

**Analysing Crisis Management and Leadership within the Supply Chain Industry-
leading up-to Brexit**

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Abstract

Crisis for any organisation is their greatest threat; without crisis management, businesses face catastrophic consequences to the longevity of their sheer existence. This research examines leadership and crisis management in supply chain leaders leading up to Brexit. Brexit itself was a process of many years, years of uncertainty with no transparent outcome in sight for much of its build-up. Businesses across Ireland and the United Kingdom had to plan for Brexit relatively blind. Simultaneously with a global pandemic, a dual event of its magnitude we will likely not see again. Companies had the choice to make provisions or sit back and wait until it all unfolded. Leaders up and down the country had the role of stabilising their operations whilst also planning what seemed the impossible mission of preparing their business for the mystery surrounding the conclusive Brexit deal. Was there adequate time to prepare, enough guidance and where the authorities prepared themselves. Businesses had the arduous task of making vital decisions, employment layoffs, complete shut down or partial closure. Brexit seemed like a million years away from their thoughts yet, its damaging effect so apparent and its arrival approaching fast. Act on the facts on hand or wait until the Brexit outcome is clear, these decisions were critical, Irish and UK supply chain leaders had their toughest test yet.

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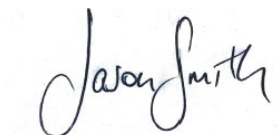
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List of Abbreviations

EORI	Economic Operators Registration and Identification
UK	United Kingdom
EU	European Union
NCI	National College of Ireland
TAME	Technical Assistance for Micro Exporters
NI	Northern Ireland

1.0. Introduction

The topic of this dissertation focuses on crisis management and leadership. With a focus on pre-crisis management in the lead up to Brexit and the impact, Covid-19 had on preparations.

1.1. Brexit Background and context

“On 23 June 2016, the UK public voted in favour of leaving the EU in a national referendum” (Sampson, 2017).” As per BBC News (2016), they had voted to leave the EU by 52% to 48%. From the beginning, the decisions that lead up to the vote had been plagued by a complete lack of planning and great leadership. Former UK Prime Minister David Cameron, who agreed to appease his anti-EU friends, had no faith in its success. Cameron even instructed the Foreign Office not to establish a contingency plan if the country chose to leave the EU (Carlin 2019). Carlin (2019) also highlighted that Britain’s logistics of disconnecting from Europe during the campaign received surprisingly little attention. When the citizens of the United Kingdom chose to leave the European Union, they sent a shockwave through Ireland, the country's closest neighbour (Connelly, 2018). “Due to the locality of Ireland to Britain, research has shown that Ireland will experience the largest proportional losses from Brexit, alongside the Netherlands and Belgium” (Dhingra et al., 2016). Whilst the UK government overlooked the complexity of exiting the EU, negligence persisted well in 2020, with the transitional period troubled with high levels of economic uncertainty and political turmoil.

1.2. Identified problem

In the globalised world, businesses have become highly reliant on international companies to export and import goods. For example, the United Kingdom (UK) has multinational organisations which rely on European Union (EU) for products’ importation. The EU used to contribute towards 54% import of goods to the UK (Figure 1) (Gysegom et al., 2019).

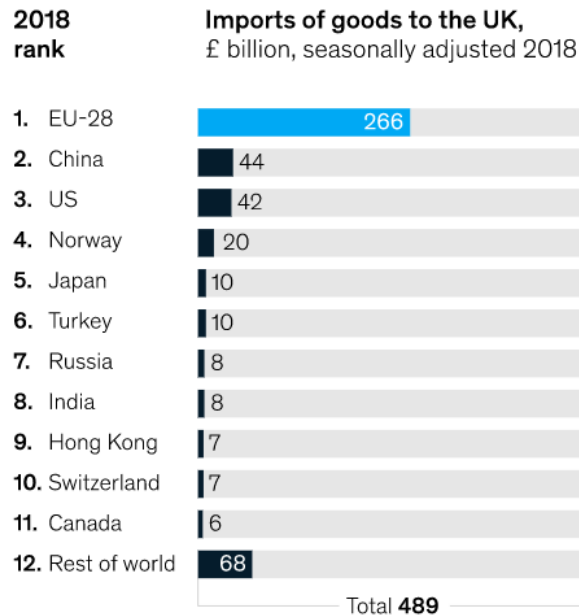


Figure 1: Goods' Import to the UK (Gysegom et al., 2019).

However, the problem was raised due to Brexit, which led to generating uncertainty within the supply chain activities between the UK and EU, leading the businesses to suffer up to a great extent. For example, UK-based companies like McKinsey suffered approximately seven million pounds within a year for managing increased processes of new customs oriented to supply-chain post Brexit (Gysegom et al., 2019). It is also seen that some campaigns like the Irish government advertising campaigns on social media were established by spending over €149,974 for targeting and aiming businesses towards recovering losses for reviving the economic conditions (The Journal. i.e., 2020). However, the problem has remained the concern of worry; for example, delays of Brexit resulted in leaving shelves of Marks & Spencer empty without the availability of fresh food within Ireland (Halpin, 2021). On the distinct side, it is seen that Sainsbury, a UK-based retailer, started sourcing goods from Spar wholesalers to fulfil the gaps within the supply chain of Northern Ireland that were generated by the red tape of Brexit (Leader, 2021). However, supermarkets have been facing huge issues because of the disruption of loads or mixed pallets that used to be sent out to Northern Ireland from Great Britain because of burden, administrative pressure and delays caused by Brexit (McHugh, 2021). Now, it seems imperative and rational to investigate how crisis management and leadership have been obtained to overcome the supply chain problems amid the Brexit event.

1.3. Proposed research

This study will aim to understand the factors that influenced both good and bad strategic decision-making in the lead up to Brexit. Brexit posed a considerable risk to businesses in the UK and Ireland; this research will look at the factors that stood in the way of companies making critical choices and also the elements that influenced them. This research outlines the importance of good crisis management within a business. According to Harvard Business (2004), crisis management should begin in a calm and objective setting before the issue starts. Brexit did not allow this, and the uncertainty only caused businesses to delay planning, and for many, by the time they constructed a plan, it was too late. Through scenario planning and worst-case provisions, the researcher has identified examples of good strategic planning that resulted in businesses being well prepared even in times of doubt. The decisions by others to adopt a wait-and-see approach and its consequences demonstrate the fundamental importance of crisis management regardless of the level of risk to that business. Crisis management calls for crisis leadership, and according to Koehn (2020), Leaders are forged in a crisis; this research will look at the decisions of some of Ireland supply chain leaders and the influence it had on their firm's position pre- and post-Brexit. The impact of pre-Brexit planning itself may not be apparent due to the global pandemic, nor will the effects of Brexit itself from its beginning in 2021 onwards until Covid-19 has well and indeed passed.

2.0 Literature Review

2.1. Introduction

This section discusses crisis management and leadership, the two key areas of literature that will help examine the preparedness of some of Ireland and the UK supply chain leaders leading up to the UK leaving the EU.

2.2. Initial Reaction and Response

The economic impact of the Covid-19 outbreak and its related trade restrictions in the United Kingdom and the European Union likely outweighed the immediate preparation of Brexit (Scott, 2021). Following the impact of Covid-19, Masons (2020) stated that several manufacturers were still working to re-establish their supply networks. They then had to assess how they would adapt and change to reflect the new EU-UK business relationship. There were many winners and losers when the UK and EU announced their trade agreement on Dec. 24, 2020. Still, one thing was sure: the agreement was reached a week barely before it went into effect, giving businesses little time to react. Customs declarations, Duties, Vat on the importation, Health Certificates, are just some of the new customs formalities for firms to grasp, not to mention the long delays that come hand in hand. According to SP Global (2021), Brexit has disrupted supply-chain operations between the EU and the UK. For example, the supply chain system has been significantly affected due to the new rule of goods' trading, uncertainties, customer formalities, and disputes (SP Global, 2021).

Brexit has been a geopolitical event that has disrupted supply chains locally, nationally, and even globally. Did Ireland's supply chain Leaders foresee the impact of Brexit, were there adequate preparations for this sort of crisis, did they learn from past situations or were they too engulfed in a crisis collision of both Covid and Brexit. Yes, the unusual shock and unknown factors were difficult for businesses to quantify (Bloom, 2019). Neglect may have been due to the sheer investment in getting their business ready when much of the lockdowns had most companies on their knees.

Perhaps since there was no deadline insight at the time backed up with uncertainty. As Urban (2013) indicates, there is no panic monster with no deadline; we had a nation of procrastinators procrastinating! Backed up from 2019 to 2020, Irish Revenue introduced the Trader Engagement Programme working with businesses to identify and understand the potential customs consequences of Brexit and how to handle the issues (DFA, 2019). Yet, in November 2020, many businesses in the high-risk sectors of construction, agriculture, forestry, and fishing still had not registered for an EORI number (Revenue, 2020).

Perhaps companies had held on for another extension, believing that Covid-19 December reopening and with the clock forever ticking for a trade deal to be reached. Conceivably they were led to consider these issues should have paved the way for some more time to prepare, hardly for Boris, who disagreed on a transition extension.

The pandemic left companies believing that Brexit was unnecessary, with an outlook that now is not the time when acting quickly was for sure the same move they needed. The UK authorities decided to push back implement a gradual imposition of customs checks to July 2021 but then again delayed to January 2022, further clarifying UK businesses' lack of readiness. Partridge (2021) Believes the postponement of some formalities will allow more time to equip the infrastructure and UK businesses as they continue to grasp the new rules. Perhaps Ireland too should have allowed some time to make up for the insufficient preparedness by Irish companies. There was some evidence of this in the article by RTE News (2021) that Irish Revenue had eased interim restrictions on the filing of safety and security declarations. This allowed businesses to meet their customs responsibilities and move their goods between Ireland and the United Kingdom. Carswell (2021) reported the IT issues in the early stages due to a significant increase in customs entries, a 12-fold increase in declarations from 1.7 million to 20 million. Brennan (2020) mentions how the pandemic affected Revenues Brexit planning, which should have dominated its workload but instead, it had complex support schemes to manage due to Covid-19. More evidence to support the realities that it was not only supply chain leaders who were not prepared, but the governing authorities that were there to guide businesses were also ill-prepared for Brexit.

2.3. Consequences and The Decision to Act.

Natural disasters, financial disasters, businesses are not immune to a crisis, and nowadays, companies need to reassess their supply chain strategies to make them more resilient to disruption (Alicke, Strigel, 2020). Vuela (2019) reports that Brexit has been more disruptive to the supply chain than natural disasters and cyber-attacks combined for UK businesses. According to Vuela (2019), 57 percent of enterprises say political or market uncertainty prevented them from growing into new countries, with 50 percent of UK businesses stating Brexit uncertainty had harmed their supply chains in the years leading to the exit.

Supply chain crisis management is back. In 2019, global losses due to earthquakes, floods, fires and the like reached \$150 billion; in 2017, nearly \$350 billion in losses were recorded due to Hurricanes Irma in the continental US and Maria in Puerto Rico (Alicke, Strigel, 2020). The UK's decision to leave the EU found that UK services exports from 2016 to 2019 were £113 billion lower than they would have been having the UK not voted to leave (Noonan et al. 2021). These high costs and losses, combined with extended recovery times, have prompted many businesses to rethink their supply-chain strategies and footprints to make them more resilient to disruption.

Both the Irish and the UK governments had implemented strategies to support businesses. Still, they too hung on the balance of uncertainty and had a small window to act before a whirlwind of complexity hit firms on both sides on January 1st 2021. Companies within Ireland had different levels of risk when it came to trading with the UK. Aliche, Strigel (2020) would categorise them as predictability and impact of risk (high exposure to risk and low exposure to risk). We shall see in this research the types of risk exposure to our participants, the strategies they used and their leadership styles and innovative decisions that impacted their behaviours once the crisis hit. Those who opted for the more reactive approach may not have needed such a significant response and may address ad hoc. Some leaders may have chosen to stay curious longer, refraining from jumping to a solution right away, which can cause them to overthink things and make things worse when they do not have all the facts. A more proactive company will establish a systematic supply-chain risk-management approach.

2.4. Crisis Management

Crisis management “is an ongoing process to prevent or reduce negative consequences involving activities before, during and after a crisis” (Hede, 2018). Nonetheless, Sickler (2021) deems the ideal way to deal with a crisis is to prevent it altogether. For many businesses in Ireland and the UK, future events were overshadowed by present matters; strategies and innovation overshadowed by recovery. For some supply chain leaders, there was no time or the resources to call for, and they were just not aware of the damages Brexit would bring, substantial and lasting change as referred to by (Horgan-Jones et al. 2020). A proactive, worst-case scenario planning was paramount for some businesses, stirred with innovative crisis management and key strategies.

Clegg (2009) simply said innovation could mean the difference between survival and disaster. Clegg (2009) also states that if you can make your company innovative, you'll have the best opportunity to overcome business challenges, develop fantastic new products and services. As per Sahin et al. (2015), innovative crisis management is when businesses deal with the crisis using competitive strategies, internal level savings, advertisements, logical investments, trading activities and defensive strategy (Sahin et al. 2015). According to The Journal.ie (2020), the Irish government utilised innovative digital campaigns for triggering businesses to improve activities for economic recovery amid Brexit (The Journal.ie, 2020). Further, as per BBC News (2020), negotiation-based leadership has been seen as essential for overcoming Brexit oriented issues faced by suppliers (BBC News, 2020). In this way, supply chain activities were decided to be improvised while Brexit was taking place.

In 2007 not only did Adobe have new platforms and software to compete with, but they were also in the midst of a financial crisis (Anthony, 2020). Adobe's solution was to adopt a transformational strategy, entering new digitised markets. Supply chain firms could have adopted a similar approach by entering new markets and exploring new technologies; to better cope with Brexit's changes.

Businesses like Blockbuster, Blackberry and Kodak failed to implement innovative solutions when they were in crisis, did not adapt, and their closest competitor capitalised (Pugh, 2018). So, it was important that businesses were prepared for potential new markets and even a revamp of their business model.

2.5. Strategies and Frameworks

The high-uncertainty environment that existed in the years before the UK departed the EU led Gysegom et al. (2019) to believe that they should have been used by UK businesses to rethink their supply chain strategy and make them more resilient. With the EU, the UK's largest market for exports, Gysegom et al. (2019) and the UK, Ireland biggest import market Trading Economy (2020) undoubtedly highlighted the need for businesses on both sides to analyse their supply chain strategies in the high-uncertainty environment immediately. The message was clear Allas et al. (2019) state there was no time to stop and wait for Brexit to disperse; whatever the verdict, global megatrends were at work and required immediate attention.

Regardless of the outcome, some might have anticipated. Revenue and the Irish governments funded training providers had reached out well before the transition ended with constant reminders that there would be a need to prepare for customs and administrative requirements regardless of a deal. The Brexit transition was like a "brewing storm", which was anticipated and had plans to have a high impact once it materialised. Alicke and Strigel (2020) believe that the classification of this risk best enables a response strategy. Due to Brexit, companies have been forced to restructure their supply chains to establish the resilience needed to deal with material and resource availability, access suppliers, and continue supplying customers. While some businesses moved quickly to take preventative measures, others struggled to know where to begin.

In 2000 lightning damaged millions of microchips owned by Nokia in New Mexico. Their quick response was drastically aided by their multi-supplier strategy, resulting in little suffering during the crisis (Chopra et al., 2004). In the same building, another firm Ericsson with a single-sourcing policy lost four hundred million in sales due to its lack of a multi-supplier strategy; this resulted in disruption to production for months (Chopra et al., 2004). These two significantly different results from the same event demonstrate the necessity of proactively managing supply-chain risk. Diversification of operations and the implementation of a multi-sourcing strategy was the logical approach, according to Alicke and Strigel (2020); however, too many businesses ignored this approach. Businesses that deemed Brexit a threat could have sourced other suppliers within the EU. For those who do not fall under third-country customs rules, evident today, many companies opted to ignore the opportunities. Businesses who solely trade with the UK were left with a bundle of rules and regulations and increased costs. Too many businesses underestimated the threat of disruption and overestimated the difficulty of a successful response.

Deloitte (2019) outlines a four-part strategy to assess and respond to the impact of Brexit on a business's supply chain. These are understanding the current state, prioritising risks and opportunities, mitigation planning, defining trade compliance and customs duty mitigation strategies, identifying alternative suppliers, designing a cohesive third-party risk management framework to reduce the likelihood of supply disruption, Alternative network routes, customs training and Implementing solutions.

Brexit affected firms who had felt the pressure of the current outcome; if looking back now, Gysegom et al. (2019) believed they should have redefined their sourcing strategy, reviewed inventory build-ups and prepared for changes in the demand. Those who failed ran the risk of longer lead times due to border delays, additional administrative burden, and the multiplication of inventory build-ups which will pass unwanted stock-holding costs to frustrated and disheartened customers (Alicke, Strigel, 2020).

These proactive approaches, coupled with a risk-management culture, could have made their way into many Irish and UK businesses as they sat out employing a "wait and see" strategy for the fast-changing external environment when the UK left the EU. Roscoe et al. (2020) investigate how organisations develop and implement plans to effectively handle supply chain disruption caused by geopolitical events and how the company's size influences strategic decision-making. Roscoe et al. (2020) out-lines four Supply chain risk strategies: passive strategy, reactive strategy, proactive, and wait-and-see. The research concludes that no one approach was predominant, but instead, they used multiple techniques concurrently whilst moving fluidly between them. A worst-case scenario contingency plan was also found to provide a framework to plan on and reduce the sense of supply chain risk.

Whatever the outcome of Brexit, businesses could and should have used their current state of high uncertainty to rethink their supply chains and make them more resilient. Many companies needed to update their supply-chain strategies, increase operational flexibility and create new structural agility in their organisations (Gysegom et al. 2019).

2.6. Worst-case Scenario

Whether it was a deal or no deal, The EU and UK governments may not have had a master plan to steer the supply chain industry out of uncertainty, but that did not mean organisations did not need one. Laker and Roulet (2019) believed that businesses that survive and ultimately stand out are those that create certainty for themselves. Long and unpredictable processes had led to many businesses being either well prepared or adopting a wait-and-see approach. That was not the same for a large organisation like Land Rover who expected significant disruptions to its value chain as a result of Brexit; the company had simply opted to evaluate the worst-case scenario and close its four UK operations to cope with the drop in demand and impending fears about the potentials of a no-deal Brexit (Laker et al., 2019).

Dyson took a more rebalancing strategy, according to Laker et al. (2019) and moved its headquarters to Singapore, hoping it could capitalise on the growth of that region. Carson (2017) believes that preparation for a worst-case scenario is not about being negative; it is about future-proofing. “If you prepare for a worst-case scenario, you do so not to be pessimistic; prepare for the worst, and if a better outcome emerges, you’ll be well-placed to make the most of it” (Carson, 2017). Worst-case scenario planning is not a new concept; Shell pioneered scenario planning in the early 1970s (Erdmann et al., 2015). Erdmann et al. (2015) say that companies lack the organisational muscle memory to do it right. By listening to planners' analyses of the global economic environment, Shell created a technique known as "scenario planning." This strategic decision prepared them well for the eventuality—if not the timing—of the 1973 oil crisis (Wack, 1985). Through scenario exploration, development and implementation, Chermack (2011) believed that the general goal is to elicit strategic insights, broaden decision-makers assumptions, and develop the ability to detect significant discontinuities before it's too late.

The UK government’s reasonable worst-case scenario set out to describe the impact of Brexit, released at the later stages of 2020, outlining a no-deal Brexit and laying out a set of assumptions on chaotic border disruption (Peston, 2020). The fear of long queues and disrupted freight flow at both UK and EU ports required both the UK And Ireland's governments to ask traders to prepare for the worst-case scenario to avoid long delays due to insufficient paperwork readiness (Irish Times, 2020). Given that the UK and the EU were amidst in vital Brexit discussions, it was critical for the supply chain industry to fully appreciate the repercussions of various post-Brexit scenarios (Mahfouz et al., 2018).

There was no industry at risk like the agriculture industry, focusing on the Irish Cheese exports. Mahfouz et al. (2020) studied this through a simulation model that was developed to investigate three Brexit worst-case scenarios: 1) applying non-tariff barriers at ports, 2) replacing the UK landbridge with direct routes to continental Europe, and 3) lack of checking infrastructure at the UK ports. The findings for the non-tariff barriers at ports was for businesses to avoid the barriers and the significant bottlenecks that would undoubtedly reduce the shelf life of the cheeses. Documentary and SPS checks would significantly delay the goods, and planning for direct shipping would be a long-term solution. Direct maritime routes showed a regular and reasonable transportation duration, as well as acceptable shelf life (Mahfouz et al., 2020). In this Mahfouz et al. (2020) study, the third scenario further exemplifies the lack of readiness of UK western ports for large amounts of border checks. Joanna Partridge (2021) can further support this; her report that even in March 2021, some UK ports were not ready to introduce border check posts. Evidence that the UK itself had not planned for a worst-case scenario, even when regardless of a deal or no deal, tariffs or no tariffs, customs formalities encompass a whole load of document checks and physical checks.

Businesses and governments struggled with worse-case planning because a considerable investment was certainly needed but out of reach due to UK-EU negotiations and Covid spending. Large companies would have a crisis prevention and control team to handle different types and levels of crises throughout the year. They would plan for worst-case scenarios, as was the case for Land Rover, since the consequences would be substantial. However, for lots of supply chain leaders, preparing for the unknown was put to one side. They had opted for a wait and see strategy, which was too late for measures to be put in place.

2.7. Wait and See Approach

According to Griffin (2018), taking a wait-and-see approach isn't the same as ignoring the situation. It indicates that not every situation necessitates the use of every crisis-response technique right away. Or at least some analysis is required before responding to the crisis; pulse Integration (2020) argues that in an economic crisis, inaction has proven to be one of the riskiest responses. Due to Brexit's uncertainty, businesses deferred decisions and delayed investments, according to Intertrader Ireland (2019). With low levels of investment in innovation, with just 6 percent of firms planning to spend on research and development over the next 12 months (Intertrader Ireland, 2019).

Businesses may have opted for a “wait and see” strategy due to the different levels of risk perceived by the firm (Clarke et al., 2017). Despite this, only one out of every nine businesses questioned in November 2020 had a strong knowledge of the dangers of being unprepared for Brexit and the mitigations in place (EY, 2020). Many leading analysts maintain that companies could not afford to wait for an agreement to be finalised. The worst moment to begin crisis preparation is after the event has already occurred (Beyondaum, 2021). As a result, many businesses in the UK and Ireland planned to take this route ahead of time, leaving them little control over the risks and uncertainties involved. ‘Wait and see’ was no longer a viable approach for businesses that wanted to optimise their supply chain in a post-Brexit environment (Deloitte, 2019).

2.8. Leadership in a Crisis.

Koehn (2020) believes that real leaders are not born; instead, they are made and forged in crisis. The dual events of Covid-19 and Brexit had focused on supply chain leaders, who are now more than ever under the microscope during both crises (Russell, 2020). In the lead up to Brexit, businesses witnessed a once-in-a-lifetime convergence of complexity and diversity, one that called into question all leadership assumptions (Rhinesmith, Dotlich, 2009). Brexit has brought many challenges and uncertainties, “uncertainty is the scarcity of definitive answers” (Rhinesmith, Dotlich 2009).

It seemed impossible to predict if any plan would work in the future, even if it had worked in the past, according to Silicon Republic (2017). The uncertainty surrounding Brexit provided an opportunity to rethink a company's structure.

Without a doubt, Brexit has altered the criteria of success for supply chain leaders, prompting many to rethink their business strategy, organisational structure, and business models. Companies must have enough flexibility to respond quickly to changes in their external environment. Companies must learn how to successfully grow, lead, and leverage their human resources to achieve this. Effective leadership can make situations manageable rather than daunting (Hernandez, 2020). Leaders today need to have a vision that inspires and moves people. Petriglieri (2020) believes they need to be more agile and be ready for multiple challenges should they arise.

We must look at the different leadership types in a crisis; the incorrect leader who cannot perform their best will do little to inspire their subordinates. Even the strongest leaders can change when the context changes. The leader responsible for the pre-crisis or crisis must handle highly dynamic and unpredictable environments (Brandebom, 2019). Their decisions will impact the companies' performance and staff position at the firm. A destructive leader in the supply chain will continue without regard to the future events of Brexit. If they are passive leaders, they will pass the responsibilities to others and become stressed and unable to control the preparation. This Laissez-faire leadership style might not be well suited for practices of a future crisis within the crisis; businesses in crisis need leaders. Brexit was a disruptive change, and many supply chain leaders overestimated the difficulty of a successful reaction and underestimated the threat of disruption (Anthony, 2020). It seems that in uncertain times influential leaders become passive leaders, with a lack of decisiveness whilst avoiding responsibility.

When dealing with ambiguity, especially when it comes to risk, leaders must utilise their heads. Whole leaders are well-versed in the dangers they face, and if their course of action proves to be too dangerous, they are aware of this and adjust their strategy to lessen their company's vulnerability (Rhinesmith, Dotlich 2009). Because crisis leadership is such a broad topic, it's tempting to focus solely on what crisis leaders must do once the crisis has begun. According to Johnson (2017), ignoring the moment before a crisis occurs would deprive leaders of the depth of duties expected of them before they are aware of the greatest test of their careers. This research will analyse the participant's crisis preparation before Brexit occurred. The leadership behaviours were perhaps lacking with the absence of clarity and ambiguous information about Brexit.

2.9. Conclusion

Some companies may have taken on a strategy that did not fit the given risk, had they alternative suppliers, but why did many do so little when the consequences were pretty damaging. Perhaps the UK market was simply too small for many businesses to justify devoting considerable resources to Brexit preparations (Alicke, Strigel 2020). It may not be as damaging, but one thing was sure for the supply chain industry: businesses were either well-prepared or had consciously decided to take a wait-and-see approach.

Business sectors like Pharma companies and fast-moving consumer goods are just some that had no choice but to plan for the worst-case scenario; the greater the risk, the greater the preparation. For others, most companies were still at the analysis phase, waiting for more clarity before making any significant investment decisions. In our findings, we will see supply chain leaders who chose to plan for the worst-case scenario and those who opted for a wait and see approach, leading to a lack of or evidence of crisis management and an absence of or strong affluence leadership. This will give us an indication of leadership styles our supply chain leaders possessed.

Through selected methodology and case studies, the research shows real-life examples of how supply chain leaders were prepared for Brexit and how the leadership style guided them through Brexit's uncertainties to their industry.

3.0. Research Question

3.1. Research question

To what extent have leadership and crisis management been observed as efficient within the supply-chain industry, specifically regarding Brexit?

3.2. Aim

To assess the scenario of crisis management and leadership within the industry of supply chain amid Brexit.

3.3. Research objectives:

The research objectives are

- To critically examine the crisis management and leadership scenario observed in the supply chain industry leading up to Brexit.
- To analyse the issues-oriented to supply chain operations between EU and UK based businesses due to the decision of Brexit.
- To analyse the impact of the Covid-19 on Brexit planning.

3.4. Conclusion

The research question to be answered and particular study objectives are explained in this chapter. The next chapter discusses the research methodology determined to be the most effective in achieving the objectives and answering the research question.

4.0. Methodology

4.1. Introduction

The purpose of this chapter is to outline the researcher's approach and provide a rationale validation of the choices that were made. Through selected methodology and case studies, the research shows real-life examples of how supply chain leaders were prepared for Brexit and how the leadership style guided them through Brexit's uncertainties to their industry. The chosen approach will be explained, describing the methodology's advantages over the other approaches studied. The types of data obtained and the methods used to analyse the data will be discussed. The chosen methodology's shortcomings will also be explored. The sampling, data gathering, and analysis methodologies will be described. Ethical considerations and the research's validity will also be evaluated. To assure validity and credibility at each level of the research technique, this study uses the research onion model (Saunders et al., 2009). According to Crossley and Jansen (2021), this technique helps realise what research design needs to make.

4.2. Research Philosophy

According to Chetty (2016), the expression philosophy in research refers to the development of knowledge and the nature of that knowledge. Research philosophy is beliefs about how evidence on a topic should be collected, analysed, and applied. By constructing contextual knowledge, research philosophy establishes the research foundations for understanding the nature of the research problem. There are two main research assumptions: ontology and epistemology (Saunders et al., 2016).

Burrell and Morgan (1979) believe epistemology is concerned with what constitutes acceptable, genuine, and legitimate knowledge, as well as how we might transmit knowledge to others. On the other hand, Ontology, according to Moon and Blackman (2017), concerns what genuinely exists in the world and can be learned about by humans. There are five major philosophies in business and management, but three pertain to be more common: positivism, interpretivism, and pragmatism. These philosophies drive research by defining the research's premises and identifying essential ideas to comprehend the research's nature. Each philosophy is accompanied by theoretical values that help the researcher choose research instruments, strategies, and approaches (Creswell, 2013).

In this study, the researcher has considered the interpretivism philosophy over the other research philosophies. According to interpretivism, the researcher must be aware of the differences between persons as social actors. Interpretivist research aims to develop new, more nuanced understandings and interpretations of social realities and settings (Saunders et al., 2016). According to Saunders et al. (2016), interpretivism is appropriate in business and management research, particularly in organisational behaviour, because it is employed to analyse people rather than objects. Weber (2004) believes the Interpretivists use Case studies, ethnographic studies, phenomenographic studies, and ethnomethodological studies as the most common study methods.

Further support can be referenced to Dudovskiy (2021), who believes the interpretivist method relies on naturalistic data collection methods such as interviews and observations. Interpretivism philosophy also favours secondary data study. Meanings arise toward the end of the research process in this type of study (Dudovskiy, 2021). This study aimed to determine the factors that influenced Brexit preparation decisions in Ireland and the United Kingdom by some of its supply chain leaders. It was critical to understand participants' perspectives, empathise with them, and create meaning, making an interpretivist philosophy the appropriate strategy.

4.3. Research Approach (Deductive and Inductive)

The research approach is the next layer of the Research Onion (Saunders et al. 2016). It is critical to clearly define the research approach because it will influence the data gathering and analysis decisions made in a study (Crossley, Jansen 2021). The research strategy validates data sourcing, collecting, analysis, and interpretation methodologies to fulfil research objectives and questions with precise analysis. Qualitative researchers usually take an inductive approach, which means they create a theory or seek a pattern of meaning based on the data they have gathered. The second layer of the research onion includes two terms: deductive and inductive reasoning. The deductive approach develops the hypothesis based on a pre-existing theory and then formulates the research approach to test it (Silverman, 2013). Unlike the deductive technique, which requires adopting a pre-existing theory, the inductive approach allows for the construction of a theory. Gabriel (2013).

The researcher used an inductive strategy in this study, which is consistent with the interpretivism philosophy (Creswell, 2013). Hyde (2000) describes that the inductive reasoning technique, which is most typically used in qualitative studies, is an efficient way of building theory from collected facts and understanding. Inductive reasoning uses individual data to make large generalisations, concluding collected data (Bradford, 2017).

4.4. Research Strategy

This study used a combination of primary and secondary sources for its research.

4.4.1. Primary Data

According to Saunders et al. (2016), the research approach is chosen based on the study question and objectives, the extent of knowledge, the time period and accessible resources, and the researcher's philosophical substantiation. This layer of the research onion details how research can be conducted based on the study's aims (Crossley, Jansen 2021).

Depending on the research, the tactics employed can include quantitative, qualitative, or both types of data collection. Case study, ethnography, action research, grounded theory, narrative inquiry, experiment, survey, and archival research are some of the strategies Saunders et al. (2016) suggest for answering the research question. The researcher constructed a case study regarding the organisation being investigated to collect qualitative data to analyse the preparedness of various firms in Ireland and the United Kingdom.

A grounded theory strategy was also used to establish the role of leadership during the Brexit transitional period. Giving the current global pandemic face-to-face interaction with the interviewees was challenging, as was video interactions due to time constraints. Interviewees took place over the phone via open-ended questions and follow-up emails to allow flexibility, which was utilised to collect qualitative data. It also took a sensitive approach to get participants to be open, honest, and address the matter of Brexit. As many firms try to correct the detriment that Brexit and Covid-19 have brought, semi-structured interviews allowed the researcher and participant to form a social bond that overcame that barrier (Yin 2016, Saunders et al. 2016).

4.4.2. Secondary Data

The researcher determined that re-analysing secondary data would be instrumental in validating and proving the trustworthiness of data gained through qualitative approaches (Saunders et al., 2012). The researcher had access to some of Ireland's small businesses through their Local Enterprise Office. These qualitative sources contained data that measured the readiness of companies and the vision their leaders adopted to steer their business away from crisis.

4.5. Sample Selection / Research Choice

For a given study, the mono method is related to the use of only one research strategy. For this research mono method qualitative choice in a qualitative approach was used to analyse participants' views and opinions.

In this study, the advantages of a qualitative method over a quantitative approach include preventing data reduction and allowing people to participate in the discovery process. According to Denscombe (2010), The basic principle of sampling is that reliable results can be obtained without collecting data from every single member of a survey's "population."

To ensure that the findings from the research sample can be applied to the entire population, the sample should be representative of the population. Thought was considered to avoid sampling bias and the tendency to favour selecting participants with particular characteristics. The participants are business connections or associates of the researcher. The population of eight participants was carefully picked to help distinguish the findings and achieve the study's objectives. Random sampling was not used due to the chance of missing out on a particular group in the sample. According to Marshall (1996), random sampling is not the most effective method for learning complicated human behaviours. The participants involved in this research were from vast backgrounds with a selected few distributors and manufacturers with mixed complications from the UK and Ireland and an Irish transport business that serves these businesses.

This selection of eight participants allowed for purposive sampling of primary studies, which in Ames et al. (2019), opinion was a technique to achieve a tolerable amount of data that included studies representing a wide geographic spread, rich data and a focus that closely resembled the synthesis objective. The decision to use the Purposive sampling was also the determining factor in interviewee choice and the assurance they had the necessary knowledge to contribute to the research properly. Participants in table 1 met the following requirements; they worked for a company based in Ireland and the United Kingdom, they also worked for a company that employs between 1 and 250 employees. Finally, they were either owners or senior managers with responsibility for strategic decision making.

4.5.1. Primary Data

Unique ID	Job Title	Company size	Industry
Participant one	Senior Manager	20 employees	Machinery Distributor (IE)
Participant two	Senior Manager	80 employees	Insulation Solutions (IE)
Participant three	Owner	100 employees	Food Manufacturing (UK)
Participant four	Senior Manager	50 employees	Garden (IE)
Participant five	Owner	10 employees	Machinery Distributor (IE)
Participant Six	Senior Manager	150 employees	Variety Store (IE)
Participant Seven	Owner	20 employees	Manufacturer (UK)
Participant Eight	Owner	20 employees	Logistic / Transport (IE)

Table 1. Table of participants for this research.

4.5.2. Secondary Data (Case Studies)

Unique ID	Job Title	Company size	Industry
Case Study One	MD	-	Beauty Products (IE)
Case Study Two	MD	-	Chemical Solutions (IE)
Case Study Three	Owner	-	Agriculture (IE)
Case Study Four	MD	-	Health (IE)
Case Study Five	Owner	-	Seafood (IE)
Case Study Six	Owner	-	Prepared Foods (IE)

Table 2. Table of Case Studies for this research. Courtesy of: Local Enterprise

4.6. Time Horizon

There are two different points in time where data can be collected; these are cross-sectional and longitudinal time horizons. The researcher has chosen a cross-sectional study, which Saunders et al. (2009) refers to as a "snapshot" in time, an analysis of a specific phenomenon (or phenomena) at a certain period. Due to time restrictions, cross-sectional studies were conducted in a short period. Over one-week, semi-structured interviews were conducted to collect the snapshot.

4.7. Data Collection & Analysis

The researcher attempted to collect a larger sample of participants. Still, due to the current economic climate, many businesses were too busy to support as they continue to manage their businesses through difficult times. Eight participants agreed to partake in the study, which gave the researcher enough input to initiate the research process. The interviewees were briefed over the phone and then later, receiving emails that included the research topic, consent form, overview of the aims, and a request for participation in an online qualitative setting. The usage of semi-structured interviews by the researcher in Saunders et al. (2016) view aided the collection of genuine and trustworthy data relevant to the research issue. The detailed emails about the study aims, objectives and the consent form also highlighted the application of complete anonymity, gave the participant comfort and eliminated any fear they had for themselves and the businesses they spoke for. This allowed an honest and open reflection on their experiences and opinions on Brexit's firms and issues. The researcher had made it clear to the participants that they may seek any explanations they needed and that they would see the typed and completed interviews before signing off should they wish to. Each interview was transcribed at an average of twenty-five to thirty minutes.

On completion, follow up calls were made to clarify some answers and allow participants to submit further thoughts and opinions. This, in Nowell et al. (2017) view, is the approach to provide meaningful and valuable results, conducted rigorously and methodically, so it becomes more widely acknowledged and valued. The data was then sorted into pieces and analysed using thematic analysis.

The thematic analysis provides a very flexible approach that may be changed for the demands of many studies, delivering a rich and detailed yet complex description of data, thanks to its theoretical freedom (Braun, Clarke, 2006). According to Braun and Clarke (2006), theme analysis should be a primary method for qualitative analysis since it teaches core abilities that can be used for many different types of qualitative research.

Delve (2021) does, however, point out that thematic analysis has certain drawbacks, including intimidation of data interpretation and difficulty distinguishing between data that is and isn't essential to emphasise. Braun and Clarke (2006) provided a six-phase framework to establish trustworthiness during each phase of thematic analysis.

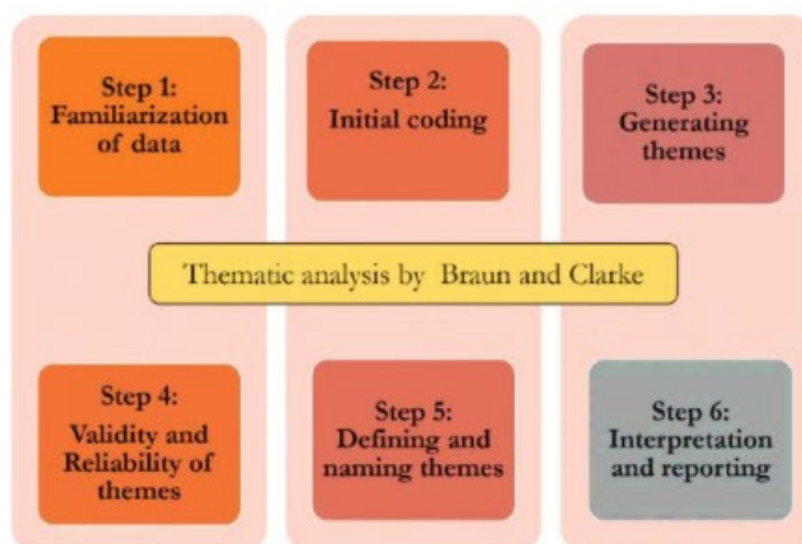


Image: (Thematic Analysis Dr Rania Albsoul)

The researcher utilised the above framework, engaged with the data on a repeated basis and reviewed the data with reasonable interpretation. Documented thoughts about potential codes/themes were duly noted, usage of the coding framework was diagrammed to make sense of theme connections. The list was re-evaluated and further specified. In the analysis and findings chapter, a confirmed list of validated themes was developed, which will be addressed in detail.

4.8. Ethical considerations

The National College of Ireland (NCI) ethics form was completed as part of the proposal in January 2021 and submitted to the NCI ethics committee to ensure authorisation to undertake this research. Participation was entirely voluntary; participants were given background information on the study's issue and complete descriptions of the study's goals and objectives. Participants were then required to complete an informed consent form—the consent form guaranteed anonymity as well as the ability to withdraw at any moment. The researcher verbally repeated the form's contents and gave a unique identification number to each participant. There will be no mention of names or organisations in the study. Primary data were captured during the research and stored on an encrypted cloud system only available to the researcher.

These files will be deleted once the grade for this research is received and the interviewee notified once this has been actioned.

4.9. Limitations of the research

The research's drawbacks are the inability to hold face-to-face meetings and alternate means such as zoom. Despite their best efforts, all participants turned down meetings in these ways in favour of the phone interview. The inability to be flexible and adaptable, analyse body language, explore responses, and investigate intentions were all drawbacks, as was the ability to clarify. This method of research also reduced the time input from the participant. Still, consideration and appreciation to the participants were critical; a once-in-a-lifetime event was a dual shock to their businesses. There was also a split of five men and three women as participants, the researcher favoured a more 50/50 split, but this was not achievable.

4.10. Conclusion

Brexit has been a tiresome ordeal for supply chain leaders across the UK & Ireland. Opinions have been quite strong, and feelings have been mixed. This chapter has provided detail on the research methodology used to ensure the research question is effectively answered. The philosophy of the researcher was outlined along with the research method, approach and chosen sample. Details on data collection and analysis were provided, along with steps taken to ensure reliability and validity. Finally, details of ethical considerations taken throughout were provided. The next chapter will present the analysis and findings from the qualitative interviews.

5.0. Analysis and Findings

5.1. Introduction

This research aims to identify crisis management decision-making and leadership elements in the Irish and UK supply chain industry. Using the thematic analysis framework produced by Braun and Clarke (2006), the researcher was able to identify nine themes from senior managers/owner perspective. Each will be analysed relating to the experience of the eight participants involved in the semi-structured interview process. Participants will be numbered by their unique identifier provided in Tables one and two.

5.2. Thematic Analysis

5.2.1. Brexit Preparedness

Each of the participants was asked how prepared they were before the UK left the European Union under the circumstances of the uncertainty of the UK-EU trade agreement. The response was mixed, some of the participants were well prepared, and some were not so. Participant five identified uncertainty making it increasingly difficult to prepare, however lucky for them, some experience helped them through.

“We had a tough time dealing with the uncertainty – and there was a lot of information being thrown around the place like... there will be freedom of movement... there won't be... etc.”

We were familiar with the “process” in our receipt of goods from outside of the EU (Bosnia / Taiwan / China), And we have also shipped items to the USA and outside of the EU. So, we were okay with the process but didn't have any real preparation on the UK side with regards to our own freight partners.” (Participant five)

We can also see from participants that it was around October / November when they started to take preparations seriously.

“I believe we were as prepared as we could be; from October we were having weekly Brexit meetings with our suppliers to discuss possible impacts and also had meetings with IT specialists to discuss the changes required to our systems and with our transport companies to discuss clearance.” (Participant Three)

“Though we were reasonably prepared. Looked at various scenarios with both a no / deal, looked and implemented options to avoid UK supply of product, had regular meetings (once a week in most cases) during October / November. Used external consultants to map scenarios and financial implications, brought in a significant amount of stock pre-December 31st in case of no-deal / delays in supply. At one stage we began to question the number of meetings we were having as there was no concrete outcome - i.e., Deal / no deal. “(Participant Four)

Lack of certainty and no concrete outcome had one participant, participant four-question the need for maintaining regular weekly meetings. Also, the lack of clarity from the UK government led participant seven to believe that little would change in light of the UK’s exit.

“We were not adequately prepared, we believed we would get a trade deal that would be similar to pre-Brexit. The requirements for an EORI number, Vat and Customs declarations have proved much more challenging than we had expected. In addition, it was difficult to access help when faced with problems.” (Participant Seven)

Participant six did not believe they were prepared at all, leaving and trusting the preparations to their head office in Copenhagen. Their HQ had employed a European leader in customs clearance and compliance; however, this third-party customs clearance agent was ill-prepared as it transpired.

“Not very prepared. Our Logistics Management operation is conducted through our head office in Copenhagen and we, as a local team, had left it to them to organise. They engaged a 3rd party customs clearance company (based in the Nordics) who may have overpromised what they could offer the company.” (Participant Six)

The researcher then looked into several secondary data case studies; case study four took a proactive rather than reactive approach. Selling health products to UK customers, Covid-19 caused a surge in demand from stay-at-home customers pre-Brexit. With uncertainty regarding tariffs, regulations, and possible trade restrictions, seventy percent of its business was exported to the UK market. They felt it was too big a share to ignore proactive preparation.

The biggest challenge is that we don’t know exactly what is coming or how expensive it will be. However, because I did the LEO Prepare Your Business for Customs programme, I know I have done all the right things, like registering for my EORI (Economic Operators Registration and

Identification) number. I know the things I need to look out for, and it gives me the tools I need to talk to a customs broker.” (Case Study Four)

For case study six, preparation was challenging, especially since no firm decisions could be made as they sat out the decision from London and Brussels. This made it extremely frustrating since they source fifty percent of its supplies from Northern Ireland.

“If you are dealt a card you’ve got to play it, but we haven’t seen the cards yet. Where Brexit leads nobody knows. We have looked at alternative suppliers for a significant amount of the produce sourced in Northern Ireland. We have that safety net, but we are not able to make any firm decisions yet because we still don’t know the final outcome of Brexit. (Case Study Six)

Case study six still prepared all they could for the worst-case, as did case study two, who felt trading in both the Irish and UK market in both directions, there was just no alternative but to be aware and prepared.

“When your business sells and manufactures products in Ireland and the UK for both markets, then it makes sense to be Brexit aware” (Case Study Two)

5.2.2. Adequate time to put a plan in place

The ability to put strategies in place and implement innovation for the participants may have heavily relied on an actual outcome, but none of this was in sight for some. For the majority of businesses, they believed there was not enough time. With doubt, how could companies come to terms with preparing for both a no-deal and a deal? Participant three felt preparation for businesses should have begun after the free trade agreement was signed.

“No, I do not believe we had enough time; the reason for this is that we were preparing for unknown outcomes and decisions such as a free trade agreement were made very late. It is my opinion that the government should have allowed us additional time to prepare after the final details were known.” (Participant Three)

Valid point, investment-wise businesses were dealing with a pandemic; a more transparent picture mid-2020 may have given companies more time to put strategy and resources in place to alleviate the impact of Brexit. Participant one mirrored the lack of time to prepare, plan, and invest for the worst-case scenario, which would eventually be wasted time and energy.

“No, there was not enough time. We did not know the sort of agreement there would be until it was done and it was almost into immediate effect. We had to base our plans off a worst-case scenario, no-deal Brexit, we had taken what were eventually extreme measures once a detail was done.”
(Participant One)

Participant two reiterated the prolongation of the emerging deal, given the start and stop nature. Participant two also believed there was not enough time; a last-minute deal coupled with a significant system upgrade by Irish revenue would put the timing of it all into perspective.

“Given the stop-start nature of the emerging deal and ultimately a final deal arriving on Christmas eve, the answer has to be no; there was not enough time. Coupled with the Revenue Commissioners introduction of the new AIS system a short time before, I think these compounded issues making January a very stressful month for all importers.” (Participant Two)

In hindsight, there was adequate time to prepare, but prepare for what exactly that is much of the thoughts of all participants, despite that participant four believed there was “plenty of time, but human nature usually results in waiting until the last minute.” - procrastination at its finest and perhaps the so-called plenty of time could have been used to fuel creativity. Participant six Covid-19 and lack of clarity and support from the Government on what a post-Brexit world would look like was more than enough to eat up that ample time to prepare.

“Yes, there was ample time to prepare. However, two key factors - businesses were in survival mode due to Covid, which was a major distraction and business threat and lack of clarity and support from the Government on what a post-Brexit world would look like.” (Participant Six)

5.2.3. Gradual Implementation of Customs Formalities

In this theme analysis, gradual implementation of customs formalities is looked upon. The literature review research demonstrates that the UK has allowed an incremental approach for 2021, much to the inadequacy of its ports infrastructure and to enable businesses to prepare. With the bit of time between a deal and full implementation, Irish companies would have welcomed another grace period to allow them the time to put strategies and measures in place. Participant one remarked that the Irish Government's hands were tied.

“I do not think the Irish Government has or had the power to apply this; it would have been an EU wide gradual implementation. I think once the Brexit deal was agreed, the actual commencement/implementation should have been pushed back to allow businesses time to understand the new requirements.” (Participant One)

Perhaps it depended on the industry as participant two informed the researcher. The impact on sectors such as food and agriculture were colossal, and a graduated approach would have solved much heartache in January.

“I think that importers in areas such as food and agriculture should have a much more graduated approach as there is a greater administrative burden on these sectors.”

(Participant Two)

Participant four, who trades in garden supplies, preferred a clearer break rather than a gradual one, which would suit the simplistic sectors.

“Better to have a clear break than gradually introducing any changes. but our industry is very simple” (Participant Four)

Participant two cited the lack of readiness for the customs agents performing the customs declarations and the Irish Revenues relevant departments that serve the checks. Customs brokers are licensed in many countries worldwide due to the many consequential decisions they make daily.

“Overall, I don't think there were properly enough trained customs clearance agents with enough experience to grasp the system properly.”

(Participants Two)

The researcher agrees with participants two that there were not correctly enough trained customs agents. A grace period or incremental implementation of formalities would have served better. Much will be disclosed when customs initiate audits. Relevant Departments were also not prepared for the level of queries that may have been eased had there been a gradual approach. Participants six & Participant seven point out this.

“Yes, I agree with this. Although the Government had continuous awareness campaigns regarding Brexit, I don't believe their relevant Departments were prepared enough themselves, and therefore a gradual approach would have benefitted both businesses and the relevant authorities themselves.”
(Participants Six)

“In January, eight out of ten phone calls that were made to Revenue; were left unanswered, the person who would pick up the phone would take your number to call you back (but never did), would give you wrong information or just tell us they didn't know the answer to the question asked. (Participant Seven)

For UK-based companies (Participant Seven), they welcome the gradual implementation, allowable of course, because the UK no longer abides by EU law, and they could implement as they wished. Beneficial, of course, for UK imports; however, UK exports, on the other hand, did not benefit from the same relaxed laws, and they had to deal with multiple headaches in EU countries.

“The UK's approach has benefited EU trade into the UK. However, the EU gave no gradual implementation that created significantly more problems for UK based companies supplying to the EU. As a UK supplier into the EU, we had bigger issues in terms of different customs and vat regimes in many countries to understand. In contrast, an EU company had to deal with just one set of rules for the UK, and even then, they had a generous timescale to adapt. The EU should have helped more especially given the covid pandemic happened at the same time.” (Participants Seven)

5.2.4. Alternative Suppliers

This theme sets out to analyse the strategic planning of multi-suppliers for the participants. One crucial factor was goods leaving the EU lost their preferential treatment when those goods entered the UK. The UK itself has been treated as a central distribution hub for Irish businesses. However, under the EU-UK Trade and Cooperation Agreement.

- A claim for preferential tariff treatment for imports into Ireland can be made only where the goods are of UK origin.

EU goods that did not substantially transform when placed in the UK and then subsequently imported into Ireland were classified as 3rd country goods under this agreement (Revenue 2021). This was not fully understood for many businesses in Ireland and the UK, still evident today. According to Participant eight, firms in the UK and Ireland believed the goods should have been duty-free since the goods were manufactured in the EU. It was not that they did not understand the customs processes of a transit movement

that allows for EU goods to travel under guarantee throughout the UK landbridge or the total avoidance of the UK landbridge via direct shipping. It was the confusion of a trade agreement between the EU and the UK and that EU goods entering Ireland would be treated the same as China goods entering. Had participant four been aware of this well before January trading, preparation for alternative suppliers would have been a lot different.

“It only became apparent as we began ordering stock early in the new year that products with an EU country of origin going into GB and subsequently being exported back into EU would have tariffs imposed even though a deal between GB and EU had been agreed. had this been made clear we would have begun to move all product sourcing away from GB. However, at this stage, a lot of these EU sourced products had already been moved into GB to supply to this market subsequently.”

(Participant Four)

Participant one was fortunate enough that many of its “UK suppliers opened up supply hubs in the EU to circumvent duties” on low margin supplies they would typically have bought directly from the UK. Participant two was not in such a lucky position that some products they purchased from the UK did not have European equivalent suppliers.

“Yes, but not for all products that we source in the UK had European equivalents, so we knew in advance that this would be a pinch point.” (Participant Two)

Since the transition ended, participant five has “stirred all UK procurement towards its EU parts suppliers, accepting smaller items are OK for UK purchase”. However, participant six states that sourcing direct from an EU supplier may not be commercially viable for them.

“No, we didn't have alternative suppliers. All our imports are shipped from our UKI warehouse based in the UK. We hadn't envisaged any issues with products that we sell, but the likes of seeds, succulents and animal-based products proved to be problematic once we commenced importing post-Brexit. We are currently investigating shipping directly from the manufacturers who are based in Europe, but that would entail receiving minimum order quantities, which for some products would be too much.” (Participant Six)

On analysis of participants' responses to alternative suppliers, they have adapted well; for Irish businesses sourcing from the mainland, the EU brings greater costs and transit times and more of a burden than the UK - EU purchase. As Irish companies buy more from EU suppliers, buyer-supplier relationships built over time will reduce cost so they can see pre-Brexit margins.

5.2.5. Opportunity to Innovate

Covid-19 may have restricted many businesses to remain in their lane; that was the case for participants one and four, who ensured the continued supply for existing products and services.

“No, the focus was on ensuring, a continuation of supply for existing products and services”

(Participant One)

No, we just tried to ensure that we had a continuity of supply, avoiding tariffs.

Where possible by changing where products were sourced from but using our current suppliers.

(Participant four)

Contractual agreements and product specifications for participants one and seven restrict the opportunity to innovate.

“No, we had contractual agreements with both customers and suppliers for many products.”

(Participant four)

“No, we did not use the opportunity to innovate because of the product we manufacture. A lot of the specifications are governed by retailers requiring data in specified formats to be able to operate on their sites.” (Participant Seven)

Participants two serves the construction industry and felt “That not many new opportunities exist that we wouldn't have already known about or been aware of” participant three is part of a large group company, as is participant six, who felt their “business model is very standardised” and that they sell the same products across all our 950 variety stores across 30 countries.

Two participants (primary data) did avail of innovative opportunities, but these were Covid-19 related buyer behaviour changes. With regards to Brexit and innovation for our primary data participants, few opportunities were availed of.

For many of the case studies, innovation was their only way to survive; high costs and red tape left them no choice to revisit their workflow improving on existing products, services or processes, for case study two, moving much of its production from the UK to its Irish base solved a problem.

“The first thing we did was make contact with the Irish factory that manufactures our products. We sat down with them and looked at the raw materials that they use currently and then looked at all the products that are currently being manufactured in the UK for us, and we were able to increase what is made here going forward. The factory in Cork will go from making two products to making 18 products for us.” (Case Study Two)

They also had a company in Belgium make a specialist product. On visiting their Belgium warehouse, they realised they manufactured high-performance products, so they moved some products to Belgium.

Case study two continued to make some of their products in the UK for the UK market. These innovative strategic decisions helped them prepare for business in a post-Brexit world.

For case study one, new EU single-use plastic laws forced them to pivot their range of beauty products. This was the beginning of Brexit preparation; support through LEO had helped them better understand the new customs rules and see new potential markets. Brexit did not mean the end-all; for some, the UK may have been their most significant concern; however, it led to opportunities elsewhere for some.

“I went to a trade show in Bologna last year with help from the TAME Grant. It was a great opportunity to look at other markets beyond the UK. I met with potential customers from Australia and New Zealand there.” (Case Study One)

Participant eight indicated that setting up a UK firm was key to its ability to remain competitive and maintain its position as Ireland (Irish owned) Leading Transport and Logistics provider.

“While many UK businesses set up EU entities, we decided to set up a UK company to handle customs declarations in the UK. We wanted to bring everything in-house; this was a strategic decision based on the fact that on January 21st 2022, the UK will lift all easements, and customs clearances will be required at all ports. Currently, the UK allows businesses to delay clearance which enables drivers to leave the port unchecked. Having an in-house team to clear in the UK and Ireland allows us to mitigate any delays or disruptions that may be caused if we outsourced all our customs declarations, in-house gives us greater overall control.” (Participant Eight)

5.2.6. Government Support

This research has established that all primary data participants did not utilise the financial support on offer; only two of the seven participants sought help through their local enterprise and attended webinars. Participant seven stated that they did not request any support before January 1st, and the implications of that decision can be seen below.

“No, we did not receive or request any support before the 1st of Jan 2021. However, when we needed some support on EORIs, imports and exports we found it very difficult to get in touch with relevant departments to help us. Many UK companies (small companies like us) were in the same position so trying to get an answer was difficult.” (Participant Seven)

The absence of support sought by five participants played its part in the lack of invaluable knowledge that may have stirred them in the right direction from the get-go, helping to avoid disruption to their supply chain, aid key strategies and alleviate any revenue losses. Participant six felt they could have done more.

“No, but in hindsight, engaging some external expertise would have been very beneficial to steer us through the Brexit process, most notably how the end-to-end system works, highlighting any issues with the importation of specific products and providing general guidance.” (Participant Six)

Our secondary sources all received support from their local enterprise, with some receiving government grants. This enabled them to be well equipped for the ending of the transition. For all of the case studies, support was sought from their local enterprise, which offered bespoke support and general customs support in the form of customs workshops. This better equipped them for all the customs related questions their clients may have thrown at them.

“Completing the workshop enabled the company to make all the preparations it required. “In the end, it wasn’t as daunting as I had feared it would be. I had been worried there would be different commodity codes in different countries, but they’re the same. If I hadn’t done the Prepare your Business for Customs workshop, it would have been a lot scarier.” (Case Study Five)

5.2.7. Brexit Strategy

Most of the participants did not adopt a Brexit team but rather a collective of senior management from all departments gathered to work through a plan via weekly meetings, which helped to understand the current state.

Prioritising risks participant one, was able to highlight a problem shipping from their supplier direct to their customer. The solution turned out to be more costly.

“Contingency plans were worked on a case-by-case basis for each UK based supplier. It quickly became apparent our existing means of supplying goods directly from UK manufacturers to Irish end-users would no longer be possible as the UK supplier invoice would need to accompany the consignment. All UK goods would need to be shipped to our premises first, creating additional costs and increasing lead-time for end-users.” (Participant One)

For businesses, their focus was only on products affected by those that fell under third country duties. Participant two concentrates reviewed each product that would be affected; they also had to look at the fact that EU regulations are different now to those of the UK, which added additional paperwork and administration.

“A team of our CEO, Financial Controller and Purchasing Manager met regularly and reviewed in detail each product that would be affected, so whilst a plan wasn't formally written down, it was worked on in detail at a weekly meeting as things evolved. An additional factor that added a complication along the way was the issue of product certification. Building products require CE certification, and others require fire certification. UK testing bodies were no longer recognised, so ensuring products were tested in European test houses became an added burden.” (Participant One)

Participant four were able to look at the initial consequences, EU alternative suppliers and also review other additional costs (paperwork) and implications with trading with the UK.

“Looked at assumptions & cost impact to the business in terms of import tariffs in remaining to source from the UK in a no-deal scenario. Reviewed options and implemented changes to where products are sourced from (away from GB to EU sourced). Reviewed and looked at the impact of other costs including extra paperwork, delays in supply, carrying more stock and impact on cash flow etc.” (Participant Four)

The below participant had left all preparation to its HQ in Denmark; however, they did work out the impact customs duties would have on their profitability.

“No, all planning was conducted by our Logistics team in the Head Office in Copenhagen. We did calculate the impact of import duties on our profitability and devised mitigation strategies to counteract the impact, e.g., price increases.” (Participant Six)

Only one of the researcher's participants has nominated a dedicated team who created a simple and effective strategy, which enabled them to work out various solutions based on decisions made. They also highlighted that NI & ROI customer were more concerned than their UK customers; this was probably the result of NI & ROI customers worried about port delays, longer transit times (participant three is a manufacturer of food)

“Yes, we did have a dedicated Brexit team; this team then completed an analysis of our current working model and then various solutions dependent on the various outcomes and decisions made. We then had weekly meetings with our suppliers to discuss possible outcomes. We received several questionnaires from our customers. We supply goods to the UK and Ireland, interestingly the Irish customers both in ROI and Northern Ireland in our experience were far more concerned with the impact of Brexit than the UK customers.” (Participant Three)

5.2.8. Could more have been done.

The consensus amongst participants was that they could have done more, but perhaps that was expected under the economic climate of 2020/2021. For participant three, who spent all of last year operating business, as usual, much of that was focused on Covid-19 issues leaving Brexit to witness another kick down the road. On the other hand, for participants, six Covid-19 lockdowns in the earlier months of 2021 allowed them time to catch up on preparations for Brexit. Both participants felt that had Covid-19 not been present, their preparations for Brexit would have taken place a lot earlier.

“Yes, I believe that we spent much of our time in 2020 focusing on covid issues, and therefore we left Brexit discussions until later than we would have done if covid had not happened. Being in the food industry we worked throughout, however without covid no doubt we would have started planning and having discussions earlier, people would have been more accessible as many people were working at home or furloughed in other industries, we found that responses were received much slower than normal.” (Participant Three)

“For sure, we could have done a lot more in preparation. In some ways, Covid did give us some time to organise ourselves as we were in no way ready on 1st January. However, the counterargument is that if Covid wasn't an issue, we might have addressed Brexit earlier and been better prepared.” (Participant Six)

Given the level of uncertainty, participant one “felt they had planned reasonably well, buffer stock allowed for time”, this was especially beneficial in January when ports were congested. Trucks were held up for days due to inadequate paperwork (Collins, 2021). A supply chain nightmare according to participant eight, who was around before Ireland and the UK entered the Union, “some customers were sending commercial docs with none of the key data, Origin of the goods, Incoterms, weights and some had no EORI numbers for both supplier and the buyer.” Looking back now, stockpiling allowed for supply chain observation, and time to understand the problems. These delays impacted participant two, ultimately the absence of UK suppliers and other supply chain members that had a knock-on effect. A shipping trailer may have forty different consignments for forty different customers. It only takes one supplier to produce the wrong paperwork, and all the shipments will be customs held as a result. That is what happened in January, and it is still happening today, according to participant eight.

“The unknown for us was the preparedness of the logistics chain overall, and whilst we might have had things lined up, others didn't, and it impacted on us. Another factor was the unpreparedness of the UK suppliers in some cases.” (Participant Two)

Deep into 2021, we are still seeing UK & ROI suppliers providing insufficient data. A customs entry has to have a large amount of data. There was and still is evidence that suppliers have ignored the much-needed information contained on a commercial invoice.

5.2.9. Was Great Leadership Evident.

The researcher chose not to directly gather information on the participant’s leadership styles but rather analyse their traits and behaviours based on their decisions leading up to Brexit.

5.3. Conclusion

The goal of this chapter was to convey the findings from the eight participants and five local business case studies as they prepared for Brexit. The researcher will discuss participants’ perspectives and case studies in connection to the literature in the next chapter.

6.0 Discussion

6.1. Introduction

The findings were based on the questions asked of the participants, and a sample of the responses was set out accordingly. This research set out to examine if businesses in the UK and Ireland were prepared for Brexit. This section aims to go through the findings from section five and connect the literature and study objectives.

6.2. How prepared were businesses, and how ready were the authorities?

It is clear from reviewing the existing academic material and interviewing participants that many supply chain leaders were unprepared for Brexit. Both the resources highlight the economic impact of the Covid-19 outbreak as a barrier to Brexit preparations. Both the supply chain leaders and the authorities spent much of 2019 worrying about what the outcome of Brexit would be whilst developing contingency plans. However, once Covid-19 took hold in 2020, the business focus was distracted, and many of those working on Brexit were reassigned to dealing with the pandemic's widespread and rapid impact (Deloitte 2020). There was little doubt that the initial economic shock from Covid-19 would be much worse than any immediate impact from Brexit, and the majority sensed that. Participants concluded had Covid-19 not taken place, their Preparations for Brexit would have been their primary concern. The predominant attention to Covid-19 can be seen even six months into Brexit; even as the restrictions are lifted, businesses have resumed their worries surrounding Brexit (Healy, 2021). The findings and the literature review can be further backed by a survey from the central statistics office in the first quarter of 2021. This highlighted that more than 60% of respondents had taken no steps in preparation for Brexit. Furthermore, 13 percent of respondents said they were looking for new suppliers, while 8% said they were ready for new customs procedures or tariffs. In all sectors, fewer than 5% of respondents thought Brexit would benefit business in 2021. Uncertainty was a central theme in the literature, and according to the CSO survey of eight thousand SME's preparing for Brexit uncertainty, 39% of responding businesses took no action (Healy 2021). Brexit uncertainty was undoubtedly the reason businesses were not well prepared; Van Stolk, Hafner (2020) agreed reducing uncertainty made sense, but the problem was there was little time to come to terms with the certainty. Many participants agreed that the commencement could have been pushed back to allow businesses time to understand the new requirements.

In the Literature review, initial reaction, and questions related to the authorities' preparedness, their findings impacted the readiness of the businesses who adhere to those rules. Many of these key stakeholders in Brexit preparations were not prepared themselves, only added to the level of uncertainty. According to Tormala and Rucker (2015), "certainty profoundly shapes our behaviour".

The more confident we are of a belief, regardless of how objectively right it is, the more persistent it will be and the more influence it will have on our actions (Tormala, Rucker 2015). Brexit vagueness did not feed belief in the leaders of Irish and English supply chain businesses. For many companies did prepare, but again they did not implement any solutions until the outcome was known. For many, this was too late, and the impact was felt early on; for others, another lockdown gave them a sigh of relief to focus more on preparation.

6.3 Was Crisis Management Evident leading up to Brexit?

Question three asked participants if a gradual implementation of customs formalities approach would have helped them handle the crisis better, in light of certainty arriving 24th December 2020. The UK were free to implement as they wished; the decision in the EU to delay such formalities, according to participant one, would have had to have been an EU wide decision. A phased approach was already available for UK importers about UK regulations. Supply chain leaders whose businesses trade in this direction availed the UK easing of measures that allowed enterprises to adjust. This would have been welcomed by companies selling in the other directions. Evidence in the literature showed Revenue themselves had to intervene and issue temporary alternative solutions for some customs formalities since the business was not adequately prepared. The investment of both time and money was significant; participant eight, a veteran Customs Broker, informed the researcher that he has been working as a broker for forty years and is still learning the craft. The complexity alone, for businesses, was too much to grasp in such a short space of time, especially when the level of knowledge required was so vast. Perhaps the phasing of regulations overall could have allowed the supply chain and the Irish revenues staff time to learn the processes promptly.

Uncertainty was without question a fundamental cause of low execution of crisis management but also the general lack of understanding of all customs formalities that seemed to drop all at once. Businesses were struggling with the basics of a commercial invoice, let alone the dilemma of understanding the rules of origin. Participant Eight adds that even in June 2021, there are long wait times for clearances, slow response time from customs and inadequate paperwork from suppliers. This was apparent in the findings early this year when wrong paperwork was the number one reason for port congestion. Crisis planning by way of alternative suppliers and business growth outside of the UK, without doubt, topped the list of strategies for most businesses amid Brexit. It was important for companies to build resilience into their supply base. McGrath (2020) feels that other product sources may be possible in some circumstances, but this is not always the case. It was apparent that an alternative supplier strategy was achievable for some, but for others, it was unfeasible.

For our participants, many had built UK supplier relationships, one particular participant was not aware of the EU-UK rules of origin agreement, and this had huge implications on their goods which are now dutiable items, another example of the intricacy and complexity of rules of origin and the claim for preferential tariff treatment. They have decided to act directly on that basis, shipping direct from the EU, but it has cost considerably since they had not done a cost analysis and their pricing was based on pre-Brexit trade. For participants, two alternative suppliers were not possible because there was no EU supplier option. This shows that some firms have had to accept the changes and make amendments to their pricing strategy. Not knowing trade between the UK and the EU would result in a deal or no deal led many businesses to engage in different strategies; it depended on the size and the level of disruption for some industries. Those Participants who sought support from their local enterprise did demonstrate strategies that would lead their business through the crisis, unlike companies that ignored the availability of support. Both the UK and Irish governments had introduced grants and training for businesses; unfortunately, for many, they simply did not have the time due or resources to avail themselves. Strategies that took centre stage were a (proactive) worst-case scenario and also a wait-and-see approach. Many businesses proved that even when certainty was not in sight, a scenario planning proactive approach led many supply chain leaders to a secured future.

Evidence of innovation can be seen by case study two, which sought professional guidance finding a long-term strategy that meant moving much of its UK production for the EU market to Ireland. Participant eight also chose to create a presence in the UK to support its customers in a door to door, one-stop-shop fashion. The focus was on continuing their current products but perhaps for some, now that Brexit is six months deep and most businesses have exited lockdown, opportunities to focus on innovation may arise. That is the case for some companies in the UK. The Festival UK*2022 is a UK wide-event championing the country's innovation and creativity in the wake of coronavirus and Brexit (gov.uk 2021). The sheer size of the company and Brexit risk, along with those who sought support, paved the way for effective strategies, scenario planning and innovative ideas. for those who chose a wait-and-see method before applying any change, carelessness prevailed when in fact, they should have used an enterprise risk assessment and acted upon the findings (Glendon 2017).

6.4 Did participants show great Leadership?

Whether they were subconsciously or consciously aware of the impending crisis of Brexit, influential supply chain leaders should have been aware of the behaviours that would help them manage the crisis. Before Covid-19, business executives' tasks and responsibilities were primarily focused on promoting innovation, driving revenue, and increasing market share (Nichols et al., 2020). However, due to the uncertainty, for many of the participant's products, continuation was their immediate strategy whilst controlling costs and maintaining liquidity. The literature would suggest that worst-case planning was vital to alleviating the impact of the crisis; in retrospect, each participant had their environments to analyse and conditions to dissect.

Innovation for some was critical to survival; for others, not so much; Nichols et al. (2020) believe that the best leaders analyse information quickly, figure out what matters most swiftly, and make decisions with conviction. Johnson (2017) lays out a simple definition of crisis leadership, in that it entails a leader to “face a challenge of critical importance that they probably haven’t tackled before”.

Participant eight showed leadership in vision, setting up the UK company to offer customs processes and solutions in both countries. This participant also saw the opportunity to apply for AEO status, which will open up many possibilities domestically. Basaran (1998) believes that in today's world, leader management entails foresight into the future, identifying realistic vision and objectives for the organisation’s future, and encouraging employees to achieve these goals. Showcasing an open mind and searching for possibilities that will help better serve them, Participant eight chose to make the most of Brexit, not allowing it to consume and deter the businesses objectives and goals (Llopis, 2020).

Participant four demonstrated various leadership skills, exploring employee engagement analytics, clear communication with weekly meetings, analysing the resources on hand and resources required to get them through the crisis (Llopis, 2020). They listened to their subordinates and re-evaluated the situation week by week to develop new and improved strategies. Teamwork will instil employees' desire to work together in the face of a crisis (Basaran, 1998). Several participants involved more people and more divisions; Andrea et al. (2020) indicated that less of the hierarchical model involved many more stakeholders in encouraging different views and debate.

Brexit needed leaders to adopt a specific mindset, technique and behaviour, that employs confidence in the chaos, reflective learning, evolution of the ecosystem, which was the case study two that shifted their production from the UK to the EU (Irish Management Institute 2020). We saw participants prolong reflection with no clear decision. The wait and see approach were fostered by some participants; D’Auria and De Smet (2020) believes this is a common mistake that leaders make during crises to wait for all of the data to come together before deciding what to do. This was apparent for many of the participants, who believed nothing could have been done without clarity.

A leader's goal is to reduce loss and keep things operating as normal as possible (Klann, 2003). The supply chain leader within this research displayed varying responses to the Brexit crisis. Some acted strategically, with a vision for the future, some fostering creativity and innovation. Some adopted team building and promoting teamwork; some were accountable and responsible and thought they could have done more when looking back now. Some did not act at all, leaving it too late; nonetheless, those who chose to act accordingly showcased authentic leadership and the ability to set clear goals and persistence in achieving them (Patel, 2017).

7.0. Conclusion

7.1. Review

The research's conclusion highlights the expected research outcomes, implications, and main findings obtained from the applied research method regarding the effect of crisis management and leadership on the efficiency of supply chain organisations during the Brexit issue in the United Kingdom and the European Union.

In the finding, the researcher has highlighted the shortcomings in preparation for Brexit, the impact of uncertainty and how it affected the readiness of supply chain leaders. Businesses halted their preparation in light of continued Brexit extensions and the collapse of discussions between the EU and UK political leaders. Notably, Covid-19 also had a massive impact on their ability to put Brexit; first, Covid-19 took centre stage and led with the eye of the storm circling the economy. Brexit was still in negotiations, and many businesses chose to abandon the groundwork until a more precise picture was before them. For some, the consequences were too high a risk, so a more proactive approach was elected. This worst-case scenario approach among all participants and the case studies was by far the most successful. Based on the information, these businesses prepared with customs training and alternative suppliers and put measures to prepare them for the worst-case deal - a no-deal.

On the other hand, some supply chain leaders heavily depended on others to resolve the matter or wait and see what the Brexit deal would encounter, albeit this was too late for many. Regardless of uncertainty, there was enough evidence of the impact and enough support to equip these businesses better, and some chose to embrace, and others discarded the opportunities. The literature and the findings revealed the former approach was superior, and those who chose it were set for the eventuality.

7.2. Research Limitations

The primary data sources could have produced much more if the researcher had more time with the participants and could do face-to-face or zoom calls. The participants were selected from varying sectors; unfortunately for these businesses, many of them are in a mode of deep recovery from the dual impact of Covid and Brexit. The researcher was much appreciative of the participants' time, and their input gave an excellent understanding of their preparation for Brexit. The secondary data had its limitations in that it was a biased observation of businesses that all witnessed success in Brexit preparation. However, it did give a good insight into the problems businesses incurred and how they handled these through either innovation supported by their local enterprise.

7.3. Recommendations for future research

Several recommendations are made as a result of this study. O'Carroll (2020) believes that Brexit will hit the economy like a 'slow puncture', and others think the full impact of Brexit will not be felt until the pandemic is brought to a halt (Xinhua, 2021). So, the actual effect of Brexit may well be some time away. This research has highlighted the difference between worst-case and wait-and-see crisis scenario planning. Building upon the findings, in time, a comparative study between the two approaches would indicate the effectiveness of the chosen path and its economic impact. This dissertation shows growing concern among supply chain leaders and highlighted the absence of crisis management even when crises of all kinds hit businesses every year. Further studies could examine why businesses fail to put adequate systems and models for crisis even when a crisis is a recurrence and detrimental.

7.4. Reflection

While the research significantly increased my academic understanding, it also taught me essential skills and lessons that will be useful in my professional professions now and in the future. The logic and reasoning necessary to analyse a problem were the most exciting lessons learnt during the dissertation. My views were widened in terms of research tactics, ethics, methodologies, and methods, and implementing these lessons will aid me in identifying the appropriate techniques and procedures to employ in providing solutions to any difficulties in the future.

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Appendix 1 - Interview Questions

Questions

Q1/ Brexit was a great uncertainty for businesses operating cross-border. Therefore, it was crucial for companies operating complex supply chains to consider the implications of Brexit on their businesses. How prepared were you for Brexit?

Q2/ Did you believe there was enough time to prepare for Brexit? Why do you think you had enough time or did not have enough time?

Q3/ Do you think the Irish government should have gradually implemented customs formalities like the UK has to allow the business to adapt? Discuss...

Q4/ Did you have alternative EU suppliers in line to step in? If so, why did you decide to line up alternative suppliers?

Q5/ Did you take the opportunity to innovate and foresee the need to diversify and identify opportunities to manufacture/import/export new products? Why did you make this decision?

Q6/ Did you avail any government support from your Local Enterprise Office / InterTrader / Enterprise Ireland on aspects of your business dealing with the impact of the UK leaving the EU? (use of a Brexit Scorecard? A Mentor?)

Q7/ Did you nominate a dedicated team or an individual to produce a Brexit plan? To focus on the initial consequences, set a baseline set of assumptions to inform your Brexit planning? And analyse your business and assess your assumptions to highlight the areas of greatest risk? Or perhaps develop a cost-benefit analysis of a network review? Or perhaps another strategy?

Q8/ No doubt dealing with the double impact of Covid 19, and Brexit was disastrous for the supply chain industry, the likelihood Covid 19 had an enormous effect on Brexit planning, Looking back, do you believe you could have done more to mitigate the impact of Brexit? And why do you think this?

Appendix 2 - Interview Consent Form

Jason Smith Dissertation

“Analysing Crisis Management And Leadership Within Supply Chain Industry-leading Up-to Brexit”

Consent to take part in research

I..... voluntarily agree to participate in this research study.

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing, and I have had the opportunity to ask questions about the study.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research, my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.
- I understand that disguised extracts from my interview may be quoted in...Jason Smith Dissertation.
- I understand that if I inform the researcher that I or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original data will be retained in Jason Smith’s dropbox account until the exam board confirms the results of his dissertation sometime in August / September 2021.

- I understand that under freedom of information legislation, I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

Signature of participant / Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study.

Signature of researcher / Date