in food producing animals. 8% related to allergens and the number of allergen incidents has risen from 89 in 2013/14 to a peak of 213 in 2015/16, before slightly dipping to 187 in 2016/17. Part of this pattern over time may be due to regulation changes, and varying sampling priorities. There were also 6% chemical contaminations of which fires were the cause of almost all chemical contamination incidents [23].

The 2016/17 data on prosecutions show a large annual increase in the total amount of fines handed down, rising from £38. 8 million in 2015/16 to £69. 9 million in 2016/17. This is the second consecutive year which has seen a large increase in the amount of fines resulting from convictions for health and safety offences. 2016/17 is the first full year where new sentencing guidelines have been in effect [24]. In 2016/17 there were 593 cases prosecuted by HSE, with a conviction rate of 93% and received fines totalling £69. 9 million, with an average penalty of around £126,000 per case resulting in conviction. In contrast, this is more than double the average fine in 2015/16 [24]. In the 2016/17 period the single largest fine was £5 million and a total of 38 cases received fines over £500,000 [24]. However, the true cost can be countered in the fact that 137 workers were killed at work in 2016/17 and there were 500 deaths a year caused by food-borne illnesses which costs UK PLC nearly 1. 5 billion a year [25].

The post Brexit chapter for food manufacturers is still an unknown and magnetises further challenges with the continued economic crisis of 2008 and the relentless stalking of foodborne pathogens. The importance of food manufactures fostering a proactive culture has always been important but getting the cultural rubric in sync with a company's vision and its employees is rather like riding the tiger. If a company is to recognise the importance of culture and is able to win the hearts and minds of its employees and then to think 'job done', this will no doubt rapidly unravel employee identity, loyalty, purpose and trust. Senior management need to recognise that they have their foot on the cultural gas pedal. It is rather like a 'cultural thermostat' regulated by the minority and affecting the majority [26]. However, whilst it is a given that the majority of food manufacturers are familiar with the term culture, many 'over-egg' employee buy-in and fail to invest sufficient resources to nurture and sustain a positive food culture [27].

Cultural references and debates appear unabated, often resulting in its true meaning being lost in translation, as can be seen in the fountains of cultural definitions. Culture can be defined as a 'dynamic process characterised by the shared values, expectations, and practices across the members and generations of a defined group [28]. But what does this mean, given the challenges food manufactures face and their much reliance on a multicultural workforce [29].

According to [30], there are three levels of organisational culture. In terms of a company's 'safety climate', evidence of food manufacturers culture can be visibly identifiable via its artefacts. They are indeed those symbols and representations of what the organisation tangibly communicates. For instance, employee uniforms, symbols of what they are and what they stand for. They can also encompass what the organisation's employees say in terms of terminology and they describe their organisation [1]. In essence it's what we see, hear and feel when we are introduced to or integrated into an organisation. The challenge is that a company's artefacts are readily identifiable but difficult to understand and explain [31].

The manifestation or germination of a company's artefacts evolve from two often hidden behavioural catalysts within an organisations safety culture. Firstly, they are the organisational values and belief systems [29]. These can be as basic as a company's mission and value statement. In which values are those developed beliefs about what is important to its workforce. They are often the unwritten benchmarks by which employees order their roles and influence their decisions and it is possible to capture a measure of this via survey analysis. Secondly, fermenting beneath values and beliefs are the organisations' underlying assumptions [32]. These are not visible, difficult to identify and it is not always clear how they evolve [27]. They are the collective employee perceptions and behaviours that in many cases organisations fail to question, the organisation just does. Such as the way we do things around here [33].

The question of the way we do things in food manufacturing is still a cause of concern. Despite the investment and the wide spread adoption of Food Safety Management Systems such as; FSSC/FS 22000 (Food Safety System Certification standard), ISO 22000, British Retail Consortium (BRC), Global Food Safety Standard Initiative (GFSI), Hazard Analysis and Critical Control Points (HACCP) food manufacture is not without risk [34]. Such systems fail to prevent food contamination and this is primarily due to behavioural non-compliance of procedures and poor management practices [1]. To emphasise the clear and present failings, in December 2017 alone, there were a total of 8 major failures in food safety compliance from suspected Salmonella and E-coli 0157 outbreaks, foreign fragments found in food to unhygienic practices [23]. Thus, the enigma is why do food manufacturers fail to grasp the cultural nettle in embedding and sustaining a healthy safety culture into the organisations ethos and daily operations [35].

Methodology

Ethical approval was confirmed to research the effects of Brexit on Food Manufacturers in terms food safety culture. A non-probabilistic convenience-sampling technique was adopted to select ten UK food manufacturers [36]. A qualitative research methodology was further deployed in this study, underpinned by an interpretivist philosophical paradigm via semi-structured focus groups. Four discussion themes were extracted from the literature review, namely Food Culture, Food Safety Management, Food Safety Communications and Food Safety Motivation.

A total of 20 senior managers participated in the research exercise, consisting of two managers from each of the food manufacturers. The participants were divided into four focus groups, consisting of five managers. Table 1 indicates the profile of the participants. A grounded theory approach was used during the analysis of the raw data concluding with a manual content and thematic analysis and an *in-vivo*qualitative data analysis software package was used to formulate themes figure 1 and capture anecdotal comments [37].

Discussion

Theme 1: Food safety culture

There was a general consensus that despite thorough European and national legislation, HACCP- based food safety management systems, training audits and site inspections, foodborne breeches are still occurring with critical consequences to both consumers, employees and the organisation's brand reputation [38]. Participants expressed concern that Brexit and a potential hard Brexit decision would put additional pressure on cost savings and access to overseas labour [15]. For instance:

Senior planning food manager:"We are constantly working against a reduced bottom line, those who voted to leave have no idea on the devastating effects it will have on the food industry. We are heavily reliant on overseas labour markets and without it you will see some businesses forced under, whilst others will struggle focusing on their culture, as the priority will be to save costs".

Technical food manager: "Brexit will be more than a 'spanner in the works' is will starve us from accessing a committed overseas market. We are already seeing line packers returning back to their home countries and this drainage not only affects operations, but the company culture, as the future is uncertain".

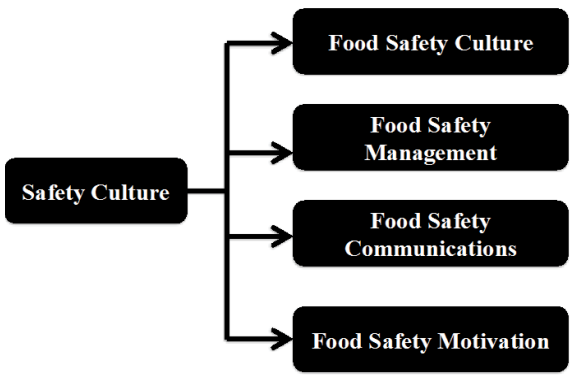

Figure 1: Safety Culture Research Themes.

Table 1: Participants profile.

Gender	Male	Female	Mixed Gender
	14	6	0
Senior Management	6	3	0
Middle Management	8	3	0
Years' Service			
0 - 4	2	0	0
5 - 9	6	3	0
10+	7	3	0

Whilst discussions around culture, safety culture and safety climate were varied there was a general understanding of the components of culture and that employee behaviour was influenced by culture [39]. There was evidence that participants were of the opinion that safety culture was different and in certain cases detached from an organisations culture, but connected to a company's safety climate [40]. For instance:

Hygiene manager: "Other departments sometimes do forget how important food safety culture is over the company culture, without a good safety climate we would be out of business".

Quality manager: "I've worked in food manufacturing over 20 years and the problem is that non safety/food quality people step away from getting involved and simply pass the problem on to us to sort out, quite often a company culture is fragmented. "

It was evident that organisations had invested in HACCP systems and adopted various assessment tools to measure their food safety climate [41]. Such as self-assessment surveys, Food Safety Management Systems diagnostic tools. There was evidence to suggest that a lower hygiene and food safety status was related to a less robustly embedded HACCP system [42]. The challenge that many participants expressed was the number of commercial models available and uncertainty as to which model was the best [43]. Further concern was directed over their actual utility, as there was evidence of commercial organisations offering systems, which upon completion of culture surveys pumped out suggested generic areas to consider for improvement. Many participants expressed the view that a commercial culture model needs to provide a bespoke advice in term of face-to-face interviews or focus groups. For instance:

Senior quality manager: "It's all very good buying these culture models but often the advice is way too generic. Very good for the consultancy company's revenue but not so good for us, in terms of real value added solutions".

Quality manager: "I've worked for companies in the past where HACCPwas considered a tick box exercise almost an inconvenience to day to day operations. This approach resulted in a high turnover of staff. The irony is that many

of those businesses are still going with that type of cultural attitude.

Theme 2: Food Safety Management

Participants agreed with Crosby's (1972) statement that quality is free but the true cost and challenge was related to nurturing an effective food safety culture. There was a particular concern about post Brexit and how this would affect regulations, potentially quality systems, and ultimately managing the change process [5]. There was consensus from participants [44], that poor practices related to food handling are the result of employee noncompliance and that management serve as role models in adhering to company policy [45]. They also stressed the challenges of meeting production runs, quality standards and food safety [46]. For instance:

Food plant manager

"Come Brexit, we are all in serious, unknown territory. It is going be very difficult managing the change. It will no doubt involve more time managing UK personnel and critical control points".

Planning manager

"Some overseas employees have already decided to take the initiative and return home. Due to Brexit, we expect to have a skills drainage, which poses the question, whose going fill these vacancies. We have always struggled to get UK nationals to do the work and if we have to rely on them this will be a big challenge to manage compliance".

Whilst there was support for the importance of training employees to follow quality and safety procedures, it was mainly focused at operational supervisor staff and operatives [40]. There was little reference concerning the importance of both executive and senior management training that focused on strategy, leadership, managing teams, conflict resolutions and recognition [47]. For instance:

Senior food manager

'Its common practice to train staff, the challenge we face is making sure they follow best practice. Concerning executive training, its good in theory but in practice it's a logistical nightmare".

The general feedback indicated that management were aware of varying styles of leadership from 'servant leadership (i. e. empowering the workforce to make decisions) to transformational leadership' [48]. However, discussions suggested that whilst this is easy to talk about, it was challenging to implement due to key barriers such as time pressures, production schedules, inadequate facilities, lack of accountability, administrative burdens which prevented high levels of interaction with operational staff [1]. For instance:

Plant quality manager

"Yes it would be good to spend more time on the factory floor, however on Monday morning we hit the ground running sorting our operational problems and client management. However, our management teams do report back us concerning production runs".

Site maintenance manager

"Our plant is having to make significant cost savings due to competition, heaven know what is going to happened after Brexit. Much of our time is spent ensuring lines don't break down, this is our priority and our supervisors manage the staff, it's their job to work with the staff".

In the main, feedback suggested that despite the reliance on non-UK employees, their management teams had stated that the mixed blend of nationalities had created a healthy work culture. It was acknowledged that many employees were focused on rates of pay but their staff were committed and they had created sub-cultures of support between co-workers [49]. There were key concerns that Brexit would jeopardise this productive working food safety culture as there were already signs that a minority of overseas staff had decided to either return home, or to seek employment from more stable European countries such as Germany [14].

Operations manager

It's a pity that Brexit bureaucrats don't visit our factories and see how multinational cultures work. Then they may change their minds in not destroying our food industry and supply chain".

Theme 3: Food Safety Communications

Whilst there is a distinct lack of academic studies on food safety communication (Jacobsen et al. , 2014), all participants expressed a clear appreciation of its importance and its role in establishing a positive health and safety culture. The miss-communication surrounding Brexit and its association with rumors, emphasizes that when communication is lacking in clarity, individuals will fill in the gaps with hearsay often resulting in miscommunication. As with food safety systems, organizations are committed to their success, however all too often informal communication and communication distortion became a common occurrence [43]. It was, however, noted that senior management struggled to find time to visit the factory floor and informally relied on operational managers and supervisors to pass on information to staff. For instance:

Quality assurance manager

"No matter what we say to staff, they will always try to read between the lines and this often fuels unnecessary gossip and politics".

Plant manager

"It's very much like telling a joke, everyone slightly changes its structure and this often results in a total distortion of the facts, it's quite frustrating".

Organisational structures are very similar to tattoos, often quick to make but very difficult to get rid of. Despite their simplistic design and formal reporting channels, they often manifest into a labyrinth of informal communication channels and, thereby, prove difficult to control [50]. Such a scenario is often the result of management failing to ensure that procedures are adhered to or formally revising and amending procedures to enhance communication in terms

of transparency, accuracy and speed [51]. A key driver to miscommunication can often be associated with role models such as managers who due to work pressures fail to follow company procedure and their subordinated follow suit, hence, the informal system inadvertently becomes the formal system [41]. For instance:

Planning manager

"Despite having all the bells and whistles such as appraisal, training and suggestions systems we still have a problem with rumors and whispers".

Factory manager

"Our business depends on operational managers adhering to company procedures. Whilst quality and safety is never compromised there are cases when mangers have to make quick decisions, and do not always follow non critical procedures".

Production manager

"We are constantly working against the clock to ensure our product is produced and delivered on time. Such pressures do result in managers making fast decisions that do not compromise safety and quality".

A key barometer to the effectiveness of communications is very much on how teams operate, not just within a department but also across different departments such as planning, hygiene, production etc. , [52]. Participants agreed that this should be the case, however, ensuring departments worked together was on occasions challenging in terms of timely and accurate information [40]. There was, however, a general lack of distinction between groups and teams. In the sense that group dynamics, were akin to a set hierarchy in which specific members prioritize themselves over other members [53]. The issue of trust was also a key driver in reinforcing a team's identity and support in their management structure. As trust is critical to successful and sustained relationships between teams and cross-functional department, it goes beyond contractual commitments and either binds or extinguishes collaboration [54]. The lack of trust related to personality or stereotype barriers is considered to be one of the most difficult barriers to overcome [39]. For instance:

Production manager

'Its human nature to be in groups and groups will always have a hierarchy. This is where training ensures that our groups will work together".

Production manager

"Although we have our daily management meetings to prioritize schedules, our planning department often does not appreciate the time it takes to change production runs".

Theme 4: Food Safety Motivation

There are just as many definitions and theories of motivation as there are of culture and this often adds unnecessary confusion in determining the best motivational model to implement within a food-manufacturing environment. Such sentiments were voiced by the participants and supported [55]. Whilst there are a selective number of commonly adopted theories such as Herzberg's 'Two Factor Theory' and 'Vrooms Theory of Motivation' associated with employee performance, the 'Theory of Planned Behaviour' is the most sourced model in food research, particularly in food handling behaviours. The theory focuses on employee attitudes, peer pressure and organisational behavioural controls that collectively influence employee performance in terms of food safety behavioural compliance. However, as with all models, they do attract levels of criticisms in terms of their ability in designing motivational food safety interventions [38].

An alternative model is the 'Social Cognition Model' which evolved around the premise that employees instigate logical decisions based on cost benefit analysis of potential outcomes of behaviour. Whilst there has been evidence of predicting employee behaviour via the use of motivational incentives, such as bonus and reward systems, the model in the main has not been fully exploited and assessed within food manufacturing. However, participants openly stated that the primary motivational drive from their workforce was monetary, yet, this was not mentioned disparagingly, as they stated, this was the reality and their mainly migrant work force were committed to food safety and quality [34]. For instance:

Operations manager

"Money is not a dirty word and my staff who are on the production runs are motivated by money and they do a good job".

Production manager

"My staff work 12 hour shifts and are driven by money, they are a highly committed team".

Plant manager

"Those days are long gone in which there was a management style of tell them, ask them, slap them. But money is a key motivator for our production lines".

Discussions around personal incentives, such as a desire for challenging and interesting employment, work choice flexibility, opportunity for self-education were supported by participants as catalysts for motivation [56]. However, there was a general view that they are very attractive in theory but the practicalities of the production schedules, invariably hinder such practices and that the staff were in the main focused on money, which had a strong impact on productivity [57].

Yet, participants indicated that their training schedules ensured that if staff wished to progress they could liaise with their line managers and be provided with development opportunities. They cited examples in which operational staff had transferred to administrative roles with a lower pay scale, thus emphasising that money whilst being a motivator, is only one element in the motivational equation [58].

Hygiene manager

"Training programmes are delivered by the HR

teams;however, we still need to provide them with additional hands on training to do the job".

Product line manager

"We need to take another look at our inductions as staff need repeat or additional training once they are released onto the factory floor".

Factory manager

"Brexit is a clear distraction for our migrant workforce, both our and their futures are uncertain and this is affecting levels of job security and motivation".

Conclusion

Whilst the Food Manufacturing sectors future is unclear, organisations need to exploit this window of opportunity, prior to the Brexit departure date to proactively recalibrate their focus on retaining its current workforce whilst at the same time appealing to the UKs employment market. Food manufacturer strategic decision makers need to thoroughly assess methods to enhance their company compliance to food safety culture. Organisations cannot hide behind their company's food safety systems and commercial safety models. They need to question if they are fit for purpose in terms of fostering and maintaining a food safety culture in areas such as food culture, management, communications team, and motivational strategies with teeth. To do otherwise will be an organisation's folly and to further reinforce the current perception by both retainers and leavers, that Brexit is a Dog's Brexit.

References

1. Casey T, Griffin MA, Flatau Harrison H, Neal A (2017) Safety Climate and Culture: Integrating Psychological and Systems Perspectives. Journal of Occupational Health Psychology 20: 341-353.
2. Elliot L (2017) Unimaginable for UK to leave EU without a deal, says IMF chief. The guardian.
3. Macaskill A (2018)Trump says he would negotiate Brexit with 'tougher' attitude than Theresa May.
4. Connolly S (2018) UK's final EU withdrawal bill could cost £100bn, says ex-Brexit minister.
5. Rachman G (2017) Financial Times: Brexit Britain is at Europe's mercy.
6. Barnes J (2017) Remainder Varoufakis dismisses Brexit bill gloom-£50bn is comparable to divorce value.
7. Grice A (2013) It is time for the British people to have their say': David Cameron promises EU exit vote by 2017. Independent.
8. Bryans J (2018) The Voice of the UK Dairy Industry.
9. Maushagen P, Macdonald A (2018) EU and UK negotiators eye accelerated Brexit transition talks.
10. Stones M (2016) Brexit: Top three challenged for Food manufacturers.
11. Kuenssberg L (2017) The clock's ticking on Brexit talks, EU warns UK.
12. Mayo V (2017) UK must do hundreds of deals, warns Michel Barnier.
13. Merrick R (2018) Theresa May to attempt to calm Tory Party civil war at Brexit 'war cabinet' meeting.
14. Ferguson K (2018) Brexit a 'self-harming act' and suggests the UK could STAY in the EU.
15. Laurence F (2017) Brexit could destroy the UK's food and farming industry or be the making of it.
16. Mason R (2018) Brexit would damage UK growth, says leaked cabinet report.
17. Haverty M (2016) EU's top negotiator reminds Theresa May clock is ticking day before her crucial Brexit speech.
18. Ahmed K (2018) Fears grow across the Atlantic over Brexit fallout.
19. Lang T, Erik Millstone, Terry Marsden (2017) A Food Brexit: time to get real/A Brexit Briefing.
20. Levell P, O'Connell M, Smith K (2017) How Might Brexit Affect Food Prices.
21. Chu, B (2016) Brexit: True cost of UK leaving EU without trade deal revealed.
22. Rayner J (2017) Brexit and the coming food crisis: 'If you can't feed a country, you haven't got a country.
23. FSA (2017) Food Standards Agency News.
24. HSE (2017) Health and safety statistics.
25. FSA (2015) Annual Report for Incidents 2015.
26. Bennis W (2009) On Becoming a Leader (ISBN-13: 978-0465014088 ed.). Basic Books Publishers.
27. Hsieh T (2010) Delivering happiness: A path to profits, passion and purpose. Grand Central Publishing, New York, 152.
28. Cruickshank A, Collins D (2012) Cultural Change in elite sports performance teams. Examining and advancing effectiveness in the new era. Journal ofApplied of Applied Sport Psychology. 24: 338-355.
29. Warrick DD (2015) Understanding, building, and changing organization cultures. In D. D. Warrick & J. Mueller (Eds.) Lessons in changing cultures: Learning from real world cases. Oxford, UK: Rossi Smith Academic Publishing. 1-16.
30. Schein H (1999) Empowerment, coercive persuasion and organizational learning: do they connect? The Learning Organization. 6: 163-172.
31. Nyarugwe SP (2016) Determinants for conducting food safety culture research. Trends in Food Science & Technology. 56: 77-87.
32. Wiegmann D, Zhamng HV, Sharma G, Mitchell A (2002) Safety Culture: A review. Technical Report (ARL-02-3/FAA-02-2). Federal Aviation Administration. Aviation Research Lab Institute of Aviation: Savoy, IL.
33. Deal T, Kennedy A (1982) Corporate cultures: The rites and rituals of organizational life. Reading MA: Addison Wesley.
34. Macheka L, Manditsera F, Ngadze R, Mubaiwa J, Nyanga L (2013) Barriers, benefits and motivation factors for the implementation of food safety management system in the food sector in Haeare Province Zimbabwe. Food control. 34: 126-131.
35. Denison D (1990) Corporate culture and organizational effectiveness. New York: Wiley.
36. Saunders M, Lewis P, Thornhill A (2012) Research Methods for Business Students. (5th Edition ed.). Prentice Hall.
37. Glaser B, Strauss A (1967) The Discovery of Grounded Theory: Strategies for Qualitative Research (Aldine Publishing Co ed.). Chicago IL.
38. De Boeck E, Mortier A, Jacxsens L, Dequit L, Vlerick P (2017). Towards anextended food safety culture model: Studying the moderating role of burnout and job stress, the mediating role of food safety knowledge and motivation in the relation between food safety climate and food safety behavior. Trends in Food Science & Technology. 62: 202-214.
39. Griffith C (2014) Developing and Maintaining a Positive Food Safety Culture (1st Edition ed.). Publisher: Highfield. co. uk Limited.
40. Nychas G, Panagou E, Mohareb F (2016) Novel Approaches for food safety management and communications. Journal of Current Opinions in Food Science. 12: 13-20.
41. Jespersen L, Griffiths M, Wallace C (2017) Comparative analysis of existing food safety culture evaluation systems. Food Control. 79: 371-379.
42. Greig J, Todd E, Bartleson C, Michaels B (2007) Outbreaks where food

workers have been implicated in the spread of foodborne disease. Part 1. Description of the problem, methods, and agents involved. Journal of Food Protection. 70: 1752-1761.

43. De Boeck E, Jacxsens L, Bollaerts M, Vlerick P (2015) Food safety climate in food processing organizations: Development and validation of a self-assessment tool. Trends in Food Science & Technology. 46: 242-251.

44. Lee T (1996) Perceptions, attitudes, and behavior: the vital elements of a safety culture. Health and Safety. 1-15.

45. Jespersen L, Griffiths M, Maclaurin T, Chapman B, Wallace CA (2016) Measurement of food safety culture using survey and maturity profiling tools. Food Control. 66: 174-182.

46. Jesus AS, AMD J, H L, Marianon N (2018) Safety Management System in TQM environments. Safety Science. 101: 135-143.

47. Powell DA, Jacob CJ, Chapman BJ (2011) Enhancing food safety culture to reduce rates of foodborne illness. Food Control. 22: 817-822.

48. Dierendonck D (2011) Servant Leadership: a review and synthesis. Jounral of Management. 37: 1228-1261.

49. Harvey J, Erdos G, Bolam H, Cox MAA, Kennedy JNP, Gregory DT (2002) An analysis of safety culture attitudes in a highly regulated environment. Work & Stress. 16: 18-36.

50. Dasgupta M, Gupta R (2009) Innovation in organizations: a review of the role of organizational learning and knowledge management. Global Business Review. 10: 203-224.

51. Singer SJ, Gaba DM, Geppert JJ, Sinaiko AD, Howard SK, *et al*. (2003) The culture of safety: results of an organization-wide survey in 15 California hospitals. Quality and Safety of Health Care. 12: 112-8.

52. Thill J, Courtland L (2008) Excellence in Business Communication (8th ed.). Upper Saddle River, NJ: Pearson Education.

53. Yiannas F (2009) Food Safety Culture: Creating a Behavior Based Food Safety Management System. New York, NY: Springer.

54. Bstieler L, Hemmert M, Barczak G (2017) The changing bases of mutual trust formation in inter-organizational relationships: A dyadic study of university-industry research collaborations. Journal of Business research. 74: 47-54.

55. Balvociute R, Bakanauskiene I (2011) Research on Work Incentives and Motivating Factors in Manufacturing and Service Sector Companies of Siauliai City. Social Research Journal. 4: 56-62.

56. Lugosi P, Janta H, Wilczek B (2016) Work(ing) dynamics of migrant networking among Poles employed in hospitality and food production. Journal of the Sociological Review. 64: 894-911.

57. Lane K, Esser J, Holte B, Anne M (2010) A study of nurse faculty job satisfaction in community colleges in Florida. Teaching and Learning in Nursing. 5: 16-26.

58. Watson D, Hall L, Tazzyman S (2016) Trick or Treat: Academic Buy-in to Third Stream Activities. Journal of Industry and Higher Education. 30: 155-167.

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