



The Impact of Horizontal Mergers and Acquisitions on Supply Chain Management:
The Case of the Industrial Maintenance, Repair and Overhaul Distribution Sector

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List of Abbreviations

AIT	Applied Industrial Technologies
B&H	Buck & Hickman
B2B	Business-to-business
B2C	Business-to-consumer
BDNA	Barnes Distribution North America
CAR	Cumulative Abnormal Returns
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CMA	Cross-border Mergers and Acquisitions
COC	Change of Control
DE	Developed Economies
EE	Emerging Economies
ERP	Enterprise Resource Planning System
HQ	Headquarters
LSE	London Stock Exchange
M&A(s)	Mergers and Acquisitions
MD	Managing Director
MRO	Maintenance, Repair and Overhaul
NDA	Non-disclosure Agreement
NYSE	New York Stock Exchange
P&G	Proctor & Gamble
PMI	Post-merger Integration
PPE	Personal Protection Equipment
Q1, Q2, etc.	Question 1, Question 2, etc.
R&D	Research and Development
ROA	Return on Assets
SC	Supply Chain
SCI	Supply Chain Integration
SCM	Supply Chain Management
TAC	Total Acquisition Cost
WINA	Würth Industry of North America

Abstract

A great majority of commercial businesses plan to or, at least, desire to grow and expand their operations, enter new markets, obtain new technologies, and find new customers. These goals can be achieved in an organic way through slow expansion, steady project investment, gradual growth of sales, investment in R&D (research and development), etc. Another way, one that is much quicker and that can offer instantaneous growth, is through mergers with or acquisitions of (M&As) other businesses. If all goes well, M&A deals can reward numerous stakeholders, including institutional and individual shareholders, suppliers, customers as well as employees. Mergers and acquisitions can drive company growth enormously, multiplying turnover just in a matter of years. The rewards are very promising.

On the flip side, however, many M&A initiatives either fail or do not deliver initially set objectives, as will be discussed later in the study. In the last two decades, numerous authors have researched the M&A area, often in an attempt to understand barriers to and enablers of successful merger and acquisition deal completion and realisation. These authors have looked into various aspects of the M&A process, including human resource management and customer management, sales channels integration, and have diligently scrutinised the financial and strategic characteristics of M&A deals. Surprisingly, despite the abundance of research and knowledge, the M&A completion success rate has not been improving by any significant measure, yet this has not discouraged organisations from pursuing these, as is now known, high risk growth strategies.

In this research the author is looking at supply chains of businesses concerned with the subject of mergers and acquisitions. Organisations may either be conducting an acquisition, or becoming acquired by somebody else, or may be merging with another business. Thorough consideration is given to the pre-acquisition or pre-merger stage of the process, as well as to post-acquisition or post-merger supply chain practices and integration. The author believes that skilful supply chain management, including the integration of merging supply chains, can help to improve the chances of successful M&A deal completion through the enabling of full potential realisation within the shortest possible time. What is more, to date, very limited research has been carried out on the subject, and so there is a direct need for the study.

1. Introduction

1.1. Research Background

Mergers and acquisitions within the business context have well been established for decades, and yet they are still gaining popularity (Cefis & Marsili, 2015; Hitt et al., 2009) on account of being a great medium for businesses to grow (Valentini, 2015). Frequently changing legislation and market deregulations stimulate and positively impact their usage, as was the case within the shipping industry in the eighties and nineties (Andreou, Louca, & Panayides, 2012). M&As' strategic role within the business environment is unquestionable, with a global M&A value of \$4.76 trillion in 2015 and \$3.6 trillion in 2016 (imaa-institute.org, 2018). Only three countries in the world have higher GDP (gross domestic product) than the quoted global M&A value, i.e. Japan (\$4.4 trillion), China (\$11.3 trillion) and the US with its \$18.5 trillion (statisticstimes.com, 2016). To show the development and the recent spike in M&As' popularity it should be mentioned that at the beginning of the 21st century in 2001, there were 6,000 merger and acquisition deals logged globally with a total value of only \$1 trillion (Jim Langabeer, 2003). The beginnings of corporate mergers and acquisitions date back to the late 19th century, when a phenomenon called the First Merger Wave was observed (Nelson, 1959); thus, they have already been around for more than a century.

Unsurprisingly, businesses not only merge and acquire locally but also across borders. In fact, in recent years, companies have been more eager to acquire their counterparts from other countries than was the case before (Bauer, Matzler, & Wolf, 2014; Weber & Tarba, 2010; H. Zhu, Xia, & Makino, 2015). For all these years, M&As have seemed to attract attention despite their seemingly high failure rate (Tarba, Ahammad, Junni, Stokes, & Morag, 2017) of 44% (Cartwright & Schoenberg, 2006). Some researchers quote even less encouraging statistics, showing failure rates of 50% (Dauber, 2012; Waldman & Javidan, 2009), and for CMAs (cross-border mergers and acquisitions) the rate is an astounding 70 to 90% (Rahim, Ahmad, Ahmad, & Rahim, 2013). Similar views to the latter are shared by Steve Tappin, a leadership expert, who says that for M&As an 80 by 20 rule applies, where 80% represents underperformers and failures, whereas only 20% signifies wins (as cited in Hope, 2014). Likewise, major

independent consulting organisations such as KPMG, report low success of merger initiatives. Performance gains for as many as 83% of deals are sub-expectations, and results are similar, irrespective of the research methodologies or goals (as cited in Dhar, 2008) or even negative (Uhlenbruck, Hughes-Morgan, Hitt, Ferrier, & Brymer, 2017). The above shows that all parties i.e. academia, independent business experts, and consultancy companies, speak with one voice in relation to the high-risk factor of merger and acquisition initiatives.

Having said that, there are many examples of successful as well as poor mergers and acquisitions. The latter include Daimler Benz's acquisition of 1998 of Chrysler, as well as the merger of AOL with Time Warner (Chua & Goh, 2009) announced in the early January 2000 (Junnarkar & Hu, 2000). In fact, the AOL and Time Warner merger is one of the most notorious and simultaneously the largest by value to date, although its conclusion dates back to December 2001. The deal oscillated around \$164 billion (Thompson, 2003) and is now regarded as a massive failure (Wade, 2010). The idea was to merge two corporations, an eminent internet business and an acclaimed media company. The new AOL Time Warner was meant to deliver a new quality and experience for its customers (Arango, 2010) through the creation of "the world's largest media company" (Junnarkar & Hu, 2000, para. 1). Eight years later, in March 2009, both companies were separate businesses again, with Time Warner's share value down 80% compared to the pre-merger era (A. Smith, 2009).

In the light of the above facts, one might ask why companies are so keen to merge with or acquire others, given the risk. The answer is that successful M&As offer fantastic growth opportunities, give better leverage through synergies (Andreou et al., 2012; Sohini Ghosh & Dutta, 2014; Häkkinen, Norrman, Hilmola, & Ojala, 2004; Uhlenbruck et al., 2017) and provide access to new markets (Kiliç, 2011) to name a few advantages. In addition to this, CMAs help to control and manage environmental uncertainty, and add new resources (Deng & Yang, 2015). According to a report jointly prepared by Cass Business School and The Towers Watson Human Capital (as cited in Roberts, 2015), on average companies who in 2014 acquired other smaller businesses experienced a share price increase of 5.8%, which was 1.3% up versus the previous year. All these opportunities seem convincing enough for businesses to pursue M&A initiatives. More about the potential benefits will be provided in the literature review chapter.

In contrast to the previously cited poorly executed M&As, an example of a large company from the shipping industry that is perceived as very successful with its mergers and acquisitions is AP Moller-Maersk, a business already present in 135 countries and employing approximately 117,000 employees (Alexandrou, Gounopoulos, & Thomas, 2014). One of its recent acquisitions in 2005 was a horizontal M&A of a large competitor, Royal P&O Nedlloyd N.V., but there were many others, including TORM Lines, Seal-Land Services Inc. as well as Safmarine Container Lines. According to Alexandrou et al. (2014) purely organic expansion will not facilitate impressive pace of growth of a company, and M&As are the only option to ensure and strengthen global presence and scope.

Another interesting example of a merger in a B2C (business-to-consumer) environment is that of Office Depot and OfficeMax, which came to work together in a deal called a “merger of equals” (news.officedepot.com, 2013b, para. 1). Office Depot was ranked as the second largest American office supplies retailer, whereas OfficeMax was ranked third (Sahagian, 2013). This was a horizontal merger in which the synergies within supply chains were anticipated to deliver between 70 and \$100 million in savings (Hartley, 2014). According to Mr Hartley, who acts as a senior vice president responsible for supply chain operations (news.officedepot.com, 2013a), “a supply chain is a key enabler to the rest of the company helping meet goals and timelines” (Hartley, 2014).

Interestingly in early February 2015, Staples announced its plans to acquire Office Depot Inc. i.e. Office Depot and OfficeMax together (Swamynathan, 2015), but eventually the deal was not approved. As Kendall and Fitzgerald (2015) reported in The Wall Street Journal, regulators believed that the deal would adversely impact others within the market, including the customers of both companies. For this reason the U.S. antitrust agency blocked the acquisition on the grounds that the union of the two high profile office supply market leaders would be anti-competitive, the authors noted. They further added that the regulator alleged that prices would increase, and that the market would be left with a limited choice as to where to buy office supplies. Following a note issued by a Chairwoman Edith Ramirez of the Federal Trade Commission, doubts were expressed in relation to “the proposed merger between Staples and Office Depot” as the deal was “likely to eliminate beneficial competition

that large companies rely on to reduce the costs of office supplies” (as cited in Kendall & Fitzgerald, 2015, para. 3).

The representatives of both companies believe that the analysis of the regulator was flawed, and market challenges were not properly understood, say Kendall and Fitzgerald (2015). As a result of the deal blockage news, the shares of both businesses abruptly fell; by 11% for Staples, and 15% for Office Depot. The authors added that this was not the first time the antitrust body had stopped the two companies from merging; a similar verdict was issued in 1997. The management of Staples and Office Depot believe however, that the current market situation is different to what it was back in the '90s (Kendall & Fitzgerald, 2015). If the deal went ahead, the three previously independent market leaders would operate within the same group of companies. The intention of the new super group was to compete more effectively with other online businesses, predominantly Amazon, as well as giant retailers such as Walmart and Target (Fontanella-Khan, 2015), but this will not be the case.

Apart from the attempted merger of Staples with Office Depot, and the previously concluded merger of Office Depot with OfficeMax in the B2C setting, there are also many, if not more, M&As in the B2B (business-to-business) environment. One of them is a horizontal acquisition of a \$63 million business, Safety Solutions Inc. by the market leader, fortune 500 company i.e. W.W. Grainger, Inc. whose sales in 2014 reached \$10 billion (invest.grainger.com, 2015c). This is a classic example of a horizontal acquisition in the American industrial MRO (maintenance, repair and overhaul) distribution sector where a market leader buys another smaller distributor to strengthen its presence in the region and add new offerings. According to Mr Court Carruthers, Senior Vice President and Group President for Americas, the “acquisition extends Grainger’s strong position in safety with a leading on-site safety footwear service and a unique benefit management program that tracks purchasing and compliance for customers” (as cited in invest.grainger.com, 2013, para. 2). Mr Carruthers added that the acquisition was a good fit with Grainger’s operations. Similar examples multiply within the MRO distribution industry and these will be discussed in detail in the literature review chapter. In the following section the need for the research is discussed, and a gap in theory is identified.

1.2. The Need

The current state of research related to mergers and acquisitions is very fragmented (Weber, 2013; Weber & Tarba, 2010). Various authors have focused on different areas and have proposed a number of solutions to improve M&As' success rate. For instance, Weber and Drori (2008) argue that human resource practices play an important role and can have an impact on post-merger performance. Similarly, Figueiredo (2013) asserts that sound employee communication can help the M&A initiative. In contrast, Palmatier, Miao, and Fang (2007) focus their attention on sales channels integration within the B2B relationships and assert that M&As' success is largely dependent on these. Valentini (2015, p. 1) admits that the "gap in the understanding of the full impact of M&A is problematic".

Calipha, Tarba, and Brock (2010) acknowledge the importance of integration; however, they look at it from a wider perspective i.e. speed of integration, integration strategies etc. Waldman and Javidan (2009), on the other hand, assess the impact of strong leadership on the M&As' performance and argue that this is yet another decisive factor. Without any doubt, "post-M&A integration is recognised as one of the critical phases of merger or acquisition" (Kato & Schoenberg, 2014, p. 4) and Bauer et al. (2014) further add that integration is complex, but still necessary. Also, Steigenberger (2016, p. 1) puts emphasis on business integration for acquisitions and mergers, making the statement that integration "is a key driver of the success or failure of mergers and acquisitions". Similarly, Zorn, Sexton, Bhussar, and Lamont (2017) say that acquisition failures are often linked with integration difficulties, amongst other things.

Interestingly, over the years, although the body of knowledge regarding mergers and acquisitions has grown, the M&As' success rate has not improved. Numerous studies "which systematically explored the most frequently used variables in research on M&A phenomenon have been unable to determine clear predictors for M&A success or failure" (Tarba et al., 2017, p. 2). A very high number of mergers and acquisitions continue to fail, as was discussed in the previous section of the chapter. Weber and Tarba (2010, p. 209) believe that "much has been written about the financial, strategic and integration aspects of M&As, but findings are contradictory and the reasons for variation in M&A performance have remained unclear". Steigenberger (2016, p. 1)

reached a similar conclusion, saying that “a substantial body of research has addressed M&A integration, offering rich but widely dispersed insights into this phenomenon”. It seems obvious that companies cannot handle the integration, and fail to extract value (Epstein, 2005).

Häkkinen et al. (2004) argue that very little attention has been given to supply chain issues in the context of mergers and acquisitions. As early as in 2003, Langabeer discussed supply chain aspects of merging companies and concluded that SCI (supply chain integration) positively impacts post-merger performance. In fact, understanding the logistics of merging companies before the actual merger takes place can help in predicting obstacles and judging their impact on the initiative (Häkkinen et al., 2004), thereby improving the chances of success. Precisely for this reason this research will look into pre-merger or pre-acquisition supply chain due diligence, as well as post-initiative supply chain management practices, as both can have a significant impact on the M&As' success.

Similar to Weber and Tarba (2010), Häkkinen et al. (2004, p. 39) also claim “that a research gap exists”. According to Nagurney (2009, p. 2) without any doubt a post-merger integration of the supply chains of the affected “companies is the key to improving the likelihood of success”. The importance of SCI was also acknowledged by consultants from Accenture, a global consulting and outsourcing firm. The authors claim that “exceptional supply chain merger integration capabilities can help the new organisation get off to a quicker and more productive start”, further adding that “a new supply chain is likely to help acquirers grow” (Timmermans, Diaz, Gupta, Delsaux, & Herd, 2014, p. 3). There are researchers who suggest that the poor statistics in relation to M&As' success rate are interlinked with poorly executed post-initiative integration (Dao, Bauer, Strobl, Matzler, & Eulerich, 2016).

An important point, which is directly in the focus of this research, was made by Langabeer and Seifert in 2003. The authors implied that the answer to the question of why so many mergers fail or underperform lies within supply chains. To justify their claims, the authors pointed at research in which a convincing correlation between the effective SCI of merging companies and an improvement of M&A's success rate was revealed. According to Herd, Saksena, and Steger (2005, p. 11) “because of the major impact that the supply chain can have on a deal, and on the ongoing strength and

success of the newly merged company, companies must bring supply chain considerations to the forefront of any merger discussions”. Furthermore, in 2016, Steigenberger admitted that the knowledge in relation to the integration on the operational level for M&A deals needs strengthening, later specifically referring to SCI, IT integration, etc.

All the above considerations show the direct need for research as robust supply chain practices potentially can improve the likelihood of M&A success. Academia as well as business practitioners agree that SCI is a key element, yet only limited research deals with the subject. Evidence is needed to show that the SCI for M&A initiatives matters and to what extent it can improve chances of successful merger completion and realisation. If what Christopher said in 1992 is true - that supply chains compete, not organisations - the need for the research reinforces. Supply chains simply cannot be neglected in mergers and acquisitions if their role is as important as Christopher believes.

Perhaps the best justification for the research need are the words of Herd et al. (2005, p. 9):

M&A investors are frequently short-changed for various reasons, but one of the most critical is that the companies involved neglect the important role that supply chains can play in allowing deals to bear the ripest fruit.

Finally, Hameri and Weiss (2017, p. 308), who investigated the effect of acquisitions on inventory performance, propose further research in relation to “the factors affecting pre- and post-acquisition operational performance”, which is what this study addresses.

In the next section the business context of the research is discussed and analysed.

1.3. Business Context Overview

This research will look into horizontal mergers and acquisitions within the industrial MRO distribution business context (interchangeably referred to as the MRO industry). The fragmentation in this industry is still very high even in the world’s most developed MRO markets of North America (Grainger, 2015) and Europe (Brammer, 2013) and market consolidation is ongoing (Frazier, 1999) and will continue for many years to come (electrocomponents.com, 2014a). Due to the fact that consolidation mostly

happens through acquisitions of smaller companies by larger regional businesses, as will be discussed and evidenced later in the literature review chapter, the main focus of the research is on horizontal acquisitions. The illustration of business context is shown in Figure 1 below.

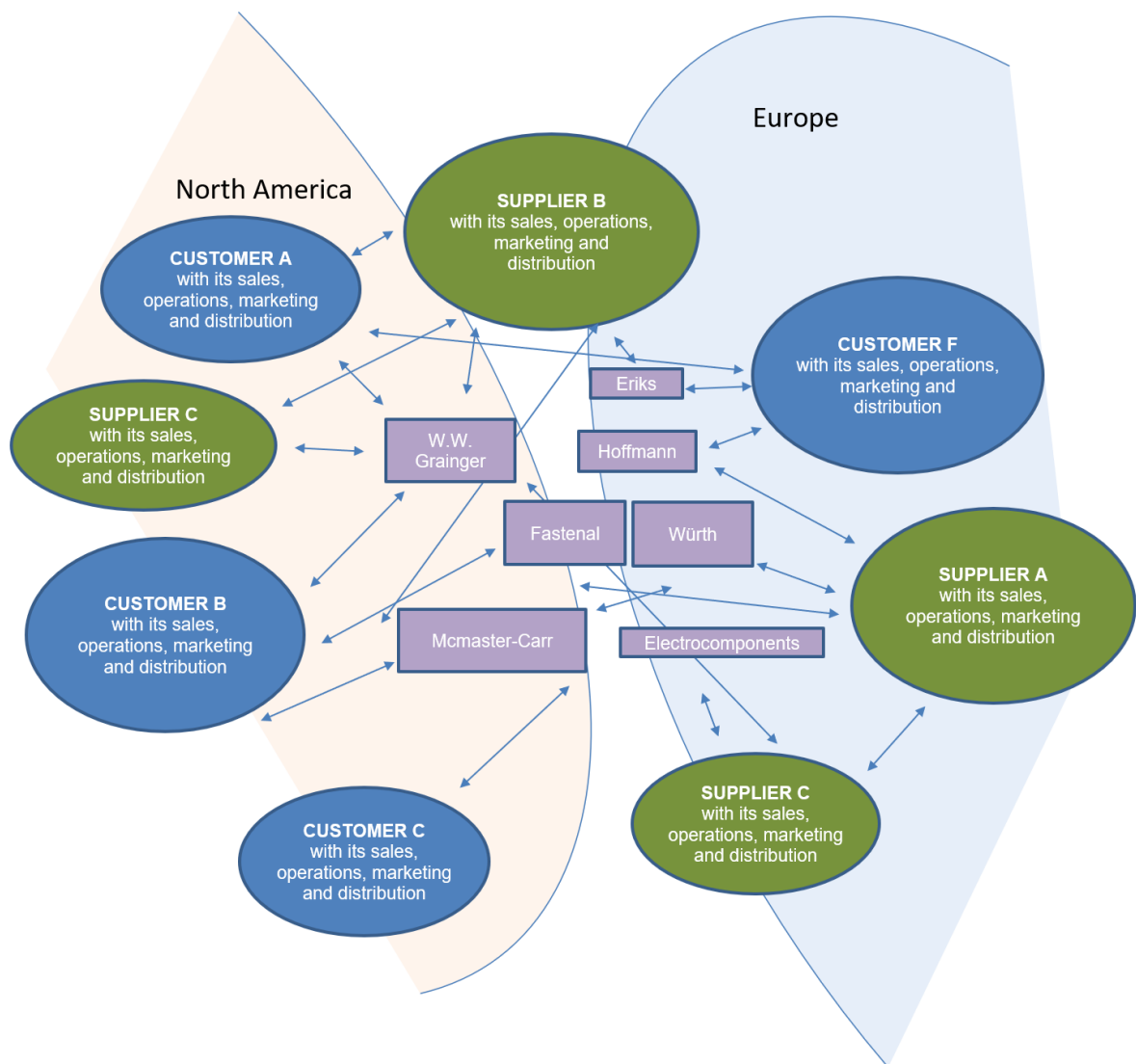


Figure 1: Business Context with Distributor Relationships (as adapted from Mudambi & Aggarwal, 2003, p. 318)

As shown above, MRO distributors frequently deliver their products and services to the same customers and buy from the same suppliers/manufacturers (Mudambi & Aggarwal, 2003). However, they can specialise in certain product ranges e.g. fasteners (Bossard Holding, Fastenal) and power transmission (Brammer), or develop their expertise in delivering to customers from a specialist industry. Examples are the Edgen Group who delivers “specialty steel products to the energy sector”, or Berner who specialises in the automotive and construction sectors (Baird, 2013, p. 21). Some

of these companies can only offer regional coverage e.g. MSC Industrial Direct delivering its MRO supplies to the US customer base only (Baird, 2013). Multinational corporations can work with different industrial distributors with comparable product offerings not only in different geographies, but also within the same market. A good example is PepsiCo with its US-based MRO distributors such as Motion Industries (Cleanlink.com, 2014) and Wesco International, Inc. (wesco.com, 2015).

The MRO distribution industry is very fragmented and even for the most mature American market, the eight largest distributors account for only 31% of national sales (Baird, 2013). In Europe the situation is even worse, and according to Lauer (2015, para. 6) from the Accenture consulting firm, European “buyers do not have a consistent distribution network across all EU countries”. Frequently, distributors develop relationships amongst each other, so-called cooperative competition (Mudambi & Aggarwal, 2003), and may buy products one from another to ensure the availability of products. This may not be the most cost-effective solution; however, in certain business sectors, production line stoppages can be very costly (Gutierrez Gonzalez, Aguilar Fernandez, & Cordoba Lobo, 2012); therefore, the availability of products is of the utmost importance.

In simple terms, “industrial distribution involves moving products from multiple manufacturers to multiple users” (eriebearings.com, 2014, para. 4). Distributors offer additional services such as expertise, inventory holding, promotions, standardisation, and simplification of administration. There are millions of jobs within the industry and combined business is worth several billions of dollars (eriebearings.com, 2014). Mudambi and Aggarwal (2003) simply say that distributors link product users with product manufacturers. The next section of this work deals with the representation of the gap in theory, and is accompanied by relevant diagrams.

1.4. Research Outline

The identified gap in theory has two aspects, i.e.:

- 1) As directly derived from the literature review a **representation of gap** in theory (level 1) for mergers and acquisitions, either vertical or horizontal, is shown in the diagram below.

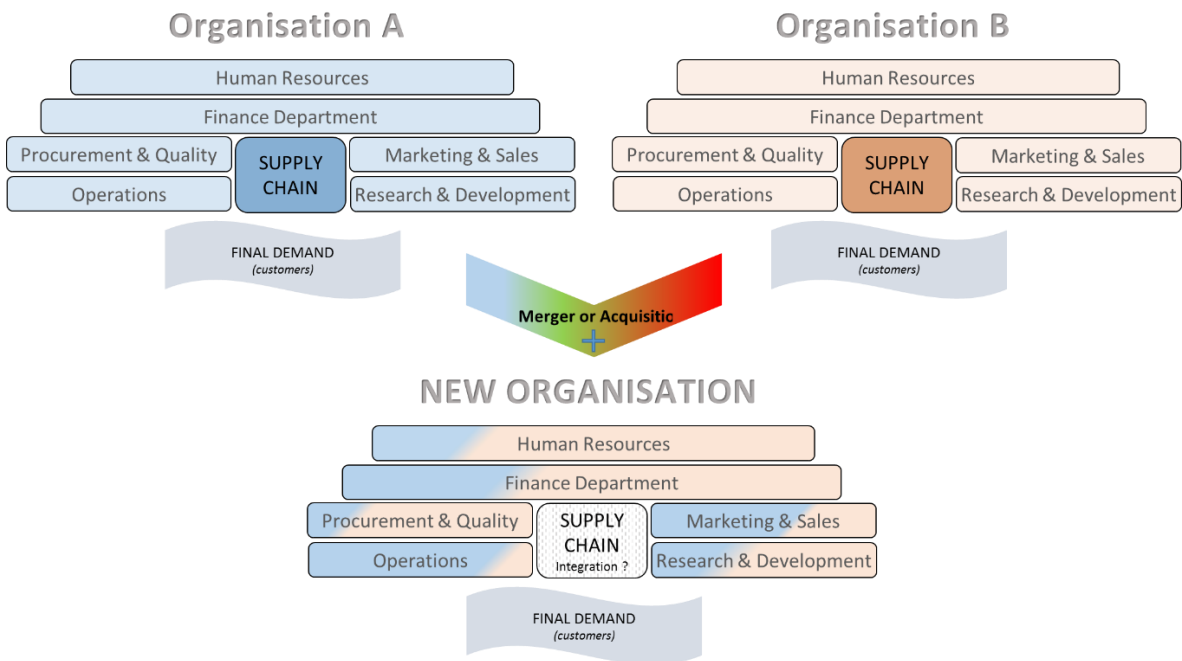


Figure 2: The Representation Gap in Theory

In the above diagram, organisation 'A' merges with organisation 'B' or possibly one of them buys the other. In the high level gap in theory (the representation level) the discussion is general and may concern both mergers and acquisitions, and these can be either vertical or horizontal. The outcome organisation, called above the 'new organisation', features various company departments coloured blue and pink which represents various levels of integration of these departments post-merger or post-acquisition. The level of integration of the respective departments, either bluer or pinker, is random and for illustrative purposes only and does not represent any trend or integration level within the industry. The new supply chain function is coloured grey, and this is the focus of the research.

- 2) At the **research level** (level 2) the focus is on **horizontal acquisitions** and their impact on supply chains within the industrial MRO distribution market, and these are shown in the diagram below.

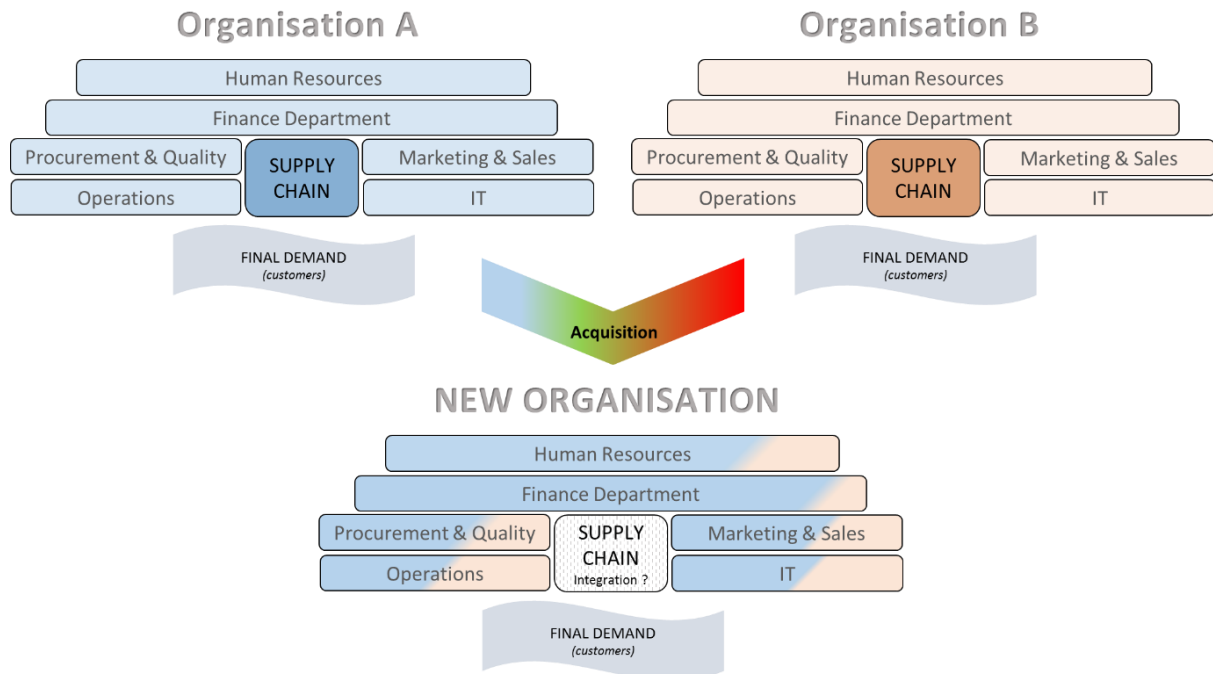


Figure 3: The Research Level Gap in Theory

Unlike in the previous diagram, the discussion is narrowed down and is purely about horizontal acquisitions within the industrial distribution sector. The MRO sector is a good vehicle to test the gap in theory since there are many acquisitions in this market, as was noted by Anderson and Narus (1990). The two authors noticed that large distributors acquire smaller, private, often family-owned businesses at a fast pace. Despite the fact that the phenomenon was observed in the nineties, the fragmentation is still very high (Baird, 2013). The market consolidation is still ongoing as will be discussed in the next chapter, and MRO distributors continuously try to expand and strengthen their dominant positions through acquisitions. A similar situation was discussed by Palma-Mendoza and Neailey (2015) using the example of a UK distributor to the airline industry. The consolidation will continue for years to come as there are numerous opportunities in the market, with larger industrial distributors acquiring firms from other geographies to expand their footprint, establish global presence, add value through better economies of scale, improve margins, and acquire new technologies (Baird, 2013).

The outcome organisation in Figure 3, called the 'new organisation', features various company departments coloured blue and pink which represents various levels of integration of these departments post-acquisition. The level of integration of respective departments, either bluer or pinker, is random and for illustrative purposes only and does not represent any industry trend or integration level within the MRO market. In the next section, specific research questions are discussed, followed by the aims and objectives.

1.4.1. Research Questions

- 1) Are business leaders from the industrial MRO distribution market considering and scrutinising supply chain arrangements and processes of target companies before change of control (COC) during horizontal acquisitions, and if so to what extent?
- 2) What actions are taken, and practices embraced by organisations from the industrial MRO distribution market in post-acquisition stages of horizontal acquisitions in relation to supply chain areas of their newly enlarged enterprises?

1.4.2. Aims

In this research the author will investigate the degree and form of consideration given to supply chains in pre-initiative stages of horizontal acquisitions, and will also explore the practices embraced by organisations in post-initiative stages of horizontal acquisitions in relation to the supply chain functions of their businesses within the industrial MRO distribution market.

1.4.3. Objectives

- a) to undertake a literature review to look at current practices and approaches when it comes to supply chain due diligence and planning in the pre-M&A stage of the process;
- b) to undertake a literature review to look at current practices and approaches to post-acquisition supply chain management during horizontal M&As;

- c) to identify and critically analyse current issues, including barriers, associated with supply chain practices for M&A initiatives throughout the whole process;
- d) to explore and evaluate how and why these barriers exist and what can be done to overcome them, including an assessment of enablers;
- e) to synthesise a comparative set of outcomes from the theoretical and empirical research, highlighting differences between the practice and theory.

1.5. Significance and Intended Contribution of the Research

In this work, thorough consideration will be given to pre- and post-M&A practices embraced by organisations during mergers and acquisitions. The goal is to ascertain what practices in relation to companies' supply chains can help to improve the chances for successful M&A completion. Additionally, barriers and enablers of the M&A process will be identified.

The theoretical and empirical findings, with the discussion, will add to the current state of knowledge in relation to mergers and acquisitions, especially within the industrial MRO distribution business context. Moreover, practitioners will find this work useful for informing their judgement and for helping them to take better business decisions. In the next chapter, the author undertakes a literature review of the area discussed above.

1.6. Structure of Thesis

This work features six chapters as outlined in Table 1 below. In Chapter 1 an initial discussion in relation to mergers and acquisitions takes place. The author explains: why M&As are so popular; how successful businesses are in making them work; and what are the main motives behind these growth strategies. Also, the need for the research is discussed and the business context is presented. This is followed by research questions, aims and objectives and lastly a discussion is presented on the significance and intended contribution of the research.

In Chapter 2, an in-depth literature review is undertaken, including the academic sources as well as practitioners' business publications, with the aim of determining the current knowledge and discovering practical implications and ways of acting by

business people in the given circumstances. Several research specific concepts are explained and discussed in order to provide a full picture of the research subject. The focus is not only on understanding what mergers and acquisitions are, and how business people go about integrating supply chains of merging or acquiring companies, but also on pre-merger and pre-acquisition supply chain considerations. In-depth analysis of current barriers and enablers is conducted to provide answers to the posed research questions.

Subsequently, Chapter 3 looks into a specific research methodology. In short, there will be an interpretive philosophy with qualitative methods employed within the research, interviews conducted, company documentation revised, and elements of triangulation incorporated to ensure better data reliability.

In Chapter 4 the author will present findings from the data collection stage of the research.

In Chapter 5, findings from the data collection stage of the study and literature review will be discussed.

Finally, in Chapter 6, conclusions will follow, the research questions will be answered, recommendations for further study will be provided and the limitations of the thesis will be formulated.

Chapter 1	Introduction
Chapter 2	Literature Review
Chapter 3	Research Methodology
Chapter 4	Findings
Chapter 5	Discussion
Chapter 6	Conclusion

Table 1: Structure of the Thesis

2. Literature Review

2.1. Introduction to Mergers and Acquisitions; an Overview

Mergers and acquisitions in today's global economy are a widely accepted strategy which offers corporate expansion through accelerated growth (Andriuškevičius, 2015). The reason M&As are particularly interesting is that, arguably, merged companies are valued higher than the added value of standalone businesses (Hsu & Chen, 2006). As Rahman and Lambkin (2015) say, the combined global value of all M&As in 2007 was \$4.1 trillion and this was the highest value achieved in a single year until the recent past, with 76,000 deals recorded at a time worldwide. During the financial crisis of 2008 and 2009 there were significantly fewer M&As concluded, but the situation kept improving in 2010 and later (Rahman & Lambkin, 2015). The global value of mergers and acquisitions in 2013 alone was \$2.3 trillion (Degbey, 2015). The data for 2014 shows further signs of recovery with M&A value of \$3.5 trillion (Primack, 2015a). Interestingly, in 2015 the economic slowdown of the previous decade's crisis was fully erased, with a total M&A value of \$4.28 trillion i.e. the highest number in history (Goenka, 2016).

When looking at the above figures and statistics regarding M&As, a degree of caution is recommended. The reason for this is that various sources tend to provide divergent figures for the same time periods. For example, when looking at the year 2007, the data derived from the Institute of Mergers, Acquisitions and Alliances indicates nearly \$5 trillion worth of M&As for the entire year (imaa-institute.org, 2018), which is considerably more than the previously quoted \$4.28 trillion for 2015. At the same time, Rahman and Lambkin (2015) quote \$4.1 trillion for the same time span i.e. the year 2007, which is in turn less than the figure from 2015. Therefore, it cannot be definitively stated that M&As in 2015 surpassed the value of mergers and acquisitions from 2007. In any event, despite visible differences in values from source to source, these averages are very informative and show a "strength of the global economy" as well as attitudes and general confidence in the market in time (Hsu & Chen, 2006, p. 58), as shown in Figure 4 below on the M&A value tracker year-on-year since 1985. A simple conclusion is that the stronger the M&A activity the better the news for market

participants, including investors (Burrows, 2014), due to the fact that the amount of M&As reflects the state of global markets.

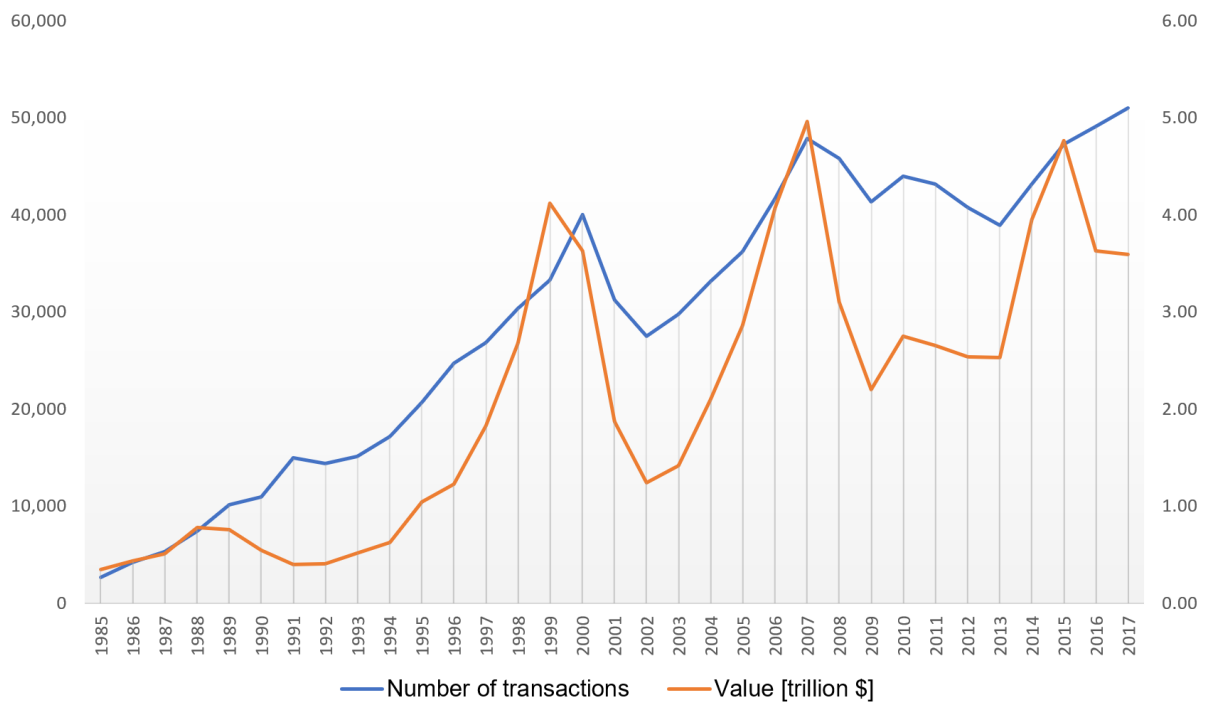


Figure 4: Recorded Global Value of M&A Deals (as adapted from imaa-institute.org, 2018)

Significant M&A deals draw intense media attention and the largest make headlines e.g. the well-known acquisition of Compaq by Hewlett Packard, as well as the previously mentioned AOL merger with Time Warner, or Citicorp with Travelers Group (Hsu & Chen, 2006). Often, businesses acquire more than once, and if this happens habitually then they can be referred to as serial acquirers (Aktas, De Bodt, & Roll, 2013), a term to be discussed in detail later within the chapter. An example of a business that frequently resorts to acquisitions is Cisco Systems, Inc. where in the '90s alone, the company conducted 40 acquisitions of independent businesses for a total of approximately \$20 billion, say Hsu and Chen (2006). They add that also, giants such as Intel or Microsoft heavily support themselves with mergers and acquisitions to expand. The whole M&A process, however, is very complex and requires a significant time investment across many M&A stages (Hsu & Chen, 2006) as will be discussed later in the chapter.

The M&A strategy is keenly used by business leaders, and which, as shown above in Figure 4, continuously gains acceptance. The popularity of M&As can mistakenly

suggest that they are risk-free initiatives (Bailey, 2001). Numerous organisations resort to M&As to deliver accelerated growth in a non-organic way (Jharkharia, 2012). However, the reality is different, many arrangements fail, and according to Schoenberg (2006) between 44 and 56% of deals do not deliver value, with some authors arguing a failure rate of 77% (Chua & Goh, 2009). As the past studies suggest, the outcome of CMAs is also disappointing (Schoenberg, 2006). A number of research projects have looked into the M&A subject; however, these have mostly scrutinised financial and strategic aspects of companies to predict M&As performance (Weber & Tarba, 2010) and have not necessarily looked into operations and supply chains.

2.2. Mergers, Acquisitions, Serial Acquirers

At this stage, it is important to distinguish between a merger and an acquisition. As a consequence of a merger of two independent entities, usually a new third entity is created (Vieru, Rivard, & Dutot, 2014). This is normally preceded by negotiations between both companies' representatives, who agree the terms of a deal (Kansal & Chandani, 2014). In contrast, an acquisition means that one company absorbs another company into its structures (Vieru et al., 2014). According to Giacomazzi, Panella, Pernici, and Sansoni (1997, p. 290) "an acquisition is defined as an act of exchange by which a company, called here a bidder company, uses money, stocks or their combination, to acquire some assets of the target company".

As mentioned earlier, if a particular organisation conducts several acquisitions in a relatively short period of time, it may be regarded as a serial acquirer. Aktas et al. (2013) provide an analogy for repetitive acquiring, comparing it to a sportsperson doing exercise repetition. As the authors reason, just as too much repetition can have a negative impact on the sportsperson's future performance, excessive acquiring can harm the business. Without a doubt, doing numerous acquisitions can help the acquirer learn the process and gain knowledge. On the flip side however, due to the diversity and a sheer size of a massively expanded business, excessive integration costs can arise, the authors reason.

According to Aktas et al. (2013), many businesses have been classed as serial acquirers, and although this occurrence is known to academia, there is limited knowledge about the practice. The authors add that the existing evidence shows that

businesses that acquired five other entities in a three-year time span, delivered 1.7% CAR (cumulative abnormal returns). The ratio falls significantly if more than five acquisitions are conducted and every subsequent acquisition delivers only 0.52% CAR, they say. Aktas et al. (2013) imply that if acquisition integration costs are higher than benefits, the acquisition program requires close scrutiny.

2.3. Reasons for Pursuing M&As

When strategies like “brand differentiation, short-term price cuts, and investments in new technologies fail to produce the desired results” company leaders resort to acquisitions or mergers (James Langabeer & Seifert, 2003, p. 59). They hope that the M&A will revive the business and improve the company’s performance, the authors say. After conducting a literature review, it was found that the main reasons companies pursue merger and acquisition initiatives are as below:

- a) to quickly access new markets (Kato & Schoenberg, 2014; S. Lee, Kim, & Park, 2015),
- b) to gain more power in the market,
- c) to add resources in terms of know-how, brands and licenses,
- d) to obtain access to new customers and distribution channels, as well as competent, experienced employees,
- e) to remove a competitor (Caiazza & Volpe, 2015),
- f) to gain access to new technology (Bauer et al., 2014; Caiazza & Volpe, 2015),
- g) to warrant an instant growth and repositioning (Dauber, 2012; Vieru et al., 2014; Wijnhoven, Spil, Stegwee, & Fa, 2006),
- h) desire to control the whole value chain directly through ownership incl. raw materials and other natural resources (Jharkharia, 2012),
- i) acquisitions can help join capabilities, thereby positively impacting product development, as well as limiting risk exposure (Chua & Goh, 2009),
- j) James Langabeer and Seifert (2003) additionally mention that companies pursue merger and acquisition initiatives purely to survive.

To put the above into a real market context, AlphaSemi acquired GammaSemi to obtain access to its partner’s expertise. “The underlying thrust for such a move was clearly knowledge-centric” (Chua & Goh, 2009, p. 85), and for some businesses this

is enough to pursue an M&A. James Langabeer and Seifert (2003) discuss additional objectives that CEOs (chief executive officer) want to achieve when pursuing M&As. These include; enhanced competitiveness, better profitability, greater shareholder value, or widened product scope, they say.

The objectives presented above are predominantly strategic, not directly related to the capabilities and performance of supply chains. The supply chain objectives for M&As would rather be “inventory optimisation or working capital minimisation, higher service levels, improved distribution coverage, faster shipment cycle times, reduced order-to-cash cycles, better utilisation of manufacturing and logistical assets, and leveraged procurement processes” (James Langabeer & Seifert, 2003, p. 60). According to the authors, the discussed supply chain objectives and goals can create great synergies adding good value; therefore, they result in greater effectiveness of operations. These synergies can further help build the case and provide a strong argument in favour of mergers and acquisitions.

An interesting observation was made by Bauer et al. (2014) in relation to international M&As. As the authors argue, the main reason for companies these days to pursue CMAs is to obtain new technology and know-how. This is a new development, since in the past it was believed that companies mainly engaged in M&A deals to enter new markets (especially companies from the technology sector), the authors say. They add that technology is much more quickly obtainable through mergers and acquisitions than through internal development, so companies frequently resort to acquisitions to obtain it.

Numerous authors have provided their ideas explaining the main motives for companies to pursue M&As. In the opinion of J. Zhu, Boyaci, and Ray (2015) these are the desire for synergy gains and increased market power. To support their views, the authors refer to the unsuccessful attempted merger of Staples with Office Depot worth \$6 billion, but also to a \$49 billion merger of Kraft with Heinz. For both of these mergers, the authors believe, the companies pursued supply chain cost reductions and synergies. The situation is different in the case of Greencore Group and Northern Foods, where the overriding reason behind the merger was a desire to change the power balance within the market, the authors say.

In fact, cost synergies as an M&A driver have been proposed by more scholars. These include Federgruen and Pierson (2011) who admit that synergies can be significant and act as a main motivator for mergers. As an example, the authors refer to the \$57 billion acquisition of The Gillette Company by the Proctor & Gamble Co. (P&G) from 2005. They advise that the decision to acquire Gillette resulted in P&G moving to the market's forefront in the personal care and household sector. AT Kearney estimated the level of cost synergies at around \$1 billion per year, which was more than Gillette's half year pre-acquisition profits (as cited in Federgruen & Pierson, 2011). Interestingly, the initial business forecasts were rather cautious, and a similar level of synergies was anticipated in three years rather than one (Stowell, 2013). In general, it can be stated that the level of achieved operational synergies indicates how successful a merger was (Cho, 2014).

However, in relation to the projected synergies a caution is advisable. Alhenawi and Krishnaswami (2015) contest the statement that synergies and value gains are closely correlated. The authors believe that it takes too long for synergies to materialise, even up to several years, and this will only happen if the business "collaborate towards the creation of these synergies" (Alhenawi & Krishnaswami, 2015, p. 1). They say that the issue is that researchers tend to use high returns for their metrics shortly after mergers are announced and this practice misrepresents the true state. The subject of synergy realisation was also looked into by Colombo and Rabbiosi (2014) who admit that efficiency gains can materialise, but the company will need to undergo reorganisation. These synergies "can arise from combining similar resources and capabilities", but there is a cost attached to it (Colombo & Rabbiosi, 2014, p. 1039). The reorganisation of the newly acquired company can cause harm in certain areas of both businesses, the authors state. This can take the form of various conflicts and personnel issues that can eventually lead to damage that will neutralise the acquisition effects (Colombo & Rabbiosi, 2014).

Since, as shown above, realisation of synergies can be problematic, and the synergies are frequently the driving force behind mergers (J. Zhu et al., 2015), i.e. the deal justifiers, they should be considered by every executive concerned with the subject of M&As. Interestingly, in a study by Dutordoir, Roosenboom, and Vasconcelos (2014), public company leaders of equity-financed transactions are keener to disclose expected synergies if they are led to believe that the shareholders of the acquiring firm

are not fully convinced that the deal will add any significant value. As they add, for cross-border deals, the bidding company management is more careful when providing estimates, whereas for deals within the same industry, where more data and experience are available, they are more confident about the available estimate figures.

Perhaps a slightly controversial subject when it comes to motives and reasons for pursuing M&As is managerial self-interest. According to Lebedev, Peng, Xie, and Stevens (2015), CEO's remuneration can greatly depend on the size of the company under management. This can therefore be an incentive to pursue M&A deals the authors say, potentially to the detriment of the organisation. This will specifically be researched within this work during the data collection stage, and conclusions will be provided. The reason why this is important is because, according to Jharkharia (2012), there are instances when businesses operating within the developing economies resort to CMAs of businesses larger than themselves. This behaviour may suggest that some deals bring excessive and unnecessary risks, and managerial self-interest can be a factor triggering potentially harmful actions. According to Lebedev et al. (2015, p. 660) there are no specific studies "of managerial self-interest motivation in the context of M&As in and out of EE" (emerging economies). However, as the authors claim, personal motives can play a bigger part in the EE, because corporate governance practices are less sound, and executives are not rewarded as well as their colleagues from the developed economies (DE).

The above considerations show that there are various reasons for businesses to pursue M&A deals, and Lebedev et al. (2015) noted that scholars do not speak with one voice in relation to the subject. This statement actually comes as no surprise, since businesses have diverse goals, operate within different markets, and are at various stages of development. For this reason, they may pursue M&As for different reasons. In the next section, the author will look into different types of mergers and acquisitions as derived from the academic literature.

2.4. Main Types of Mergers and Acquisitions

Motives for pursuing a horizontal M&A on a domestic market can be different to those for acquiring a foreign organisation (Chen & Findlay, 2003), and so the risk factors may vary (Carpenter & Wyman, 2008). Different drivers are behind vertical and

horizontal M&As, as will be discussed later in the chapter. The decision to either acquire a business or merge with another organisation may have various operational implications. The identified major combinations for M&As are shown in Figure 5 below. Later in the section the presented M&A categories are discussed and analysed.

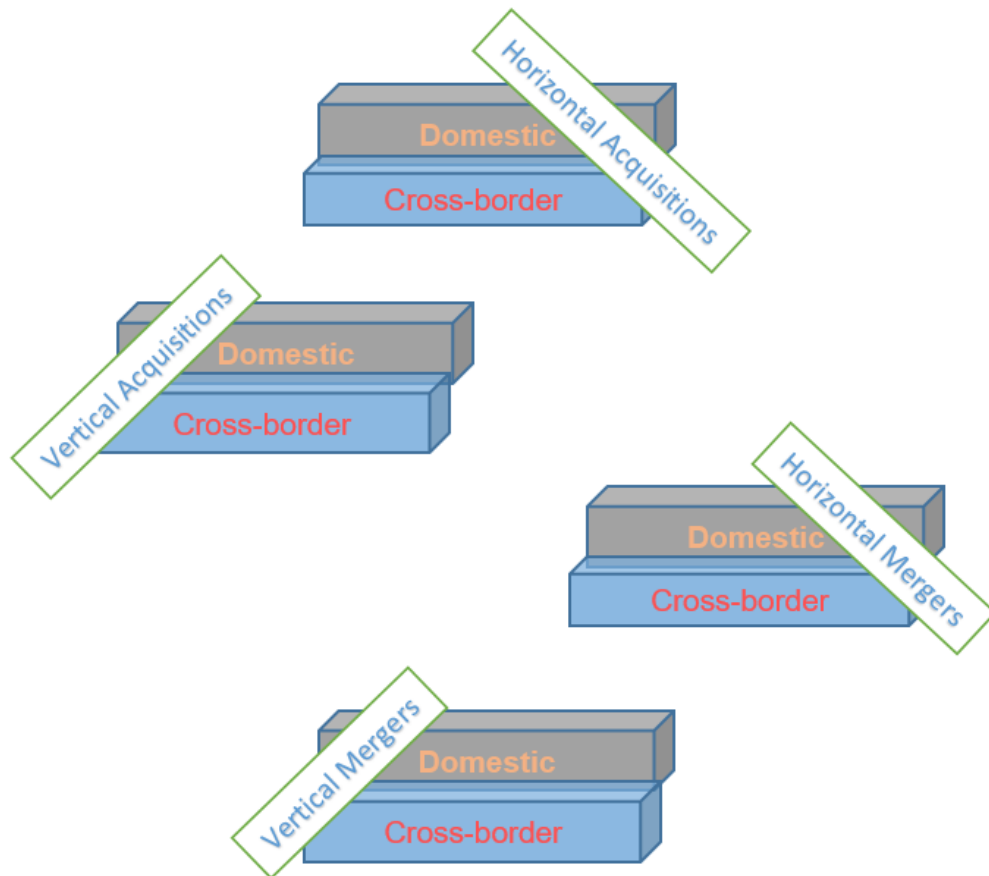


Figure 5: Major Merger and Acquisition Combinations (as adapted from Beladi, Chakrabarti, & Marjit, 2013; Chen & Findlay, 2003; Rahman & Lambkin, 2015)

2.4.1. Horizontal vs. Vertical

As shown earlier in Figure 5, there are two types of mergers or acquisitions; these are horizontal and vertical deals. The most prevalent type on the market are the horizontal initiatives, which represent 80% of all M&As (Rahman & Lambkin, 2015). These are discussed first in the following paragraphs.

Horizontal Deals

According to J. Zhu et al. (2015) researchers from various fields researched horizontal mergers for decades. They say that specialists in economics, finance sciences, as well

as strategists dealt with the subject. Still, horizontal “mergers have received very little attention in the operations management literature” because “researchers in the operations and supply chain management areas are usually more interested in the role of cooperation among competing agents” (J. Zhu et al., 2015, p. 2).

In simple terms, horizontal acquisitions refer to enterprises acquiring “firms in the same industry” (Colombo & Rabbiosi, 2014, p. 1039), i.e. conducting similar business to their targets. Companies pursuing horizontal deals can have different motives to businesses resorting to vertical mergers or acquisitions. Rahman and Lambkin (2015) go on to say that the main motive for horizontal M&As is to grow profit and turnover through rapid expansion and enriched offerings. Interestingly, the researchers posit that cost optimisations and other efficiency improvements are not as important as profit and turnover growth, and are considered and dealt with later in the process.

Bhattacharyya and Nain (2011) claim that the academic discussion and literature in relation to horizontal mergers, do not provide answers, with scholars arriving at contradictory conclusions. A further study may be necessary in this field. An example of two organisations that conducted a horizontal merger are Chevron and Texaco (Kansal & Chandani, 2014). As previously discussed, at times authorities stop horizontal deals from happening to protect the market, as was the case with Staples and Office Depot in the US (Kendall & Fitzgerald, 2015). More discussion with specific examples will be provided in the subsequent sections.

Vertical Mergers and Vertical Integration

According to the definition by Harrigan (1985, p. 397), vertical integration “involves a variety of decisions concerning whether corporations, through their business units, should provide certain goods or services in-house or purchase them from outsiders instead”. It is up to businesses to decide upon “appropriate governance models for efficient supply chains”, with several tools and strategies to choose from, e.g. “collaboration, alliances, joint ventures, contracting and full vertical integration” (Guan & Rehme, 2012, p. 187). In the literature, vertical integration is perceived as the ultimate form of coordination within supply chains, or a “precursor to supply chain integration” (Guan & Rehme, 2012, p. 187). As an example, Guan and Rehme (2012) invoke Zara, an apparel manufacturer from Spain. They argue that the company owns a great proportion of its supply chain from design, production and distribution, through

to retail stores around the world. Their competitors, on the other hand, such as The Gap, Benetton etc., rely more on their suppliers and outsourcing, the authors add. The latter is specifically discussed later in the section.

Vertical integration can either occur through:

- a) vertical ownership (financial),
- b) vertical contracts (Guan & Rehme, 2012).

Guan and Rehme (2012) note that vertical ownership is obtainable through mergers and acquisitions where intercompany boundaries are removed. The other option to achieve vertical integration, the authors argue, is through vertical contracting. They say this can take the form of exclusive dealing and territories, price upkeep etc. The driving forces behind vertical integration are:

- a) transaction cost considerations,
- b) strategic considerations,
- c) output and / or input price advantages,
- d) uncertainties about cost and / or prices (Guan & Rehme, 2012, p. 189).

Beladi et al. (2013) say that for a vertical relationship situation to occur, companies need to be on different levels of the supply chain, e.g. when the outputs of one company are the inputs for another. The authors add that vertical mergers are monitored by antitrust bodies and market regulators due to concerns that market leaders might accumulate too much power through vertical integration within their industry. In the '50s and '60s in the US, antitrust decisions were often negative for vertical merger submissions. The authorities believed that vertical supply chain integration adversely affected "competition by removing resources from the input market, thereby leveraging monopoly power from one market to another" (Beladi et al., 2013, p. 98). However, this reasoning lacked evidence and thus faced widespread criticism, the authors add.

Beladi et al. (2013) went on to say that things started to change in the late '70s and '80s, with some bodies, such as the Chicago School, claiming that market leverage concerns in the case of vertical integration were misplaced. The new thinking was that vertical integration could improve internal efficiencies and consumers would only benefit; however, as is now known, this is not always the case. A real risk exists of

organisations wanting to engage in vertical integration activities in order to gain more power in the market, to the detriment of others (Beladi et al., 2013).

In the '90s, Lummus and Vokurka (1999, p. 12) stated that “few companies continue to be vertically integrated” with a trend showing more reliance on suppliers, who are expected to deliver products and services at low cost, and with a good quality of supply. This approach, the authors believe, ensures that the cooperating businesses are mutually interested in their partner’s success. However, currently the opposite is happening, with some bigger organisations again trying to control their supply operations, says Zhang (2013). The newly observed phenomenon of businesses trying to vertically integrate brings new challenges, the author says. He provides an example of Oracle acquiring Sun Microsystems Inc. back in 2010, an action which put Oracle in the position of a software producer, but also a computer and component manufacturer.

Zhang (2013) noticed that the above situation resembled the state of things from the '60s when businesses were operating on several levels of their supply chains. The reason why the Oracle’s acquisition of Sun Microsystems came as a surprise was that the IT industry always led the way with outsourcing and specialisation, and others normally followed suit, Zhang (2013) argues. The discussed example from the IT arena is not an isolated incident. The author reasons that Apple is yet another business from the IT sector that is highly vertically integrated. He says that Apple controls the design of its hardware, IT systems, and accessories, and also produces a great deal of its own software. The author continues that similar examples multiply within other industries e.g. oil and gas, where conglomerates own their supply chains and are highly vertically integrated. Often they themselves conduct drilling, transport crude, refine, and distribute the finished product to their own retail stations (Zhang, 2013).

2.4.2. Domestic vs. Cross-border

Mergers and acquisitions in a non-domestic market became increasingly popular in the mid-1990s and the motives behind pursuing cross-border deals are different to those for domestic M&As (Chen & Findlay, 2003) and the risk factors can vary, being especially unfavourably high in certain parts of Asia and Africa (Carpenter & Wyman,

2008). There were several reasons for the sudden increase in the popularity of cross-border initiatives, such as trade liberalisation, less strict controls, service deregulation, and state-owned enterprises privatisation (Chen & Findlay, 2003).

Interestingly, businesses operating within the US market still favour domestic acquisitions, unlike in Europe. According to Kansal and Chandani (2014), in the US about 88% of acquisitions are internal. In Europe, on the other hand, companies would rather resort to international buying, with Spain at the forefront with 61% of all deals recorded outside of the country, the authors say. This can be partly justified through the market size. The US market is large enough to focus on domestic competitors across various states, and opportunities are numerous. In Europe, in order to expand, companies instead need to resort to acquiring abroad to overcome the local limitations.

Kansal and Chandani (2014) go on to say that businesses from Brazil, Russia, India and China, similarly to the US, mostly acquire domestic competitors (87%), but the trend is quickly changing. For businesses from the Asia Pacific region the situation is not as straightforward as in other continents. The authors note that Indian companies are keener to pursue international acquisitions, with 59% of deals recorded outside of their own market. In Japan on the other hand, companies are instead focusing on the domestic market. In contrast, businesses from Singapore and UAE pursue international opportunities more often. Australian companies, just like in Japan, target domestic competitors (Kansal & Chandani, 2014).

Cross-border vertical mergers are more complex than domestic ones, say Beladi et al. (2013), and they also attract more intense attention from market regulators from both or all involved economies, the authors reason. They say that frequently, regulators reach divergent conclusions in relation to the approval of a particular M&A initiative, especially if benefits are perceived not to be equally distributed between the economies. This was the case for an attempted merger of General Electric with Honeywell with an estimated worth of \$42 billion (Beladi et al., 2013), a deal called Project Storm. The submitted proposal was approved by the Department of Justice of the US as well as 11 distinct jurisdictions, but fell short in Europe, not receiving antitrust approvals (Grant & Neven, 2005). A similar outcome occurred with the attempted merger of Staples with Office Depot. This time however, the proceedings were

successful in Europe (Braithwaite, 2016), but stopped in the US, resulting in the deal termination (McLaughlin & Harris, 2016).

Although, as discussed earlier, risks involved with CMAs can be higher than those for domestic initiatives, S. Lee et al. (2015) believe, referring to several studies, that cultural differences for CMAs can positively impact upon the organisation. The above conclusion can seem illogical, since the expectation is that culture clashes may cause more issues for CMAs than domestic mergers and acquisitions. However, the authors reason that this may be because the acquiring companies give more attention to potential culture issues for CMAs in anticipation of problems; therefore, they put more effort into this area post-acquisition to avoid problem escalation. Indeed culture issues are high up on the executives' agenda, as in a survey by Booz, Allen and Hamilton of European CEOs, cultural integration was found to be more important for the success of M&As than financial and strategic aspects of businesses (Stahl & Voigt, 2005).

2.4.3. Emerging Economies and M&As

Another aspect of M&As is where they are conducted, i.e. within emerging markets or DE. According to Lebedev et al. (2015) in contrast to the DE, mergers within the emerging markets have not received enough academic attention. The authors claim that this is a gross underrepresentation of the research because CMAs within the EE constitute 37% of all CMAs.

According to Lebedev et al. (2015), businesses from the EE find it increasingly attractive to buy companies from the developed markets to overcome local constraints and market barriers. Acquiring well-known brands and technologies also offers immediate market entry. Organisations from the emerging markets engage in M&As of companies from the developed markets also in order not to become marginalised in the global market, and to keep up with the rest of the world, they say. Lebedev et al. (2015) provide an example of the above situation where a business from the EE acquired an organisation from the DE, i.e. a highly publicised acquisition conducted by Lenovo of IBM. Lenovo's justification for the acquisition was the desire to tackle growing competition from HP, Dell and the like within the Chinese market. Not only did this acquisition provide Lenovo with IBM's renowned brands, but also offered access to IBM's R&D and distribution network in the DE, the authors say. There are more

examples from the automotive industry. These include the renowned Tata Motors and its acquisition of Jaguar and Land Rover in 2008 (Becker-Ritterspach & Bruche, 2012), or the purchase of Volvo by Chinese multinational Geely Holding Group from Ford in 2010 (Y. Liu & Kokko, 2013).

2.5. Examples of Mergers and Acquisitions

A very good example of an acquisition bid is provided by Van Tartwijk (2015), namely Fedex's intention to buy TNT, as announced in April 2015. The US-based Fedex paid \$4.8 billion for the Dutch-based TNT Express NV (E. M. Johnson, 2017). In this situation, Fedex's decision was mainly driven by the desire to strengthen its European footprint, says Van Tartwijk (2015). Even before the deal was concluded, G. Smith (2015) said that if Fedex was successful, it would become Europe's number three delivery company just after United Parcel Service (hereafter UPS) and the German Deutsche Post AG (with its recognisable DHL parcel services). From 2013, TNT, when acting on its own, was not successful, mainly due to its restructuring programme, and in consequence has retreated from certain international markets (G. Smith, 2015).

Van Tartwijk (2015) adds that Fedex's rival, i.e. UPS, in its domestic market, had already attempted to acquire TNT in 2013, but the deal did not receive the necessary approvals. Back then, UPS offered \$7 billion, which is considerably more than what Fedex offered in 2015. However, the circumstances changed, with TNT struggling on its own with other larger competitors and making losses (Van Tartwijk, 2015). In October 2015, TNT advised that its profits may fall below expectations, calling a profit warning, which resulted in a share price drop (Proper, 2015). The deal was successfully finalised in 2016, but already in the second half of 2017, FedEx announced that the integration costs of TNT in 2018 would increase by \$75 million, to \$350 million, totalling approximately \$800 million over a four-year period (E. M. Johnson, 2017).

Yet another example of a horizontal acquisition is that of Royal Dutch Shell PLC's bid for BG Group PLC within the oil and gas industry. For this acquisition, Shell offered approximately £47 billion according to Blas and Katakey (2015). Similar to Fedex's example, Shell's main motivation was to add further resources i.e. oilfields in South America and specifically in Brazil, as well as to strengthen its position in natural gas,

which BG was renowned for (Blas & Katakey, 2015). The acquisition was finalised in February 2016 (Connors & Kent, 2016) and the two companies together were expected to create the largest independent manufacturer of liquefied natural gas, according to Williams and Kent (2015). As advised by Bomey (2016, para. 1), the acquisition made Royal Dutch Shell “the world’s second largest energy company”, only behind Exxon Mobil.

There are also numerous acquisitions and mergers within the domestic British market. On the 30th of July 2015 it was announced that the US headquartered W.W. Grainger would be acquiring a private company i.e. Cromwell Group Ltd. for the consideration of \$482 million as published by Dulaney (2015) in The Wall Street Journal. Already in September 2015 it was announced that the acquisition was successfully finalised (nasdaq.com, 2015). Grainger, which predominantly operates in the American market, is seeking to expand its operations abroad, says Dulaney (2015), and British Cromwell was thought to be an ideal fit. Cromwell’s revenue was just under 5% of Grainger’s, and the combined turnover was forecast to be around \$10.5 billion. Grainger was intending to grow its online sales channel in the two major European markets, i.e. Germany and the UK (Dulaney, 2015).

In fact, Grainger was already present in Europe, even before the acquisition of Cromwell. Its move to acquire the British based Cromwell is yet further evidence that the business is intending to enter Europe on a wider scale. According to the company’s news release from the 31st of August 2011, the organisation had already acquired a Dutch-based Fabory Group (grainger.com, 2011). This was yet another example of a horizontal acquisition conducted by a large industrial distributor of a regional leader selling fasteners, present in 14 countries. According to the Group’s statement, the acquisition presented Grainger with access to the European world’s largest MRO market. Through the acquisition of Fabory, Grainger gained access to Central and Eastern European markets and customers (grainger.com, 2011), whereas the acquisition of Cromwell opened up the mature British and German markets to Grainger.

In December 2015 a statement was released that E.I. du Pont de Nemours and Company (hereafter DuPont) would be merging with The Dow Chemical Co. (often referred to as Dow), say Bunge, Benoit, and Dulaney (2015). A significant M&A

initiative, which added to the list of the largest M&As ever conducted. The authors say that the combined business would be worth \$120 billion, and the deal would impact the whole chemical industry. Both businesses would turn over \$90 billion annually if sales were at the level of 2014, according to Bunge et al. (2015). Furthermore they say, the company planned to cut around \$3 billion in costs, and split into three businesses specialising in different areas i.e. “agriculture, material sciences and specialty products in nutrition and electronics” (Bunge et al., 2015, para. 2).

Both businesses have a long history, and have been around in America since the 19th century, with DuPont starting in 1802, and Dow in 1897 (Bunge et al., 2015). Recently, the businesses struggled with the adverse FX headwind due to the strengthening US dollar currency, and were further pressurised by falling commodity prices, say Bunge et al. (2015). According to the authors, investors expected both businesses to act more courageously, and the decision to merge may be the consequence of these requests. The deal is marketed as a merger of equal businesses, and a split into three autonomic companies is expected to ensure better focus and ability to compete in markets, they say. Interestingly, market reactions were rather negative, with the shares of both companies falling after the news release (Bunge et al., 2015). Primack (2015b) claims that on top of the mentioned \$3 billion cost synergies, businesses are expecting to deliver \$1 billion in growth synergies. Additionally, Dow made a statement that they would take a full ownership of Dow Corning, a joint venture business of Dow Chemical Co. and Corning Inc. (Primack, 2015b). The merger was finally completed at the beginning of September 2017 (Reuters, 2017), taking it nearly two years from the merger’s announcement.

2.6. Mergers and Acquisitions and their Stakeholders

Mergers and acquisitions, apart from directly affecting organisations which actually merge, acquire or are being acquired, also impact other stakeholders, including shareholders, suppliers, customers, or even industries and economies. All these groups may have different drives, expectations, and goals. Since the impact can be enormous, with the potential to significantly change the market balance, market regulators have their final say in relation to the approval or deal rejection, as was discussed earlier. More about the above is discussed in the following sections.

2.6.1. M&As from the Perspective of an Acquired Company

The acquisitioned companies, despite giving up their sovereignty, may have some strong reasons for wanting to be acquired. In the global economy and with fiercer competition, many businesses struggle and cannot fight off competitive pressures. This frequently manifests itself in a steadily worsening market position, and in consequence financial inability (Lipczynski, Wilson, & Goddard, 2005). This was the situation with Neptune Orient Lines and its subsequent acquisition by CMA CGM, as discussed by Azhar, Shen, and Gus (2015). A potential acquisition can help keep operations running, and keep the workforce in continued employment as was the case with TNT and Fedex, which were mentioned earlier. Lipczynski et al. (2005) further add that companies may want to be acquired when they believe they cannot provide for growth purely on their own, lacking either expertise, cash or both. Also, the authors reason, an acquisition can help to fulfil potential tax liabilities or other significant financial obligations that otherwise can pull the company down.

2.6.2. M&As from the Perspective of an Acquiring Company

Companies who go out to the market to acquire other businesses have different motives to those who are seeking a strategic buyer for themselves. Business leaders claim that the main reasons for M&As are synergies, and potential economies of scale (Bhattacharyya & Nain, 2011). Some publications suggest business security motives, or more accurately put, supply chain security and resilience, e.g. a publication by Catalyst Corporate Finance and Ricardo Strategic Consulting entitled “Demand for composites leads to £2.3b record M&A” from 2013 (Humphries, 2013). The author notes that sometimes mergers and acquisitions are pursued to ensure continuity of supply, as was the case for the discussed raw material producers. More reasons why businesses conduct mergers and acquisitions were discussed in the earlier sections of this work.

Another interesting point, as mentioned by Lipczynski et al. (2005), is that horizontal deals often happen at a value well under the company’s true worth. They say that the reason for this is that there is a shortage of well-informed potential corporate buyers; therefore, the price for the company seeking for an investor, does not build up in a bid process.

2.6.3. Authorities, Market Regulators and Their Stance on M&A Deals

The reason why market regulators control and approve horizontal deals is that organisations may excessively concentrate power which may adversely affect suppliers as well as customers (Bhattacharyya & Nain, 2011). For this reason, some M&A initiatives do not receive approval, as was the case with UPS wanting to acquire Fedex, or Staples attempting to merge with Office Depot as was discussed earlier.

On the other hand, in certain circumstances, e.g. within the Asian region in the nineties, predominantly in Thailand and Korea, the authorities not only liberalised regulations and policies for CMAs, but also promoted them (Chen & Findlay, 2003). This was in order to help local economies to recover as well as to encourage markets' financial and corporate reorganisation. As a result, say Chen and Findlay, the liberalisation program delivered a sharp growth of CMAs by an astounding 620%. As the authors reason, part of the liberalisation regarded lesser restrictions for foreign capital involvement, improved accounting standards that more resembled those of the DE, as well as the introduction of the shareholding system known from the DE. These changes brought foreign investors to the domestic financial marketplace, further facilitating the process of acquisition in the Asian region (Chen & Findlay, 2003).

As discussed earlier, market regulators from different economies occasionally give contradictory decisions that stop M&As from happening. This may be done to protect their market, or can happen if the distribution of M&A's value is perceived as unfair e.g. as with Staples and Office Depot.

2.6.4. Other Parties Affected by M&As

Shareholders

Mergers and acquisitions can be attractive not only for businesses, but also for shareholders. In a study conducted by Alexandrou et al. (2014, p. 212) within the shipping industry, both the "acquirers and targets realised average abnormal gains of 1.2% and 3.3% respectively".

Suppliers

According to Bhattacharyya and Nain (2011) horizontal mergers can negatively impact suppliers' performance, due to the increased buying power. After conducting a comprehensive study, the researchers delivered evidence showing that suppliers suffer performance dents for a period of three years after the industry consolidation, and their selling prices drop.

Company Owners Selling Their Organisations

Rahman and Lambkin (2015) say there is growing evidence that mergers and acquisitions deliver poorly, and those who benefit are the owners of the sold businesses, who receive decent payments for their stakes. Also, Adams and Neely (2000) noticed that M&As helped many companies to increase their growth, but those who invariably benefitted were shareholders of the sold enterprises.

2.7. Supply Chain Management

Before going into a detailed discussion about SCI for M&A initiatives, firstly it is necessary to define the supply chain (SC), supply chain management (SCM) and SCI concepts. Mentzer et al. (2001, p. 4) defined an SC "as a set of three or more entities (organisations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer". As easy as it seems, there are no major issues with defining the supply chain concept. Things get more problematic with the definition of SCM.

Fabbe-Costes and Jahre (2008) noted that SCM can be defined in many ways, which causes confusion. For this reason, in the next few paragraphs, popular notions will be introduced and compared. Although SCM is often referred to in the literature as logistics, these terms should not be used interchangeably, as they are not the same (Cooper, Lambert, & Pagh, 1997). According to Mangan and Christopher (2005), SCM is a much broader concept than logistics. They add that unlike logistics, SCM does not only deal with internal matters of the organisation, but also extends to other parties with whom the organisation deals i.e. vendors and customers.

The term SCM was first introduced in 1982 by R. K. Oliver and M. D. Webber (as cited in Fabbe-Costes & Jahre, 2008). According to the authors, since then the newly

named SCM has become a popular notion and a fashionable management concept, especially within logistics (Ross, 2013). Holweg and Helo (2014) add that SCM quickly evolved as a sub-discipline of operations management. Fabbe-Costes and Jahre (2008) noticed that there are numerous definitions for supply chain management, many of which relate to integration. Not surprisingly Ross's definition from two decades previously was reprinted in 2013, and this is due to its continued accuracy. In the author's opinion, the supply chain management concept does not equate to simple techniques and methods for shipping products with the intent to move them to end customers at a minimum cost, but a great deal more. The researcher in his work states that SCM "is a comprehensive, dynamic, growth-oriented, and competitive-winning management approach to thriving in a business environment driven by global change and uncertainty" (Ross, 1997, p. 2; 2013). The definition originates from Ross's work from 1997, where the author emphasised the importance of SCM in the business climate of the '90s.

Sherer (2005) stresses that before the SCM era i.e. pre-1980s, companies worked in isolation and in parallel to their suppliers. Hardly any buyer perceived suppliers through the prism of collaboration, let alone as a partner who could add value. This in turn led to the low status and poor perception of the purchasing function within organisations, says the author. He adds that things started to change with Walmart and the idea of cooperation between customers and their suppliers. Many of the latter were actually pushed into cooperation and alignment, says Sherer (2005). Walmart's sheer size allowed the company to reshape the industry, as few suppliers wanted to risk losing such an important account, he adds. The decision to cooperate with suppliers paid off, and as the author says, Walmart's success warranted widespread publicity. In the nineties further changes pushed partnering to another level with "a collaborative planning, forecasting and replenishment process" (Sherer, 2005, p. 78).

According to Tolossa, Beshah, Kitaw, Giulio, and Alberto (2013), SCM's goals are to utilise assets available within the SC's borders in an efficient way. Departments and functions that lie within company's SC are supply and demand management, "sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customers" (Tolossa et al., 2013, p. 165). As the authors argue, there are several areas that fall under the SC's umbrella, either upstream or downstream of

the organisation. These include company “customers, distributors, manufacturers, suppliers, material costs, transportation costs, manufacturing costs, inventory costs” (Tolossa et al., 2013, p. 165) and similar, as illustrated in Figure 6 below.

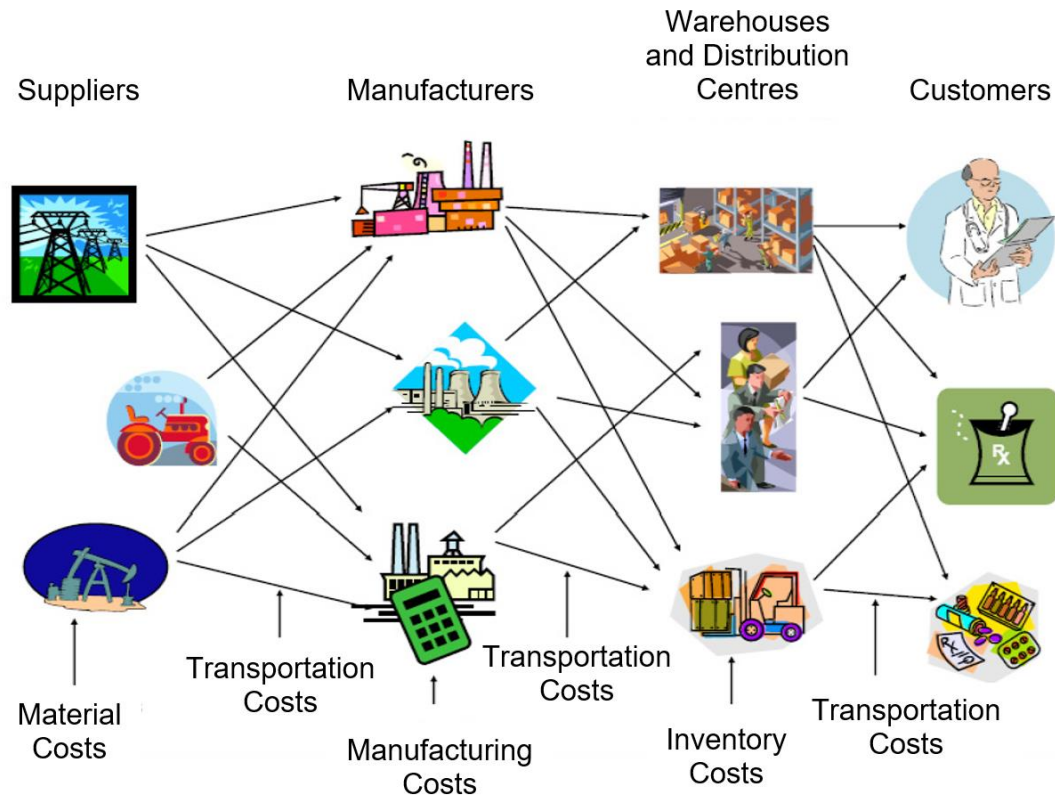


Figure 6: Typical Supply Chain Representation (Tolossa et al., 2013, p. 165)

Due to the popularity of cooperation between partners in the supply chain, which manifests itself through all kinds of alliances, joint planning, cross-company projects, information sharing etc., the supply chain management concept has spread across various industries (Banomyong & Supatn, 2011). The application of supply chain management is expected to minimise the engagement of resources needed in operations, simultaneously maintaining the required service levels, or even increasing them through better product availability, the authors say.

The rise of popularity and interest around SCM came in a natural way and was no surprise. As Lummus and Vokurka (1999) point out, already in the ‘80s businesses had started appreciating partnering with suppliers. Furthermore, in the ‘90s businesses started focusing on their core operations, i.e. areas in which they specialised; therefore, SCM became more important as the reliance on suppliers increased, say Lummus and Vokurka (1999). They add that organisations were simply becoming less

and less vertically integrated. Information flow and physical product flow with main supply chain functions are shown below in Figure 7.

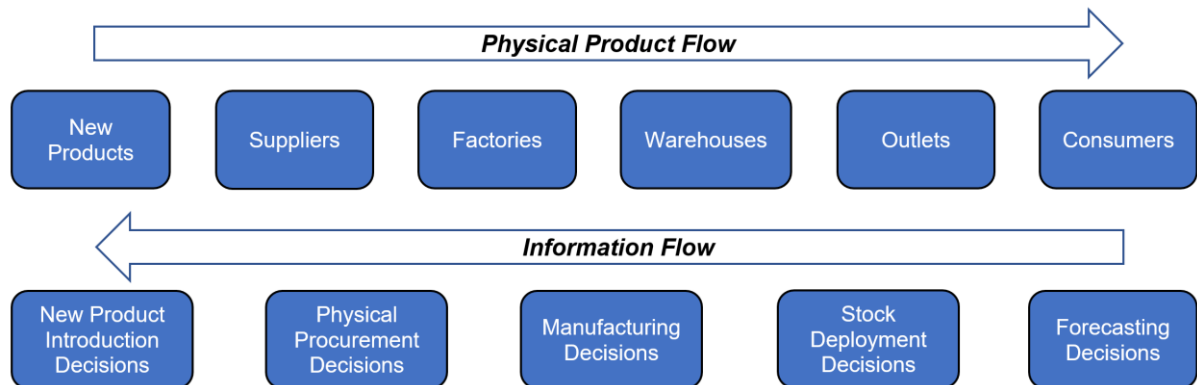


Figure 7: Physical and Information Flow (Sherer, 2005, p. 80)

In the view of Subramanian and Gunasekaran (2015) a goal for SCM is to deliver better value of goods or services to the customer, and SCM embraces all participants along the way, including suppliers, customers and intermediaries. Similarly Ahi and Searcy (2013) believe that the SC starts early with raw material processing and finishes with final delivery to the end-customer. The scholars, in one voice with Fabbe-Costes and Jahre (2008), also say that the ever growing interest in the supply chain area “led to the development of numerous definitions to describe it” (Ahi & Searcy, 2013, p. 330). In the extensive research conducted by Cooper et al. (1997, p. 11), the authors reached a conclusion that “the integration of all key business processes across the supply chain” is under the SCM function responsibility, including product development or company customers, i.e. functions which will never lie within the logistics area.

Several researchers from various universities joined forces in 2001 to define SCM and published their findings in the Journal of Business Logistics in a paper entitled “Defining Supply Chain Management”. In that, a reference is made to the seminal work by Forrester, where the authors admit that although the “article is more than 40 years old it appears that Forrester identified key management issues and illustrated the dynamics of factors associated with the phenomenon referred to in contemporary business literature as Supply Chain Management” (as cited in Mentzer et al., 2001, p. 2). Forrester’s understanding of the then processes was indeed ground-breaking as shown in the quote below from the Harvard Business Review of 1958.

Management is on the verge of a major breakthrough in understanding how industrial company success depends on the interaction between the flows of information, materials, money, manpower, and capital equipment. The way these five flow systems interlock to amplify one another and to cause change and fluctuation will form a basis for anticipating the effects of decisions, policies, organisational forms, and investment choices (Forrester, 1958, p. 37).

Ahi and Searcy (2013) say that initially the SCM term was used as a common umbrella for control of materials, information flows, planning of materials, as well as logistic operations. The authors note that more areas are either being embraced by or pushed to the supply chain function. These include risk, integration and network of relationships. SCM, as the authors argue, has moved away from being focused primarily on material flows.

As Feller, Shunk, and Callarman (2006, p. 3) say, supply chain management is a philosophy introduced “to manage the total flow of goods from suppliers to the ultimate users, and evolved to consider a broad integration of business processes along the chain of supply”. The authors highlight that initially SCM referred to the intra-company processes and functions, but later in the ‘90s evolved with the adoption of rapid response systems within the grocery and textile industries. A good example was introduced earlier, i.e. Walmart with its rapid response program collecting data at the point of sale (Feller et al., 2006) which heralded a sea of change across industries in the years to come.

According to Sherer (2005) when it comes to systems supporting supply chain functions at their early stage of evolution, these were mostly bespoke programmes supporting specific organisations where no intercompany cooperation took place. No cooperation within the company, as well as lack of external coordination with suppliers and customers were the reality of the past, the author says. Changes came with the first systems resembling today’s enterprise data interchange systems. He adds that these brought the first signs of standardisation, where specific rules and routines applied, forcing various business units to pay more regard to others in the network. In order to introduce a particular standard, various parties needed to agree upon ways of doing things, and importantly, had to adhere to them (Sherer, 2005). However, along with the technology, other challenges came about. A problematic issue with IT-supported supply chains is trust (Duris, 2002), which will be discussed in more detail in the barrier identification section of the chapter.

At this stage, and in the light of the above discussed various definitions of the SCM, it is beneficial to quote a description of the SCM function embraced by the Global Supply Chain Forum (GSCF) from 1998. According to GSCF, SCM is “the integration of key business processes from the end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders” (Croxtton, García-Dastugue, Lambert, & Rogers, 2001, p. 13). This constitutes a good summarising definition that incorporates elements discussed by others and introduced in the previous paragraphs of the section.

2.8. Supply Chain Performance Management and Measurement

The reason why performance measurement is so important was acknowledged by Lord Kelvin in the 19th century.

When you can measure what you are speaking about, and express it in numbers, you know something about it...[otherwise] your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely in thought advanced to the stage of science” (Lord Kelvin, as cited in Neely, Gregory, & Platts, 1995, p. 80).

According to Neely et al. (1995, p. 80), performance measurement “is the process of quantifying action, where measurement is the process of quantification and action leads to performance”. They add that an important characteristic of every business is to operate efficiently and effectively. An efficient organisation can deliver to targets economically, at low cost, while still ensuring the desired level of customer satisfaction. Effectiveness, however, “refers to the extent to which customer requirements are met” (Neely et al., 1995, p. 80). This shows that effectiveness and efficiency relate to both internal and external matters of a business. As an example, the authors propose product reliability i.e. quality. When looking at a product’s reliability through effectiveness, this definitely improves customer satisfaction, they say. On the other hand, when efficiency considerations come into play, reliable products reduce warranty claim costs, and ensure less failure, say Neely et al. (1995). Another term that warrants an introduction is “a performance measurement system which can be defined as a set of metrics used to quantify both the efficiency and effectiveness of actions” (Neely et al., 1995, p. 81).

The above are only basic concepts in relation to performance management. At this stage performance measurement in the area of supply chains will be looked at. James Langabeer and Seifert (2003) point out that although it is acknowledged that effective procurement, manufacturing and distribution management positively impact a company's results, there is little empirical evidence proving the supply chain's ability to deliver to an organisation's bottom line. For this reason, the authors conducted a study to deliver empirical evidence with metrics such as inventory levels, stock turns, productivity of labour and shipping costs. As James Langabeer and Seifert (2003) reason, these are metrics usually favoured by supply chain directors.

In order to reach viable conclusions, and judge if supply chain improvements and post-merger integration truly positively impact corporate results, James Langabeer and Seifert (2003) looked at realised margins and ROA (return on assets). In the aftermath, the authors observed that the better the SC metrics, the more the ROA and margins increased. Detailed analysis showed that high inventory levels counter-proportionally affect ROA, and operating margins. Also, corporate results improved in line with the growing stock turns, as well as labour productivity. The same is true for shipping costs, i.e. the lower the costs, the better the balance sheets. The authors argue they are the first researchers to attest to the relationship between the supply chain management and company results, yet very few supply chain managers recognise the importance of their function within the wider organisation. This in turn may lead them to avoid getting involved with more strategic aspects of the corporate world, including mergers and acquisitions (James Langabeer & Seifert, 2003), a subject which will be researched within this work.

2.9. Supply Chain vs. Value Chain and Value Chain Architecture

When talking about the concept of the SC and SCM, it is also important to discuss the notion of value chain architecture. The term has been around since 1985 and was introduced by Michael Porter in his seminal work entitled "Competitive Advantage", in which he dealt with competitive strategy implementation and how it affects business performance (as cited in Feller et al., 2006). As the authors say, "value is a subjective experience that is dependent on context" and is created through meeting customer needs (Feller et al., 2006, p. 1). The needs can be met via the delivery of a good

service, product or a resource by way of exchange or transaction. This means that “value is an experience” and therefore flows in a counter supply chain direction and parallel to cash flow, from a customer to the provider (Feller et al., 2006, p. 1) and “is created in sequential steps by a set of distinct firms” (Holweg & Helo, 2014, p. 231) as shown in Figure 8 below.

Feller et al. (2006) explain that the above provides an explanation for why companies conduct market research, i.e. organisations are trying to obtain understanding of their customers, specifically what they value. The authors say that businesses equipped with this knowledge are better positioned to efficiently, quickly, at low cost and accurately meet these requirements.

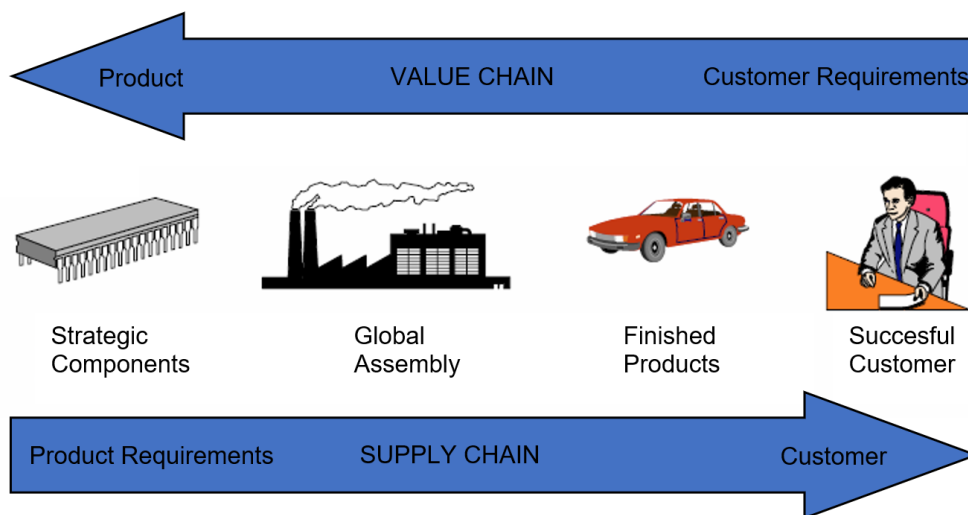


Figure 8: Value Chain vs. Supply Chain (Feller et al., 2006, p. 2)

Feller et al. (2006) conclude that in order to maximise value in a dynamic and complex environment there is a need to stop separating value chains from supply chains, and synchronise them instead. In fact, they say that within the modern SCM, the value chain, financial flow, supply chain, knowledge flow and information flow should all be correlated. In order for this to happen, the full “holistic view of the end-to-end business process throughout the product life cycle and across geographical borders” needs to be assumed (Feller et al., 2006, p. 6).

2.10. Supply Chain Integration

Although the standard form of SCI is not strictly within the scope of this thesis, it has many similarities to the subject of this work, or at least a part of it. In the scope of this work is the SCI of two distinct supply chains which either merge, or one swallows the other in an acquisition bid. Therefore, the focus of this research, although still concerning SCI, will be on different activities, e.g. how businesses combine systems, which policies they follow after the acquisition (not necessarily strictly, e.g. integration practices with the company partners). Furthermore, the present research goes beyond SCI, as enquiries will be made in relation to practices and activities undertaken by businesses prior to acquisition or merger, e.g. supply chain due diligence. This is expressed in one of the research questions. SCI for M&As is still a form of SCI, but the focus is different. In this section of the research the author will look at SCI, and then in the next section, strictly SCI for M&As will be discussed.

Guan and Rehme (2012) and C. W. Lee, Kwon, and Severance (2007) believe that the best strategy to improve a supply chain's performance is to properly integrate it. The integration can refer to both intra and inter-organisational activities e.g. ensuring a real-time exchange of information with suppliers and customers, say C. W. Lee et al. (2007). Frohlich and Westbrook (2001) introduced the concept of arcs of integration, which define the scope of integration. This is both intra and inter-organisational. The researchers explain that a narrower arc refers to the integration of intra-company functions, and a wider arc embraces the internal functions, as well as other independent organisations in the supply chain. The researchers point out that the narrow arc of integration is easier to pursue and accomplish than the wider arc. Nonetheless, although companies understand and are aware of the importance of integration, they still fail in both external and internal integration, the two authors argue. SCI is known to create strategic advantages, but there is a lack of academic research to show how performance metrics improve in line with the integration (C. W. Lee et al., 2007).

Before going into a detailed discussion about SCI, it is necessary to clarify what integration means. According to Jayaram and Tan (2010), the concept of integration means cooperation between two or more parties in order to achieve common goals. SCI in turn "refers to coordination mechanisms in the form of business processes that

should be streamlined and interconnected both within and outside company boundaries” (Jayaram & Tan, 2010, p. 262). The authors advise that over the past few years a growing number of researchers have looked into the integration of supply chains and its impact on company performance. Fabbe-Costes and Jahre (2008) admit that there are many definitions of integration; however, they are not very formal and not often related. Also Guan and Rehme (2012) acknowledge that the SC integration is a frequently discussed topic in the supply chain literature. They add that this is vital for companies to adopt specific governance models for their supply chains, not only in order to grow but sometimes to survive.

As explained in detail by Lambert and Cooper (2000) there are numerous activities related to SCI, such as the structure of information flow, methods of management etc. and companies integrate different parts of their supply chains depending on the business processes in focus. The authors continue by saying that for SCM to be successful, the integration of business processes require an active support from the key supply chain members, which is a very important observation from the point of view of this research. Because of the recent popularity of outsourcing strategies, supply chains are especially challenged and need to ensure excellent intercompany integration, say Guan and Rehme (2012), adding that this is to ensure full control over the outsourced processes. However, if all controls are in place, the reward is improved supply chain efficiency (Kroes & Ghosh, 2010).

SCI shares similar characteristics with the previously discussed vertical integration, but there are major differences too. “Transaction cost economics provide the theoretical basis for vertical integration, while the theory of industrial dynamics supplies the foundation for supply chain integration”, and also “the primary integrating mechanism in supply chain integration is considered to be cooperation and coordination rather than ownership” (Guan & Rehme, 2012, p. 190). The authors say that the supply chain integration is triggered by the promise of potential gains that can be achieved via SC alignment of businesses, external pressures, including increasing competition, and the desire to lower costs, further fulfilling customers’ diverse needs. Palma-Mendoza and Neailey (2015, p. 1) believe that both SCM alongside SCI are prerequisites for any company wishing to gain a competitive advantage and “operate as a single entity driven directly by customer demand”.

Although many researchers advocate SCI, believing it positively impacts a company's financial performance, some authors point out certain conditions and situations when this may not necessarily be the case. In a study by Zhao, Feng, and Wang (2015) conducted with the participation of 195 companies, the authors argue that both too little or too much SCI can adversely affect a company's financial performance. Although the study was conducted amongst Chinese businesses, its conclusions may also apply to Western markets. In fact, Fabbe-Costes and Jahre (2008) challenge the opinion that the higher the degree of integration the better the organisation's performance. They claim that there is no evidence to support the statement, and that it is hard to advise managers about what and how to integrate. However, the authors still consider supply chain integration "to be of strategic as well as operational importance" (Fabbe-Costes & Jahre, 2008, p. 131), and so this will be dealt with later in the chapter. In the next section, the subject of SCI strictly for M&A initiatives will be discussed, i.e. the very focus of the research.

2.10.1. Supply Chain Integration for Mergers and Acquisitions

Brown (as cited in O'Reilly, 2002, para. 5) pose a question of "where does supply chain integration fit in the M&A puzzle". Furthermore, a reference is made to a reductionist view according to which, if two distinct supply chains come together in the aftermath of a merger or acquisition, some form of integration is essential. Byrne (2007) argues that most cost synergies lie within supply chains and this is a major area for integration. The author adds that by not making it right with the SCI, the chances are no value will be extracted from an M&A deal.

Arthur Andersen Consulting prepared a report in 2000 after interviewing 31 executives from businesses conducting M&As (as cited in O'Reilly, 2002). The selected participants were asked to address benefits and identify risks related to mergers and acquisitions. According to the author, 42% of survey participants highlighted the fact that the integration stage of the process was not optimal. Very importantly from the point of view of this research, the message was that there were no supply chain integration projects and initiatives undertaken. However, the report also noted that some respondents stated that the potential benefits of SCI are tempting and companies are becoming more open (as cited in O'Reilly, 2002). As Byrne (2007)

stated, most cost synergies lie hidden within supply chains, yet according to the research cited by O'Reilly (2002), businesses do not even attempt to integrate them. The failure rate of M&A initiatives, as previously mentioned, is still very high. Therefore, there is a need for this research to look into supply chain management practices in the context of M&As within the industrial MRO distribution market.

Herd et al. (2005) believe that companies who pursue M&As in order to expand to new markets, optimise costs of operations or improve spare capacity management, will specifically need to turn their attention to supply chains. For these businesses, the SCI process and execution can be a deal saver and lead to successful completion of the M&A initiative, the authors argue. The supply chain is the area to search for immense savings, as was the case for a high profile merger of HP and Compaq, where cost-saving targets of \$2.5 billion were achieved one year ahead of time (Herd et al., 2005).

It is important to notice that “how quickly and intelligently” businesses “integrate new assets such as plants, warehouses or transportation equipment into an existing supply chain network can make or break the early success of a merger” (O'Reilly, 2002, para. 4). According to a business consultant, Tom Brown (as cited in O'Reilly, 2002), businesses are so preoccupied with gaining a market share and grasping the financial side of M&As that they forget about business integration, which makes it tough to effectively operate as one entity. Dung and Thanh (2012) further add that SCI is overlooked in general by organisations, and inadequate attention is paid to the subject of integration.

According to J. Zhu et al. (2015) even horizontal deals do not always deliver efficiencies, whereas gains from synergies are often below expectations. Byrne (2007) highlighted that 45% of merger and acquisition initiatives did not deliver the expected cost savings through synergies. The author refers to a study by Economist Intelligence Unit and Accenture in which it was revealed that just over 50% of deals delivered the expected synergies (as cited in Byrne, 2007). J. Zhu et al. (2015) refer to Quaker Oats Company and its unsuccessful acquisition of Snapple. The transaction delivered an astounding \$1.4 billion loss in just over two years. There are other similar cases, the authors continue, e.g. a merger of Sears Holding with Kmart which delivered a 10% revenue decrease in four years, instead of the expected sizeable market capture. The authors add that at the same time, Walmart and Target, close competitors to Sears,

grew by approximately 31% and 24% respectively. Perhaps “part of the reason for this lack of success may be that many companies ignore the hard work of establishing an effective and efficient consolidated supply chain” (Singh, 2009, para. 3).

Similarly, Cheng and Seeger (2012) say that companies fail, because they are unable to integrate together to create a coherent business. Although the authors mostly focus on communication and cultural issues, they conclude that “managers need to communicate and clearly define objectives and performance expectations during the integration and implementation process” (Cheng & Seeger, 2012, p. 116). Communication and setting targets for supply chains during the integration phase of M&As will be discussed later in the barriers section of the chapter.

Importantly, as Herd et al. (2005) advocate, the supply chain is more than just an area for searching for cost savings. They say that in fact, supply chains can contribute to the growth of revenue. A good example is that of Cadbury Schweppes buying a confectionery part of Adams for \$4.2 billion. As the authors argue, despite initially unfavourable expert predictions, the deal was a success, with Cadbury Schweppes reporting a growth of revenue exceeding targets just one year after the acquisition. Notably, supply chain targets and performance goals were exceeded by 14% in the first 100 days after the deal conclusion, the authors say. This was a tremendous success showing a real value behind supply chain integration for M&A initiatives. McFarlane and Fleming (2011, para. 7) say that “if both the target and the acquirer have a decentralised supply chain, there are opportunities to assess (preferably at the start of the due diligence phase) the potential benefits of creating a centralised operating model”. In the publication, both authors insist on tax-efficient supply chain planning, and this should be coupled with traditional planning techniques to maximise the shareholder return, in a minimum time period.

In a report prepared by Orion Consulting about the role of supply chains within M&As, it was revealed that just below 5% of businesses introduced a form of supply chain related metrics to their M&As, and under 1% of companies professionally dealt with the matter of adequately assessing the SC’s performance (as cited in O’Reilly, 2002). Although there were many scholars quoted within this work who claimed that the failure rate of M&A ventures is continuously very high, there is yet another academician who reaffirms these views. Prof. Holthausen, a director of mergers and

acquisitions in Wharton School of Business in the USA, revealed in his study that a number of companies cannot show any positives after a merger (Knowledge@Wharton, 2005). At times, the situation is even worse with “acquiring firm’s relative returns decreasing by 5% over a five-year period” post-acquisition (Jim Langabeer, 2003, para. 10). Other authors investigating financial sectors reached similar conclusions, saying that there is no empirical evidence proving that M&A deals drive performance (Du & Sim, 2015). However, they admit that the perception and image in relation to M&As are positive and so merger activity continues.

Nagurney, Woolley, and Qiang (2010, p. 334) believe that in the present competitive global business environment, with many mergers conducted every year, it is important to develop a tool to be able to “predict the associated strategic gains associated with supply chain network integration, in the context of M&A”. The tough market environment, as the authors say, turned the interest of practitioners and scholars towards supply chains, and how to improve their performance. Similarly, Dung and Thanh (2012) argue that supply chain integration of networks of the businesses engaged in horizontal deals is particularly important. Notwithstanding, many organisations still neglect the need to focus on supply chains for their mergers and acquisitions, an inaction which may lead them to failure, the authors believe. Furthermore, Herd et al. (2005, p. 9) say that “supply chain integration gets short shrift in many big deals”, and with the absence of integration, the full benefits may not come, says Jharkharia (2012). Integrating supply chains of merging businesses is a difficult task and organisations make mistakes, which “are common at every stage of the process” (Jharkharia, 2012, p. 294).

2.11. Business Context; Detailed Analysis

A brief business context for the research was already presented in the previous chapter of this work. In the next section a detailed definition of the industrial distributor will be given and roles and validity of industrial distributors within the market will be discussed. On top of that, the world’s major distributors will be identified and discussed. This is in order to justify the choice, and prove that the industrial MRO distribution market is a good vehicle to test the gap in theory.

2.11.1. Definition and Roles of Industrial Distributors in the Market

Mudambi and Aggarwal (2003) provide an explanation for roles that distributors fulfill in the B2B environment. In line with their views, distributors connect user organisations with product manufacturers. An early definition of an industrial distributor by Anderson and Narus (1984, p. 62) accurately holds that distributors “resell products and provide attendant services to other firms for use in the production of those firms’ goods and/or services”. Mudambi and Aggarwal (2003) note that, traditionally, distributors were used by product manufacturers as a result of the make vs. buy analysis. They say that manufacturers believe that distributors can perform tasks and distribute their products to customers at a lower cost. Very importantly, the outcome of letting distributors into the supply chains is that manufacturers can limit the direct relationships with multiple business customers, thereby streamlining their structure, and making their external relationship channels more manageable (Mudambi & Aggarwal, 2003).

Things started to change, with many new challenges and opportunities emerging, in the era of e-commerce (Webb, 2002). However many opportunities doing business over the internet arose, says Webb (2002), there is a major limitation i.e. the internet channel cannot move goods from one location to another, and partners are still required. In the modern e-connected and technology-driven world, Mudambi and Aggarwal (2003) pose a question of whether there is still room for industrial distributors these days, given what e-commerce can offer. The authors argue that e-connectivity can reshape customer relationship management, leaving no room for distributors. Potentially, the new e-technology can equip manufacturers with tools that will permit the development of online sales channels, allowing for cost-effective customer management, and cutting out distributors. To justify their opinions, the researchers refer to the article by Gosh S. published in the Harvard Business Review back in 1998. In that, Shikhar Ghosh (1998, para. 4) argues that the internet can facilitate direct relationships with customers “bypassing others in the value chain”. Mudambi and Aggarwal (2003) added that the tougher competition, with e-commerce and globalisation playing their part, had already pushed distributors to their boundaries and made them more willing to seek out for opportunities and consolidate the market through mergers and acquisitions. All in all, industrial distributors need to, the authors say, protect the value they can deliver to their customers and the manufacturers they

buy products from, and importantly to effectively communicate the value they can deliver to their partners.

2.11.2. Industrial MRO Distributors

There are various reasons that businesses support themselves with MRO suppliers, but the demand for industrial distributors, e.g. as within the UK MRO airline sector, faces substantial growth. Palma-Mendoza and Neailey (2015) say that the MRO suppliers are seeking to optimise their processes in order to maximise their competitiveness, including the introduction of e-business software for better [vertical] supply chain integration. They add that modern applications can offer better visibility, improved speed of communication, component tracking, and importantly, can help to optimise levels of inventory.

UK aviation is only one example of a sector where MRO distributors can add value. According to Sarkar and Mohapatra (2006), in order to build strong relationships with suppliers, companies need to optimise their supply bases to manageable sizes. This is exactly what MRO distributors can offer to their customers. With the use of distributors, businesses can limit the number of supply contacts (Mudambi & Aggarwal, 2003) for the whole range of maintenance, repair and overhaul products and services. This in turn helps to streamline operations and reduce administration, to name a few advantages, say Sarkar and Mohapatra (2006). They add that supplier reduction is a strategic decision process involving retention of a limited number of suppliers, and a conscious desire to develop a long-term supplier relationship. Furthermore, the researchers add that relationships need to be nurtured, but this requires effort and use of resources by both sides.

The case study organisation (an MRO provider) from Palma-Mendoza and Neailey (2015) kept consolidating the market through acquisitions, and various forms of partnerships and joint ventures, ultimately becoming the world's leading independent MRO and technical solution provider. The difficult economic situation expressed in tight margins pushed the whole sector towards seeking cost savings and reducing the costs of operations, the authors say.

In the European market there are numerous companies operating in the maintenance, repair and overhaul area, and some of them were already introduced in the business

context section of the first chapter. In order to deliver a more insightful overview of the industry and enrich the business context of the study, the main industrial distributors operating on various continents will be introduced and discussed in the following pages of the work. These companies have different product offerings and provide various auxiliary services. An attempt will be made to identify to what extent MRO distributors engage in M&A deals, and how these initiatives propel their growth. The overview will also help to establish if industrial distributors would rather acquire their rivals, or merge with them; thereby delivering a rationale behind the research level (level 2) gap in theory discussed in the first chapter. The following companies, shown in Table 2 below, will be discussed in the subsequent sections of the chapter, in chronological order by incorporation date, starting with the oldest i.e. McMaster-Carr Supply Company.

Company	Country	Incorporated
McMaster-Carr Supply Company	USA	1901
Brammer PLC	UK	1920
Applied Industrial Technologies, Inc.	USA	1923
W. W. Grainger, Inc.	USA	1927
Electrocomponents PLC	UK	1937
Eriks	Netherlands	1940
MSC Industrial Direct Co., Inc.	USA	1941
Würth Group	Germany	1945
Fastenal Company	USA	1967
IHP Group	France	1987
Amazon Supply / Business	USA	2012

Table 2: Business Context; Industrial Distributors

McMaster-Carr Supply Company (USA-based)

McMaster-Carr is a large American business that was established in 1901 in Elmhurst, Illinois. The business mostly sells in the USA, but is also present internationally. Its offerings include tools, storage, hardware products, fastening equipment, joining

equipment, filtering equipment, building products, polishing and abrading equipment and similar. As the business is in private hands (Blas & Katakey, 2015), there is limited data available about the company, and this has always been the case. However, despite the fact that minimum information is disclosed about the organisation, Modern Distribution Management (a business dealing with expertise analysis, market research and distribution news) ranked McMaster-Car as the ninth largest distributor. This was possible thanks to analysis of industry data and additional insight from experts. The business offers around half a million various products (www.mgm.com, 2012).

Brammer PLC (UK-based)

Brammer is a British company headquartered in Manchester, with sales of around €800 million. It is a typical industrial MRO distributor operating across 23 countries throughout more than 350 local branches. The company defines itself as an expert in delivering substantial cost savings and reducing TAC (total acquisition cost) of buy-in components. The business was founded in 1920. Brammer is growing both organically and through acquisitions. A recent major acquisition conducted in the domestic market was that of Buck & Hickman (B&H) in 2011 for the consideration of £27.6 million. This was a typical domestic horizontal acquisition, involving one industrial MRO distributor taking over another industrial MRO distributor specialising in tools and general maintenance. Brammer's original business was centred more around bearings, seals, mechanical power transmission, electrical power transmission, fluid power and the like (Brammer, 2016).

Through the acquisition of B&H, Brammer enhanced its offering, adding new product groups to its range. As was discussed in the previous points of the chapter, for many businesses this can be a driver behind the acquisition. The discussed acquisition of B&H also offered access to a rich customer base, and further strengthened Brammer's position on the domestic British market. Buck & Hickman itself is a business with a wealth of heritage as it was originally founded in the 1830s (Brammer, 2011). In its history, the organisation was subject to numerous acquisitions, first in 1970 when Sterling Guarantee Trust purchased the business from the founding family after 140 years in private hands. Later, in 1985, as a consequence of a merger of the Sterling Guarantee Trust with P&O, Buck and Hickman became a part of P&O. In 1993, P&O decided to sell B&H to Charles Baynes PLC, and under the new ownership, the

company acquired Pillar Engineering in 1994, as well as UK Tools a year later. At the beginning of the 21st century, B&H was sold to Premier Farnell. In 2007, however Premier Farnell itself was acquired by BSS Group, with B&H on board (Buck&Hickman, 2016). Lastly, BSS Group sells B&H to Brammer in 2011 (Brammer, 2016).

Apart from buying B&H in the UK, Brammer conducted several acquisitions on the continent. These included a major business in France in 1992 (Roulement Service), Spain (Rodamientos USA), but also other businesses in Belgium, the Netherlands and Luxembourg in 1999 (Brammer, 2016).

In the 21st century the Brammer Group concluded numerous acquisitions, including another business in Spain in 2001 i.e. Rabind Group, as well as a sizeable German THF GmbH. In 2002, the business further expanded in Central Europe, specifically in the Czech Republic (through the acquisition of Awexim) and Austria (Britannia Edelstahlgesellschaft). In the year of 2003, Brammer went further east through the acquisition of Berdo Techink (Hungary) and THF Hungary. Two years later, in 2005, the business entered the Slovak market through a buyout of MHBH (also present in the Czech Republic). In 2006, Brammer acquired Ramaekers in Belgium and again in Hungary, KS Csapagy. In 2007, Brammer Group conducted several more acquisitions, namely that of Fin S.A. Group based in Poland, Rotate Ltd. from Ireland, Spanish Boada Industrial S.A., Czech's ZPV Group and the domestic Mercia Engineering Supplies Limited (Brammer, 2016).

Similarly, in 2008, the company continued its expansion and strengthened its position in Europe through the acquisition of Centre Roulement in France, Walser in Austria, HandelsondernemingOtten B.V. from the Netherlands, Italian Tecnoforniture Srl, and again in the domestic market, CBS Rotary Power Motion Ltd. Additionally, the company entered Romania through the acquisition of 25% of the stake of CN Industrial Group Srl. In the next three years, Brammer did not acquire any company, eventually taking over the previously discussed B&H. In 2014, Brammer entered Scandinavian markets through the acquisition of Lonne Holding AS with operations in Sweden, Norway, Finland and Denmark (Brammer, 2016).

Brammer Group has made several more acquisitions in recent years, further consolidating its presence in the European market. In 18 months between early 2014

and mid-2015 there were 15 M&As announced. Some of these were Kipab AB, Röstberg & Bengtsson AB, as well as CCH Transtech AB in Sweden. Brammer's goals are to enhance MRO expertise, and provide solid response times to its customers. In France in recent months, Brammer acquired F.I.C.A and other smaller businesses to gain competencies in specialist pneumatics and hydraulics areas to better position itself to serve French manufacturers. In the Polish market, Brammer has recently acquired Parker Stores so it can conduct specialist air leakage audits as an additional service for its customers. The acquisition has also provided access to a specialist stock (Brammer, 2015).

Brammer has also expanded in another highly specialist area of PPE (Personal Protection Equipment). This has been propelled by the acquisition of Spanish Alar Protección. The acquisition expanded Brammer's competencies, allowing the company to offer health and safety training and personalised PPE products to its customer base (made-to-measure boots and shoes and protective prescription spectacles). To strengthen Brammer's position in the PPE market in Spain, the business has also recently acquired Suministros Ondiz (Brammer, 2015).

In Germany, Brammer acquired Martin Depner (a tools and general maintenance specialist) and in the Netherlands O.A.T., a business with expertise in tools and general maintenance, but also in bearings and power transmission, which was a good fit with Brammer's existing offering. On top of the above, there were additional acquisition initiatives in Italy, i.e. of Italian Sirio as well as Tisaf Srl, and again in the UK of Premier Bearing Co. Limited. As Brammer's CEO used to say, through these numerous acquisition deals, not only do Brammer's existing customers benefit through the company's enhanced capabilities and service in many European countries, but so do customers of the acquired businesses. He added that the benefit for the customers of the acquired businesses comes from the fact that they will be able to trade with a pan-European business that focuses on reducing TAC for its customers, and that is increasing its "production efficiency and reducing its working capital" (Brammer, 2015, para. 11).

Applied Industrial Technologies (USA-based)

Applied Industrial Technologies (AIT) is an industrial MRO distributor delivering to businesses across almost every industry. AIT also delivers to original equipment

manufacturers customers, and the number of products it offers exceeds five million. AIT offers auxiliary services, including, but not limited to inventory management, maintenance training, and similar services aimed at adding value for its customers. The business was established more than 90 years ago (media.corporate-ir.net, 2015). The company appreciates both organic expansion and development through acquisitions. It is currently operating around 560 branches in the US, Canada, Australia, Mexico, Puerto Rico, and New Zealand. All these are serviced via 12 distribution centres. The business turned over \$2.75 billion in a fiscal year by end-H1 2015 (media.corporate-ir.net, 2015). AIT’s business model is shown in Figure 9 below.



Figure 9: Business Model (media.corporate-ir.net, 2015, p. 1)

According to a note released in 2015 by the company, the growth strategy incorporates acquisitions, which are very important to the business. Through strategic acquisitions AIT intends to expand its reach, and build on the current capabilities, in order to add value for shareholders. Some of the most recent acquisitions were the buyout of Atlantic Fasteners, a business trading in fasteners and other consumables, but also S. G. Morris Co., a company that distributes fluid power systems and components (media.corporate-ir.net, 2015).

It took the business 20 years to float on the NYSE (New York Stock Exchange), and this happened in 1953 with the change of the name from The Ohio Ball Bearing Company by Joseph M. Bruening to Bearings, Inc. The first acquisition came four years later in 1957. The target company was Dixie Bearings, Inc. In the nineties there were more acquisitions: of King Bearing, Inc. in 1990, then in 1994 Mainline Industrial Distributors, Inc. and Engineered Sales, Inc. in 1996. Finally, in 1997 the business changed its name to Applied Industrial Technologies, and the very same year acquired Invetech Company. Another year later, in 1998, AIT acquired Rafael Benitez Carrillo in Puerto Rico, and its last acquisitions of the 20th century were Bearing & Transmission, and B&T Rubber HyPOWER Systems in Canada (Applied.com, 2016).

In the 21st century the business set out to expand through acquisitions even more, starting with Baleros Industriales, S. A. de C.V. from Mexico in 2002, and the very same year in Canada taking over Industrial Equipment Co. Ltd. Many more acquisitions followed in the following years such as Rodamientos y Bandas de la Laguna, S.A. de C.V. in Mexico in 2003, and in 2005 and 2007 Groupe GLM and Spencer Industries, Inc. respectively. In 2006 AIT acquired Minnesota Bearing Company, and in 2007 VYCMEX S.A. de C.V. from Mexico. In 2008, the business set out to acquire Suministros Industriales Enol, S.A. de C.V., Fluid Power Resource, LLC and eight more distributors as follows: Hydro Air, Bay Advanced Technologies, Hughes HiTech, Power Systems, DTS Fluid Power, Carolina Fluid Components, FluidTech and Cincinnati Transmission - all in the very same year (Applied.com, 2016).

In 2009 there were no acquisitions, but instead the business went into partnership with ORS Nasco and LagasseSweet, and became an authorised distributor of linear motion technologies by THK. From 2010 until today, the business acquired numerous companies, three of which were in 2010. These were Canadian SCS Supply Group Inc., Bearing & Transmission and UZ Engineered Products from the US. In 2011, further purchases included Gulf Coast Bearing & Supply Co. as well as Canadian Chaines-Plus. In 2012, four more companies joined the group i.e. Solutions Industrielles Chicoutimi and Specialites Industrielles Harvey, a part of a distribution purchased from SKF (operations in Australia and New Zealand), HyQuip company, and Parts Associates, Inc. from Cleveland. In 2013, one acquisition was made, of Texas Oilpatch Services, and there were five more in 2014. These were Knox Oil Field Supply, Great Southern Bearings and Northam Bearings, Knox Oil Field Supply, Rodamientos y Derivados del Norte S.A de C.V. from Mexico, Reliance Industrial Products from Canada and Ira Pump & Supply, Co., Inc. In 2015, AIT acquired Atlantic Fasteners, a distributor of fasteners and other industrial supplies, and S. G. Morris Co., a business trading in engineered fluid power systems and fluid power components. In the tax year of 2016, AIT acquired HUB Industrial Supply (Applied.com, 2016).

W. W. Grainger (USA)

Like many industrial MRO distributors, also Grainger was founded by an entrepreneurial individual William W. Grainger. The company was set up in 1927, and trades under GWW symbols on the NYSE (pressroom.grainger.com, 2016). Grainger is a B2B distributor of MRO products predominantly supplying safety products, motors, test instruments and power transmission, power tools, lab supplies, janitorial products and some outdoor equipment. The company's revenue in 2014 was \$10 billion (invest.grainger.com, 2015b), and the number of active customers exceeds 2 Mio. Due to the sheer size of the markets in which Grainger operates, estimated at around \$380 billion, the combined market share is only about 3%. The business estimates the global MRO market at around \$595 billion (invest.grainger.com, 2015a).

Within Grainger's domestic market in the U.S. the business has 1.2 million active customers, and the average customer order is around \$250. The size of the American market is believed to be \$150 billion (invest.grainger.com, 2015b) of which Grainger's share is around 6%. Globally, the group operates through 33 distribution centres, employing 23,600 staff. According to Grainger, customers value the good selection of products, competitive pricing and reliable service. These benefits are fulfilled through the company's two business models. The first model is called multichannel, and this is utilised to predominantly service large accounts of complex operations and developed procurement. The business puts emphasis on strong relationships with customers and value-added services. The other business model is a single channel model (online) with competitively priced products, including Grainger's Zoro line. Simplicity is at the heart of this channel, with limited additional services rendered (Grainger, 2015).

Grainger set numerous priorities, and amongst them are those directly related to supply chains. The company aims to invest significant funds in its supply chains and IT within its North American market. Grainger appreciates the role of the team, constantly seeking to attract the best talent in the industry to work with its customers. The company states that the MRO market is very fragmented, and the business is intending to steadily consolidate it. Similar to other MRO distributors, Grainger is very active in the acquisition area. The group claims that its M&A deals are intended to

support organic growth through the addition of new capabilities. These in turn will help the business to reach new customers (invest.grainger.com, 2015a).

Amongst a long list of the conducted acquisitions are Canadian Acklands-Grainger, WFS Enterprises Inc., a business operating in the manufacturing area. In Europe, Grainger purchased Fabory in 2011, a business incorporated in the Netherlands. Grainger Group considers the European MRO market as the second largest in the world and estimates its value at \$130 billion. Through the acquisition of Fabory, Grainger immediately entered several European markets, including that of Eastern Europe (invest.grainger.com, 2015a).

Another of Grainger's acquisitions is Cromwell, in the UK, already introduced in this work, as well as Imperial Supplies LLC in 2009, a business which was turning over 67 million annually (pressroom.grainger.com, 2009). More recently, in 2013, the group acquired E&R Industrial Sales, Inc., which operates in and supplies to the U.S. metalworking market. E&R's sales in 2012 were reported at \$180 million (pressroom.grainger.com, 2013), further adding to Grainger's global turnover.

In 2012, W. W. Grainger, Inc. acquired Techni-Tool, Inc. with its business arm Wassco, Inc.; however, the terms of the deal were not disclosed to the public. This added an additional \$88 million to Grainger's turnover and 200 staff. The company stated that the acquisition would stimulate the business's organic growth (mdm.com, 2012). Another example of an acquisition outside of Grainger's domestic market is Brazilian AnFreixo S.A, from 2012. AnFreixo's sales performance for the year 2011 was \$37 million, and the business was strictly an MRO provider. Again, transaction details were not revealed. AnFreixo was part of a conglomerate, the Votorantim Group (a \$20 billion business), which sold 100% of its share to Grainger. As Grainger says, the business is a good "entry point for physical operations in Brazil, the largest MRO market in Latin America" (pressroom.grainger.com, 2012, para. 2).

In 2010 Grainger purchased an online provider called SafetyCertified, Inc.; however, as previously, details of the transaction were kept confidential. SafetyCertified is an online program that helps businesses with Occupational Safety and Health Administration regulations. The software features training, research and regulation guidance according to specific requirements. All this is now offered to Grainger's customers as an addition to its current offering, enabling comprehensive solutions

around safety. Through their educational features and solutions verified in practice, businesses can reduce compensation claims raised by employees (pressroom.grainger.com, 2010).

Electrocomponents PLC / RS Components (UK)

Electrocomponents PLC is yet another distributor of maintenance and electronics. It is based in Oxford in the UK, and was incorporated in London in 1937. The company claims to source its half a million products from 2,500 suppliers. It is present in 32 countries, which was made possible through an aggressive expansion, and also via acquisitions. The business operates under the RS Component brand (Europe and the rest of the world) and Allied Electronics in America, delivering to more than one million customers through its 17 distribution centres scattered around the globe (electrocomponents.com, 2014a).

Electrocomponents is a British public company, and already in the previous century had made plans to enter the US market. This happened in 1999 through the acquisition of Allied Electronics (wsj.com, 1999) a business initially registered in Chicago in 1937. Initially trading as Radiospares, the business floated on the LSE (London Stock Exchange) in the UK in 1967 as Electrocomponents PLC (electrocomponents.com, 2014a). Leaders of the business in the '90s concluded that due to the business environment in America and the entry barriers, the only way to enter the market was through acquisition (wsj.com, 1999).

However, the business started its international expansion well before the acquisition of the American company. In 1986, Electrocomponents PLC acquired Radionics based in Dublin, Ireland (electrocomponents.com, 2014b). Later, in 1990, Electrocomponents acquired Verospeed operating in France and Austria and other countries. The very same year, the group started operations in Australia through the acquisition of its Australian distributor (electrocomponents.com, 2014b).

In 1994 the business acquired Dutch Radioparts, merging it with the RS Denmark operations. Also, the company entered New Zealand through the acquisition of the local distributor in the country (electrocomponents.com, 2014b). In 1995 Electrocomponents PLC acquired Singapore-based distributor, Spanish RS Amidata as well South African distributor in 1996, thereby opening up the S.A. market. In 2001 the group acquired a Norwegian distributor. In order to deliver a better footprint within

various markets, apart from the above acquisitions, the company also invested in several start-ups (electrocomponents.com, 2014b).

When it comes to the IT infrastructure, Electrocomponents PLC aims to operate on a single SAP system in every region. This is to provide agility and fast service. The strategy to implement one system is very widespread, and the company truly appreciates the benefits of working on a single platform. In 2014 the group implemented SAP in Asia, incl. China (electrocomponents.com, 2014a).

Eriks (the Netherlands)

Eriks is very heavily involved in acquisitions; between early 2013 and mid-2014 the company acquired in the USA C&C Industries, Inc., Leader Global Technologies and Advanced Sealing through its subsidiary Lewis-Goetz, and in Canada CCTX Flow Products. Even more acquisitions were conducted in Europe within an 18-month time period; these were Maagtechnic AG with operations in several countries including Switzerland, France, Germany and the Czech Republic. In addition to those companies mentioned earlier, the business went on to acquire CET Motors, Vega from Poland, Leader Gasket of Slovakia, Klaus Technische Grosshandlung from Germany and G&H Engineering Services in the UK. Like many other distributors discussed throughout this work, Eriks trades tools and maintenance products, safety goods, rubber and sealing, bearings and power transmission, industrial plastics and flow technology (Eriks, 2015).

Eriks also extensively invests in the North American market, continuously developing its network in both Canada and the USA. One of its relatively recent acquisitions in this region was the acquisition in 2011 of Industrial Controls and Lewis-Goetz. Industrial Controls delivers to 10,000 customers who are regarded as blue chip businesses, and the acquisition added 17 more branches to the Eriks's existing North American network, and sales of around \$84 million. Eriks's decision was to keep IC's independence and operate as a subsidiary, with Eriks having 100% share ownership. The other acquisition of Lewis-Goetz added 86 new branches in both Canada and the USA and turnover of \$400 million. This acquisition, Eriks's representatives claim, significantly enhanced the group's presence and position in the USA (eriks.co.uk, 2011).

Eriks aims to achieve substantial growth targets, supporting itself with acquisitions, and so far, it is over-achieving its goals. In 2010 the target was to double the turnover from €1 billion to €2 billion in five years by 2015. This was actually achieved in four years. The business employs in excess of 8,000 staff across 450 sites located in 28 countries. A third of its turnover comes from the North American market. The business claims to serve more than 200,000 B2B customers and stocks about 680,000 various products. Within its portfolio there are 65 companies trading as one business (Eriks, 2015). Eriks is a good example of a company that acquires numerous competitors, delivering a sizeable rate of growth, as shown in Figure 10 below.

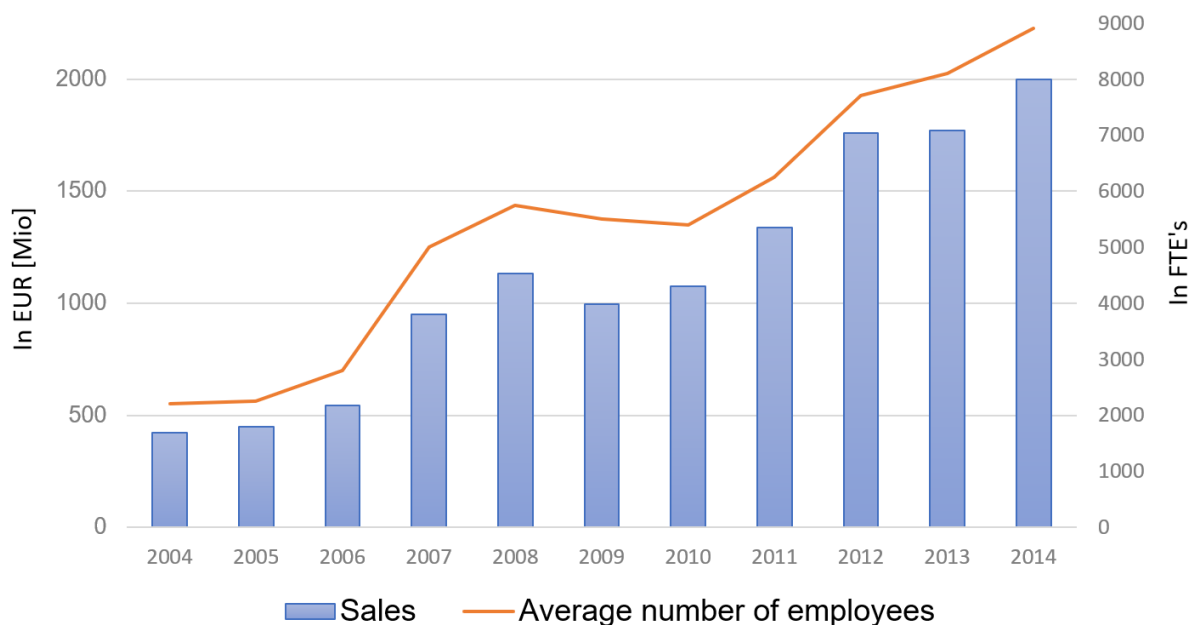


Figure 10: Eriks's Growth Diagram (Eriks, 2015, p. 7)

The above diagram, although based on Eriks's example, shows the potential for industrial MRO distributors and how they can grow through acquisitions, at a rate that would not be achievable purely organically.

In just a decade, Eriks grew its turnover five times, and 20 times in terms of the number of employees from 400 to 8,000 people. The company originates from the Netherlands, but has diversified its presence, as shown below in Figure 11.

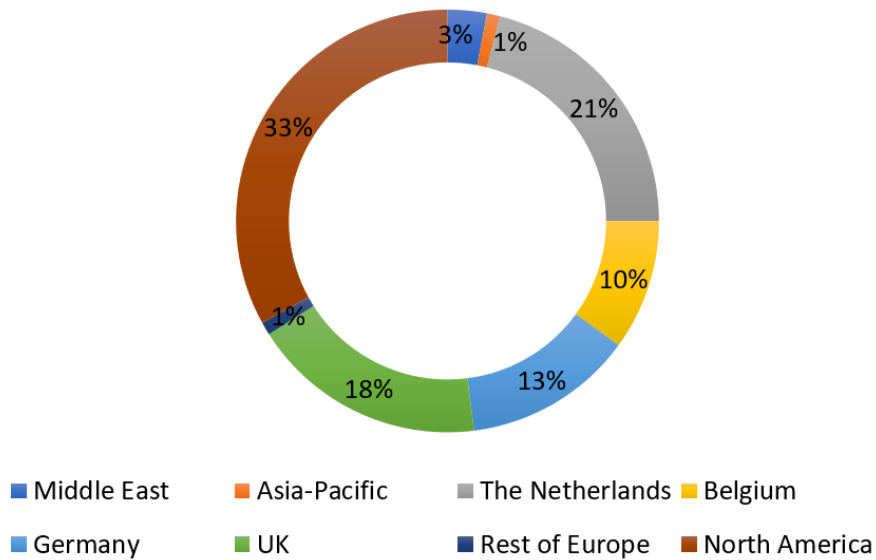


Figure 11: Eriks's Sales by Region (Eriks, 2015, p. 7)

The above diagram visualises the way Eriks managed to enter new markets, in many cases through acquisitions. Currently, the domestic market of the business is no longer the largest turnover contributor, with North America leading over the Netherlands, followed by the UK's 18% (Eriks, 2015).

Eriks categorised its customers into four groups. These are:

- a) OEM; these customers use Eriks's products directly in the production of finished goods (machinery and other equipment). Original equipment manufacturers customers represent 22% of overall sales,
- b) MRO; this group of customers uses Eriks's supplies to service their equipment and installations and they are the biggest customer group, representing 60% of the group's sales,
- c) contract and project customers, representing 10% of the overall turnover,
- d) distribution and exports; these are customers in countries where Eriks is not currently present, and this portion of the business represents 8% of sales (Eriks, 2015).

MSC Industrial Direct / MSC Industrial Supply (USA)

MSC Industrial Direct is one of the larger North American industrial distributors of MRO products and additional services. Like many other businesses in the MRO industry, it markets itself as a business that helps its customers to achieve better productivity and achieve efficiencies, including supply chain solutions and inventory management. The

business has a turnover of \$2.8 billion, and employs some 6,500 staff. Its range of offered products is sourced from around 3,000 suppliers. The company was established in 1941 as Sid Tool Co. in New York, USA (mscdirect.com, 2016). The organisation has performed several acquisitions in an effort to expand.

In 2006, MSC acquired J&L Industrial, previously owned by Kennametal, and the deal was of the value of \$349.5 million. MSC's expectations ahead of the acquisition were synergies and better performance. The company's CEO said that the deal would expand MSC's market presence, enhance its customer base (J&L serviced around 76,000 customers) and add to its service and product offering. On top of this, the business would try and capitalise through cross-selling opportunities, also achieving cost savings. Soon after the acquisition, the businesses started the integration phase (Businesswire.com, 2006).

Another acquisition came in 2011, of Rutland Tools. Rutland Tools & Supply was a part of Lawson Products Inc., and the transaction was for the cash consideration of \$11 million. The acquired business was established in 1955 and specialised in tools (industrial, cutting), machinery, abrasives, safety and various MRO products. The company's customer base was 20,000, and the business offered around 100,000 products through various channels, including catalogues, online channels and showrooms. This allowed the business to generate \$33.7 million in sales in 2009 (www.reliableplant.com, 2010).

In the very same year, MSC purchased American Tools Supply, Inc. along with its affiliate, American Specialty Grinding Co., Inc. The combined turnover of both businesses was expected to add a further \$50 million to MSC's total sales. The financial terms were not divulged to the public. MSC's CEO said that the acquisition of those businesses was "yet another step in the execution of a long-term strategy" (prnewswire.com, 2011, para. 2). The acquisition was also expected to strengthen MSC's position in the north-eastern markets of the USA. American Tool Supply, Inc. was established in 1983 specialising in metal working supplies, whereas the American Specialty Grinding Co., Inc. has been present since 1969 and developed its expertise in "custom-made tools and re-sharpening services" (prnewswire.com, 2011, para. 5).

Soon after numerous acquisitions in 2011, MSC went further in executing its growth strategy, and in early 2012 announced its intention to acquire ATS Industrial Supply,

a business founded in 1970, and specialising in MRO and metalworking products. Sales of the new target business in 2011 were at the level of \$34.5 million. MSC's senior leadership highlighted that both businesses fitted together well. This time, MSC's CEO clearly stated that acquiring other businesses was MSC's long-term strategy (prnewswire.com, 2012).

Another major acquisition came in 2013 with the purchase of Barnes Distribution North America (BDNA). The deal was announced in February 2013, and the value of the deal was estimated at \$550 million. BDNA claimed to turn over \$300 million in 2012, which would significantly add to MSC's sales. Interestingly, MSC's motives behind this acquisition were different to those of the previous acquisitions. According to MSC's CEO, "the rationale for the acquisition was based more on the capabilities, growth platforms and synergies the business will provide than its current earnings or growth" (mdm.com, 2013, para. 1). BDNA's acquisition had the highest value of any ever conducted by MSC, and according to the experts from Modern Distribution Management it was a significant consolidation case for the whole industry. From this moment on, the business focused more on integration, to ensure a good infrastructure and readiness for more acquisitions in the future (mdm.com, 2014).

The company issues forward-looking statements, and in these it claims that the actual results may differ because of several factors, including "problems with successfully integrating acquired operations," or some unexpected industry consolidation (edgar.secdatabase.com, 2014, para. 3). This shows that the business treats the integration of its acquisitions seriously, simultaneously admitting this is a complex process which may not go as well as planned. Also, it is aware that the whole market is in the process of heavy consolidation, which poses additional threats.

Würth Group (Germany)

The Würth Group is present globally, conducting operations across all continents, with 400 businesses in its portfolio from 84 countries. The business employs c.a. 60,000 people, half of which are sales force. The group's parent company was founded in 1945 in Künzelsau in Germany by Adolf Würth under the name Adolf Würth GmbH & Co. KG. Initially a screw business, it later developed into a global business with sales in excess of €10 billion in 2014 (wuerth-phoenix.com, 2016). The company is heavily active in the area of acquisitions, all of which complement its organic growth. For

example, in 2014 it acquired the U.S.-based RL Industries Inc. known to the market as Timberline Fasteners, mainly supplying fasteners and tools (wuerth.com, 2014).

Würth, unlike others, acquires on various continents including Asia, where in 2014 the group acquired Korea Fasteners Limited (wuerth.com, 2014). In 2015, again Würth strengthened its position by acquiring a New York headquartered business; Northern Safety. The aforementioned acquisition was a good match with WINA (Würth Industry of North America). Through the acquisition the group intends to enter the North American safety market, due to the fact that Northern Safety is renowned for its superior quality safety and industrial supplies. Throughout its 18 locations, Northern Safety supplies in excess of 100,000 customers. According to the Würth Industry, “the acquisition of Northern Safety will add depth and diversity to the Würth Group’s current product offering” (ishn.com, 2015, para. 3).

Interestingly, according to Würth’s representatives, the logistics and physical location of Northern Safety, its delivery systems and e-commerce site fit the overall operations and strategy of the group. The acquired distributor offers own brand products to complement its offering of other branded products such as those of 3M, DeWalt, Honeywell, Ansell etc. Würth Group in general specialises in screws and accessories, tools, PPE and a range of chemical products. All these are called the Würth Line, and are considered the company’s core business (ishn.com, 2015).

The company’s American expansion has not ended with Northern Safety. In October 2015, WINA acquired Des Moines Bolt from Iowa, with more locations in Missouri and Nebraska. The new business was renamed Würth Des Moines Bolt and is one of 400 businesses in Würth’s portfolio. Through this acquisition WINA continues its acquisition strategy to deliver quick growth, and has the intention to triple its sales figures to \$1 billion in seven years starting in 2013 (fastener-world.com, 2015). Other past acquisitions include the American Revcar Fasteners, Eastern Fastener Corporation in 1997, and Baer Supply Company. Also, in 1997, Würth Group acquired Adams Nut & Bolt and Snider Bolt & Screw businesses. At the end of the 20th century, Würth further expanded in the US market through the acquisitions of Service Supply Co. and Action Bolt & Tool from Indiana, and Florida respectively. The company, with its global presence and continuous expansion, seeks to keep the management of the

acquired businesses intact, frequently trading under the newly acquired subsidiary's name, thus Würth Des Moines Bolt (fundinguniverse.com, 2003).

All the above are just some examples of Würth's acquisitions, but there were dozens more across the globe. Even the Würth's business units, not just the group itself, have their own strategies to grow through acquisitions. The intensive acquisition policy with nearly 100 businesses acquired between 1998 and 2003, delivered astounding growth, and the business reached its goal of €5 billion in revenue by the end of the year 2000. The company's other goal was to achieve €15 billion by the end of 2010 (fundinguniverse.com, 2003); however, this target was missed since according to the company's annual report the revenue at the end of 2010 was €8.6 billion, and just exceeded €10 billion at the end of 2014. Still, in 14 years the business managed to grow substantially by more than 100% from 5 to €10 billion (wuerth.com, 2015). Clearly, this kind of growth would not be possible purely in an organic way.

Fastenal (USA-based)

Fastenal conducts its business through a network of 2,600 locations predominantly in the North American market, but also other continents including Europe and Asia. All operations are supported by 14 distribution centres, of which 11 are in North America. Fastenal offers a variety of industrial supplies, with expertise in fasteners (investor.fastenal.com, 2015).

Unlike other distributors, Fastenal did not turn to acquisitions to grow its business. Instead, the organisation keeps opening new branches and store locations one by one, giving store managers considerable autonomy. However, at times, though normally reluctant, even Fastenal acquires other businesses (G. Johnson, 2003). This shows that within the MRO distribution industry, acquisitions are part of everyday life for those who seek growth.

One of the recent businesses that joined Fastenal was Fasteners, Inc., with operations in Washington, Idaho, Montana as well as Oregon, all in the US market. Company leaders believed that the target company shared identical core integrity values, and a high level of quality service expected by customers. These, and the additional geographical expansion, were reasons enough to undertake the acquisition (investor.fastenal.com, 2015).

The group was established in 1967 in Winona, Minnesota, USA and made it to the stock market in 1987. In the late 20th century the business started its operations in Mexico (encyclopedia.com, 2006). Currently the organisation is present in 22 countries employing more than 18,000 staff. Sales for the year 2014 were at \$3.73 billion which was an increase of 12.2% versus the previous year. Fastenal's recent purchases were of Av-Tech Industries, Inc. and Holo-Krome from 2009 (Fastenal, 2015). Some of the previous targets included an acquisition of 2001 of a part of Textron Inc. with the decision taken to trade under the original Anchor Wire brand. In 2003, the group sold Anchor Wire and FAS-N-IT brand to the Hillman Group Inc. The business expected to financially benefit from the transaction (ewweb.com, 2003).

The company representatives admit that globally their market share is small despite the group's large turnover (Fastenal, 2015). This may suggest that the business is intending to further consolidate the market across continents.

IPH Group (France)

A company incorporated in France with its beginnings in 1987. From the early stages the company started expanding to other European markets frequently resorting to acquisitions. Some of these were Ad-Industrie, which was a part of Autodistribution, operating in the area of industrial supplies. The very same year, IPH Group acquired Romanian-based Novotech as well as French Anjac-FI, a division of Anjac group responsible for MRO supplies. Later on, the company went on to strengthen its position and expand in Belgium by acquiring D'hont and Mano in 2009 and 2011 respectively. In 2011, IPH also entered the Dutch market through the acquisition of Steenhuis and Geul. The next year, through its French arm Orexad, IPH conducted a purchase on the domestic market of Société d'Outillage du Dauphiné. The reason for the latter acquisition was to further consolidate the company's presence and accelerate its development in a previously underrepresented sector. In 2012, the business made further acquisitions, of Zitec Industrietechnik as well as Wilhelm Jung on the German market. Both businesses operated in the power transmission area, offering a strong footprint in the local market (IPH, 2016).

The above shows that various company owners continued market consolidation solely through acquisitions, with no single merger along the way. According to the new owner's press release, the company operates 250 outlet branches around Europe,

servicing industrial businesses, and has gained recognition over the years. Thanks to the acquisitions, as the business highlights, IPH Group managed to triple its turnover in the last five years. This success was mostly driven by the previous owner i.e. the investment bank Investcorp (Pai Partners, 2012). The group's combined turnover in 2015 was €1.12 billion, and it had in excess of 4,000 staff (IPH, 2016). As was announced in 2017, a private equity group Advent International acquired both Brammer and IPH, and is merging both companies, in "a deal that significantly shifts the distribution competitive landscape..., across Europe" (Gale, 2017, para. 1).

Amazon Supply / Amazon Business (USA)

In 2012, Amazon launched a new platform customised to deal with B2B customers, called Amazon Supply. Amazon's intention is to deliver MRO products to industrial customers. Initially, the company listed around half a million products on its dedicated website with products similar to those of other main distributors e.g. "lab & scientific, test, measure & inspect, occupational health & safety, janitorial & sanitation, office, fleet & vehicle maintenance, power & hand tools, cutting tools, abrasives & finishing, materials handling, materials (e.g., metals), hydraulics pneumatics & plumbing, fasteners and power transmission" (Bush, 2012, para. 1).

In order for Amazon to start competing in the industrial distribution arena, the business acquired Small Parts, Inc. in 2005 and broadened its offering. The managing director of MetalMiner, Lisa Reisman, said that Amazon's new industrial distribution arm could position itself to be particularly disruptive to traditional MRO distributors such as Grainger, DSSI or Wesco. However, as Ms Reisman reasoned, distributors could offer other value-added services, e.g. VMI, replenishment, kitting, consignment etc., so initially only small businesses might find value in Amazon's offering. Those who require more integrated systems and processes may not be particularly easy for Amazon to reach and switch to (Bush, 2012).

According to the information from Modern Distribution Management from March 2015, although Amazon has grown in the recent years, this is because of its B2C transactions, with Amazon Supply not delivering high returns. The main reason for the poor performance of Amazon Supply is that Amazon has not invested in sales representatives who would offer industrial MRO products to businesses. Another reason for the poor performance of Amazon Supply was the company's image; they

were simply not considered by others as a B2B company. According to Chris Hodson, Amazon Supply in the North American market, particularly in the USA, was not selling anything (mdm.com, 2015).

In April 2015 however, Amazon launched Amazon Business to replace Amazon Supply. Company representatives said that Amazon Business drew from the experience of Amazon Supply, specifically in the area of dealing with business customers. Amazon's idea is to get sellers and buyers together and let them trade via Amazon's B2B e-commerce system. Amazon Supply had only been around since 2012, and offered approximately 2.25 million products. The new Amazon Business is expected to further extend the range, and provide better site navigation and search facilities. The new site offers products that Amazon sells directly as a business, but on top of this, there are products owned by third-party suppliers who pay commission to Amazon of six to 15% for selling through its e-commerce platform (internetretailer.com, 2015).

2.11.3. Summary of the Business Context Section

Apart from the above discussed industrial MRO distributors, there are other notable companies trading MRO products. These include, but are not limited to: Primus, Inc., Lawson Products, Inc., Park-Ohio Holdings Corp., Noland Corporation, Pentacon, Inc., PennEngineering, Production Tool Supply or Hoffman Group. The list is nowhere near exhaustive, and this proves that the fragmentation of the MRO distribution industry is still very high. As evidenced above, almost all major market participants extensively grow through acquisitions, frequently buying numerous businesses within short time frames. Even businesses that are normally reluctant, still resort to acquisitions if required. Due to the fact that the phenomenon is so widespread within the industrial MRO distribution sector, the author of this research found it important to ascertain if and to what extent industrial MRO distributors streamline their supply chain operations after conducting acquisitions, and what level of consideration is given to supply chains pre-initiative. Moreover, an effort was made to understand how do they do this, what practices they follow, and how they prepare for acquisitions. These matters were covered in the research questions and aims and objectives of the thesis.

When looking at the numbers quoted in this section, i.e. growth of turnover over the years for some of the distributors, it seems obvious that without acquisitions, distributors would not have been able to grow so rapidly, frequently doubling in size every few years. According to G. Johnson (2003) accelerated growth through acquisitions was very popular in the nineties, and those who could afford to acquire others, did so. Although only a few companies were discussed in this chapter, this was sufficient to evidence the popularity of acquisitions within the MRO business sector, justifying the choice of the industry for the research.

The reason that understanding the fate of supply chains for mergers and acquisitions within the industrial MRO distribution market is of particular interest, is that many of the typical core competencies and offering of distributors both for suppliers and customers fall under the supply chain umbrella, as shown in Table 3 below.

Suppliers	Customers
<i>Demand generation</i>	<i>One-stop shop – range and availability (with simplified supply logistics)</i>
<i>Market information</i>	<i>Bulk breaking (with consignment stocking and repacking)</i>
<i>Outsourced services</i>	<i>Credit</i>
<i>Supply fulfilment with:</i>	<i>First-level technical support (pre-sales)</i>
▪ <i>outbound logistics</i>	<i>Logistics – delivery</i>
▪ <i>reverse logistics</i>	<i>Order consolidation</i>
▪ <i>bulk breaking</i>	<i>Product information collateral</i>

Table 3: Distributors’ Typical Core Offering (as adapted from Dent, 2011, pp. 29, 35)

The above leads the author of the thesis to argue that integrating supply chains for M&As within the industrial MRO distribution market is more important than within many other industries, where supply chains do not impact business operations and company’s core competencies as much (e.g. online companies). Therefore, SCI in the M&A context, within the industrial MRO distribution market, can particularly improve the M&A success rate, an assumption which further reinforces the need for the research.

2.12. M&A Process and Identification of Problematic Areas

Merger and acquisition deals require significant time investment from the inception through to completion, and even beyond, when taking integration of businesses into account. The entire process can be divided into several stages, of which the last, i.e. integration, is the most time-consuming and at the same time the most difficult for businesses to accomplish successfully (Hsu & Chen, 2006). James Langabeer and Seifert (2003) admit that handling supply chain integration for M&As is a complex endeavour with many intricacies that often overwhelm organisations, especially large Fortune 500 conglomerates. Also, Herd et al. (2005) claim that nowadays it is increasingly important for businesses to closely manage supply chains in the situation of M&A activity. They say that attention needs to be given to them before, throughout and after the deal. The extra effort will pay off, making the M&A more successful. The authors refer to HP's merger and integration practices with Compaq where costs of operations were streamlined in the procurement of direct materials, production and logistics. This was possible as businesses identified clear and achievable savings, and diligently planned the whole merger, they say. As a result, the newly merged entity delivered \$2.5 billion one year earlier than planned (Herd et al., 2005).

Hsu and Chen (2006) say there is no single way to approach mergers and acquisitions, and no fixed process can be followed by organisations. The solution must be bespoke and tailored to specific needs. There are good models discussed across the literature e.g. the one proposed by Aiello and Watkins (2000) that consists of the following five phases:

- a) evaluating target companies,
- b) reaching an early agreement,
- c) due diligence phase,
- d) setting the agreement,
- e) closing the deal.

Another model proposed by Breidenbach (2000, p. 70) consists of six stages, and is more relevant in the light of this work since it specifically embraces integration. This is:

- a) strategy,

- b) planning,
- c) evaluation,
- d) acquisition,
- e) integration,
- f) operation.

Through the analysis of various processes and models, Hsu and Chen (2006, p. 58) developed a four-stage model entailing:

- a) pre-merger assessment (due diligence),
- b) merger planning,
- c) implementation,
- d) audit and performance analysis.

In the first phase of the four-stage model introduced above i.e. the pre-merger due diligence assessment, the buying company is tasked to shortlist potential candidates for acquisition, agree on pricing and costs, and eventually announce a deal, say Hsu and Chen (2006). They add that this stage comprises site visits, meetings, and evaluation of TAC, and determines whether the target companies are strategically aligned with the acquiring business. Another aspect of this phase is that it is usually confidential and typically lasts up to four months, sometimes longer, the authors say. This part of the process embraces preparation of the offer and offer submission, but also acceptance and finally the announcement (Hsu & Chen, 2006).

The following stage, called merger planning, deals with the merger's approval, team assignment, and planning of integration and communication, say Hsu and Chen (2006). They further add that the boards of directors of both companies are expected to approve the deal, and if deemed necessary, so are market regulators. This is also the time when the leadership team is assigned, and plans for merger integration and operations are put forward, the authors say. As per the usual practice, representatives of both companies are taken into consideration when forming teams; this is also when stakeholders are notified about the deal (Hsu & Chen, 2006).

Stage three, considered by Hsu and Chen (2006) as a key phase, is when chaos and disorientation are likely to arise. This is when business integration takes place, and special care is given to the existing customers, they say. The authors note that loss of

talent may occur. The last stage, i.e. the fourth, is about auditing, evaluation and lessons learned (Hsu & Chen, 2006).

Adams and Neely (2000, p. 19) discuss reasons why businesses find it difficult to properly execute mergers and acquisitions from start to finish, concluding that “poor strategic concepts, personality problems at the top, cultural differences, poor employee morale, incompatible information systems, etc.” are common contributors. Additionally, the authors emphasise that the most frequent reason for M&As’ underperformance is inability to integrate businesses.

There are things that businesses should consider before signing a deal, say James Langabeer and Seifert (2003). The authors argue that supply chain representatives need to be introduced to and participate in the M&A process early in the pre-merger phase of the process. With this approach, companies will be better positioned to foresee merger fallouts, they add. The authors believe that in order to ensure a merger’s success, supply chain personnel’s active participation, both in the planning and execution stages of the initiative is critical to ensure the alignment with the rest of the group and its departments. Moreover, during the planning stage, several supply chain-related topics must be discussed and tasks performed, such as:

- a) new supply chain strategy of a merged businesses and initial operational features,
- b) determining spare capacity for manufacturing and storage issues,
- c) identify regional distribution centre overlap, and the existing transportation links, modes and routes,
- d) IT infrastructure quality, accuracy and availability of data, and support systems. Furthermore, if and to what extent should systems be integrated, and proposed time scales put forward,
- e) quality of staff in terms of skills and competences,
- f) identify a part of a company with most advanced skills in best-practice management,
- g) compare and verify current supply chain metrics across both businesses and see how closely aligned they are (James Langabeer & Seifert, 2003).

According to The Economist (1999), too many businesses refrain from asking the toughest questions before acquiring. Questions are asked when it is too late, after the

deal conclusion, e.g. as was the case with Travelers and Citicorp, as argued within the publication. Further, businesses cannot get this right, and end up paying hefty fees to consultants for their support. Organisations should instead “concentrate on the marriage, not the wedding” (The Economist, 1999, para. 9).

James Langabeer and Seifert (2003) argue that all aspects of the merging businesses must be scrutinised before the acquisition approval. These aspects include “processes, systems, network, people, and strategy for both supply chains” (James Langabeer & Seifert, 2003, p. 62). The goal ahead of the pre-merger analysis is to identify problematic areas that can pose significant issues during the integration phase, and to discover potential misalignments, the authors say. They conclude by saying that if this due diligence is not performed, the unexpected will surface, causing problems. As the authors say, the lessons learned are:

- a) more than 50% of all M&As fail, and the key reason is poor business integration. This can lead to both businesses splitting, or the necessity to sell some of the business’s units. If the new entity cannot control the new, enlarged operations, they are destined for failure. As the authors reason, this is the area where supply chain personnel can help, but businesses do not tap into this valuable resource,
- b) lack of supply chain leaders results in businesses struggling to meet deadlines, with decisions being taken late. The task for CEOs is to name the leaders of supply chains who will form their teams early in the process,
- c) every merger or acquisition duplicates infrastructure, creating overlaps. These are frequently ignored instead of being scrutinised and integrated, this is where value is hidden and where quick decisions are needed,
- d) supply chains of merging companies are different, and they serve their original businesses from the pre-initiative era. These critical differences need recognition and further action to ensure that the new organisation can effectively meet the company’s objectives and needs (James Langabeer & Seifert, 2003).

Adams and Neely (2000, p. 19) argue that “intelligent planning seems to be in short supply when M&A deals are done”. In the view of the authors, businesses are good when it comes to making deals, but post-merger they score low for planning and

integration. As they say “even where basic planning does occur, the lengthy integration effort often distracts key executives while competitors take advantage” (Adams & Neely, 2000, p. 19). The authors advocate more widespread use of post-merger indicators to track the integration efforts, saying that this would help extract more value from the initiative.

Apart from the lack of planning in the post-merger phase of the process, an even bigger problem from the perspective of this research lies in the negligence of supply chains throughout the whole M&A process (Herd et al., 2005). This holds equally true for the pre-merger stage, later during the planning phase, and disappointingly at the start of the integration. The authors argue that M&A value creation is greatly affected by the way companies manage their supply chain matters, and refer to the several mergers conducted between the late nineties and the first decade of the 21st century, such as Unilever’s merger with Best Foods, Cingular Wireless with AT&T Wireless, and a merger of HP with Compaq. Herd et al. (2005) developed a checklist and highlighted areas that are particularly important for those who desire to improve their M&A process. These are:

- a) supply chain leadership,
- b) goal identification,
- c) development of a plan detailing implementation steps,
- d) and importantly a development of key measures.

According to Herd et al. (2005), the above checklist will not only help to extract more value from the merging supply chains, but will also facilitate faster accomplishment of goals. The authors note that “due to the complex nature of business combinations, and the myriad differences in companies’ cultures, strategies, and operations, there is no standard way to manage an M&A” (Herd et al., 2005, p. 9). However, these companies that embraced a similar approach with their mergers and acquisitions, benefited significantly, the authors say.

In the next section, barrier identification for M&A initiatives takes place, followed by an evaluation of the enablers for M&A deals.

2.13. Barrier Identification and Assessment for M&A Initiatives

Businesses pursue M&As for several reasons, as was discussed earlier in the chapter. The reasons may include a desire to expand into other markets (Kato & Schoenberg, 2014), to add more resources to the business to enhance competitiveness, to gain more power (Caiazza & Volpe, 2015), or to obtain synergies (J. Zhu et al., 2015). However profound the initial expectations are, the reality is often different. James Langabeer and Seifert (2003) say that companies habitually report worse than expected after-merger operating results. The authors add that “failure to either adequately plan the merger or execute the integration has resulted in subpar post-merger results” (James Langabeer & Seifert, 2003, p. 59). The researchers believe that it must be very frustrating for businesses to get to a point years later where they reach a conclusion that they are financially actually worse off than they were before the whole M&A initiative started.

Various sources refer to several reasons why merger and acquisition initiatives fail. Many of the barriers will either be directly related to the supply chain, or indirectly causing supply chains not to function properly. Apart from SC issues there are other obstacles affecting M&As’ performance. Although this work focuses on supply chains during mergers or acquisitions, it is important to highlight various issues attributed to M&A’s failure, even if they are not strictly associated with SCs. This will provide a thorough context for the research, and broaden the understanding of various barriers, not just those concerning supply chains. Having said this, the non-supply chain related issues will not be researched within this work.

The most often cited reasons for poor M&A execution are:

- a) failure to deliver to forecasted synergies,
- b) inability to integrate companies’ human resources,
- c) inability to integrate processes,
- d) failure to integrate systems,
- e) “poor or non-existent implementation of strategies for capturing, integrating and/or retaining assets” (Bailey, 2001, p. 16).

In addition to the above, Kansal and Chandani (2014) argue that numerous M&As under-deliver due to inadequate execution of change management. This is very

unfortunate, the authors believe, as change is ever present; therefore, its proper handling is obligatory. The section below identifies strictly supply chain related issues for mergers and acquisitions, as derived from the literature.

Barrier no 1: Pre-deal supply chain ignorance at the board level

According to Herd et al. (2005), board directors disregard the importance of supply chains for mergers and acquisitions at the very early stages, i.e. pre-merger or pre-acquisition. According to Herd et al. (2005) investors (who bear the whole risk) do not get the most out of M&A deals, partly because of the supply chain negligence.

Barrier no 2: Supply chain personnel not recognising the importance of their role

James Langabeer and Seifert (2003) argue that supply chain personnel are not aware of their own value and how positively they can influence mergers and acquisitions. For this reason, supply chain managers do not even get involved, the authors reason; therefore, their invaluable insights and potential to deliver thorough operational excellence is not realised.

Barrier no 3: Over-rushed supply chain system consolidation in an M&A context in the integration phase of the merger

A frequent mistake made by businesses is consolidating supply chain systems too quickly, in an effort to deliver consistent data, says Singh (2009). He adds that these initiatives often result in cost overruns, are counterproductive and overwhelm businesses with the scope of the required work.

Barrier no 4: Very rarely is any consideration given to the potential impact of an M&A deal on merging supply chains pre-initiative

An issue identified by James Langabeer and Seifert (2003) in a study conducted over a ten-year period where 400 mergers were scrutinised, relates to the fact that only in the case of a very limited number of deals, was the potential impact of a transaction on supply chains of the affected companies considered pre-initiative.

Barrier no 5: Lack of appreciation of supply chains during the planning stage by the board directors

Even though little attention is given to supply chains pre-merger, the same applies to the planning stage of the merger (Herd et al., 2005).

Barrier no 6: Mismatch between the perception of how well the post-initiative integration of supply chains goes vs. the real outcomes vs. the confidence of the board

In a study conducted by Accenture it was revealed that mergers caused numerous disruptions within supply chains (as cited in Byrne, 2007). However, the supply chain staff responsible for the after-merger integration rated their integration efforts positively, awarding 64 points on a scale of 100, the publication reveals. There seems to be a mismatch between the perception of how well the integration goes, and the real outcomes of integration. The very same research revealed that in fact 67% of supply chain managers admitted that mergers and acquisitions caused disruptions to product launches. Also, as it was detailed within the article, 62% stated that M&As led to the loss of supply chain staff, and 53% expressed concern regarding the quality of the service and product. Interestingly, corporate executives seemed to be confident about M&A strategies, but expressed doubt regarding the operational side, worrying about the actual execution (Byrne, 2007).

Barrier no 7: Lack of trust for sharing data with partners across the supply chain

Duris (2002) says that organisations are not getting as much as promised from the implemented technology. The author implies that data sharing with partners in the supply chain shifts power to other participants. "It is not that people do not trust the technology"; it is rather lack of trust towards others who may be given access to data (Duris, 2002, p. 50) that would be inaccessible if not for the technology. Technology itself is not an issue the author points out, as people know it can deliver.

Barrier no 8: Merger planning teams are not the same people who are responsible for the operational side of integration

James Langabeer and Seifert (2003) noticed that a significant flaw in the M&A process is that those who are responsible for the merger in the planning stage i.e. finance

people and planning teams, are not those who oversee the merger's execution i.e. the supply chain and operations staff.

Barrier no 9: Missing time frames as to when supply chain savings ought to be delivered

During the prioritisation activity, the responsible officials should specify time frames within which savings and value should be delivered, say Herd et al. (2005). This approach ensures there will be no unnecessary delays. Furthermore, Herd et al. (2005, p. 10) add that "the most successfully merged companies focus on maximising value creation in the first 100 days after COC".

Barrier no 10: Time pressure when conducting M&As renders supply chain matters unimportant

In many cases, when businesses acquire their counterparts they face great time pressure and so the supply chain aspects of the deal are omitted. As time goes by, companies realise that their "supply chain is broken" and this is when they start seeking help (Tompkins, 2011, para. 5).

Barrier no 11: Businesses define the ultimate shape of supply chains without a road map showing how to get there

Singh (2009) contends that it is a common mistake for businesses to define a final state and shape of their merged supply chains, and then start to replace its systems and processes at the same time, risking unnecessary disruptions. Additionally, there are no midway steps developed how to get to the final and desired state (Singh, 2009).

Barrier no 12: Supply chain personnel not contributing to the pre-merger stage of the process

Supply chain representatives do not contribute pre-merger and do not perform due diligence, and thus, the integration potential of the merger is wasted (James Langabeer & Seifert, 2003). The authors argue that similar practices go against common sense, because SC representatives are directly responsible for most of a company's resources. Also, supply chain staff will be responsible for relationships with the expanded customer base after-merger; therefore lack of early involvement is a

mistake, the authors say. As James Langabeer and Seifert (2003, p. 59) posit, “all too often, supply chain integration and the performance implications of misaligned chains are only afterthoughts in M&A proceedings”.

Barrier no 13: High costs attached to the supply chain integration stop companies from launching integration projects

Businesses assume that proper supply chain network integration requires high capital investment; therefore, they are reluctant to engage in integration activities (O'Reilly, 2002). In effect, the author says, the delivered cost savings are less than expected, and synergies are not as significant.

Barrier no 14: Late identification of saving targets for SC teams to pursue

Herd et al. (2005) say that a very important task is to outline specific requirements for supply chains of the merging companies well in advance. Many businesses start late they say, on the day the COC comes about. By this time, cost-saving opportunities should have already been recognised and prioritised so that the new company can start delivering to targets on day one (Herd et al., 2005).

Barrier no 15: Negligence of the supply chain area when sealing a final M&A deal

Another reason why post-merger results can be subpar, according to Jharkharia (2012), is because the supply chain area is not given any consideration when signing the M&A deal.

Barrier no 16: Lack of clarity in relation to the officials accountable for integration efforts

Early in the M&A process, the company's chief executive needs to name a director and managers accountable for the integration of supply chains (James Langabeer & Seifert, 2003). Otherwise, the authors say, customer service and response times will deteriorate.

Barrier no 17: Resistance to seeking help beyond a company's boundaries if the required knowledge does not exist within

Businesses frequently seek help already a year into their M&A deal, says Tompkins (2011). The reason it takes them one year to do this is because under normal circumstances, this is the time required for it to become apparent that the M&A is not working, he adds. Businesses realise that the "supply chain is not working, and they want to know why this is so and how it can be fixed" (Tompkins, 2011, para. 2).

Barrier no 18: Considerable time investment deters companies from integrating supply chains

O'Reilly (2002) believes that within supply chains there are numerous optimisation opportunities, but companies are either ignorant and neglect the need to do anything with their SCs or are put off by the significant time investment required to properly optimise their supply chains.

Barrier no 19: Lack of planning checklists for merging supply chains pre-initiative

It is a common occurrence that in the M&A context there is no specific planning checklist developed to support and deal with merging supply chains of the concerned businesses (James Langabeer & Seifert, 2003).

Barrier no 20: Lack of understanding of IT integration costs to enable supply chain saving generation

Lazenby (2010) posits that up to 60% of post-M&A cost-saving initiatives highly depend on IT systems, and this is not acknowledged across many organisations. IT integration is crucial to realising supply chain savings, the author believes, yet executives do not really have a clear understanding of the IT's role and impact upon the deal.

Barrier no 21: Absence of due diligence guidelines to support merging supply chains prior to M&A

James Langabeer and Seifert (2003, p. 61) argue that the absence of due diligence guidelines and thorough considerations around supply chains adversely affect the

post-merger phase of a deal, raising uncertainty and blocking “effective execution and quick and complete integration”. The authors suggest that amidst the merger’s muddle, the supply chain is only an afterthought, whereas business politics play the main part.

Barrier no 22: Selection of the wrong indicators for the post-merger phase

Singh (2009) posits that a common mistake that organisations repetitively make is choosing inappropriate indicators which prevent company leaders from making meaningful, fact-based decisions.

Barrier no 23: Lack of involvement of IT executives in the pre-deal due diligence

Bailey (2001, p. 18) claims that “the due diligence phase shrouded in secrecy, confidentiality or deal protection issues is generally the purview of accountants, banker’s auditors or outside consultants” and adds that “IT is rarely considered strategic enough to influence the value matrix that either validates or negates an M&A deal”. IT executives must be a part of a committee responsible for assessing acquisition candidates, according to Lazenby (2010). Bailey (2001) adds that even in the initial post-merger stages, those who are normally involved are the highest-level directors i.e. CEO, CFO (chief financial officer) and chief operations officer, and IT directors are rarely included.

Barrier no 24: Negligence of the supply chain area through the negotiation phase of an M&A

Jharkharia (2012) claims that the reason post-initiative results are not satisfactory is that the entire supply chain function is forgotten when company representatives negotiate the deal at the very early stages of the M&A process.

Barrier no 25: Strategic objectives for M&A activities outlined by senior management do not embrace the supply chain area and its improvements for better performance

James Langabeer and Seifert (2003), through analyses of companies involved in merger deals in a ten-year period, observed that strategic objectives outlined by the company’s senior management do not touch upon the supply chain area to improve its performance.

Barrier no 26: Exclusion of senior supply chain officials pre-initiative

One of the more serious barriers in the M&A process appears to be the exclusion of supply chain officers from the pre-merger stage of the process; this is during the deal negotiations and merger preparation (Jharkharia, 2012). James Langabeer and Seifert (2003) highlight that to ensure smooth integration, SC managers need to be involved throughout the process and play an important role, and should not merely participate. This is still not happening, despite the fact that a merger's success depends on supply chain integration (James Langabeer & Seifert, 2003).

Barrier no 27: Short-termism in the context of mergers and acquisitions

According to Singh (2009), short-termism in M&A initiatives and a desire to quickly cut costs without considering the possible impact of such actions on supply chains in the longer run is a mistake that is often repeated by organisations. As the author says, these practices include plant closures, wage cuts, as well as compulsory redundancy programs. Matters should go in a different direction the author argues. He adds that a long-term approach is necessary, with a focus on eliminating non-value adding activities and identifying potential areas for synergies, as will be discussed in more detail in the next section of the work, where enablers for M&As are presented.

Barrier no 28: Slow integration of merging or acquisitioned businesses

The conclusions reached by James Langabeer and Seifert (2003) are that corporate results depend on the speed of supply chain integration of the two merging companies. O'Reilly (2002, para. 4) adds that "how quickly and intelligently" businesses "integrate new assets such as plants, warehouses or transportation equipment into an existing supply chain network can make or break the early success of a merger". James Langabeer and Seifert (2003) continue by saying that the integration refers to policies, systems, human resources and an infrastructure. They add that companies that did not manage to integrate their supply chains promptly in a time frame of up to two years, underperformed. The most successful businesses could integrate their SCs in one year after the deal, significantly contributing to improved margins (James Langabeer & Seifert, 2003). As the authors highlight, full and rapid integration was a rare accomplishment within large companies.

Barrier no 29: Negligence of supply chains by the board during the integration phase

After the pre-deal arrangements, during the integration phase, company directors do not appreciate the value that the supply chain can bring, say Herd et al. (2005).

Barrier no 30: Selection of target companies purely in the light of financial indicators

Bertoncelj and Kovač (2007) suggest that in the modern world, companies need to stop making their decisions about M&As purely through consideration of financial indicators. As they say, “so-called soft factors are equally important for success and combine the economic logic of corporate performance and social capital” (Bertoncelj & Kovač, 2007, p. 169).

Barrier no 31: Not enough attention given to the post-merger planning and supply chain assessment

Singh (2009) reasons that businesses do not assess properly their supply chain capabilities post-merger, and usually limit themselves to the consolidation of transaction systems and systems supporting order taking. These efforts, the author believes, are misdirected.

Barrier no 32: Overarching supply chain strategy not aligned with business strategy and competitive strategy of the two merged companies

Dung and Thanh (2012) refer to the disastrous merger of Newell and Rubbermaid, which initially looked as if the two were a perfect fit. The authors say that part of the reason for the merger’s failure during the integration phase of the process was the mismatched supply chain strategy and its lack of alignment with the merged company’s business and competitive strategies of both units. The two merged businesses had various strategies, i.e. innovation and development of the brand for Rubbermaid, and a low cost strategy for Newell (Dung & Thanh, 2012).

Barrier no 33: Little attention given to cultural and social issues in the M&A context

Steigenberger (2016) refers to the previously introduced merger of Daimler with Chrysler, where the author reasons that cultural issues as well as social context, among others, were downplayed and this contributed to the merger’s failure. Also,

Zorn et al. (2017) posit that cultural differences were one of the identified integration challenges during acquisitions.

Barrier no 34: Lack of clarity in relation to order of tasks set for accomplishment and assigned responsibilities

James Langabeer and Seifert (2003) argue that businesses frequently make mistakes when integrating their supply chains in the aftermath of an M&A, by not clearly prioritising integration tasks, and not assigning responsibilities for these tasks, and not holding individuals accountable for results.

Barrier no 35: Organisations not planning for an inevitable disruption

Some level of disruption should be planned for, thoroughly considered and acknowledged as a fact in the post-initiative phase of the process (Singh, 2009). Similar behaviour results in businesses having to cover additional costs impacting their revenues, and this is because potential disruptions were not considered in due time, says Singh (2009). Also, Adams and Neely (2000, p. 19) assert that “intelligent planning seems to be in short supply” for M&A initiatives.

Barrier no 36: Managerial self-interest

As was discussed earlier in the literature review chapter, Lebedev et al. (2015) say that CEO’s remuneration can depend on the size of the company. This factor can act as an incentive to pursue M&A deals in a situation when they perhaps should not be pursued at a given time, the authors believe. As reported by Jharkharia (2012), businesses sometimes acquire counterparts that are larger than themselves, and this may bring unnecessary risks. Although, the author says, this is more of a threat within the developing markets, similar behaviour may be a serious issue along the way as companies grow through acquisitions.

2.14. Enablers & Best Practices for Supply Chain Integration for M&As

In this section, enablers and best practices for integrating supply chains of merging or acquiring companies will be identified. Several authors, many of whom have already been introduced earlier in this work, have identified enablers and processes that can

support and improve M&A performance under the given circumstances. These are presented in the following pages of the work.

Enabler no 1: Outcome measurement

Herd et al. (2005) assert that supply chain integration metrics within the M&A context give important information on where the process is going, and what it is delivering. They add that measurement helps managers to stay focused on important targets. The authors refer to an organisation that merged with another entity in the year 2000. The business kept recording its sources of expenditures, as well as achieved savings. Specific targets were developed and progress closely measured (Herd et al., 2005). To draw from their experience, the authors presented key supply chain success integration metrics to aid the integration of merging supply chains, as shown in Table 4 below.

Metric	Indicates Progress In:
Supply chain synergies captured vs. synergies targeted	<i>Revenue synergy Operating-expense synergy Capital-expense synergy Working-capital synergy</i>
Percentage of Day 1 requirements successfully met on time	<i>Organisational and functional stabilisation</i>
Number of contracts repriced and renegotiated for cost savings	<i>Sourcing-strategy implementation</i>
Negotiated savings as a percentage of overall spending	<i>Operating-expense synergy Capital-expense synergy</i>
Spending compliance with procurement contracts	<i>Implementation of procurement controls</i>
Purchase-order cycle time	<i>Implementation of standard processes and systems to prevent potential supply disruptions</i>
Third-party logistics provider order-fulfilment costs vs. pre-merger baseline Transportation costs vs. pre-merger baseline	<i>Operating-expense synergy</i>
On-time order delivery Order accuracy Fill rate versus pre-merger baseline	<i>Implementation of processes and systems to prevent deterioration in customer service</i>
Inventory turns	<i>Working-capital synergy</i>

Table 4: Key Supply Chain Integration Metrics (Herd et al., 2005, p. 11)

Enabler no 2: Due diligence, better prioritisation and a more strategic approach

Byrne (2007) argues that businesses that are successful with their M&As are those that take due diligence very seriously. He adds that a strategic approach with complete prioritisation is essential for achieving success. Specific integration steps need to be identified, and several teams or individuals must get involved to ensure a long-term accomplishment. The more accurate the data, facts and the judgement, the more prosperous the future ahead, the author contends. Doing the due diligence homework properly is especially important these days for businesses engaging in CMAs or for initiatives within new environments, as well as in particularly challenging conditions, articulates Byrne (2007). Iyer (2016) says that companies that perform due diligence with their supply chains are 80% more likely to succeed than other businesses. The author adds that supply chain due diligence helps companies to identify and review their own processes and infrastructure, and very importantly those of the target company, making it easier to prioritise and subsequently integrate.

Enabler no 3: Quicker supply chain integration of the merging businesses

James Langabeer and Seifert (2003) emphasise that in order to successfully merge businesses, rapid supply chain integration is obligatory because it delivers better value to the newly formed entity. The authors argue that quick integration within one year delivers stabilisation and better business results. They further add that companies who required two years or more to integrate their SCs were in general less successful with their M&A initiatives.

Enabler no 4: Leader nomination and creation of an SC team

Herd et al. (2005) believe that an important task ahead of a company board is to decide on a supply chain integration team and nominate its leader. The authors say that the newly nominated team leader needs to direct his entire attention towards the merger and integration of supply chains. Importantly, all this needs to start at the beginning of a planning process, they say. This is also what Byrne (2007) highlights, saying that SC executives need to start their work early in the merger planning phase of the process. To raise the status within the organisation of supply chain integration activities, the team leader needs to be a senior officer with well-established relationships with other stakeholders (Herd et al., 2005).

Herd et al. (2005) refer to an organisation conducting an M&A activity, where nearly a third of merger savings came from the supply chains area. The discussed organisation followed the above recommendations and appointed a supply chain leader responsible for bringing the two company's supply chains together. The SC leader along with the team were tasked to "aggressively generate savings in procurement, logistics, and asset management" (Herd et al., 2005, p. 9). Byrne (2007) is yet another author, practitioner, and a business consultant who insists on early involvement of supply chain leaders in a planning process. The supply chain representatives need to ensure equal treatment of supply chain matters during the M&A process, like those of other corporate divisions e.g. finance, marketing, sales, IT etc., the author says.

Enabler no 5: Company-wide communication in relation to supply chain integration

Tompkins (2011) believes that an important factor supporting supply chain integration efforts in the M&A context is wide communication. The author says that very early in the process after the deal conclusion, good and open communication will fast-track the integration of supply chains.

Enabler no 6: Introduction of metrics for the measurement of value creation, and not only cost savings

Byrne (2007) argues that it is a mistake not to introduce metrics for capturing value creation. He says that businesses focus on cost savings, missing out on the value that integration can deliver if measured and pursued. The author identifies several areas including an improvement in quality, fewer disruptions across supply chains, or better fill rates and inventory turns.

Enabler no 7: Bringing inherited disparate transaction systems together, rather than hastily integrating them

Singh (2009) believes that instead of rushing and heavily investing in system consolidation after an M&A initiative, a better idea is to develop a shared database bringing the inherited systems together. As the author argues, modern databases offer tools that can do just that in a relatively short time frame. He also says that in a matter of weeks adequate reporting can be developed, cutting costs and time.

Enabler no 8: Prior acquisition experience

There is sufficient empirical evidence to state that businesses that have already conducted acquisitions and integrated target companies into their structures will do better in the future, says Steigenberger (2016). The author adds that there are conditions which “can help leverage pre-acquisition experience in a positive way. In particular, high-level management attention and careful and thorough integration planning” (Steigenberger, 2016, p. 7).

Enabler no 9: Development of a strategy for IT department to support supply chains

Jharkharia and Shankar (2005) believe that the IT strategy should include supply chains and be coupled with a strategic vision. This comprehensive approach, the authors contend, can resolve numerous supply chain issues.

Enabler no 10: The inclusion of external experts within supply chain teams to support integration activities

Herd et al. (2005) propose the inclusion of external experts into a supply chain team responsible for integrating a company’s disparate supply chains. This approach can indeed deliver great insights, and knowledge not available within the organisation. During the data collection stage of this work, this subject will specifically be researched to find out if businesses support themselves with consultants that facilitate the integration processes.

Enabler no 11: Early inclusion of external parties to support M&A efforts

According to Byrne (2007), European and North American mergers and acquisitions typically take nine months from the deal announcement to closure. As the author believes, every day can deliver savings and financial benefits, and so this time cannot be wasted. To capitalise on this extra time, often neglected by others, and stay ahead of the competition, external parties should be introduced to the pre-deal team. These can be representatives of investment banks, consulting companies, accounting and law specialists etc., the author says. Byrne (2007) admits that the external expertise and insights can allow more in-depth analysis, normally obtainable at a much later stage. This is because the external participants possess data that is usually hard to

access. This will lead to quick opportunity and value extraction from the deal, from the first moments after the merger (Byrne, 2007).

Enabler no 12: Selection of the right metrics, consistent across both merging businesses

Singh (2009) says that selecting the adequate metrics is a difficult task, as metrics can be different across various organisations. The author suggests using metrics that will deliver satisfactory precision, where data is available and which are “backed by common definitions” employed by both of the merging organisations (Singh, 2009, para.10). The author argues that it is more important to focus on data availability and on this basis, build good metrics, rather than to introduce the perfect metric for which no adequate data exists.

Singh (2009) proposes metrics for merging businesses around three areas, financial performance, order performance and supply performance as shown below in Table 5.

Financial Performance	<ul style="list-style-type: none"> • <i>Variable supply chain costs per shipment</i> • <i>Inventory turns</i>
Supply Performance	<ul style="list-style-type: none"> • <i>Capacity utilisation</i> • <i>Order lead time</i>
Order Performance	<ul style="list-style-type: none"> • <i>Percent of orders delayed</i> • <i>Inventory velocity</i>

Table 5: Common Metrics for Merging Businesses (Singh, 2009, para. 31)

Enabler no 13: Communication of expectations and objectives during the integration and implementation phase of the process

Cheng and Seeger (2012, p. 116) argue that “managers need to communicate and clearly define objectives and performance expectations during the integration and implementation process”. Furthermore, Bertoneclj and Kovač (2007) assert that a lack of timely and accurate communication lowers morale among the staff, and adversely affect shareholders. The recipe for effective communication is: “no secrets, no surprises, no hype, and no empty promises” say Bertoneclj and Kovač (2007, p. 177). Additionally, the authors say, those businesses that get the communication right are 13% more likely to succeed than others.

Enabler no 14: Introduction of post-merger integration measurement systems and tracking, not just simple balance scorecards

Adams and Neely (2000, p. 19) propose “the adoption of effective post-merger integration (PMI) tracking and measurement systems” and discuss the creation of “a meaningful business performance model and measurement system for the PMI environment”. According to the authors, the occasionally adopted balanced scorecard is not the best tool to use within a great proportion of PMI projects due to its numerous disadvantages. The performance prism with its five different facets is designed in a way to always keep focus on stakeholders’ needs. The way it differs from the balanced scorecard is that apart from shareholders and customers, it also takes into consideration company staff, vendors, intermediaries, market regulators and even communities (Adams & Neely, 2000).

Enabler no 15: Carrying out a post-merger evaluation of supply chains

Singh (2009) discusses the necessity for businesses to assess their supply chains post-initiative. There are several goals to be accomplished through the assessment, namely:

- a) revision of the current structure of the organisation, with a focus on identification of opportunities for improvement,
- b) obtaining knowledge about pre-merger competencies of both merging organisations around their demand management, inventories, planning of production and demand, as well as scheduling,
- c) developing guidelines and steps in relation to how to consolidate processes and systems in a way to downplay disruptions and improve efficiencies.

Enabler no 16: Change management in the M&A context

Change will inevitably be a part of any merger or acquisition. In order to make the most of the arising opportunities, businesses should find ways to embrace change instead of minimising it, says Byrne (2007). M&As should be perceived as an opportunity to change things, including processes, resources, cost structure etc., the author says. Strictly for supply chains “companies should also integrate supply chain capabilities

that can adapt to demand changes or supply disruptions that may occur as a result of the merger” (Byrne, 2007, para. 14).

Enabler no 17: Inclusion of experienced employees from both organisations engaging in an M&A initiative

The supply chain team responsible for bringing the distinct supply chains together should consist of experienced managers from both businesses engaging in the merger or acquisition initiative, say Herd et al. (2005). As the authors argue, the team members should work full time on the merger integration, with each person having their specific tasks and scope clearly defined.

Enabler no 18: Information sharing for better supply chain management

According to Jharkharia and Shankar (2005), sharing information is a prerequisite for successful and effective supply chain management, and this is possible thanks to the development of information technology systems, as happened in the recent years. According to the authors, currently, organisations embark upon IT projects to enable data-driven supply chains.

Enabler no 19: Development of tools and techniques by IT departments to align new acquisitions better and quicker

According to Lazenby (2010), IT departments within well performing organisations develop tools and techniques to quicker integrate and align new acquisitions. This is a very important point from the perspective of supply chain integration of the merging businesses, and will therefore be researched during the data collection stage.

Enabler no 20: Trust between partners in the supply chain

Trust between partners is essential for IT enablement to happen in order to support supply chains, say Jharkharia and Shankar (2005). Well-developed relationships and confidentiality are prerequisites, especially for cross-organisational IT infrastructure links, where third parties gain access to sensitive data, the authors assert. Partners need to share their databases and refer to the same source regarding e.g. out of stock products, inventory levels, and forecasts. This is a long-term investment, fraught with

high risk, and requires significant funds, where detailed planning and mutual cooperation are crucial (Jharkharia & Shankar, 2005).

Enabler no 21: Full comprehension of the target company's operating structure

According to McFarlane and Fleming (2011), full knowledge of the operating structure and supply chain design of the target company is critical before sealing a deal. The authors claim that M&A integration can bring many disruptions; therefore, it is important to understand challenges, and the levels of necessary investment. This in turn "could influence whether the target is, in fact, a viable investment" (McFarlane & Fleming, 2011, para. 6).

Enabler no 22: Development of a road map

Singh (2009) proposes the creation of a joint team under the supervision of a supply chain personnel, but with representatives of other departments e.g. IT, finance, or manufacturing, as required. The task facing the team is to analyse the potential for short-term cost savings, but also to recommend long-term goals e.g. around productivity improvements, the author says. He further adds that the outcome will be several small projects with time scales between three and five months, and asserts that "these projects will constitute a road map for combining the supply chains and delivering productivity gains" (Singh, 2009, para. 25). Importantly, the author says, every project needs to deliver specific benefits to the business and return on investment.

Enabler no 23: Corporate culture due diligence for M&As

O'Reilly (2002) contends that corporate culture matters may look trivial, but in fact the merger's success may depend on them. The author believes that people should share a common vision, work towards a resolution, and be given an opportunity to raise questions and express concerns. This holds equally true for both acquirers and those being acquired, says O'Reilly (2002). A big difference in cultures may cause integration issues along the line, the author adds; therefore, simply looking at strategic and financial implications is not enough. O'Reilly (2002) adds that due diligence with culture matters gives a good basis and understanding of possible challenges that may need sorting out to successfully integrate the target company. A good assessment

conducted early in the process, listing cultural “similarities and differences builds a positive framework for successful integration down the line” (O’Reilly, 2002, para. 31).

Enabler no 24: Accurately forecasting potential synergies and setting achievable goals

Herd et al. (2005) argue that numerous mergers fail because the projected savings are not delivered. This is very worrying fact, because often synergies are M&A deal justifiers (Cheng & Seeger, 2012). There is no specific set of instructions, procedures and actions for what to do and how to integrate supply chains of merging or acquiring businesses. As Byrne (2007, para. 11) says, “one size does not fit all”, further adding that executives need to identify goals, and “tie them to the individual transaction’s objectives”.

Many mergers are bound to fail because the initial promises in the form of projected savings and other benefits are unrealistic (Herd et al., 2005). It is a complex process to accurately estimate benefits that supply chains can deliver, and the task “requires skilful blending of top-down and bottom-up methodologies” (Herd et al., 2005, p. 10). As the authors explain, the employment of the top-down methodology allows the execution team to verify if the forecasted benefits are achievable in the given circumstances. These circumstances include external factors such as business environment, similarity to other deals, and current competitive surrounding, they add.

The bottom-up methodology deals with the internal aspects of a business, including analysis of cost-saving opportunities and revenue improvement across the merging supply chains (Herd et al., 2005). At times, the new expanded business may need to close manufacturing facilities, amalgamate procurement units, or potentially merge warehouses, the authors say. They further add that the outcome of the bottom-up and top-down analysis puts the management team in a position to be able to realistically estimate benefits, and judge if their teams have accurately spotted and evaluated opportunities. Only organisations equipped with this knowledge can comfortably announce M&A deals, limiting the risk of over-promising (Herd et al., 2005). The authors argue that the amalgamation of top-down and bottom-up methodologies has led numerous mergers to a successful end. What is more, the above approach delivers answers to the question of where specifically organisations can search for savings, say Herd et al. (2005).

On the basis of the above identified barriers and enabler, a conceptual framework was developed, as presented in the next section.

2.15. Conceptual Framework

In the light of the two research questions and the study’s aims and objectives, during the literature review phase of the research, 36 barriers and 24 enablers relating to mergers and acquisitions were identified. Initially, all the barriers and enablers were grouped into nine categories; however, acting upon the feedback received from the academic experts and business practitioners during the pilot study, these were then downsized to seven thematic groups. Nonetheless, an extra group, group one, was later added in addition to the seven thematic groups, and was reserved for classification questions. These questions were intended to deliver additional background information about the interviewees, such as the length of their experience, exposure to corporate mergers and acquisitions and the like. The outcome of the above discussed exercise is a conceptual framework, a theoretical contribution to knowledge, shown in Table 6 below.

Group 1: Classification Questions	
<i>Reserved for the interview classification questions</i>	
Group 2: Strategies, Processes and Tools & Techniques	
B32: <i>Overarching supply chain strategy not aligned with business strategy and competitive strategy of the two merged companies</i>	E19: <i>Development of tools and techniques by IT departments to align new acquisitions better and quicker</i>
E9: <i>Development of a strategy for IT department to support supply chains</i>	E16: <i>Change management in the M&A context</i>
Group 3: Human Factor, Trust & Teams	
B7: <i>Lack of trust for sharing data with partners across the supply chain</i>	B17: <i>Resistance to seeking help beyond a company’s boundaries if the required knowledge does not exist within</i>
B6: <i>Mismatch between the perception of how well the post-initiative integration of supply chains goes vs. the real outcomes vs. the confidence of the board</i>	E17: <i>Inclusion of experienced employees from both organisations engaging in an M&A initiative</i>
B2: <i>Supply chain personnel not recognising the importance of their role</i>	E11: <i>Early inclusion of external parties to support M&A efforts</i>
E20: <i>Trust between partners in the supply chain</i>	E18: <i>Information sharing for better supply chain management</i>
B33: <i>Little attention given to cultural and social issues in the M&A context</i>	B36: <i>Managerial self-interest</i>

Group 4: Metrics, Objectives & Measurement	
B25: Strategic objectives for M&A activities outlined by senior management do not embrace the supply chain area and its improvements for better performance	E1: Outcome measurement B14: Late identification of saving targets for SC teams to pursue
E6: Introduction of metrics for the measurement of value creation, and not only cost savings	E14: Introduction of post-merger integration measurement systems and tracking, not just simple balance scorecards
B22: Selection of the wrong indicators for the post-merger phase	E12: Selection of the right metrics, consistent across both merging businesses
E24: Accurately forecasting potential synergies and setting achievable goals	E13: Communication of expectations and objectives during the integration and implementation phase of the process
Group 5: Time Aspect and Time Frames	
B18: Considerable time investment deters companies from integrating supply chains	B3: Over-rushed supply chain system consolidation in an M&A context in the integration phase of the merger
B27: Short-termism in the context of mergers and acquisitions	
B9: Missing time frames as to when supply chain savings ought to be delivered	B10: Time pressure when conducting M&As renders supply chain matters unimportant
Group 6: Pre-initiative Considerations & Due Diligence	
B4: Very rarely is any consideration given to the potential impact of an M&A deal on merging supply chains pre-initiative	B1: Pre-deal supply chain ignorance at the board level
B30: Selection of target companies purely in the light of financial indicators	E8: Prior acquisition experience
B24: Negligence of the supply chain area through the negotiation phase of an M&A	B12: Supply chain personnel not contributing to the pre-merger stage of the process
B26: Exclusion of senior supply chain officials pre-initiative	B15: Negligence of the supply chain area when sealing a final M&A deal
E4: Leader nomination and creation of an SC team	E23: Corporate culture due diligence for M&As
B23: Lack of involvement of IT executives in the pre-deal due diligence	E2: Due diligence, better prioritisation and a more strategic approach
B21: Absence of due diligence guidelines to support merging supply chains prior to M&A	E21: Full comprehension of the target company's operating structure
Group 7: Acquisition Planning & Assessment	
B11: Businesses define the ultimate shape of supply chains without a road map showing how to get there	B8: Merger planning teams are not the same people who are responsible for the operational side of integration

B31: Not enough attention given to the post-merger planning and supply chain assessment	B5: Lack of appreciation of supply chains during the planning stage by the board directors
B34: Lack of clarity in relation to order of tasks set for accomplishment and assigned responsibilities	B35: Organisations not planning for an inevitable disruption
E22: Development of a road map	E22: Development of a road map
E15: Carry out a post-merger evaluation of supply chains	
Group 8: Post-acquisition Planning & Integration	
E7: Bringing inherited disparate transaction systems together, rather than hastily integrating them	E5: Company-wide communication in relation to supply chain integration
B29: Negligence of supply chains by the board during the integration phase	B28: Slow integration of merging or acquisitioned businesses
B16: Lack of clarity in relation to the officials accountable for integration efforts	B20: Lack of understanding of IT integration costs to enable supply chain saving generation
E10: The inclusion of external experts within supply chain teams to support integration activities	B13: High costs attached to the supply chain integration stop companies from launching integration projects
E3: Quicker supply chain integration of the merging businesses	

Table 6: Conceptual Framework

In the next chapter, research methodology is presented and discussed.

3. Research Methodology

3.1. Introduction

It is important to ensure that the embraced research methodology enables the author of the study to answer research questions and facilitates the process of fulfilling aims and objectives. Saunders, Lewis, and Thornhill (2012) stipulate that the methodological choices made early in the research process will have a direct impact on the research design and chosen methods for data collection and analysis. The preceding two sentences explicitly imply that the term ‘methodology’ differs from what is understood by the concept of ‘methods’. For the purpose of this research, and following Saunders et al. (2012, p. 674), the term ‘methods’ relates to procedures and techniques for obtaining data, and subsequently data analysis, whereas ‘methodology’ refers to “the theory of how research should be undertaken including the theoretical and philosophical assumptions”.

Examples of the data collection methods include observation, interviews, and questionnaires, whereas techniques of analysis can be quantitative, which are statistical, and qualitative, i.e. non-statistical (Saunders et al., 2012). Sobh and Perry (2006) note that within qualitative research, scientists use small samples, and through finding subtle differences in the meaning of words, endeavour to build theories. On the other hand they say, researchers working with quantitative research collect data and use larger samples to test theories.

An abundance of quality research has been successfully accomplished over the course of the last few decades, much of which has produced good and reliable results (Hair, Celsi, Money, Samouel, & Page, 2015). For this reason, the authors advise modelling the research methodology and methodological approaches on other quality research from the area of business sciences. This is to avoid reinventing something which has already been proven to work. An adoption of tested approaches that worked for others, e.g. regarding how to analyse data, or the choice of software for analysis, can be very helpful (Hair et al., 2015).

In this point, a general methodological outline will be provided, as shown in Figure 12 below, whereas detailed considerations in relation to the philosophical assumptions, research methods, approaches etc., will be debated in the next sections of the chapter.



Figure 12: A Qualitative Research Design Model (M. D. Myers, 2013, p. 24)

Having said that, and in the light of the above research model shown in Figure 12, this study embraces interpretive philosophy and qualitative research design. The selected methodological choice is multiple methods, more specifically a multi-method qualitative study (with semi-structured interviews, observation, and revision of documents as data collection techniques). The research strategy is a case study (single case; embedded), and the study's research approach is inductive. The collected qualitative data was entered into NVivo 11 for Windows package, ver. 11.4.1.1064 and subsequently analysed. Finally, a written record was produced.

In the following sections, the embraced research methodology and a rationale for the choice in the light of the subject of the work and the goals set earlier in Chapter 1 will be discussed. Philosophical assumptions will be introduced and debated from the perspective of this research, and the selected research methods of collecting data, as well as techniques for analysis of the data collected will be justified. The discussion starts in the next point with philosophical considerations.

3.2. Philosophical Considerations

According to Collis and Hussey (2014, p. 43) "philosophy is a set or system of beliefs". A research philosophy is an all-embracing term that "relates to the development of knowledge and the nature of that knowledge" (Saunders et al., 2012, p. 127). What Saunders et al. (2012, p. 128) further state is that, in general, academic researchers throughout their enquiries make assumptions not only "about human knowledge" and "the nature of the realities", but also assumptions with regard to the way they understand research questions. They add that the researcher's influence is not limited to the above, and extends to methods for data collection and interpretation of findings. In simple terms, the concept of research philosophy represents researchers' assumptions about the world, and the way it is perceived (Saunders et al., 2012). According to M. D. Myers (2013), philosophical assumptions are not well expressed by researchers, and although they get a grasp of them, they do not make them explicit,

which is a mistake. New knowledge is acquired in one way or another, and philosophical assumptions on which the research enquiry is built cannot be neglected, the author says.

The research paradigm is “a philosophical framework that guides how scientific research should be conducted” where the framework is “based on people’s philosophies and their assumptions about the world and the nature of knowledge” (Collis & Hussey, 2014, p. 43). P. Johnson and Clark (2006) reason that it is more important for the researcher to defend his or her philosophical choices than philosophically inform the research. As will be discussed below, there are several research paradigms and the researcher needs to be able to argue why the paradigm of choice is better than the available alternative for the purpose of the conducted research. Saunders et al. (2012) claim that no single methodology is superior to another, as all of them have relevance in certain circumstances. They add that what is expected of the researcher is that the pursued philosophical stance will enable research questions to be answered.

Saunders et al. (2012) note that over the years the discussion in academia has been about the two competitive research philosophies, i.e. positivist and interpretivist. However, for the purpose of the business and management research the authors add two more, and propose the following four research philosophies; pragmatism, positivism, realism and interpretivism. Similar to Saunders et al. (2012), Collis and Hussey (2014) also posit that positivism and interpretivism are the two principal paradigms, but note that positivism evolved from the philosophy of realism. When it comes to pragmatism, the scholars suggest caution before adopting this particular philosophical stance. This will be further discussed in the next sections.

The selection of an appropriate research paradigm and the acknowledgement of its importance for the research is even more important than the focus on specific methodologies, since a methodology is only a subset of a paradigm, say Sobh and Perry (2006). They add that a research paradigm in fact consists of an epistemology, ontology and methodology. “Ontology is reality, epistemology is the relationship between that reality and the researcher”, whereas methodology refers to the techniques used “to discover that reality” (Sobh & Perry, 2006, p. 1194). For this reason a philosophical paradigm “is an overall conceptual framework within which a

researcher may work” (Sobh & Perry, 2006, p. 1194) or as Guba and Lincoln (1994, p. 105) put it, a “basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways”. This is why a thorough consideration of the paradigm for the research is so important. The earlier introduced research paradigms will be discussed in the following sections of the chapter, starting with positivism and its more recent variation i.e. post-positivism.

3.2.1. Positivism and Post-positivism

Collis and Hussey (2014) posit that up until the 20th century the only research paradigm that existed was the positivist philosophy, and the source of scientific achievements was, as known today, in natural sciences. Back in those days, researchers focused their attention on inanimate objects in the surrounding physical world, and the interaction of energy and matter, the authors say. They add that explanatory theories were developed with the application of inductive knowledge, and these were used for prediction. The most popular methods for data collection were experiments and observation.

Similar to Collis and Hussey (2014), Saunders et al. (2012) also agree that the positivist philosophy is associated with natural sciences. They say that within the boundaries of the positivist paradigm, researchers are collecting data through observation of surrounding reality, striving to either find patterns or casual relationships to create generalisations. The authors explain that in order to collect credible data, researchers either develop hypotheses or support themselves with the existing theories.

For a positivist researcher to be able to observe phenomena directly and in an objective way, a conviction about the existence of dualism between the researcher (the subject) and the object (the observed) is in place, and a scientific and rigorous methodology is employed, say Gill and Johnson (2010). They continue by saying that the new knowledge must not have been affected by the act of observation and ought to be independent of the researcher, which is paramount to positivism. The ideas discussed above are shown in Figure 13 below.

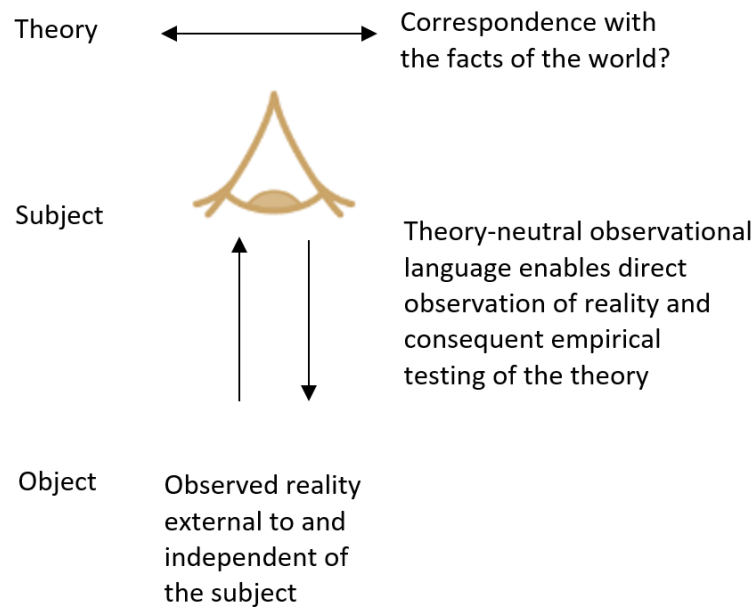


Figure 13: Positivist Dualism (Gill & Johnson, 2010, p. 194)

Hair et al. (2015) propose a newer and more up-to-date version of positivism i.e. post-positivism. While positivists “view reality as something that can be objectively ascertained and described through research”, post-positivists appreciate the need for “sociocultural and psychological lenses” in order to properly interpret an objective reality (Hair et al., 2015, p. 277). The above does not change the fact that post-positivists are still trying to approach their research findings in such a way as to eliminate bias. The authors add that the quantitative process of the research falls either within the positivist or post-positivist paradigm. In the next point, the research paradigm of realism is discussed and some similarities and differences between positivism and realism are highlighted.

3.2.2. Realism

The philosophical stance of realism is linked to scientific enquiries, and at the heart of the philosophy lies a conviction that objects and the human mind are independent of each other. As Saunders et al. (2012, p. 136) put it, “there is a reality quite independent of the mind”, or as Sobh and Perry (2006, p. 1199) say, there is “an external reality”. When it comes to epistemological assumptions, realism is on the same side as positivism in that both philosophies take a scientific approach to knowledge development, say Saunders et al. (2012). This assumption is important when collecting and analysing data, the authors argue.

Sobh and Perry (2006, p. 1200) state that those who subscribe to the realist stance of philosophy, “believe that there is a real world out there to discover”. These researchers are aware that how they perceive the world is not necessarily how the world is, the authors say. They add that the difference between positivism and realism when it comes to ontological assumptions is that positivists believe that reality exists and can be apprehended, whereas realists believe in real reality but think it can only be probabilistically and imperfectly apprehended. The epistemology of the realist and the positivist perspectives also differs. Positivists believe that findings are true whereas realists acknowledge that they are probably true, according to Sobh and Perry (2006). As such, commonly used methodologies for positivists are quantitative and for realists qualitative, the authors say; however, Saunders et al. (2012) add that they can also be quantitative, and this is determined by the researched subject.

In fact, within realism there are two approaches, namely direct realism and critical realism. Saunders et al. (2012) argue that direct realism is about reality and its perception, i.e. senses accurately portray the world. Critical realists however, claim that sensations of the world are “images of the things in the real world, not the things directly” (Saunders et al., 2012, p. 136). What Saunders et al. (2012) also say is that senses do not always paint the real picture and can be deceptive. As an example, the authors quote flat advertisements painted on a football ground, which look as if they are real physical objects. To counter this view, direct realists blame insufficient information for the illusion, say Saunders et al. (2012).

In order to place realism between positivism and interpretivism, Krauss (2005, p. 761) says that “positivism concerns a single, concrete reality and interpretivism multiple realities, realism concerns multiple perceptions about a single, mind-independent reality”. He adds that within the realist paradigm, reality goes beyond consciousness and the self and cannot be fully discovered and known. In the positivist stance the research is value-free, in the interpretivist stance; value-laden, while in the realist stance; value cognizant i.e. “conscious of the values of human systems and of researchers” (Krauss, 2005, p. 761). The most important aspect of realism, the author says, is that human perceptions of reality and existing reality can vary.

3.2.3. Interpretivism (Phenomenology)

According to Collis and Hussey (2014), interpretivism and positivism are the two most important and opposing paradigms, lying on two different ends of a continuum of paradigms, as shown in Table 7 below.

	POSITIVISM <			> INTERPRETIVISM		
Ontological Assumptions	<i>Reality as a concrete structure</i>	<i>Reality as a concrete process</i>	<i>Reality as a contextual field of information</i>	<i>Reality as a realm of symbolic discourse</i>	<i>Reality as a social construction</i>	<i>Reality as a projection of human imagination</i>
Epistemological Stance	<i>To construct a positivist science</i>	<i>To construct systems, process, change</i>	<i>To map contexts</i>	<i>To understand patterns of symbolic discourse</i>	<i>To understand how social reality is created</i>	<i>To obtain phenomenological insight, revelation</i>
Research Methods	<i>Experiments, surveys</i>	<i>Historical analysis</i>	<i>Interpretive contextual analysis</i>	<i>Symbolic analysis</i>	<i>Hermeneutics</i>	<i>Exploration of pure subjectivity</i>

Table 7: Continuum of Paradigms (Collis & Hussey, 2014, p. 49)

The above continuum shows how ontological assumptions, epistemological stances and research methods (i.e. as previously discussed, the research paradigm) change when moving from the positivist stance to the interpretivist philosophical position. In the same way that the realist philosophy initiated positivism, the interpretivist philosophy originated from idealism, say Collis and Hussey (2014). The discussed continuum of paradigms provides a good practical overview, as to how certain assumptions change when moving from one side to another. Various authors, when discussing the interpretivist philosophical stance, talk about phenomenology as these concepts refer to the same philosophy and can be used interchangeably, according to Collis and Hussey (2014). However, the authors believe that interpretivism is a wider concept, and so this term will be used throughout this research.

Interpretivism emerged due to the shortfall of positivism in the social world (Collis & Hussey, 2014), and is combined with social constructivism (Creswell, 2007). Business studies are complex in nature and far-fetched generalisations reduce insights into the multifaceted social world, say Saunders et al. (2012). There was a need to stop “theorising by definite laws” since physical sciences are not alike social world (Saunders et al., 2012, p. 137). The working realms of social scientists are different to

those of natural scientists (Goldkuhl, 2012). According to Creswell (2007), the experiences of individuals should be accorded less significance, and the researcher should focus on finding the essence and common feature for the entire group. The researcher interacts with participants during the data collection process, and this implies that participants co-produce and interpret data in the process of data generation (Goldkuhl, 2012).

Saunders et al. (2012) believe that within interpretivism it is crucial to appreciate the ways in which humans vary and how differently they act in the social world. For this reason, the interpretivist study focuses more on research concerning people than that concerning physical objects, they say. The authors believe that people are social actors with their roles. Collis and Hussey (2014) discuss several reasons why positivism was inadequate for the research in the social world. The main arguments are that people cannot be separated from their social environment. Also, the authors believe that in order to understand people, their perceptions need to be examined. In addition to the above, the rigid structure of positivist research is not flexible enough for the social world, and interesting findings can be lost on the way, say Collis and Hussey (2014). The authors further add that complex phenomena cannot be captured in a one-off measure, as this would be misleading. For this reason, the positivist approach seems not convincing, and thus there is a need for the interpretivist philosophy, the authors contend.

Collis and Hussey (2014) posit that an important assumption for the interpretivists is that social reality lacks objectivity, and because this reality is shaped by human perceptions, it tends to be highly subjective. Additionally, as they say, the researcher cannot isolate himself or herself from this social context, and there will be a natural interaction between the researched subject and the mind of the researcher. Interpretivists agree that the simple fact of conducting the research will have a bearing on the social reality (Collis & Hussey, 2014). To contrast and distinguish between the two opposing philosophies, the following is very true i.e. “positivism focuses on measuring social phenomena, interpretivism focuses on exploring the complexity of social phenomena with a view to gaining interpretive understanding” (Collis & Hussey, 2014, p. 45).

A similar view is shared by Goldkuhl (2012) who believes that subjective meanings are very important and the researcher should seek to understand them. The author claims that the material world of the natural scientist is meaningless without the researcher's interpretation, whereas the social world where humans interact, displays an abundance of meanings, both shared meanings as well as subjective. This internal logic of the social world needs to be understood by the enquirer. In natural sciences the enquirer applies an external logic to the gathered data (Goldkuhl, 2012).

Interpretivist philosophy is based on phenomenology as well as symbolic interactionism, say Saunders et al. (2012). In simple terms, phenomenology is about the way people understand the surrounding world, whereas symbolic interactionism refers to the interpretation of the surrounding social world in a particular way, and how the actions of others are perceived and affect one's own actions and understanding (Saunders et al., 2012). The authors highlight the need for an empathetic attitude of the investigator. The researcher needs to enter and understand the social world of participants, and importantly, understand this world from their position, the authors say. Through the adoption of the interpretivist position, the researcher works with and acknowledges the presence of the subjective meanings, as they form the basis for theorising (Goldkuhl, 2012). Due to the complexity of business situations and their distinctiveness, there are researchers who argue that interpretivism is the philosophy for management and business studies (Saunders et al., 2012).

Collis and Hussey (2014) conclude by saying that interpretivists avoid quantitative methods usually appropriated by positivists, and instead opt to use methods suitable for fact-full descriptions and translations, with no regard to the frequency of occurrence of the phenomena. Interpretivists focus their attention on meanings, and the research delivers qualitative data, where findings are not statistical analysis (Collis & Hussey, 2014). For all the reasons and considerations given in this section, in this study the interpretivist paradigm is followed. In the next section, the last noteworthy paradigm is discussed, i.e. pragmatism.

3.2.4. Pragmatism

According to Goldkuhl (2012) the pragmatist philosophical strand emerged in America; however, similar thinking was evident amongst some European and East-Asian

thinkers. He says that at the heart of the pragmatist ontology lies action and change. In society, without action, human relations make little sense, therefore, “a society must be seen and grasped in terms of the action that comprises it” (Goldkuhl, 2012, p. 7). The author contends that the surrounding world cannot be changed without action, and only knowledge and a specific purpose coupled with action can lead to a desired change (Goldkuhl, 2012).

In an article published by Onwuegbuzie and Leech (2005) entitled “Taking the ‘Q’ Out of Research: Teaching Research Methodology Courses Without the Divide Between Quantitative and Qualitative Paradigms” the authors argue that the discussion in academia in relation to qualitative and quantitative research is not constructive and as such counterproductive, and not contributing to advancing the social science field. The authors suggest that researchers should become bi-researchers i.e. pragmatists. Further to the above, McKerchar (2008) advocates openness and a flexible approach to paradigms, acknowledging that researchers may have their preferences when it comes to views and subsequently, the paradigms of choice. Having said this, the author notes that researchers should be able to adapt and work within various paradigms, depending on the investigated subject. Those who are only working with either qualitative or quantitative research, referred to as ‘uni-researchers’, limit themselves as they are not capable of conducting a bilingual research, the author believes.

Pragmatists claim that qualitative and quantitative methods are not mutually exclusive, and dismiss the statement that they are not interchangeable (Onwuegbuzie & Leech, 2005). McKerchar (2008) explains that throughout the ‘70s, it was acknowledged that although the positivist and interpretivist paradigms are philosophically opposed, in fact there is a middle ground between them on a continuum, and this is the pragmatist stance and the previously discussed critical realism. For both of these stances, researchers use mixed methods and are not limited to techniques associated with only one paradigm, the author says. This approach offers flexibility where “the weakness of one paradigm can be offset against the strengths of the other”, say Collis and Hussey (2014, p. 54); however, this links with the simultaneous ignorance of the philosophical debate linked to a specific paradigm. Collis and Hussey (2014, p. 54) call it a “pluralist approach i.e. an attempt to cross the divide between the quantitative and the qualitative” approach.

In this section, all the major research philosophies were discussed, i.e. positivist, realist, interpretivist and pragmatist, including some variations within them i.e. critical realist, direct realist within realism and post-positivist within positivism. Saunders et al. (2012) argue that the determinant of which paradigm to adopt, should be the research question; therefore, every researcher should give it thorough consideration, and ensure the best choice from his own position. In the next section, the research design subject will be discussed.

3.3. Research Design

When it comes to the research design, there are three ways in which the research can be approached, namely using qualitative, quantitative or multiple methods. However, Hair et al. (2015) the concept of the research design explain in a different way and talk about exploratory research, descriptive research, and causal research. These will be discussed in more detail later in the chapter to ensure there is no misconception in relation to these concepts.

3.3.1. Qualitative Research Design

Saunders et al. (2012) contend that the best suited philosophy for the qualitative research (although not reserved for) is interpretive. The reason for this is that the researcher works within the socially constructed, subjective meanings, expressed by the study participants in relation to the phenomenon being investigated, the authors say.

The research approach of the qualitative study is usually inductive. Within this approach, researchers either build theories, or conceptual frameworks. Both theories and frameworks are created on the basis of the collected data (Hair et al., 2015).

The research strategy in the qualitative research involves use of case studies, action research, ethnography, narrative research and ground theory (Saunders et al., 2012). The authors extend this by saying that these are not necessarily limited to qualitative research, and can also be used by those who undertake a quantitative study. However, at times, a qualitative approach to the research is the only possible approach in order to fulfil the research objectives, especially when (Hair et al., 2015):

- a) limited knowledge is available in relation to the research problem,
- b) when the current body of knowledge and the previous research did not answer the research question thoroughly,
- c) when the aim of the research is to develop theories, hypotheses and new ideas for further quantitative testing,
- d) “when current knowledge involves subconscious, psychological, or cultural material that is not accessible using surveys and experiments” (Hair et al., 2015, p. 276).

An important characteristic of the qualitative research design is that it is discovery-oriented (Hair et al., 2015), and it is of the utmost importance for the researcher to build trust and gain an in-depth understanding of what participants communicate (Saunders et al., 2012). The aforementioned is very significant from the perspective of this research. In the light of the two research questions posed earlier in chapter 1, where the goal was to identify practices towards supply chains of companies engaging in M&A activities, the qualitative research design appears to be the most suitable, and therefore is the research design this study has adopted.

3.3.2. Quantitative Research Design

The most popular philosophical stance for those who are conducting their research quantitatively is positivism, where structured techniques for data collection are employed (Saunders et al., 2012). According to Saunders et al. (2012) two types of data can be collected: either data strictly referring to attributes of an organisation, people and similar, or data about the opinions of people, known as qualitative numbers. If the latter is the case and qualitative numbers are collected, the research is still conducted quantitatively, but may partly fall within the interpretivist stance, the authors say. They add that quantitative research can also be adopted by realists as well as pragmatists. Since, as was earlier discussed, realists and pragmatists occupy a mid-position on the continuum of paradigms, they are in a comfortable position in relation to the research design of their choice, “allowing a choice of whichever position or mixture of positions” (Saunders et al., 2012, p. 164).

The research approach of the quantitative study is predominantly deductive, where the data is used to test theories, but at times it may be inductive, with data being used

to develop theories (Saunders et al., 2012). As Hair et al. (2015, p. 276) precisely put it, “qualitative research emphasizes the development of hypotheses, while quantitative research focuses on testing hypotheses”.

When it comes to the research strategies of quantitative research, the following two are the most common i.e. survey research and experimental research, say Saunders et al. (2012). Survey research frequently utilises questionnaires, the authors say, but also the structured interviews or structured observation.

3.3.3. Multiple Methods Research Design

The two most common philosophical positions that would utilise a multiple methods design are either a realist stance (especially critical realists), or a pragmatist position, say Saunders et al. (2012). Critical realists, while believing in objective and external reality, simultaneously acknowledge the fact that social conditioning of an individual affects the way the surrounding world is interpreted and understood, the authors say. They add that for this reason, critical realists follow realist ontology, but interpretivist epistemology. To ensure the aforementioned makes sense, critical realists can quantitatively analyse the published data, and then employ qualitative methods to gain more in-depth understanding of people’s perceptions (Saunders et al., 2012). Pragmatists can also follow mixed methods research to deliver answers. As Tashakkori and Teddlie (2010, p. 96) argue, justification for the employment of mixed methods within the study is easy as it “relies on an argument for the utility of research means for research ends”. Things are more difficult when it comes to the philosophical considerations for pragmatism. However, even there, Tashakkori and Teddlie (2010, p. 96) argue that “the paradigm of pragmatism can be employed as the philosophical underpinning for using mixed methods and mixed models”.

Saunders et al. (2012) say that the research approach for the multiple methods is not limited to either the inductive or deductive approach. The authors explain that the researcher can use any of these, and even use both within the same research. As discussed by Yin (2015), mixed methods research bridges quantitative and qualitative methods across the same research, allowing for insightful findings about complex topics.

The research strategies for the mixed methods are varied due to different combinations of possible research approaches (e.g. mixed method research, mixed model research, multimethod qualitative study, multimethod quantitative study, as well as the two mono methods i.e. qualitative or quantitative), according to Saunders et al. (2012). However, concurrent embedded design, concurrent triangulation design, sequential explanatory design as well as sequential multi-phase design are those most commonly encountered (Saunders et al., 2012).

3.3.4. Exploratory, Descriptive, and Causal Research Designs

Hair et al. (2015), in addition to the above debated classification of the research design i.e. qualitative, quantitative and multi-method, also discuss exploratory research, descriptive research and causal research designs. Collis and Hussey (2014, p. 4) refer to this classification of the research as “according to its purpose”, further adding analytical (explanatory) and predictive research.

The exploratory research relates to the situation where little information is in the possession of the researcher, say Hair et al. (2015). They add that the researcher’s knowledge concerning the opportunity or a problem is limited. The authors contend that it is important to highlight that within the exploratory research no hypotheses are being tested, and the research is about a discovery of patterns, relationships etc. Therefore, this specific kind of research is particularly valuable within the innovative industries (Hair et al., 2015). The most common research strategies for this kind of research are case studies, historical analysis, and observation, due to the fact they offer flexibility and few constraints (Collis & Hussey, 2014). The aim of the exploratory research is predominantly to gather rich data and impressions, the authors say, further adding that this research is a good starting point for further rigorous research.

The descriptive research can be undertaken to follow up on the previously conducted exploratory research discussed above, since its goal is to “gain an accurate profile of events, persons or situations” (Saunders et al., 2012, p. 171). For those who intend to undertake descriptive research, the prerequisite is to have a clear understanding of the phenomenon under study, and before the data collection stage there should be no ambiguity about what is being investigated (Saunders et al., 2012).

The last type of a research discussed by Hair et al. (2015) is causal research, the aim of which is to test if one event is the cause of another event. In other words, what is the effect of a change of one event on another event. Within this type of research, researchers are testing cause-and-effect relationships, and in particular, the below four conditions (Hair et al., 2015):

- a) time sequence; to ensure that the effect happened after the cause,
- b) covariance; to check if both events are undeniably related,
- c) non-spurious association; to understand and control other events that may be affecting the two under observation, and if possible to eliminate them,
- d) theoretical support; to provide an explanation for the existence of the relationship (Hair et al., 2015).

To complement the above, Collis and Hussey (2014) also discuss explanatory research (also known as analytical research), and as mentioned earlier, the predictive study. Explanatory research usually follows upon descriptive research, the authors say. They add that within the explanatory study, the researcher undertakes analysis and provides further explanation, not only description of a phenomenon. In relation to the fifth study type i.e. predictive, the researcher goes even one step further than the analytical research, say Collis and Hussey (2014). If the explanatory research provides the explanation for the phenomenon in a particular situation, predictive research aims to deliver a forecast for the occurrence of the phenomena elsewhere, the authors conclude.

3.3.5. Data Collection Methods Across the Main Philosophical Paradigms

The earlier discussed four main philosophical paradigms require various research designs. The most commonly used are shown below:

- a) pragmatism: mixed or multiple method designs, quantitative and qualitative,
- b) positivism: highly structured, large samples, measurement, mainly quantitative, but can be qualitative,
- c) realism: methods chosen must fit the subject matter, quantitative or qualitative,
- d) interpretivism: small samples, in-depth investigations, qualitative (Saunders et al., 2012, p. 140).

In the next section, the subject of the research strategy is discussed and the main research strategies introduced.

3.4. Research Strategy

The section gives an overview of all major choices and combinations of research strategies and the research designs and philosophies most often associated with them. The comparison will help in placing the case study strategy amongst other alternatives, and will provide a good background for the research. The main research strategies are (Collis & Hussey, 2014; Saunders et al., 2012):

- a) experiment; mostly quantitative design, associated with a positivist strand,
- b) survey; mostly quantitative design, associated with a positivist philosophy,
- c) cross-sectional study; associated with a positivist philosophy,
- d) longitudinal studies; associated with a positivist strand,
- e) archival research; qualitative, quantitative or mixed methods design,
- f) case study; qualitative, quantitative or a mixed methods design, associated with an interpretivist strand,
- g) hermeneutics; associated with an interpretivist strand,
- h) ethnography; qualitative design, associated with an interpretivist philosophy,
- i) action research; qualitative design, associated with an interpretivist philosophy,
- j) grounded theory; qualitative design, associated with an interpretivist strand,
- k) narrative enquiry; qualitative design,
- l) feminist, gender and ethnicity studies; associated with an interpretivist strand.

The chosen research strategy for this research is the case study. As shown above, there are several research strategies, and they are associated with different designs and research methods. Two typical research strategies for interpretivist research and positivist research are the case study strategy and the survey research strategy, and these will be discussed in more detail in the following sections.

3.4.1. Case Study Research

A research strategy known as the case study is being employed by researchers to investigate a distinct phenomenon through various available methods in natural

surroundings, delivering in-depth understanding and knowledge (Collis & Hussey, 2014). Saunders et al. (2012) say that an important point for case studies is the fact that the context of a phenomenon under scrutiny and the phenomenon itself have no clearly defined borders, which in some ways can be beneficial. This is a very different situation to experimental studies where the prerequisite is to control contextual variables due to the fact they are considered a threat to the research validity, the authors say. As Yin (2015, p. 68) puts it, the case study “deals directly with the individual case in its actual context”.

Case studies allow researchers to obtain rich knowledge in relation to the context of study and enacted processes, say Saunders et al. (2012). The use of the case study strategy can deliver answers to what, why and how questions, which explains its popularity within exploratory and explanatory research, the authors say. They continue by saying that the research design for the case study strategy is not limited to only one approach, and can use qualitative, quantitative or mixed methods. Collis and Hussey (2014) assigned case studies to interpretivist research, but as they say, they may also be positivist, depending on the employed methods. Data can be collected via observation, questionnaires, interviews or document analysis, say Saunders et al. (2012). However, if the data is collected through various collection techniques and used within the same study, this will require triangulation in order to ensure “that the data are telling you what you think they are telling you” (Saunders et al., 2012, p. 179).

Apart from investigating a phenomenon in a real context and the possibility of reliance on various sources with triangulation, Collis and Hussey (2014, p. 68) highlight that the case study research “copes with the technical distinctive situation in which there will be many more variables of interest than data points”. The authors also argue that the case study research can either be exploratory and undertaken when a limited theory or knowledge about the case is available, or can be opportunist, used in a situation where the researcher can access and obtain data from a specific business, person etc. The latter gives an opportunity to investigate a specific phenomenon that could not have been investigated otherwise.

When it comes to the research design, it is important to choose the case and define its boundaries, say Saunders et al. (2012). In this research the case is an organisation from the industrial MRO distribution sector, which is in line with Collis and Hussey

(2014, p. 68) who say that “the case may be a particular business, group of workers, process, person” etc. The company’s name is not revealed, which was a requirement stipulated by the director of the organisation’s human resources department, prior to approving the commencement of the data collection stage of the study. The discussed company is a European leader in providing MRO products and auxiliary services to its vast customer base scattered around Europe, and beyond. The non-EU customers are serviced by the company’s export departments supporting its various European subsidiaries. This approach adds additional capability, e.g. in terms of allowing the organisation to meet the needs of its global customers who operate manufacturing sites outside Europe.

Collis and Hussey (2014) notice that despite advantages, a case study strategy can be problematic, e.g. when negotiating access to a company’s resources. It may also be time-consuming, the authors say. The way the researcher dealt with the above identified study feasibility issues was by seeking approval to conduct research with the company’s group HR department, thereby bypassing the need to seek approval from its European subsidiaries, which limited the risk of being declined. When it comes to the second issue, i.e. excessive time required for the research, certain participants were interviewed during a company’s meetings or assignments, when numerous senior employees of the company met in one place, making themselves available for interviews, as will be discussed later in the study.

In the course of the research, the decision was taken to expand the boundaries of the study’s context and look into the company’s various units across Europe to enrich the findings. According to Saunders et al. (2012, p. 187), a similar approach is “called an embedded case study”. More about the types of case studies follows in the next point.

3.4.1.1. Types of Case Studies (Multiple and Single, Holistic and Embedded)

Case studies can either be single or multiple, as well as holistic or embedded. Yin (2009) goes into details of single case studies and suggests four rationales for this approach. He says that the first rationale is related to the critical case, where the established theory is being tested in order to find out if the theory’s propositions are valid. Also, very relevant to a single case study, the author says, are unique or extreme cases. However, these strictly relate to a clinical psychology with specific disorders or

injuries being tested (Yin, 2009). Thirdly, a single case approach is relevant for the typical or representative cases, according to Yin (2009), for which the goal is to register circumstances of an usual situation or occurrence, e.g. in relation to a typical company project, or various projects that a business is pursuing. The fourth rationale discussed by Yin (2009) and relevant to a single case study is the revelatory case, where the researcher is studying a phenomenon that was inaccessible before.

A multiple case study, as the name suggests, consists of a number of cases, where the researcher's aim is to ascertain if findings across cases replicate, say Saunders et al. (2012). A further distinction is introduced to a literal and theoretical replication i.e. prediction for the occurrence of similar results vs. anticipation of a difference in results due to a different contextual factor, the authors argue. Single case studies are more controllable; however, multiple case studies offer a chance to prove the replication of results (Saunders et al., 2012).

Embedded and holistic studies strictly refer to the unit or units that are being analysed, according to Saunders et al. (2012). The authors continue by saying that if a single organisation is studied then this may be considered a holistic study. However, if different groups or sub-units within the business are concerned i.e. more units, then the study is embedded (Saunders et al., 2012).

3.4.2. Survey Research

Surveys are associated with a positivist philosophy, and both primary and secondary data can be collected from a sample, say Collis and Hussey (2014). They add that with the use of statistics, the researcher is generalising to the whole population based on the carefully selected sample, which is only a population's subset. The need to generalise from a sample to the whole population is due to the impracticality or inability of reaching the whole population, the authors argue. Furthermore, they say that the exception is when the population is small enough and can be directly reached for data collection purposes. When the researcher undertakes analysis of publicly available data then the methodology is known as an archival study (Collis & Hussey, 2014).

The way in which the previously discussed case study differs from surveys is that the latter has a limited ability to investigate the context of the phenomenon, say Saunders et al. (2012). The authors say that these studies are usually deductive, and they are

popular within the management studies. As surveys provide answers to who, where, what, as well as how many, how much questions, Saunders et al. (2012) argue they tend to be descriptive and exploratory. They add that the data collection technique used for surveys is questionnaires, which offer practicality, ease of comparison and are comprehensible. They are used within a quantitative research design (Saunders et al., 2012).

3.5. Data Collection Methods for the Qualitative Study

Yin (2015) specifies four major approaches to data collection within the qualitative research. These are shown in Table 8 below.

Data Collection Method	Illustrative Types of Data	Specific Examples of Data
Interviewing and conversing	<i>Language (verbal and body)</i>	<i>Another person's explanation of some behaviour or action, a recollection</i>
Observing	<i>Peoples gestures; social interactions; actions; scenes and the physical environment</i>	<i>Amount and nature of coordination between two people; spatial arrangements</i>
Collecting	<i>Contents of: personal documents, other printed materials, graphics, archival records, and physical artefacts</i>	<i>Titles, texts, dates, and chronologies; other written words; entries in an archival record</i>
Feeling	<i>Sensations</i>	<i>Coldness or warmth of place; perceived time; interpretation of other people's comfort or discomfort</i>

Table 8: Main Data Collection Methods for Qualitative Study (Yin, 2015, p. 139)

In the next sections of the research all the above collection methods i.e. interviewing, observing, collecting and feelings will be introduced, starting with interviewing.

3.5.1. Interviewing

Collis and Hussey (2014) define interviews as one of the methods for collection of primary data during which interviewees reply to questions on how they feel, think or what they do. Arksey and Knight (1999) consider the process of interviewing as a range of research approaches rather than a research method, with conversation between the researcher and interviewees being the only common thing. The authors argue that the proper interviewing approach requires specific skills as complex

debates need to be held. The authors further add that “interviews may provide data on understandings, opinions, what people remember doing, attitudes, feelings and the like, that people have in common” and these are known as survey interviews (Arksey & Knight, 1999, p. 2). Another form can be so called qualitative interviews which are more exploratory with a focus “on the distinctive features of situations and events, and upon the beliefs of individuals or sub-cultures” (Arksey & Knight, 1999, p. 3).

Collis and Hussey (2014) add that interviews can be semi-structured, structured or unstructured. For the unstructured interview, the researcher does not prepare questions beforehand, as they naturally emerge during the process of interviewing, the authors say. The goal is to ask open-ended questions on which the interviewee can reflect and cannot simply answer with a ‘yes’ or ‘no’, say Collis and Hussey (2014). In relation to the semi-structured interviews, the authors say, they differ in that the researcher has to prepare some leading questions to start the conversation and encourage the discussion. They add that this should be a very flexible process, with questions being asked in a random order as per the requirement, and without the need to ask all questions. There are also structured interviews, but these are more relevant to those researchers who are working with a positivist paradigm, according to Collis and Hussey (2014). For these, it is important to prepare specific questions in advance, and ask them in the same order, with no flexibility between one respondent and another, the authors contend. The discussed types of interviews are shown in Figure 14 below.

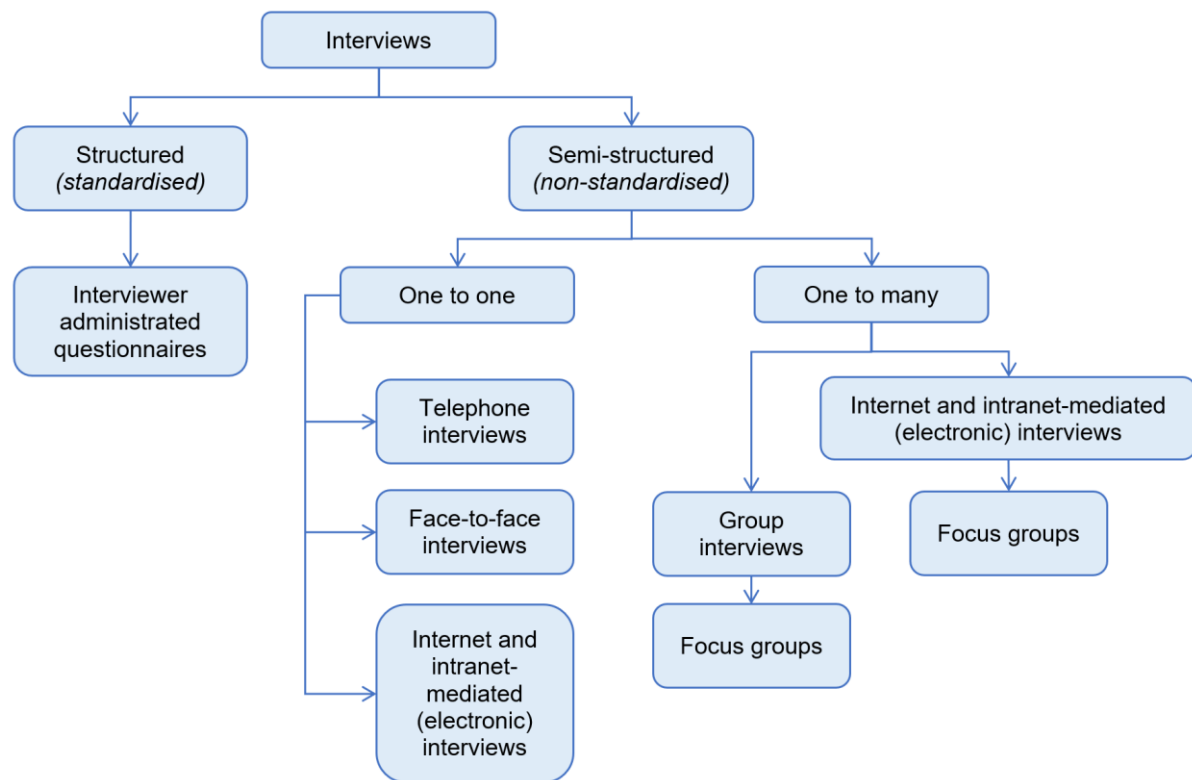


Figure 14: Types of Interviews (as adapted from Saunders et al., 2012, p. 375)

Saunders et al. (2012) posit that the researcher needs to establish a rapport with an interviewee and questions need to be structured to avoid ambiguity and should be concise. Answers need to be understood so that emerging ideas can be further explored, the authors believe. Similarly to Arksey and Knight (1999), who suggested looking at interviews as on the family of data collection approaches, Saunders et al. (2012, p. 372) also note that interviewing “is a general term for several types of interview”, the choice of which is highly dependent on the research questions and objective, as well as the research purpose, and the adopted strategy.

According to Hair et al. (2015), an advantage of interviews is that the researcher, at his or her discretion, can further enquire about and obtain more information on specific areas about which the interviewee is talking. The authors believe that new questions may emerge and can be asked, even if not planned initially; therefore, insightful information can be collected, enriching the findings.

There are several ways to collect data by means of interviewing, and Creswell (2007) proposes the approaches below:

- a) unstructured and open-ended, with the interviewer only taking notes,

- b) unstructured and open-ended, with the interviewer audiotaping and transcribing the process,
- c) semi-structured, with the interviewer audiotaping and transcribing the process,
- d) a focus group, with the interviewer audiotaping and transcribing the process,
- e) other types e.g. via electronic communication, telephone or online focus group.

In this research, semi-structured interviews are to be conducted, audiotaped and then transcribed later in the process. Both in-depth interviews and semi-structured interviews are suggested for obtaining data in situations when many questions need answering, or if questions are open-ended or complex, or if logic and the order in which questions are asked may change (Saunders et al., 2012).

Having a variety of available interview approaches provides flexibility, but it is the researcher's duty to ensure that the chosen approach produces valuable information, says Creswell (2007). The author provides an example that the telephone interview is most relevant in a situation when the researcher cannot meet with the interviewee face-to-face. However, there are negative aspects to phone interviews, e.g. inability to observe non-verbal communication (Creswell, 2007).

In order to enrich this research, additional data collection methods are employed, i.e. review of documents and observation. They will be further discussed in the next subsections.

3.5.2. Collecting (Review of Documents)

As Yin (2015) explains, collecting is about gathering objects. He adds that these objects can be archival records, documents, videos, artefacts and similar, as long as they are linked with the research subject. In most cases, collection occurs when doing the fieldwork; however, it can also happen on any other occasion when conducting library searches, checking electronic sources, and using the internet etc., the author says.

Edwards and Skinner (2010) further add that data collection also happens when reviewing newspapers or websites for research purposes. They argue that context surrounding and history checks are in part fed by documentation review. The authors admit that the review of documents is not necessarily the most important data

collection technique, and frequently supplements other major types of data collection i.e. observation and interviews. Undoubtedly, a documentation review is an unobtrusive technique, and numerous objects can be reviewed, including meeting minutes, policies, letters, announcements (Edwards & Skinner, 2010). Yin (2015) lists additional sources such as financial records, dedicated newspapers and journals. All these can help to develop better understanding of the subject. In the next section the observation method for data collection within a qualitative study is discussed.

3.5.3. Observation

The observation technique can be used both within an artificial or natural setting i.e. real life, say Collis and Hussey (2014), and when the latter is the case, then it is known as fieldwork. If the study is based on the interpretivist philosophy, a natural setting is suggested due to the significance of the context and the way it impacts the studied phenomenon (Collis & Hussey, 2014). The observation technique delivers primary data, and brings invaluable and unfiltered information (Yin, 2015). Collis and Hussey (2014) further divide observation into participant observation and non-participant observation.

In the case of participant observation, the researcher is present and involved because “a detailed understanding of the values, motives and practices of those being observed” is sought (Collis & Hussey, 2014, p. 148). As the name of the method implies, the researcher to a certain extent is both an observer and a participant, says Kielhofner (2006). He adds that the researcher can “see how things really are (observation) and also check in (participation) with knowledgeable insiders who can confirm, or not, the researcher’s emergent insights” (Kielhofner, 2006, p. 342).

For non-participant observation, audio recordings can be produced, and the researcher does not necessarily have to be personally present, a characteristic which will further remove distraction from those being observed, say Collis and Hussey (2014). However, even the lack of presence of the researcher does not warrant 100% accuracy, because participants may still alter their behaviours as they know they are being recorded, they say. They add that participants cannot be recorded without first giving their approval; therefore, they will be aware that recording is happening. Yin (2015, p. 152) adds that for the qualitative study, the researcher will make

observations during the interviewing process or when he or she becomes a participant-observer or else perhaps during some additional field activities.

3.5.4. Feelings

Feelings considered through the prism of a data collection method are more than a sense of touch, says Yin (2015). He also says that there are various traits within the researcher that can turn out to be important in a field setting. The researcher's judgement on coldness, hotness, loudness etc., is an appropriate basis for comment, even if precise measurement equipment was not used, the author contends. Other feelings are less easy to comment upon, e.g. within a work environment whether somebody is rebellious or dependent, or whether a pair of people are distant or close, or whether a specific group works disruptively or congenially (Yin, 2015). He adds that the researcher's feelings should not be ignored, and they can be triangulated with other methods to obtain corroboration or rejection. Also, the researcher's intuitions can deliver clues, again for further triangulation (Yin, 2015).

3.6. Triangulation

In simple terms, triangulation allows the researcher to use a variety of techniques for data collection within the same study to ensure that conclusions reached based on the collected data are accurate (Saunders et al., 2012). Saunders et al. (2012) say that these can be semi-structured interviews complemented by e.g. questionnaires. As Coolican (2014) argues, triangulation made its way into qualitative research from navigation and surveying. The author adds that in triangulation, different views are being compared in reference to the same thing; however, the researcher should not expect a perfect fix, as is the case when triangulating numerous navigation points to obtain an accurate reading position. In addition to the above, triangulation is also used in sociology and evaluation research, says Yin (2015). The main purpose of triangulation is to seek to obtain three different ways to verify and corroborate a finding, says the author. Researchers are advised to triangulate continually throughout their studies and take any opportunity to do this in order to enhance their research (Yin, 2015).

Also Patton (2014) contends that triangulation enriches a study via the use and combination of different methods, and these can be both qualitative and quantitative. The author discusses four types of triangulation i.e.:

- a) data triangulation; which relates to various sources of data used within a study,
- b) investigator triangulation; where the main principle is to engage several researchers within a study, to get a balanced judgement on the phenomenon,
- c) theory triangulation; with the aim of using varied perspectives to look into a set of data,
- d) methodological triangulation; engagement of multiple methods to look at a phenomenon under investigation (Patton, 2014).

The limitations of a single method study were noted decades ago, and Campbell has suggested the use of multiple methods to improve accuracy (as cited in Patton, 2014). As Patton (2014) notes, although triangulation is 'ideal', there are downsides, the major three being limited time allotted to the study, limited budget, and potentially some issues such as stakeholder-political constraints during the evaluation. When triangulating, various combination of collection methods is possible, the author says. Patton (2014) further adds that some researchers can focus more on interviewing and less on observation (which is the case in this study) or the other way around, and the decision is down to the researcher.

Yin (2015) argues that if conversations within the qualitative study are conducted in other languages than English, both the original manuscript and the English translation should be presented. This approach will allow those who understand the used foreign language to check the translation and to develop their own understanding, the author says.

3.7. Pilot Study

In the course of the research, in the literature review development stage, 36 barriers were identified (point 2.13) preventing the successful completion of integration of SCs of organisations engaged in M&A initiatives. Additionally, 24 enablers were recognised (point 2.14) facilitating the integration of SCs of companies involved in M&A deals. Based on the identified barriers and enablers, a conceptual framework was developed

and subsequently 24 interview questions were formed, to be used during the semi-structured interviews in the data collection phase of the research. Additionally, numerous support questions were developed for most of the leading interview questions; these were intended to spark further discussion and obtain more insightful answers. To improve the quality of the collected data, some aspects were covered more than once throughout the interview questions; this was to approach specific areas from various angles, and to facilitate the process of drawing conclusions.

In order to ensure the coherence, integrity and clarity of the interview questions, a pilot study was conducted, involving two academicians as well as two business practitioners. Very importantly, the individuals involved in the pilot study were not interviewed later in the process, during the main data collection stage of the research.

Feedback from the pilot study's participants proved very helpful, as several potentially problematic areas were highlighted and subsequently corrected very early in the process. These issues included an apparent overlap of some questions, in part requesting similar information, due to the lack of precise instructions and background provided to some questions (for example, when asking for the due diligence in the pre-initiative stage of the process, and later when again asking for the due diligence, this time however in the post-deal phase of the process). Simple rephrasing or moving questions between groups of questions helped to resolve several issues. Another example of a resolved issue concerned the question asking for contingency plans for things which could go wrong. Study participants highlighted that they were not convinced that the question strictly related to the integration of supply chains or mergers and acquisitions in general. This was also corrected.

Another valuable suggestion came from the scholars who suggested a reordering of the groups of questions in such a way as to start with more strategic ones and move on to specialist, and very subject-related questions as the interview unfolded. This was achieved through reorganisation of the thematic groups within the conceptual framework (point 2.15), on which the interview questions were based. All the above recommendations and hints helped to develop better quality interview questions, thereby improving the quality of the data collection stage of the process. In the next chapter the interview questions are presented and findings from the data collection stage of the research provided.

4. Findings

Due to the fact that the analysis after the data collection stage as well as the whole discussion should be governed by the overriding research questions, as suggested by Collis and Hussey (2014), it is worthwhile restating these questions at this point in the research, to keep the focus on the main purpose of the thesis. As per the first research question posed earlier in the first chapter of the research (point 1.4.1), the author of the thesis has pledged to establish whether business leaders from the industrial MRO distribution market are considering and scrutinising supply chain arrangements and processes of target companies before COC during horizontal acquisitions, and if so to what extent. Additionally, as per the second research question, the author of this work aims to ascertain what actions are taken, and practices embraced by organisations from the industrial MRO distribution market in post-acquisition stages of horizontal acquisitions in relation to supply chain areas of their newly enlarged enterprises. In order to be able to answer the presented research questions, a conceptual framework was developed on the basis of the literature review findings (point 2.15), and subsequently interview questions were formed, as discussed below.

4.1. Interview Questions

Based on the conceptual framework presented in point 2.15, a number of interview questions for each group in the conceptual framework were developed. The approach warranted full and even coverage of the area of interest, avoiding over-coverage of one aspect of M&As, but underrepresentation of questions in another. As a result, the developed interview questions resemble the order of the thematic groups from the conceptual framework and therefore revolve around strategic matters of M&As, processes, techniques, human aspects, metrics and objectives, time frames, pre-initiative considerations and due diligence, merger planning and assessment, and finally post-acquisition planning and integration.

In total, 62 interview questions were developed, of which 24 are the leading questions, and 38 are the support questions. The support questions were either not all or not always asked. They were mainly aimed at encouraging further discussion with the less talkative study participants or were designed to deepen the understanding of certain

areas of interest as required. It is important to note that before the interviewees started answering the interview questions, they were given the following instruction:

If relevant, please specify if your answers relate specifically to a situation when your business was acquired or when your company acted as a buyer of another entity. If this is not mentioned, it will be assumed that your reply holds equally true for both.

The developed interview questions, both leading and support, are presented below.

Group 1: Classification Questions

- 1) What is your role and experience within the organisation and the industry?
 - How long have you worked for the company, and within which departments?
 - During the time you have worked for the business, has your company been acquired, or acquired another business, or both?
 - If there have been instances of acquisitions, how many have occurred since you were employed?
 - Have there been more acquisitions or mergers?

Group 2: Strategies, Processes and Tools & Techniques

- 2) Is there any process in place to ensure the alignment of the supply chain strategy of the merging businesses with the overarching business strategy and/or competitive strategy?
 - What is the process?
 - Who is responsible for similar strategic matters?
 - What actions are taken?
- 3) Is there any specific IT strategy or part of it that precisely deals with the IT enablement of supply chains?
 - If possible, can you provide a support document (e.g. an extract of it)?

Group 3: Human Factor, Trust & Teams

- 4) In your opinion, how important are supply chain matters in the context of M&As within the MRO distribution industry?

- Do you believe that in general, supply chain matters have received enough attention in the M&A context from your current company, and from your past employers (if relevant)?
- 5) Are there any issues or concerns in relation to data sharing with supply chain partners? Some believe that trust is lacking, and although technology can deliver, people will not let it, in order not to shift the power to others.
 - 6) Are there any external parties included to support the process throughout any stage of an M&A?
 - Are external parties counted in when creating a supply chain team responsible for the execution of integration?
 - What are the roles of the external parties?
 - 7) In general, not necessarily talking about your current employer, in your subjective opinion, do you believe managerial self-interest across the company's senior leadership plays any role when deciding upon an acquisition, e.g. because wages go up, power increases?
 - 8) When working on the integration and possibly post-merger planning and prioritisation, do employees from both businesses participate i.e. from the acquiring and the acquired company?
 - If so, how are they selected?
 - Are any representatives from supply chain departments included?
 - 9) In your opinion, has your company been successful with the integration of supply chains of the companies it acquired? Or has your organisation been successfully integrated with the business who acquired it? How well do you rate these efforts on a scale from 1 to 10?

Group 4: Metrics, Objectives & Measurement

- 10) When formulating strategic objectives ahead of M&A, do company leaders consider improvements within supply chains to deliver better performance?
- 11) Is any outcome measurement system in place specifically looking at the progress of integration of supply chains?
 - What metrics are used to track achieved cost savings?
 - What metrics are used to track value creation?

12) Is any method employed to gauge if goals are achievable and potential synergies accurately forecast, to avoid underestimation of the potential and reduction of morale due to unrealistic targets during the M&A proceedings?

- Are these targets well communicated across teams and the responsible people? If so, how, and when?

Group 5: Time Aspect and Time Frames

13) When is the supply chain leader nominated to look after supply chain matters during the M&A process?

- What is his/her rank, e.g. director, manager, and what are his tasks?
- To your knowledge, is any supply chain team assigned to support the future deal in the early pre-initiative stage or later in the process?

14) According to your knowledge, are the time scales of M&A initiatives at times too tight, and supply chains not considered strategic enough, with the result that supply chain matters are not dealt with, or not dealt with properly in the M&A context?

Group 6: Pre-initiative Considerations & Due Diligence

15) What employees, from which departments, are included in a pre-deal due diligence team?

- Was any specific responsibility given to you or your team/department ahead of or during the acquisition?
- What is the outcome of the work of the due diligence team, e.g. a plan, roadmap, objectives?
- How are goals prioritised?
- To your knowledge are any culture aspects dealt with and scrutinised this early in the process? (Culture aspects meaning human aspects due to a different religion, habits, as well as differences due to a different geographical location of a target company).

16) Are any considerations given to supply chains before the M&A deal (incl. as early as during the screening of the target companies), e.g. operational or strategic match of the supply chains of the merging businesses?

- Is the potential impact of an acquisition on the supply chains judged before the deal?

- What actions are specifically taken and what subjects are discussed, and when, in relation to supply chains?
 - Are these subjects also discussed at the board level?
 - At what stage, if at all, are supply chain representatives included to the M&A proceedings and of what rank, e.g. managers, directors, board directors such as the chief supply chain officer?
- 17) Are there any specific guidelines dealing with supply chain matters during the pre-acquisition stage of the process?
- Are they stand-alone guidelines just for supply chains or just some points touching upon supply chain issues within the more general M&A guidelines?
 - Can you provide some support documents, e.g. a generic form of similar guidelines?

Group 7: Acquisition Planning & Assessment

- 18) Who is responsible for the M&A planning within your organisation?
- Are the individuals who plan the acquisition the same people who will be responsible for the execution of the plan? If not, do the representatives who will be executing the plan participate during the planning process?
 - Is a thorough assessment of the supply chains conducted in the post-merger stage? If so, what specifically is done? Are any support checklists utilised? (If so, can you disclose them?)
- 19) Is a precise roadmap developed in relation to how to achieve supply chain objectives in an M&A context?
- Are specific responsibilities assigned to individuals?
 - Are specific time frames agreed, and what are these time frames, e.g. a month, half a year, one year, three years?
- 20) Are any plans developed and consideration given to things which can go wrong with supply chains post-initiative?

Group 8: Post-acquisition Planning & Integration

- 21) What is your company's stance on the integration of business systems (e.g. ERP, transaction systems, reporting) post-acquisition? Specifically, are they being integrated and what time frames are considered?

- Are any other ways used to bring the disparate systems together without hastily integrating them, e.g. using some sort of business intelligence software?

22) What communication, if any, is issued to the merged business in relation to the merging supply chains and when?

- Is the communication strictly about supply chains and SC matters (e.g. objectives and plans) or only points within a wider communication, or none of the above?
- Do you recall receiving such a communication?

23) Is an assessment of IT systems conducted and a specific plan made to enable IT-driven supply chains in an M&A context?

- Are costs well understood?
- Are actions prioritised?
- Who is responsible for the buy in of IT matters for the supply chain?

24) Are any supply chain projects suspended or not pursued due to excessive costs or time requirements?

In the next point, an encryption of the interview participants and general interview organisation matters are discussed.

4.2. Interview Organisation and Participant Encryption

As discussed earlier, the interview questions were categorised into eight groups, which directly corresponded to the thematic groups from the conceptual framework. This approach ensured ease of reference between the interview questions and conceptual framework and guaranteed a high level of clarity, simultaneously shaping the way the interviews were carried out. They started with general aspects of M&As, then progressed to more strategic areas, finally covering increasingly specialist and context-related facets of acquisitions. As discussed earlier, only the first group of classification questions did not directly derive from the conceptual framework, but the presence of this was necessary. It had a twofold function; the main one was to help in obtaining background information about the interviewees, and the other was to get the study participants into a talkative mode and a more comfortable state. The strategy

proved to work, as most of the participants smoothly and with ease transitioned to answering increasingly complex interview questions.

A total of 15 interviews were conducted with the participants holding specialist, managerial, senior managerial or director's positions within the case study organisation. The introduction of two specialists to the study was a deliberate tactic. This was done to obtain a level of understanding from lower down the company hierarchy about M&A processes and practices within the company. Importantly, all the 15 participants had experienced a corporate M&A situation, and some played a substantial role in supporting M&A proceedings either within the case study organisation, in their previous employment, or both.

For the purpose of the research, and in order to meet the ethical prerequisites set ahead of the study, as well as to keep to the promise given to the study participants, the names of the interviewees were encrypted to ensure their anonymity. The respective participant codes and corresponding interviewee names were locked away and stored in a carbon copy form in a safe office environment, together with the participant consent forms and interview transcriptions. The aforementioned documents will be stored for a period of three years after the completion of the study, at which time they will be permanently and irreversibly destroyed. Table 9 below features the participants' codes, their respective position within the company, as well as the date and length of the interview.

Code of the Participant	Position Held	Date of the Interview	Length of the Interview [min]
SM1-C	<i>Senior Manager</i>	<i>04.07.2017</i>	<i>49</i>
SM2-C	<i>Senior Manager</i>	<i>05.07.2017</i>	<i>43</i>
D1-L	<i>Director</i>	<i>05.07.2017</i>	<i>63</i>
M1-L	<i>Manager</i>	<i>07.07.2017</i>	<i>51</i>
D2-L	<i>Director</i>	<i>18.07.2017</i>	<i>68</i>
D3-C	<i>Director</i>	<i>25.07.2017</i>	<i>49</i>
S1-C	<i>Specialist</i>	<i>26.07.2017</i>	<i>36</i>
D4-L	<i>Director</i>	<i>28.07.2017</i>	<i>71</i>

M2-C	<i>Manager</i>	<i>02.08.2017</i>	<i>47</i>
S2-L	<i>Specialist</i>	<i>02.08.2017</i>	<i>40</i>
M3-C	<i>Manager</i>	<i>08.08.2017</i>	<i>57</i>
SM3-L	<i>Senior Manager</i>	<i>10.08.2017</i>	<i>50</i>
M4-L	<i>Manager</i>	<i>15.08.2017</i>	<i>48</i>
D5-L	<i>Director</i>	<i>17.08.2017</i>	<i>64</i>
SM4-C	<i>Senior Manager</i>	<i>17.08.2017</i>	<i>51</i>

Table 9: Coded Study Participants and Interview Details

In an attempt to create informative and practical participant codes, the used letters and digits for every code carry a meaning. In simple terms, the first or first two letters refer to the position held by the participant within the company, and as such ‘S’ means a specialist, ‘M’ a manager, ‘SM’ a senior manager, and ‘D’ a director. Subsequently, a digit within the participant code, refers to the ordinal number of the participant within the group of specialists, managers and so on. Eventually, in order to further enrich the meaning of codes and better symbolise the study participants, either a letter ‘L’ or ‘C’ ends every code. The letter ‘L’ (local) means that an interviewee worked for one of the company’s subsidiaries in Europe, whereas the letter ‘C’ means that an interviewee worked for the company’s head office (interchangeably referred to as HQ or the centre).

All 15 interviews were voice-recorded using a high-quality audio recorder. Prior to starting every recording, each study participant was asked for consent to record an interview session, having previously been notified about the purpose of the recording. As was explained, recordings were being created to help shorten the interview sessions, allowing for the development of interview transcriptions at a later stage. In order to reassure the interviewees, before every interview began, a less formal, non-recorded discussion was carried out, where the participants were familiarised with the research goals. Also, during this stage, confidentiality matters regarding the interviews and the study were discussed, and the participants were reassured that their personal details would not be disclosed within the study. All the interviewees were notified that the recordings would be permanently deleted as soon as manual transcriptions of the interviews had been completed.

Out of 15 interviews, three were conducted in the Polish language, then subsequently transcribed and translated to English. Two of these interviews were conducted in Poland, where the researcher travelled to meet the participants. The third interview in the Polish language was conducted in the UK, due to the fact that the employee was a Polish citizen working within the company's head office in the UK. Although the participant was bilingual, the approach provided a good opportunity to test the integrity of the Polish version of the interview questions before travelling abroad to conduct more interviews. The entire documentation presented to the Polish-speaking participants was prepared in the Polish language; therefore, the affected interviewees were duly informed about the research objectives and all other aspects of the study in their native language, i.e. the language they could understand best, as per the ethical requirements sanctioned by the university. The remaining 12 participants were interviewed in English and in the UK, although some of them were not British or did not work for the company's head office. This was made possible by arranging the interviews at the time of various company meetings or assignments in the UK in which the study participants were involved. This strategy helped to minimise the study costs, but simultaneously provided good exposure to experienced company employees from other subsidiaries, further enriching the study. All in all, among the 15 subscribed interviewees, there was a good blend of local as well as central directors, senior managers, managers as well as specialists.

The group human resources department of the case study organisation approved the research and allowed the researcher to conduct interviews with its employees on any matters related to the study, upon prior verification of the interview questions. The company, however, made a reservation and asked the researcher not to reveal the company's name within the study, and to restrict access to the finished document for a period of four years after the completion (initially for two years and then further extended for another two). These conditions were accepted and for this reason the researcher refers to the organisation as 'the case study organisation' or 'the company' or 'the organisation' interchangeably. In the next section of the study, software used to analyse the collected qualitative data is named, and details regarding the data coding are discussed.

4.3. Support Software and Qualitative Data Coding

In order to analyse the large quantity of the collected qualitative data, NVivo 11 for Windows package, ver. 11.4.1.1064 (64-bit) was utilised. All interviews were manually transcribed and subsequently loaded into the software. On a few occasions, if the recordings were not clear enough, certain interviewees were re-approached and asked to clarify incomprehensible parts of interviews. Mostly this lack of clarity was due to overlaying noises or inconclusive language used by some participants. The researcher re-contacted the interviewees only if they expressed, but unclear thought had a significant meaning and a bearing on the interview, and therefore the study. This approach ensured that the findings were as accurate as possible, simultaneously limiting the number of contacts made with the interviewees in the post-data collection stage of the study.

The transcribed, verified, and, where applicable, translated interviews were loaded into the NVivo software and manually coded to ensure that every subtle and valuable phrase, word or thought was captured and accordingly categorised for further analysis. In order to accomplish the above-mentioned coding and categorisation exercise effectively, the researcher developed a series of nodes representing the discussed themes, which resemble the categories from the conceptual framework, and so the interview questions. The developed nodes are presented in Figure 15 below in the form of a map directly extracted from the NVivo software, but manually enriched with group numbers for enhanced clarity. This approach facilitated the process of presenting findings in an appropriate order, eased the pattern matching exercise during the data analysis, and provided a good basis for the meaningful and comprehensive discussion. In the next section, findings from the data collection stage of the study are presented.

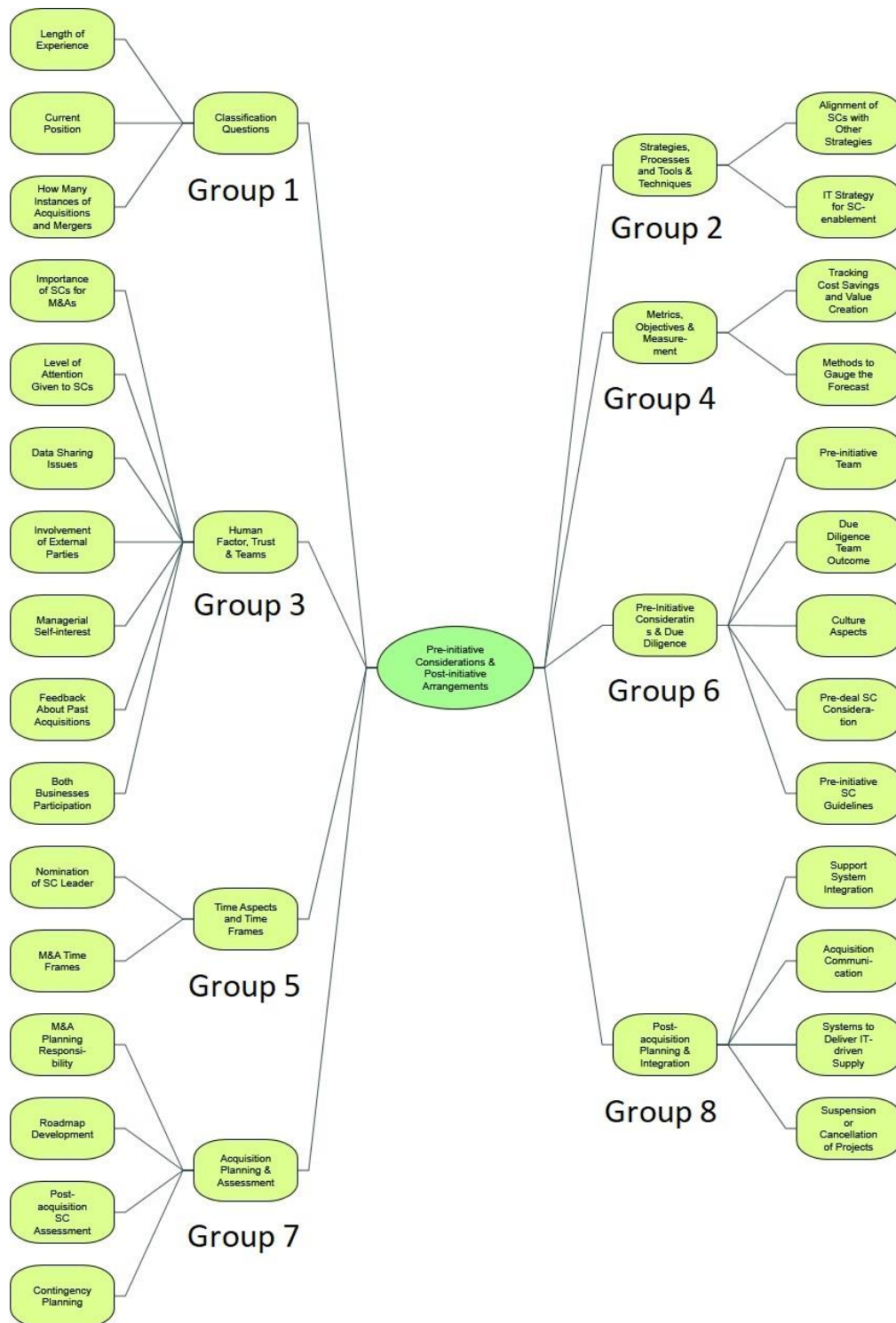


Figure 15: NVivo's Visual Map of Categories

4.4. Thematic Categories and Themes

In this section, all the relevant findings from the data collection stage of the study will be reported. In order to better visualise the data, where practicable, relevant diagrams, tables and figures will be utilised. The order of reporting findings reflects the categories

from the conceptual framework (point 2.15), and mirrors the order of the interview questions in ascending order, starting with the classification questions. More about this in the next section.

4.4.1. Classification Questions

The purpose of the classification questions was to establish the depth of the experience of the interview participants within the industrial MRO distribution sector and beyond, but also to ascertain their corporate roles and responsibilities. Additionally, the interviewees were asked to comment upon their exposure to the company mergers and/or acquisitions, and their number, i.e. how many instances of acquisitions or mergers they remembered within the case study organisation. The participants were also requested to point out what form of the corporate M&A was more popular within the organisation, if such a tendency was noticeable. Details are shown in Table 10 below.

Position Held Within the Organisation	Number of Participants	Average Count of Years of Experience per Group
<i>Director</i>	5	27
<i>Senior Manager</i>	3	18
<i>Manager</i>	5	7
<i>Specialist</i>	2	12.5

Table 10: Study Participants; Statistics

The five interviewed directors together had a total of 135 years of experience, as opposed to 72.5 years of experience gathered by the three senior managers, 28.5 years by the managers and 25 years of experience shared between the two interviewed specialists. In total, all 15 interviewees had 261 years of experience, averaging 17.4 years per interviewee. Not surprisingly, the company directors had accrued the longest average experience of all other groups of participants of 27 years per interviewee, followed by 18 years gathered by the senior managers, seven years of average experience by the managers, and 12.5 years for each specialist. Interestingly, the average experience of the interviewed company specialists of 12.5

years was longer than that of the company managers, who only had seven years of average experience.

The reason why the limited number of junior (by their position within the company) employees was invited to take part in the study was the desire to apprehend the level of knowledge held by the less senior members of the case study organisation in relation to the company policies, processes and ways of doing things in the M&A context. Also, they provided a great opportunity to verify the information delivered by the company management during the interviews, e.g. in relation to how well the communication about mergers and acquisitions filtered down the company hierarchy, the way M&A working groups were created and goals formed etc. The two interviewed specialists, as discussed earlier, had a long work experience within the MRO sector companies, and the case study organisation therefore proved to be an invaluable asset, greatly complementing the remaining, more senior interviewees.

Apart from the interviewees' length of experience, another very important matter deemed necessary to establish early in the interview, was the extent of exposure of the study participants to corporate mergers and acquisitions. This was a crucial point to make in the interview, since if the interviewees had no exposure to M&As, the whole study would make little sense. The interviewees were asked to quote the number of mergers and acquisitions conducted by the case study organisation from the moment they had started their employment with the company, until the moment of the interview. Additionally, they were asked to advise if their company preferred to acquire or merge with other businesses, but also if it had ever been acquired by other organisations.

Interestingly, the answers greatly differed, with participants reporting that anything between two and 18 acquisitions had been concluded in recent years. The substantial disparity in responses in relation to the number of acquisitions conducted is an interesting finding in itself, conceivably telling more about the M&A practices within the company than the actual number of conducted acquisitions. It certainly says a lot about the communication practices during M&As within the company, as will be discussed later in the chapter. Surprisingly, the differences were apparent, not only amongst the lower level managers or specialists, but also amongst the senior managers and directors. A summary of the interviewees' replies is shown in Table 11 below.

Position Held Within the Organisation	Number of Participants	Lowest Value	Highest Value	Average
<i>Director</i>	5	2	15	7
<i>Senior Manager</i>	3	4	18	11
<i>Manager</i>	5	4	15	8
<i>Specialist</i>	2	4	12	8

Table 11: Acquisitions in Numbers

The mode figure, i.e. the number of acquisitions most often quoted by the participants, was four. Three participants stated that there were four or around four acquisitions in the recent past, or that they could remember. The mean figure across the participants was nine, which means that on average, a study participant believed that nine acquisitions had been conducted by the organisation in the course of the last few years. Only one company director, D5-L, stated that he could not remember any acquisition, but he explained that he had only joined the company 18 months before. He further added that he had witnessed one M&A very recently, but this was a private equity company acquiring the case study organisation. This was, however, not a horizontal acquisition, therefore not directly in the focus of this research. As later discovered, the same director had experienced several acquisitions with his past employer, and therefore proved a very valuable source of information later in the interview.

An informative finding was that 14 participants reported that all initiatives were strictly acquisitions, with no single merger conducted along the way. Only initially, a less senior member of the organisation, an S2-L specialist, alleged that there was an instance of a merger, but he later retracted, saying “we have merged [with one company] ..., on reflection that was an acquisition really”. The 15th participant, a senior manager SM4-C, stated that there was one merger in the company’s history, where its subsidiary merged with an organisation in one of the countries in Europe. A concluding statement to the question was delivered by D5-L, who said that within the industrial MRO distribution industry “acquisitions are more common than certainly the mergers”.

4.4.2. Strategies, Processes and Tools and Techniques

Within the second group of questions around the company's strategies, processes, tools and techniques, two main questions were asked, Q2 and Q3. Additionally, depending on the knowledge of the participants, these were followed by up to four support questions, three for Q2 and one for Q3. The support questions were also asked if an interviewee required encouragement to talk, or their answers were short and not very insightful. The same logic applies to all other groups of questions introduced in this chapter.

The goal ahead of Q2 was to find out if there was any process in place to ensure the alignment of the supply chain strategy of the merging businesses with the overarching business strategy and/or competitive strategy of the organisation. The word 'organisation' at the end of the previous sentence refers to the new and enlarged organisation formed in the process of an acquisition or a merger. Whether the mentioned competitive and business strategies undergo amendments in the aftermath of an M&A initiative is a different subject, and is not researched within this study.

A participant SM1-C, a senior manager employed by the company's head office, in a reply to Q2 stated that he would have said "no", and that a case-by-case approach was adopted, i.e. the practices varied from one acquisition to another. Another HQ's employee, SM2-C, said that for one of the major recent acquisitions within the British market "the supply chain strategy and all competitiveness with regards to pricing and warehousing was not done in an organised or clever manner".

A similar opinion was expressed by D1-L, a local Polish supply chain director, who said that there was a degree of coordination in the group purchases, but he had never seen any group policy in this regard. Similarly, his colleague D4-L, from within the same region, and employed by the same subsidiary of the case study organisation, confirmed that no alignment process of SCs with other strategies ever existed, and he had never seen anything similar. A different senior manager from the company's British operations, SM3-L, simply stated that supply chain alignment of the acquired businesses was "an area that the business severely lacked". Another lower level manager, M1-L, this time from within the company's Spanish business, said that the organisation worked on the alignment of the customers only.

A director, D2-L, held that in the past, before the case study organisation acquired his previous employer, there was a different instance of an acquisition of his company by a non-related entity. In that case, the acquiring company, not being the case study organisation, had a policy of integration of supply chains with its business and competitive strategies in place. The former owner “wanted to develop more into MRO” and tighten its links with the newly acquired company, said the interviewee. For this reason, it launched a programme called “a 100-day plan” which covered all commercial aspects, including its supply chains, he added.

More insightful feedback in relation to the current practices within the case study organisation was provided by participant D3-C, who acted as the company’s group supply chain director. When replying to Q2, the interviewee made a distinction between the procurement and supply chain functions of the company. As he said, if the discussion was about “the broader supply chain, in other words, including purchasing, then yes” there was an alignment of procurement processes of newly acquired businesses to the business and competitive strategies of the acquirer, but even then, nothing was written down and no formal integration policy existed. This contrasts with the feedback from S1-C, who said that she believed there must have been a formal process in place and if that had not been the case then the leadership team was not doing a good job.

All in all, only two participants replied positively to the question in relation to the integration of SCs and their alignment to the business strategy of the acquiring organisation. The first one was a lower level local manager, M4-L, who claimed that he had heard such a strategy existed, simultaneously pointing at the group’s supply chain director, allegedly responsible for these things. The other participant was D5-L, who only stated that he had not seen a similar strategy, but declared that “the company spent more time integrating the supply chain than actually the front-end sales, and marketing efforts”. Nevertheless, none of the two interviewees possessed any specific knowledge to reflect upon.

The other question from within the second group of questions, Q3, around the company’s strategies and processes, related to the IT strategy or the part of it which deals with supply chains. More precisely, the participants were asked to advise if there was any IT strategy in place focusing on the enablement of supply chains in the M&A

context. The best positioned participant to answer the question was the head of group data and IT applications, working for the company's group head office i.e. SM1-C. In fact, SM1-C's insights in relation to the question would suffice for the study. The reason for this is because the question directly touched upon the participant's responsibilities. There was either nobody, or not many people within the whole organisation equipped with better knowledge in this regard. Nevertheless, other interviewees were still asked to answer the third question; this was to understand the level of knowledge and awareness concerning this matter, across the company's various regions, subsidiaries and employees.

The above invoked SM1-C, in a reply to the question, convincingly and with no hesitation stated that:

IT was the last department to be asked. They didn't know anything in advance, and even afterwards it was difficult to get in there and do something. So, it was a very difficult position for the IT to be, because the problem is you have to size potentially your IT or your resources or have some kind of a strategy to deal with, but they heard about it; oh we bought another company, do we know what they have there?

SM1-C said that the IT department was the last department to be involved with acquisitions. Having said that, the participant acknowledged that some systems were being introduced to the newly acquired companies, but it was a practice, nothing formal, people just knew what the acquired businesses needed for them to function.

When it comes to other participants, SM2-C commented that his understanding was that there was no direct focus on supply chains in any IT strategy component. Similarly, a local director, D1-L, said that "things are being discussed" in relation to IT and its function to support supply chains, but he would have not said that there was any specific IT strategy or its part that touched upon SC's enablement. Similar feedback was provided by a lower level manager working for the Spanish part of the business, M1-L, who said that there was a practice of database integration for acquisitions, which was the enablement of supply chains, but he had never seen a strategy formalising these things. As he put it, he "did not see the strategy, but saw the timeline for tasks, and targets".

An interesting finding was delivered by another local director, D2-L, from the British market. He said that the previous owner of the subsidiary currently owned by the case

study organisation had a thorough integration plan in place, also looking at the enablement of IT-driven supply chains in the M&A context. The person at the time, directly responsible for these matters was the company's IT director. Unfortunately, after the COC to the current owner, things were "just left", said the interviewee.

Another interviewee, D3-C, a group supply chain director, just like the earlier quoted SM1-C, convincingly stated that the strategy did not exist. A similar view was shared by S1-C and SM3-L, who both said the same, although S1-C believed that a similar strategy should have been put in place. Interestingly, M2-C, responsible for the company's data, stated that a similar strategy existed. Although he was not able to disclose one, he pointed at participant SM1-C who allegedly had such a strategy, being unaware he was taking part in the study. Another local director from the British region, D5-L, said that the business was merely doing what was necessary to make things work, i.e. to provide only enough IT infrastructure for the supply chain to function, which was in line with the words of SM1-C.

Other participants either had no knowledge or a very vague understanding of the matter and their feedback would not add value from the perspective of this research, therefore their comments were not provided within the findings chapter.

4.4.3. Human Factor, Trust & Teams

A third group of questions comprised of six leading questions i.e. Q4 with its two support questions, Q5, Q6 with two support questions, Q7, Q8 with two support questions, and Q9.

Q4 was aimed at establishing a perception of the study participants in relation to the importance of supply chain matters in the context of mergers and acquisitions within the MRO distribution industry. Feedback received from the interviewees was overwhelmingly positive, and is outlined in Table 12 below.

Code	Direct Quotation	Enough Attention?
SM1-C	<i>"It is important, but all depends on the existing presence and the current supply chain"</i>	No
SM2-C	<i>"Crucial. At the end of the day, we buy something, we have to be able to sell it, and we have to be able to distribute it"</i>	No
D1-L	<i>"They are important"</i>	N/A
M1-L	<i>"A crucial part of the acquisition..., we have to take supply chains into account before acquiring a company"</i>	Cannot comment
D2-L	<i>"They are very important, because one of the key things about distribution is the service. It is also during acquisitions and mergers, one thing you cannot damage is service"</i>	No
D3-C	<i>"I think they're kind of second level..., why mergers and acquisitions are important is you want to grow revenue..., at the same level you want to consolidate purchasing..., and then comes the supply chain"</i>	"Probably not"
S1-C	<i>"Hugely important, if you don't have the stock at the right price, you don't have the business"</i>	"I would hope"
D4-L	<i>"In this industry, the supply chain is like a base of operations, so it cannot be on the margins"</i>	No
M2-C	<i>"A distribution company is built on logistics, so it's the crux of the business... confidence in you is based on the ability to supply"</i>	"When things go wrong"
S2-L	<i>"Very important I would have thought"</i>	Definitely
M3-C	<i>"Between 1 and 5, where five is the highest, this is five, very important"</i>	No
SM3-L	<i>"Top, top of the tree. If you cannot supply goods, you haven't got a business. It's as simple as that. Absolutely important, fundamentally important"</i>	No
M4-L	<i>"I think it's very important. When you're buying a company you want to know the worth of that company"</i>	No
D5-L	<i>"They are absolutely fundamental..., the biggest integration benefits have to be integrating supply chains"</i>	Only some work
SM4-C	<i>"I would say the supply chain has a high priority"</i>	No

Table 12: A Summary of Responses to Q4

All 15 participants either attached a high or very high priority to supply chains in the context of acquisitions. Simultaneously, when asked to comment on whether their employer had given enough attention to supply chains during its past acquisitions, seven of them stated that it was not the case, one said it probably was not the case,

and two of them could not answer the question. One manager, M2-C, said that the focus only goes to supply chains when things go wrong, whereas a specialist, S1-C, stated that she would have hoped that supply chains did receive enough attention, but did not know if this was the case. A local director from the British market, D5-L, commented that only a limited amount of work had been accomplished. The only positive statement was delivered by a lower level specialist from the British region, S2-L, who said that in his opinion supply chains had received enough attention in the past during acquisitions. He contended that emphasis was put “on the warehouse as well as emphasis on getting the warehouse processes right”.

Interestingly, a local director from the Polish market, D1-L, said that when the current owner was acquiring the local company in 2007 that he worked for, no enquiries were made in relation to supply chains. The case study organisation was not interested in the supply chain arrangements of the target company which it eventually acquired. However, when the very same local business was acquiring other companies in the resident market, it actively researched supply chain matters concerning its target companies e.g. in relation to “the warehouse and products stored there, suppliers, the value of goods” or engaged in “checking prices of products held” by the target companies, said D1-L.

One of the senior managers from the central team, SM2-C, said that supply chain “is an afterthought” in the M&A context. In his opinion, in general, “people get too hung up on the efficiencies of the supply chain rather than actually what the supply chain’s there to deliver”. Additionally, one manager, M3-C, made a comment in relation to how ineffective supply chain integration during M&As affects the company’s customers. As he put it, they would “surely feel it, and they will point it out very quickly”.

To obtain a complete understanding in relation to the approach of the supply chain professionals to M&As, selected interviewees were asked to comment on whether they believed that the company’s supply chain representatives had enough awareness of the value they could add to improve the M&A proceedings. Also, the chances are that limited or no involvement of SC professionals in the pre-acquisition stage of M&As was due to the company’s leadership team not expecting its SC staff to get involved at this early M&A stage. In a reply, SM1-C confirmed that there was no expectation from the leadership team for the supply chain representatives to engage. M2-C added

that it would make a difference if the company's supply chain director sat on the management board, which was not the case. A different view was provided by a local Spanish manager, M1-L, who said that indeed low awareness of their value might have been the case across the SC staff, especially when they had limited or no exposure to M&As in the past.

A following subject, covered by Q5, related to data sharing with supply chain partners in merger and acquisition situations, and beyond. The two particularly well positioned interviewees to deliver an insightful feedback were SM1-C, who acted as the company's head of group data and IT applications, and M2-C, who was responsible for data management within one of the company's divisions. According to SM1-C, there were no threats related to data sharing in the context of mergers and acquisitions. His only objections were related to data sharing with the company's large key account customers, who, in SM1-C's opinion, received too much information, giving little in exchange. In relation to mergers and acquisitions, SM1-C only referred to the post-acquisition stage of the process, saying that once a target company was acquired, there would be no problems and no threats anymore. There usually were other issues such as "difficulty to get data for various reasons, language barriers, understanding barriers, software or a third party that takes care of the ERP (enterprise resource planning system) or the data" and similar, said the interviewee.

M2-C, a divisional data manager, delivered insights into the pre-acquisition stage of the M&A process. However, these were based on his experience with a previous employer and not the case study organisation. M2-C advised caution with data sharing during early stages of M&As and made a reference to a competition commission. In his opinion, the business needs to be careful about what kind of data it is disclosing in the pre-acquisition stage of the process. As he said, certain details and information ought to be hidden. M2-C's understanding was that "data sharing is really important, but [the business] should be careful as to how to share the data". The participant continued by saying that "when there's an acquisition or a merger, if the created company is too big and creates a monopoly, the competition commission comes and has a look and says it's unfair for the competition". If there is no formal approval for M&A from the authorities, "then we've got to go back, and we shared a lot of data..., we have to go back to our business as usual". For this reason, M2-C's previous

employer ensured that not too much data was revealed in such situations; only what was necessary.

A different point of view was presented by D5-L in relation to the data sharing with partners during the pre-acquisition stage of the process. In his previous employment, D5-L had acted as a commercial director for a company. As he said, mergers and acquisitions fell within his remit. In his opinion:

If you're buying a company you don't speak to them. You only do so when you are doing due diligence. Then you go in there and speak to them; they have to share this information. Usually they have a data room, and it's all in there.

As he argued, during the data room event, which happens on a specific day, potential buyers access information in relation to the target company's turnover, margins etc. The interested companies can use the gathered data for their analysis before making an offer, or withdraw if they do not "fancy buying it" anymore. The reason why D5-L believed that there were no risks with similar practices was that all the potential acquirers were being asked to sign NDAs (non-disclosure agreements); therefore, data sharing and trust was not a problem in these circumstances.

A local director, D1-L, only made a general statement in reference to data sharing practices in the corporate life. As he said, the company "always has a dilemma about whether data should be disclosed to parties outside of the business". Two interviewees, SM3-L and D5-C, did not see any threats in relation to data sharing in the context of mergers and acquisitions. Others did not make comments in this regard, diverting the discussion to non-M&A situations.

Q6, still from within the same group of questions around the human factor, trust and teams, dealt with the subject of involvement of external parties in the M&A process. A senior centre manager, SM1-C, argued that he did not believe that the business was using external consultants to support any stage of the M&A process. As he said, the individuals responsible for acquisitions had left the business some time ago. The interviewee acknowledged the fact that there should have been an external expert employed to "look into the process and know the market and the position better than the internal people".

Similar to SM1-C, his colleague from the centre's team, SM2-C, also independently said that consultants were not involved during acquisitions. SM2-C went one step

further and partially blamed the company's poorly executed M&As on the lack of external eyes. As he put it, the company assumed it understood the other MRO distributor it was acquiring, although the other business was selling a different range of products. The thinking within the organisation was that there was no need "to get anybody involved". The situation was no different in the region. When discussing the matter with local directors, D1-L said that these things were dealt with rather internally, whereas D4-L categorically stated that all was "done internally".

Another local director, D2-L, though from another country, said that there was external support when it came to legal matters for M&As, but there was nobody there to support supply chains. During his long tenure within the business, having experienced numerous takeovers and many different company owners, the participant only recalled one instance where the business employed an external supply chain expert to oversee SC matters during an acquisition. The feedback was very positive, and things worked well. For this reason, D2-L strongly recommended the practice of having external people involved, but only if they were knowledgeable, those who actually understood the MRO industry. Like D1-L, the company's group supply chain director, D3-C, also stated that bankers and lawyers were normally involved and contributed to the M&A process, but not much beyond that. This was where the external support ended, he said.

In similar fashion, other lower level managers and specialists, such as M1-L, S1-C, S2-L, and M2-C held that there were no external parties around to support acquisitions. As M2-C stated, external consultants were utilised within his past employer, but currently this form of support was not exercised. The reason for not involving external people to aid the M&A process was to save money, said S1-C. Also, the company directors and other senior managers, both local and from the company's central team i.e. SM4-C, D5-L, and SM3-L, contended that external parties were not introduced to the M&A processes. The situation had only changed very recently, said SM2-C, and various consultants were introduced to the business who looked at all aspects of the enterprise; however, this was in the aftermath of the acquisition of the business by a private equity group. Due to the fact that no external people had worked within the business in the past to help operations and supply chain functions in the M&A context, no support questions were asked of any participant.

Expectations ahead of Q7 were to obtain subjective opinions about the study participants related to the self-interest of company executives when taking decisions on acquisition or merger with another organisation. The question did not specifically relate to the case study organisation, and extended to executives from other businesses, or industries.

One participant, SM1-C, did not believe that executives' self-interest played any role when deciding upon M&As, although he acknowledged that CEOs can feel tempted by the vision of higher returns for themselves in the aftermath of M&As. The way the participant put it was that there was nothing wrong with executives earning more if they managed bigger and more profitable businesses, expanding through acquisitions. SM1-C made a direct reference to the CEO of the case study organisation, saying that his salary had not grown much with each acquisition, and certainly not proportionally to the growth of the company's revenue. By saying this, SM1-C was trying to prove that although his CEO was not specifically rewarded for making acquisitions, the company still made them, which proved the lack of self-interest in this regard.

Another senior manager, SM2-C, said that when acquiring a company, there is no self-interest in the decision-making process. If the company is well integrated and performs better because of an acquisition, executives benefit anyway through stock shares and bonuses. The same opinion was held by M4-L who said that it was the CEOs main job to grow the company, and he was rewarded for that with shares. Also, D2-L did not believe that self-interest played any part during acquisitions. Quite the opposite, the participant said that the remuneration would not grow, but there would be more responsibilities for the CEO. Similarly, SM3-L simply held that CEOs "are not looking at their self-worth" in the M&A context.

The other group of interviewees had a different understanding of the matter. D3-C admitted that self-interest did get into CEOs' heads, stating "they would not be human..., if they did not think about these things". A similar opinion was held by a local director, D4-L, who said that "if a salary is related to the size of the business or profit, he [CEO] will think that way". Also, M3-C said that "we are always human, everyone thinks about himself" admitting that self-interest can have a bearing on the decision-making process. As SM4-C put it, "personal views do tend to come into your

decisions”. The lower level manager, M1-L, believed that there was a possibility that CEOs would look at their self-interest when it came to M&As.

A very neutral and politically correct opinion was expressed by M2-C who said that initially “acquisition or merger is not done for personal gain, it’s done for business gain...., but it doesn’t hurt the person”. D1-L had no opinion in relation to the subject. D5-L, said that CEOs are “paid enough” and it is their job to “grow the company”, whereas S1-C hoped that all decisions were strictly business and “had nothing to do with his [CEO’s] personal gain”. Lastly, the local specialist S2-L contended that M&As appease shareholders, and CEOs under normal circumstances are shareholders too; therefore, their decision-making can be impacted.

Q8 was related to the subject of team selection during M&A integration, post-merger planning and prioritisation. The main goal behind the question was to find out if employees from both businesses i.e. the acquiring and the acquired businesses, participate and actively support acquisition proceedings. Also, where applicable, two support questions were asked to further deepen the understanding of the company’s practices around the selection criteria of employees for M&A operational teams, including the engagement of supply chain professionals.

Again, starting with an HQ’s senior manager, SM1-C, the participant confirmed that mixed teams consisting of employees from both businesses were formed to work on M&A matters, and he himself contributed to “IT-related projects”. SM1-C made a reference to finance professionals, who just like IT people, also created joint teams to work together on financial aspects of M&As of the newly enlarged company. The interviewee said that the selection criteria were simply “per function”, but he never witnessed joint supply chain teams. He understood that normally “there were not many people in the supply chain” departments of the acquired companies, implying that for this reason they were not invited to participate.

Another centre employee, SM2-C, had directly experienced the situation referred to in the question because his previous employer was acquired by the case study organisation. His recollection was that the employees of the acquired company were treated almost as some “third citizens...., people you didn’t want to talk to, so it was their way”. In theory, as he said, there was an opportunity for the acquired company employees to contribute during the M&A proceedings, but in reality, the “input

knowledge was kind of eroded from the business”. Furthermore, as he added, the new leadership team came from the acquirer’s side of the business, with no employees of the acquired company making their way up in the company’s hierarchy.

SM2-C also delivered an insight into the local acquisition conducted in Spain which he was asked to support when already working for the company. The key to the success was the retention of the original managing director (MD) of the acquired company. As he put it, it “worked well because the MD stayed, everybody settled in”, the company’s staff “was still there, have remained and it’s been handled quite well”. This was not the case in the UK previously, he added. “The whole company’s senior leadership team from the MD, sales director, purchasing, whatever, all changed positions and were no longer in the business, so there was this huge void”, people did not know who to talk to. However in Spain, despite the acquisition, it felt like “there was no big change at all”, he said.

D2-L was in the same situation as the above participant SM2-C i.e. the acquisition of his past employer by the case study organisation, but his reflection concerned a more distant past. D2-L provided insights into the acquisition of his past employer by a different entity, before the case study organisation came along. In that case, joint working teams “were one of the key factors to success..., we very quickly got teams round the table”. There were “product management and supply chain teams coming together to talk through... all of the supply chain elements”.

A local director from the Polish market, D1-L, said that when his employer was acquired by the case study organisation, it came “with its own plan”, determined to control the M&A process, including the company’s logistic arrangements. If things were not in line with the acquirer’s thinking, it either devised a new model, or aligned any questioned operations with the existing one. The case study organisation did not want to have a parallel supply chain structure, hence the approach. Having said that, D1-L felt that the new owner was willing to listen, as they probably were aware that the market was different than in Britain.

Another director from the same subsidiary in Poland, D4-L, in contrast to D1-L, did not mention the past acquisition of their local company by the case study organisation, but delivered insights into local acquisitions within the market. When replying to the question he said that “people from both units were taken into consideration, and only

then did it make sense”. The reason why an emphasis was put on listening to the other side was that the goal ahead of the acquisition was “to acquire knowledge, so it was not that we were searching for the market”, said the local director. There was “no participation of their [the acquired businesses] representatives” if the company was substantially smaller than the acquirer, D4-L added.

When conducting local acquisitions within the Spanish market, M1-L said that employees were asked for opinions and input during integration, but never supply chain representatives. If there was a need for an important SC decision, it was made by the operations director of the acquiring business. The company’s supply chain director, D3-C, in a reply to Q8, admitted that during two acquisitions, one in the Nordic region and the other in France, employees from both organisations worked together during the post-merger integration. Both the procurement and supply chain functions engaged and cooperated, which normally was not the case for other acquisitions, said the interviewee. In contrast, S1-C from the centre’s team, had never seen any joint teams within the case study organisation, but she did within her past employer. SM4-C only expressed his belief that procurement people worked jointly on M&A aspects.

Interestingly, S2-L, when referring to the British market and the local acquisition, contrary to others, believed that heads of departments were “sitting down touching base with their counterparts” from the acquired company. This, however, was contrary to what D2-L said when referring to the same acquisition. Also, SM3-L said that they never had been. M3-C, when referring generally to acquisitions conducted by the case study organisation, concluded that “the acquired companies are not allowed too much”, which was as he admitted, a mistake. Other participants, such as M4-L and D5-L could not make a clear statement in relation to the joint team creation or their tasks.

In Q9 the participants were asked for their feedback in relation to the company’s past acquisitions. The interviewees were requested to rate on a scale from 1 to 10 the company’s efforts with regard to the integration of the supply chains of the companies it had acquired. The answer to the question was not straightforward due to the fact that numerous acquisitions were conducted in various markets and “there have been some bad buys, there been some good buys”, as explained by SM1-C. To simplify,

the participants were asked to average them out and provide a mark. The results are presented in Table 13 below.

Code	Mark	Comments Made by the Participants
SM1-C	5	<i>"[Locally it] was a lost opportunity..., we did not achieve what we set out to achieve..., bad understanding of" warehouse merger processes</i>
SM2-C	<i>2 local / 4 overall</i>	<i>"[Overall] was better, but it's not perfect"</i>
D1-L	10 local / overall 7	<i>"We practically integrated it entirely"</i>
M1-L	1 st local 3 / 2 nd local 7	<i>"We had big issues..., then I'd say we improved"</i>
D2-L	5	<i>"The issues started when they tried to integrate NDCs in a very short space of time"</i>
D3-C	5 for Nordics / 7 for France / 3 for UK	<i>For Nordics "it's three years after the event, and they've still not integrated each branch", for the UK "the merger of the warehouses led to a significant degradation of customer service, so it's poor"</i>
S1-C	3	<i>"Because it failed dramatically..., it's horrific"</i>
D4-L	4.5 for group / 8.5 for local	<i>"We did it quickly and capably"</i>
M2-C	5	<i>"It appeared that we had lots of money and we wanted to expand quickly and we just bought whatever fit and then thought about processes, supply chain and integration later"</i>
S2-L	5	<i>"The actual handling of acquisition was not done very well, we had some issues"</i>
M3-C	2	<i>"I would not give it 1"</i>
SM3-L	1	<i>When the company "decided to close the entire warehouse, they made a massive cock up. I don't think the supply chain and all the management understood how the volume, the pallet racking, the amount of space available would fit the business..., it has fundamentally added to the issue of losing 30 million pounds worth of sales"</i>
M4-L	5	-
D5-L	5	<i>"I don't see evidence that we spent a lot of time trying to integrate suppliers"</i>
SM4-C	6	-

Table 13: A Summary of Responses to Q9

4.4.4. Metrics, Objectives & Measurement

The fourth group of questions consisted of three questions, Q10, Q11 and Q12, concerned with metrics, objectives and measurement of the M&A process. The 10th question was standalone with no additional questions attached to it. Q11 had two support questions, and Q12 had one supplementary question with it. As previously, the support questions for Q11 and Q12 were either asked to spark the discussion, or to deepen the understanding of the subject. The latter was the case if the researcher was led to believe that the interviewee had extensive experience and was in a position to deliver valuable insights to enrich the study.

In Q10 the interviewees were requested to advise if the company leaders considered improvements within supply chains to deliver better performance ahead of M&As. SM1-C simply stated that the business “never looks at the supply chain pre-acquisition”. His understanding of such a state of things was that the company management had a conviction that they would have been able to “put some supply chain in place” post-acquisition; therefore, there was no need to look at supply chains pre-acquisition. Simultaneously, SM1-C believed that this was a mistake and that the business should have looked at the supply chains of the target companies prior to acquiring them.

The other centre senior manager, SM2-C, noted that “it’s a natural” thing to look at supply chain infrastructure before the M&A deal, and identify some potential cost savings upfront, but it was not something that the business “would lead with..., they wouldn’t go, okay, that’s our optimum efficiency”. It seems that a similar situation was in Poland. D1-L, said that “not necessarily the supply chain is taken into account at this stage”. D1-L’s colleague from the same subsidiary, D4-L, confirmed that the supply chain matters in the pre-acquisition stage of the process “were low priority issues”. A manager M1-L from the Spanish arm of the organisation, in one voice with his Polish counterpart, said that supply chain matters “weren’t planned in advance”. In the British market, D2-L, could not comment upon the existing practices related to the interview question within the company. However, he made a reference to the period of time before the case study organisation acquired his employer, this was when he was in charge of acquisitions. As he said, supply chain optimisation was “one of the prime drivers” which “would give a critical mass” and these things were looked at.

Feedback provided by the company's supply chain director corroborates with the earlier introduced opinions of other study participants. D3-C stated that supply chain matters were not considered before acquisitions, and as he put it "not in this company anyway". The interviewee went further and said that this was common practice within the whole industry. Others, such as an S1-C specialist, could not comment upon the Q10. Similarly, S2-L had no knowledge in this regard. S2-L only expressed an expectation, saying that he would have thought supply chain matters were dealt with before COC.

M2-C confirmed that "in regard to distribution and logistics" he did not "really think that anything happened" in the pre-M&A stage. As he further said, these things were not "within the strategy before we purchase". The other HQ's manager, M3-C, said that "something is taken into account, but underestimated". The reason for this was, in his opinion, the lack of specialists who could advise on how to handle the acquisition. A senior manager from the domestic, local business, M3-L, said that these things were not "on the radar..., but they should be". M4-L had no knowledge in relation to the question, but his opinion was that supply chain matters should have been taken into consideration pre-acquisition, but he did not know if they were. D5-L, a local director from the British market could not comment on the subject, explaining his experience was too short with the business. However, he admitted that SC matters should have been acknowledged before the M&A process. He further added that within his previous organisation these things were looked at upfront. Finally, SM4-C said that "in my experience, sorry, it's not been important at this stage..., not that I am aware of in this company".

The following question, Q11, specifically dealt with the M&A measurement. The goal ahead of asking the question was to find out if, and if so, what, measurement systems were employed by the organisation to measure the progress of integration of supply chains of merging companies. Further enquiries were made to establish which metrics were used by the organisation to track the achieved costs savings, and which to measure the value creation. A summary of the interviewees' responses is shown in Table 14 below.

Code	Comments Made by the Participants
SM1-C	<i>"I don't think we have that..., we don't measure that"</i>
SM2-C	<i>"No, I don't think it [KPI] asks that specific question"</i>
D1-L	<i>General customer satisfaction survey, not for M&A</i>
M1-L	<i>KPI in Spain "to show the percentage of the [database] integration..., not cost savings"</i>
D2-L	<i>Only "things like you measure everyday anyway, in terms what your service level is", nothing specific for M&As</i>
D3-C	<i>"No, neither. I don't think so, not in my observation anyway"</i>
S1-C	<i>"Yeah", backed up by wrong data</i>
D4-L	<i>"Study of the level of transportation costs" within the Polish market not strictly conducted for M&As</i>
M2-C	<i>"There should be, nothing that's been communicated to me"</i>
S2-L	<i>"Definitely measured, at board level especially"</i>
M3-C	<i>"I haven't heard of anything like that"</i>
SM3-L	<i>"I think the issue we had is the supply chain is selective on how they present the information... to make them look good"</i>
M4-L	<i>"I'd imagine they would be"</i>
D5-L	<i>Within the previous company, yes</i>
SM4-C	<i>"The cost saving is... [and] would outweigh looking at the value" – not an observed fact, but an opinion</i>

Table 14: A Summary of Responses to Q11

The goal for Q12 i.e. the last question from the fourth group of questions, was to further probe the company's attitude towards the measurement systems. Within this question however, the participants were asked to comment on whether any method was employed to gauge if goals were achievable and potential synergies accurately forecast in the M&A context. Any such method, if utilised, would assist the company leadership with avoiding the mistake of underestimating the potential, or else, reducing the morale of employees due to setting unrealistically high targets. Furthermore, and in relation to the question, the participants were asked how well targets were

communicated across the company teams and the responsible people, and when. Table 15 below summarises the responses provided by the study participants.

Code	Comments Made by the Participants
SM1-C	<i>"No, we don't do that..., for so many years the company did not necessarily make people responsible or accountable for what they said"</i>
SM2-C	<i>"You would have a level of trust with regards to... that they know what they're doing"</i>
D1-L	<i>"No, they cannot make such measurements themselves..., they trust"</i>
M1-L	<i>"I don't know"</i>
D2-L	<i>"Only if it's done by external consultants"</i>
D3-C	<i>"I don't think there is any expectation that we will save X amount in the supply chain..., I've never seen anything" so nothing to measure</i>
S1-C	<i>"I don't know if there is"</i>
D4-L	<i>"I don't think so, but that is my opinion"</i>
M2-C	<i>"Nothing that's been communicated"</i>
S2-L	<i>"I've not been party to that"</i>
M3-C	<i>"It should be for sure, but I was not informed at all that such things were happening"</i>
SM3-L	<i>For the previous organisation acquired by the case study organisation "there was a complete programme that did exactly that..., which I don't think is utilised within this company"</i>
M4-L	<i>"It has to be verified, yes..., I think it's probably my opinion"</i>
D5-L	<i>For the past employer "an integration manager was responsible..., he's gotta rubber stamp it..., we had methodologies which were absolutely numbers driven"</i>
SM4-C	<i>"My response would be, they should check it, yes..., I don't believe it's well communicated"</i>

Table 15: A Summary of Responses to Q12

4.4.5. Time Aspects and Time Frames

A fifth group of questions, under a common theme of time aspects and time frames, consisted of two questions, Q13 and Q14. Q13 was accompanied by two support questions, whereas Q14 was standalone. In Q13, the participants were asked to comment upon the nomination of a supply chain leader for the sole purpose of advising and leading the M&A efforts of the organisation.

SM1-C said that an SC leader was only nominated after the announcement of the acquisition; this was in the post-merger stage of the process. His position, however, would not have been high up in the company's hierarchy, not of a director's calibre. In a reply to the support question to Q13, the participant added that the nominated SC leader would pick "whoever he needs" from the employees to work with him on the M&A's SCI. A local director, D1-L, said that supply chain leader was never nominated in the M&A proceedings on a group level. However, in relation to the local acquisitions, there normally used to be "one person delegated who was responsible for the acquisition and all logistics". Similarly, M3-C stated that "there has never been one [supply chain leader]..., there was nobody assigned and responsible for ensuring it's all joined up and making sense". The same view was shared by SM3-C, who said that normally no supply chain leader was appointed, which was a mistake. SM3-C's colleague, SM2-C, also a centre senior manager, had no knowledge in relation to the subject.

A lower level local manager, M1-L, only guessed that the supply chain leader would have been nominated from the very beginning, though he had never seen one. A local British director, D2-L, provided feedback in relation to the situation from the past, when he was acting as a commercial director, before the case study organisation acquired D2-L's past employer. D2-L back then used to look after supply chains in the M&A context, which was one of many areas he was responsible for. As the interviewee said, the supply chain M&A leader would have always come from the acquirer's side of the deal, and usually the supply chain manager would take the lead.

The company's group supply chain director, D3-C, said that in relation to the purchasing side of the deal, nomination of a leader took place soon after an M&A announcement. Even this, however, always happened in the post-acquisition stage of the process. When it came to all other supply chain matters "there is nobody really

nominated specifically to look after the supply chain”. A local director, D4-L, said that the approach in relation to the nomination of the SC leader depended on the size of the acquired business. If only a small acquisition was at stake, the acquirer’s SC executive got additional M&A responsibility. However, if the acquired organisation was of any significant size, then “at first this is more on a consultative basis”; however, still “there is no such main person nominated from the beginning to the end”.

D5-L could only comment in relation to his past employer, where the nomination happened “right at the start” in the pre-acquisition stage of the process, and the team was “sworn to secrecy..., right at the due diligence stage”. SM4-C believed that “there is clearly a strategy pre-acquisition” but he could not “confirm whether there is any activity actually post-acquisition”. Furthermore, he said that he could not “remember any specific instance when he [the leader] had actually been involved”. The centre’s specialist, S1-C, as well as M4-L, had no knowledge in relation to the matters covered by Q13, while S2-L only made a general comment that “the product and operations director had a big part to play”, not making any more insightful remarks.

The second and simultaneously the last question from the fifth group of interview questions, Q14, dealt with the M&A timeframes. The participants were asked for their opinions in relation to the M&A time scales and if they believed that they were at times too tight. If the latter was the case, the interviewees were asked to advise whether the aggressive time frames caused supply chains not to be considered strategic enough in the M&A context, and therefore they were not dealt with properly. The replies of the interviewees are presented in Table 16 below.

Code	Comments Made by the Participants
SM1-C	<i>“Correct, that’s exactly what we did”</i>
SM2-C	<i>“That [SCs] would be considered, but they wouldn’t be a top priority”</i>
D1-L	<i>“This is important, this is my opinion. It is treated in the case of various acquisitions a bit light-heartedly”</i>
M1-L	<i>“We had a situation with the first integration with timelines..., the decision of consolidating the warehouse could indicate that”</i>
D2-L	<i>“The first thing they’ve got to look at anyway is what the balance sheet’s like..., I am sure they would look at the supply chain, the supply base”</i>

D3-C	<i>"It's quite important to allow the acquired company to be understood by the acquiring company..., the purchasing side [should be done early on] but I think the other things can be left"</i>
S1-C	<i>"Yes, I think yes, but it will be looked at, at some point". Initially not important? "No"</i>
D4-L	<i>"Always pushed to the background"</i>
M2-C	<i>"I don't think they are considered strategic enough"</i>
S2-L	<i>"It was too tight, I think they were a bit [too] optimistic"</i>
M3-C	<i>"Definitely was not enough consideration given; practically it wasn't taken into account"</i>
SM3-L	<i>"It is extremely important I believe, but I don't think the business really knows"</i>
M4-L	<i>"I don't know about time scales"</i>
D5-L	<i>"From my experience in previous organisations all areas are rushed... whether it's a supply chain or not"</i>
SM4-C	<i>"Absolutely, I believe that what you've just said is right"</i>

Table 16: A Summary of Responses to Q14

4.4.6. Pre-initiative Considerations and Due Diligence

The sixth group of questions focused on the pre-acquisition stage of the merger and acquisition process. Three main questions were asked within the group i.e. Q15, Q16, and Q17. All these questions additionally featured from two to four support questions, and just as previously, these were only asked when the researcher believed that the participants could deliver a valuable insight.

Q15 covered the subject of the pre-deal due diligence teams. Within the study scope was to establish which employees, and from which departments, take an active part in this early M&A stage. To accompany the leading question, four more probing questions were available to the researcher, specifically looking into responsibilities, outcome of the work of the due diligence teams, goal prioritisation, and culture aspects of M&As.

In a reply to the question, SM1-C said that those who were involved pre-acquisition, were only members of the top management team. As he further said, a handful of other lower level people were also included, but only from the company's finance

departments. The participant, being responsible for the group's data and IT applications, was never invited to participate pre-acquisition nor ever notified about planned acquisitions. An outcome of the due diligence team's work, according to the participant, was a recommendation on whether to buy the business or not, but no detailed plan was developed at this early stage.

SM2-C made a short statement in relation to the local Spanish acquisition he was supporting. He said a bigger team was created to support the acquisition. In the pre-acquisition stage of the process, the interviewee visited the target company along with the country's MD in order "to understand what capability that would bring into the Spanish business". He claimed that the reason he had been involved was his "knowledge of market segments and products". Others who were involved at this early stage were the regional director, at a rank above the country MD, country finance director and the group CFO. According to SM2-C, the outcome of the due diligence efforts was a simple recommendation with a justification of what should be done, and what the acquisition would deliver to the business. He further claimed that locally, the regional MD would have a "significant plan for it". In a reply to the support question about the culture aspects in the context of M&As, the participant made a reference to the local British acquisition saying that no culture aspects were taken into consideration. He said that the two businesses were "25 miles away from each other", so he implied that there were no culture differences to deal with. However, he made a reference to his past employer, and an acquisition of a Scottish business. In this case, it turned out that the business "was very Scottish and that was a cultural change which probably wasn't anticipated".

A local director, D1-L, only made a vague statement and said that prior to acquiring another entity locally, things which were normally checked included finances and stocked products. Additionally, the business looked at the list of vendors of the target company. No instructions were issued by the company's HQ to scrutinise target companies from the SC perspective. In relation to the culture aspects of M&As, initially the director could not comment on whether these things were taken into account; however, after upon a brief reflection, he added that when the local business was acquired in 2007, the case study organisation asked about one particular employee whose name did not sound local, wanting to know who he was.

A local manager, M1-L, did not have much knowledge in relation to Q15, and only commented that the local divisional manager was aware of the local acquisitions prior to COC. His assumption was that he had some work to do to support these acquisitions, but he had no evidence for this. D2-L, a director with the longest tenure within the company, said that only a handful of people would be in the know in relation to the acquisition in its pre-initiative stage. The reason for this was that “quite often these things collapse”, therefore those who were involved were board directors, especially MD and finance director. Before the case study organisation acquired D2-L’s past employer, the participant was personally representing supply chains during acquisitions, although his function was that of a commercial director. As he said, his focus was on the value of stock, balance sheets, stock turns, and stock obsolescence. Just like others, he said, the outcome of the due diligence team was a recommendation on whether to pursue the acquisition or not. He further stated that the recommendation would not even be a formal document, but a short discussion between the members of the group of directors. The supply chain matters “would be down the line”, not a strategic issue when taking the decision on whether to acquire another business or not. In relation to the question about culture aspects, D2-L said that these things were not looked at this early in the process.

The centre’s supply chain director, D3-C, said that those involved pre-acquisition were CEO, the operations director and finance director. He had no knowledge about the culture aspects as he was never invited to join the pre-initiative team, despite his senior position as a group SC director. S1-C, similar to D3-C, said that those involved usually were the “top, top people”, but she doubted whether they did a good job since they did not ask their employees for insights and support. The company culture aspects might not have been considered as she said, but they were not very important, she believed.

The other local director, D4-L, in line with others, said that only a very narrow group of people were aware of the deal and involved before it was announced. In the case of the local acquisitions, both, the local and centre’s representatives took part and pursued acquisitions. Supply chain matters were not looked into at the early M&A stage, rather “more financial and strategic elements, and not details related to supply chains”. D4-L, acting locally as the company’s procurement director, personally never delivered any SC insights in the M&A context. The culture aspects were not looked into, according to the participant, but they should have been, he believed. To justify

his opinion, the interviewee provided an example of a merger from his previous employer. As he said, the M&A initiative was stopped in the aftermath of the culture analysis, being regarded as too risky.

M2-C could not comment in relation to the case study organisation; however, with his past employer, he was given a responsibility during mergers. The participant had no insight in relation to the company culture aspect for M&As and the practices within. Similarly, S2-L had no knowledge in relation to the question. However, M3-C confirmed that only high-level directors, and MDs were normally aware of planned acquisitions, but they did not discuss details in the early M&A stage. As he said, there might have been consulting companies involved providing insights in relation to the target company, its financial and market situation. M3-C had no knowledge about a roadmap, planning or prioritisation. However, in reference to the culture aspects for M&As, he replied that these were “definitely not taken into account”, and as a result people often left the company upon the acquisition, which is what he personally observed.

A senior manager, SM3-C, believed that the supply chain team should support the pre-acquisition due diligence team, but it did not happen. Not only were these aspects neglected, but not even considered. Nobody was aware upfront of any acquisitions apart from “a select few”. SM3-C had no knowledge in relation to the culture aspects for the acquisitions he witnessed. M4-L said that only a top leadership team, board directors and the CEO were aware of acquisitions, with possibly some external consultants. The culture aspects were not dealt with, according to M4-L. D5-L had no knowledge in relation to the case study organisation, but he provided extensive feedback in relation to his past employer. There was “an integration manager who was responsible from the start to the finish all the way through the due diligence”. The total number of involved people could be up to 10, and they were from various fields, including finance, accounting, supply chains etc. The observations made within the case study organisation led D5-L to believe that “they’re probably not looking too much” prior to buying another entity. However, the culture aspects were “not really looked at” even within his past employer, “purely financial, only financial” aspects of M&As.

SM4-C had no knowledge in relation to the current business, but in the past, when he worked for a different organisation, the finance, product and supply chain people were involved in the pre-acquisition team, which was a good practice in his opinion. An outcome produced by such a due diligence team was “a planned roadmap”, with well prioritised goals. In reference to the culture aspects, the participant said they would not be given “too much attention”.

Q16 still related to the pre-acquisition stage of the initiative, and a goal ahead of it was to ascertain what consideration was given to supply chains in this early M&A phase. More specifically, was the operational or strategic match of the supply chains of the involved companies taken into consideration ahead of acquisitions. To complement the leading question, four probing questions were asked of certain participants, touching upon areas such as the potential impact of acquisition on supply chains, actions taken and subjects discussed, the importance of supply chain matters, and the involvement of supply chain professionals.

SM1-C, as was already quoted earlier, simply stated that the business “never looks at the supply chain pre-acquisition”. Also, SM2-C believed that supply chain matters were “not something that they would lead with”, and the company would not try to look for “optimum [SC] efficiency” upfront. The participant expressed his disappointment with such a state of affairs, simultaneously adding that the supply chain “would never be” the top priority. SM2-C had no further knowledge, and could not comment upon the involvement of SC professionals.

D1-L, in one voice with the previously discussed participants, confirmed that supply chains were “not necessarily taken into account at this stage”. M1-L, when commenting on the Spanish acquisitions, confirmed that supply chain matters were not planned in advance. To support his claims, M1-L explained that it took the company around one year after COC only to decide the fate of the local warehouses, the number of which increased due to acquisitions. A local British director, D2-L, acknowledged that the company’s business was “all about service”; therefore, this was crucial to identify possible efficiencies in the SC area early in the process. The interviewee had not witnessed SC matters being considered in the pre-acquisition phase, but his belief was that this had happened. In the past, more than a decade ago, when D2-L was personally responsible for acquisitions before his employer was

acquired by the case study organisation, “one of the prime drivers was that [acquisition] would give us a critical mass to streamline the supply chain”.

The group’s supply chain director, D3-C, said that in this company and beyond, in the industry, “businesses do not look at supply chains pre-initiative”. Furthermore, he stated that in fact he had no knowledge about what specifically happened within the company in the M&A context before COC, as supply chain people were only included in the post-acquisition phase of deals. The participant was never asked to support any acquisition in the pre-deal stage himself. The other local director from the Polish market, D4-L, similar to his colleagues, confirmed that SC matters were low priority issues, and improvements to supply chains were not on the agenda this early in the process, concluding that supply chain matters “do not reach the board”. S1-C, a centre specialist, had no knowledge in relation to the question, only expressing hope that things happened. S2-L had no definite knowledge in relation to the question. However, just like his colleague S1-C, the participant said that he would have thought supply chain issues were examined and proper due diligence was conducted “prior to acquisition”.

M2-C said that supply chain matters might have been discussed, but the process was not formal, and no written instructions existed or were produced. As the participant said, things “go as far as to enquire conversation-wise, maybe look at the warehouses, how they work, what the deliveries are, but I think it’s just high level, nothing in detail”. M2-C’s opinion was that nobody looked at the potential impact of acquisitions on the company’s supply chains post-acquisition. The manager had no knowledge of whether and at what stage the supply chain individuals would be added to the process. M3-C only assumed that similar supply chain matters were dealt with by the external consultants, and discussed within the reports they produced. Simultaneously, M3-C argued that even if the external consultants had managed to adequately cover and assess the potential impact of acquisitions on supply chains post-acquisition, it was unlikely this part of the report would be considered by the company’s management “and have any bearing” on the M&A deal.

M4-L had no factual knowledge in reference to the question, and just like the two previously discussed specialists, he hoped that SC matters were looked at, and he believed this was important to do. The local director, D5-L, said that within his past

employer, these things were discussed, and as he held, “anything that was considered at risk or where actually we needed to support a business decision would then be flagged up”. As he continued, there was a special team within the company, supporting global mergers and acquisitions, and local teams could ask for support whenever needed. The company was actively acquiring other businesses, having conducted 34 acquisitions in a single year. As the participant said, “it was good practice, you had to get the integration quickly”. The last senior manager, SM4-C, stated that supply chain issues were not important at an early pre-acquisition stage, and no consideration, as far as he was concerned, was given to the strategic or operational match of supply chains of the merging companies. Similar insights were identified via the document revision process. A board member of the case study organisation disclosed and made available its actual integration planning checklist. The document covered several areas, such as finance, operations, insurance, IT systems and similar, but there was no reference to the company’s supply chain function.

The following question, Q17, concerned M&A supply chain guidelines utilised within the company in the pre-acquisition stage of the initiative. Two support questions were available, and these were aimed at understanding more details about the guidelines i.e. were the guidelines a standalone document, or incorporated within a set of other instructions for various company departments? To wrap the discussion up in relation to Q17, the participants were asked to provide a copy of the guidelines, if they were able to do so. A brief summary of the participants’ responses is presented in Table 17 below.

Code	Comments Made by the Participants
SM1-C	<i>“I don’t think there is anything specific for the supply chain”</i>
SM2-C	<i>“I don’t know”</i>
D1-L	<i>“I haven’t seen such a list”</i>
M1-L	<i>N/A</i>
D2-L	<i>“There would be. The people that are doing the consultancy that oversee it, that you work with, they have that”</i>
D3-C	<i>“I am not aware of any guidelines”</i>
S1-C	<i>“No, I don’t know”</i>

D4-L	<i>"Never encountered anything"</i>
M2-C	<i>"I have not seen" any guidelines</i>
S2-L	<i>"I don't know but I would be surprised if they hadn't"</i>
M3-C	<i>"No knowledge"</i>
SM3-L	<i>"I don't think anybody's even looking at this"</i>
M4-L	<i>"I think there probably is, but I wouldn't have a clue what they are"</i>
D5-L	<i>In the previous company "there was a pre-acquisition due diligence checklist"</i>
SM4-C	<i>"No, I haven't seen anything like this in this company"</i>

Table 17: A Summary of Responses to Q17

4.4.7. Acquisition Planning & Assessment

The following group of three questions, i.e. group seven, went one step forward in the M&A process and revolved around the planning and assessment of acquisitions. Q18 with its two support questions focused on the individuals responsible for the M&A planning, and the assessment of supply chains post-acquisition. Q19 dealt with a roadmap development for mergers and acquisitions and further probed the responsibilities of individuals, and M&A time frames. Finally, a standalone Q20 provided an opportunity to understand the company's stance on the contingency planning.

In relation to Q18, SM1-C said that at the time of the interview, there was nobody responsible for acquisitions, but previously "there was a guy literally brought in to buy businesses..., he was a senior [individual] at the right level". Having said that, the participant stated that not "all the purchases have been good". Importantly, SM1-C said that the mentioned acquisitions director was not in charge of the execution of a plan. His tasks were to find a business, analyse it, and decide whether to acquire it or not. In relation to the assessment of the newly acquired company, SM1-C acknowledged that it did happen on the IT side. In relation to the supply chains, until recently there was nobody responsible for the company's supply chains on the group level, and so, now, in SM1-C's opinion, that new employee acting as the group's supply chain director "would be involved but we don't buy".

Coincidentally, the above referred to group supply chain director, D3-C, also took part in this study. This provided a good opportunity to learn his opinions directly in relation to the discussed subjects, and verify the information provided by SM1-C. D3-C indirectly acknowledged the words of SM1-C, and stated that there was nobody responsible for acquisitions “because we’re not doing any acquisitions anymore, but when we did, there was a director responsible for acquisitions..., a one-man band”. As shown above, both participants used very similar words when replying to the first part of Q18. Furthermore, D3-C also said, just as SM1-C did, that the acquisitions director “wasn’t involved afterwards”. In relation to the second part of the question i.e. the supply chain assessment post-acquisition, the group’s supply chain director said that “I am not aware of any”, implying they would not be his responsibility.

Yet another participant, a senior team member, SM2-C, confirmed that somebody was “brought for the acquisitions when they conducted them, but they have now left the business, because they were brought in for a period of time to back acquisitions”. Similar to the previous two participants, SM2-C said that the acquisitions director was only there to “highlight the opportunity, and then they [opportunities] got validated by the local business to buy, and then the local business would take the responsibility”. In conjunction with the question about the supply chain assessment, the participant referred to the large acquisition on the British market, saying that “they were more focused on the suppliers..., rather than the supply chain side” of the business.

As concerns the local Polish market, both interviewed directors, D1-L and D4-L, provided their insights. D1-L said that locally, the country MD was responsible for acquisitions, and a further two individuals were responsible for planning, and another 10 for the execution of the plan. An important fact is that those who planned were also within the team of 10 responsible for the plan execution. The director further stated that the team conducted a post-acquisition supply chain assessment. The other local director, D4-L, also made reference to the individual “at the group level” who was responsible for acquisitions, just like many other participants did, but he added that there was somebody locally assessing the viability of acquisitions. The local acquisitions person was responsible for M&A initiatives, but not on a permanent basis. D4-L stated, however, that there was a detachment, and those who planned operations did not execute the plan. Apart from the finance people, all other functions were detached, which was not right, believed the participant. In reference to the

assessment of supply chains post-acquisition, the participant said that “there is no procedure, although we are looking at what can instantly be improved”.

In reference to the Spanish market, M1-L said that there was a detachment between those who planned and executed the acquisitions. The individual who planned M&As locally was the country’s MD, but the executor of a plan was the local operations director. In a reply to the question regarding the assessment of supply chains, the participant said that “it took them one year to decide to consolidate the warehouse, so probably not, it took too long”.

The local British director D2-L, analogous to other centre employees, stated that “a guy came in and looked at acquisitions, but he wasn’t involved in implementation”. In D2-L’s opinion, an assessment of supply chains was conducted, but there was no policy, or a written document to lead the process, “it would be driven by the distribution director, and finance”. The centre specialist, S1-C, said that the person responsible for acquisitions had left the business, but she had no other information in connection with the subject. The second specialist, S2-L, did not provide fact-based feedback, but “as a layman” assumed that a “member of the board” would be responsible for acquisitions, supported by external consultants. He further added that he saw “an operations director, finance director and people like that walking about”, planning and executing the plan. However, subsequently the interviewee corrected himself, saying that they were more like “overseeing”, because “they reported back to the board”. The participant was not sure about the supply chain’s assessment and whether it happened.

M2-C had no information about the company, but made a statement about his past employer, saying that the board of directors were responsible for acquisition planning, with consultants leading acquisitions. M3-C said that “a delegate from the board” was responsible for M&A planning within the company, supported by the company’s CEO. However, as he added, the two were not responsible for the execution of the plan afterwards, “they were responsible until a certain moment and then they suddenly disappeared”. As concerns the assessment of supply chains post-acquisition, it was “not carried out”.

SM3-L, a senior local manager from the British market acknowledged that the acquisitions director had gone, and the business was “in a state where we’re not

acquiring anybody". Planning and execution of M&As were detached, "it's different people". SM3-L made a reference to the past, i.e. before his employer was acquired by the case study organisation. The then business, as the participant said, used to carry out the assessment of supply chains post-acquisition. Similarly, M4-L said that "the leadership team would be responsible for planning within the organisation..., it's planned by them, it's not necessarily actioned by them".

D5-L said that within the case study organisation "the CEO and his leadership team" were responsible for acquisition planning. However, he had no detailed knowledge in relation to the current organisation. Lastly, SM4-C, in similar fashion to other participants, said that the company "employed somebody specifically to target opportunities across the whole of Europe", but those who planned were not responsible for the execution. In relation to the assessment of supply chains, some activities were performed, according to the participant, others should have been, e.g. transportation, warehousing, but he could not say if they were.

The subsequent question, i.e. Q19, was highly dependent on the previous question. If there was not a lot happening in the planning phase, roadmap development activities might have been hindered. Also, if those who planned the acquisition were different people to those who executed it, then the execution might have not gone according to the original plan. SM1-C briefly stated that he was not aware of any plans being developed for the post-acquisition stage of the initiative, specifically to support the supply chain objectives. On the other hand, SM2-C said, though without conviction, that there would "be a roadmap" but he had no information on where would it fit in the overall process. The participant could not provide any more details in relation to the plan or disclose it.

The local director, D1-L, explained that "always such a plan existed and the responsible people" who were executing it. However, the other local director from the same subsidiary, D4-L, did not confirm these words. His feedback was that there was no plan, and the supply chain post-acquisition matters were "not formalised". The local manager from Spain, M1-L, said that in relation to the IT matters to support supply chains, there was a roadmap in place, but this was more about the database integration. However, he saw plans and objectives for the company's key accounts and customer service optimisation in the M&A context.

Another local director, D2-L, this time from the British market, just like his colleagues from other regions, stated that “I never saw an integration plan, but it seemed to be all very rushed” when referring to the latest major acquisition within the UK. He noted, however, that when his employer was acquired in the past by yet another entity, before the case study organisation’s acquisition, the previous owner developed roadmaps to deliver supply chain objectives in the M&A context.

When looking at the centre’s employees, the opinions correlate with those of their local colleagues. The company’s supply chain director said that no objectives were set for supply chains to be delivered; therefore, it was hard to talk about any roadmap, “I do not think there is any expectation that we will save X amount in the supply chain..., I am not aware of a precise roadmap”. In a sarcastic way, M3-C, confirmed the words of the previously quoted director, saying that he “would be willing to find out about this” himself. Similarly, SM4-C acknowledged that he was not “aware of anything like that”, and M2-C said he had never seen any roadmap.

The centre specialist, S1-C, had no knowledge in relation to the subject, but she made a comment that it would not be wise of the company’s management not to develop a detailed roadmap. Also, a local British lower level manager, M4-L, confirmed that he had “never seen a roadmap” in place. The other specialist, S2-L, said that “there definitely would be” a roadmap in place for mergers and acquisitions. Later however, he made a reservation that he had never seen it, but he would have recommended developing something similar if it were not in place.

Finally, a local British director D5-L, again made a reference to his previous employer, saying that there was a roadmap, and it was overseen by the integration manager. The integration manager would always have somebody responsible for supply chain integration. For acquisitions, time frames were short, things happened “usually very quickly”. D5-L stressed that synergies needed to be realised “as quickly as possible..., if you can integrate the supply chain quickly, you get the savings straight away..., you are talking three months max”.

The next question, Q20, was constructed in such a way as to initiate a discussion in relation to the contingency planning ahead of merger and acquisition initiatives. The participants’ responses are summarised in Table 18 below.

Code	Comments Made by the Participants
SM1-C	<i>There was an overall 'get out' clause in a contract, not specifically for supply chains. "It happened on two occasions; we had to get out of the market. We had that, as I said, three-year period... where we could sell back the X% that we acquired and get back the same price. We had that clause in the contract"</i>
SM2-C	<i>"No"</i>
D1-L	<i>"Not really"</i>
M1-L	<i>"I don't think so. With the first acquisition which went wrong, there was no emergency or contingency plan, there was nothing", in reference to the local Spanish acquisitions</i>
D2-L	<i>At some point a local British business was planning to acquire a company which was an official distributor for one of the manufacturers of carbide. Through acquisition the company "actually strategically saw this as a way of getting it [distributorship]". The carbide manufacturer said that if the company acquired the other distributor, they would lose the distributorship for carbide. "So, we didn't buy the company". This was a situation within the subsidiary of the case study organisation, before the company owned it</i>
D3-C	<i>"I don't know"</i>
S1-C	<i>"I'd imagine you just hope it doesn't go wrong..., I don't think they plan for failure"</i>
D4-L	<i>"No, never encountered similar scenarios"</i>
M2-C	<i>"I assume so"</i>
S2-L	<i>"I would think they were thinking. But as we discussed before, I don't think they realised the task in hand, so it was too big for them. So, I think they were caught short, as there was a loss of customers"</i>
M3-C	<i>"Most cases that I know of, have had some problems there, and certainly have not been identified earlier in risk management, and unfortunately there were no lessons learned or conclusions drawn. In my opinion, after every failure, some learning should follow"</i>
SM3-L	<i>"Not that I am aware of"</i>
M4-L	<i>"I'd hope there would be, but I think they stick to the plan that they've got, and when it goes wrong they try and fix it"</i>
D5-L	<i>"No, it maybe should be. No, I don't think it was thought of"</i>
SM4-C	<i>"I would say, no"</i>

Table 18: A Summary of Responses to Q20

4.4.8. Post-acquisition Planning & Integration

The last group of questions consisted of four questions, Q21, Q22, Q23 & Q24, around acquisition planning and integration. Q21 had one support question, and it addressed the company's business systems. Q22 with its two support questions, dealt with M&A communication. Q23 focused on the post-acquisition assessment of the company's IT systems with the aim to drive better supply chain performance. The last of all the interview questions, Q24, sought to determine instances, and possibly reasons for SC project cancellations or suspensions within the organisation.

The participants' replies to Q21 delivered insights into the company's stance on the integration of the business systems and practices embraced towards the IT infrastructure in the M&A situation. SM1-C who acted as the company's head of group data and IT applications, said that the business "was not in the process of having one ERP across [Europe], there are very few exceptions where the business introduced another ERP into an acquired company". The reasons for this were the excessive costs of the new system introduction, deficiency of resources, and a lack of expertise. An exception, the participant said, was the introduction of the ERP where "there wasn't any in place", e.g. within the company's Irish division. There was another situation when the business decided to introduce a more advanced Microsoft ERP system into the newly acquired businesses across the Nordic region. The usual time frames for the new system introduction were up to one year. The next step after the acquisition was "the integration with the central systems and that can take three years, five years".

According to SM1-C, there were instances of faster integration into the company's central systems, but "there was a drive from the local business to get integrated". However, it is unusual for acquisitions to want to integrate quickly "because it's work to be done by them locally and usually the small business have one person who does all", said the interviewee. This person is more preoccupied with "the business side doing finance and IT" rather than system integration with the centre, SM1-C explained.

SM2-C confirmed that there was no single ERP system across the business. The senior manager said that the business "is looking at using a third party to put the same front screen on the front of everybody's ERP from an ordering and sales perspective, so you see the same screen so there will be more control of it rather than going to one ERP, one SAP or something". The participant acknowledged, similar to SM1-C, that

the main reasons for not having one system were excessive costs, and potential disruptions.

A Polish director, D1-L, in reference to the local M&A practices said that when the company acquires another entity, it introduces its own “ERP system virtually immediately” to the new business. When further questioned, D1-L specified that the considered time frames for the system introduction were two months. The director made a reference to a specific acquisition, during which the employees of the target company had already started learning the software handling, i.e. a month before COC. This approach enabled the newly added company to switch to the new ERP system very quickly, and “they were ready to work with the software” soon after the official COC. The participant stated that this was a good practice, further improved by delegating an experienced “individual per branch to help them through the early months and to support” them.

D4-L from the same subsidiary, confirmed that in the event of acquisition, it was normal that “the smaller company takes the ERP system of the bigger business”, therefore, “there was no other possibility” than to introduce an ERP of the case study organisation to the local acquisitions. However, D4-L stated that this was not the case when the Polish subsidiary was acquired in 2007 by the case study organisation. The Polish arm of the company “stayed with their system”, and the integration to a single group-wide ERP never happened. He further added that consideration was given to the idea of introduction of a single regional ERP within the Central and Eastern Europe, but the business was “thinking whether it would make sense to introduce one system”. However, when triangulating this subject, it was discovered that, in fact, the Polish subsidiary introduced the same ERP to the Hungarian part of the business; therefore it appears that the roll out to the Central and Eastern European region began.

On the local level in Spain, the situation appeared similar to Poland. The two newly acquired companies were originally using SAP system, but after their acquisition by the case study organisation, SAP was dropped, and the businesses moved onto a platform of the acquirer. The time frame to switch between the systems was one year, which was excessive, according to M1-L.

A local director from the British market, D2-L, said that his presumption was that the company’s strategy towards the ERPs of the acquired businesses was to “let them

use their own system, and try and link it". The explanation for this was that the business was acquiring many independent companies, so the approach seemed most practical. Before the acquisition of the local British business by the case study organisation, the local company, when still independent, always used to integrate companies it acquired. This was considered a good practice by D2-L, contrary to the new approach. However, these things had to be adequately managed, D2-L reasoned. He said that there was another instance of an acquisition of the subsidiary by yet another organisation in the past, before the business was acquired by the case study organisation, and the new owner put them on its platform, but "it was a nightmare implementation". Currently, things were different, and the organisation was not introducing the same ERPs, even locally within the British market. The participant simply concluded that "it wasn't part of integration policy" to introduce a single ERP. In his opinion, in every country where the business was present there were a "series of acquisitions and they are on different platform".

The centre director, D3-C, stated that after the acquisition, the most important thing from the IT's perspective was to integrate the new acquisition into the company's intra-company trading system. "A web-based software solution" which was a supply chain system to enable the purchase of stock from other regions, and sell the company's own stock. The participant confirmed that during the recent acquisitions "the systems were not integrated; the ERP systems are still separate today". One warehouse had been closed, and products put into another warehouse, but the participant said that he "would not call it integration..., one was forced into other..., but it wasn't done well". He also confirmed that the Nordic countries implemented the same ERP across the region. Something similar happened within the French acquisitions. Things went differently in the UK because of the cost and risk "of putting a big business on a new ERP and the UK's MD of the time was not prepared to take that decision because the costs involved were deemed too large..., and also there are big risks involved with ERP mergers and integrations". The director commented however, that this was a bad decision, and that a single ERP should have been introduced in the region.

The centre specialist, S1-C, confirmed that the business had no single ERP system, but doubted they ever would. As she added, there was a region within the business where they did not even use the same part number recognition system as the company's centre and they could not understand and read the group's codes. The

other specialist, S2-L, from the British market, confirmed the words of D3-C and said that there were two separate systems in the UK, and the business was “piggybacking” to ensure the data flow. Currently, the company trained its employees to be able to work with both systems, rather than integrate them. The supply chain people from the acquired business relied on the employees of the new owner, and the other way around, “they didn’t have one seamless, well they still haven’t got one seamless system for that”. The acquisition had happened five years ago, but still there were separate systems within the UK.

The other centre data manager, M2-C, noticed that the “current business would acquire a business regardless of what ERP they’ve got” because there was an overconfidence in an in-house built system that can work with various ERPs. As he said, this approach “puts all the pressure on the external company, part of the group, to develop bespoke situations..., and there is overreliance on bespoke” infrastructure. The business’s attitude was that “yeah, whatever the ERP, no problem, we can integrate with them”. M2-C said that ERP systems in the M&A context were normally high up on the agenda early in the due diligence stage of acquisitions across the wider industry, and could impact the decision on whether to acquire or not. However, this was not the case within the case study organisation.

Another centre employee, M3-C, said that “no thought is given prior to integration..., and to whether this would anyhow affect the business afterwards” and this “causes long delays in integration”. At times, he stated, there was a single system integration, but this was always a case-by-case situation. Also, SM3-C, confirmed there was no single ERP across the group, and as he said the business was lacking “a common ERP system that would help the supply chain [function] realise where we’ve got stock” and in what form. The manager noticed that the business had “lots of ERP systems and lots of businesses”; however, “nothing’s integrated in terms of ERP systems” which were standalone. The company was trying to link the systems “by trying to make them all talk to one company system, which was a nightmare; 14 million part numbers, different products, same products, different prices, duplicated part numbers, duplicated stock, nightmare”. The participant believed that there was no tidy up phase for acquisitions, and poor quality data was fed into the central system, summarising the situation as “poor quality in, poor quality out”. There was no uniform supply chain product information format, “it’s a bit of a mess”.

M4-L stated that the system integration “should be looked at straight away”, but getting “everyone on the same platform doesn’t happen”. In his opinion, the introduction of a single system would take years in planning, and would put people out of their jobs. The employee, similar to many other participants, made a reference to a bespoke system which communicates with various ERPs across Europe “tying them all together under one unique reference”, and the goal was to have it done in six months after the COC.

D5-L discussed the situation at his past employer where “a lot of tactical effort went into integrating systems to support supply chains” and things were already discussed in the due diligence phase of the process, but the focus of the company was to move “everything that was moveable with low risk”. The director had no experience in relation to ERPs within the case study organisation.

The last participant, SM4-C, simply stated that “unfortunately one of the disappointing things within this business is that there is never a real strategy to integrate all into the same ERP. Several country acquisitions have been made; they are all working on different ERP systems and unfortunately that is to the detriment of our business”.

Q22 addressed M&A communication practices. The participants were asked what communication, if any, and when, was issued to the merging supply chains in the aftermath of M&A initiatives. The two support questions further explored details related to the communication contents, style and whether the participants recalled ever receiving such a communication. A grouped summary of responses is shown in Table 19 below.

Code	Comments Made by the Participants
SM1-C	<i>“Never received such communication. Never asked to prepare one”</i>
SM2-C	<i>“No, never seen any”</i>
D1-L	<i>Yes, for the local Polish market, for the group acquisitions “not necessarily so”</i>
M1-L	<i>“Never witnessed any communication, either on group or local level, but helped to prepare a presentation related to the local acquisition”</i>
D2-L	<i>No group-wide communication, but to functional people like supply chain director or warehouse manager</i>

D3-C	<i>“No, I think that doesn’t happen. Not related to supply chains anyway”</i>
S1-C	<i>“Not about supply chains..., not in the context of M&A”</i>
D4-L	<i>On the local level an operational communication in relation to vendors, not necessarily customers. On the group level being aware of the introduction of new warehouses into the system. Local people only know “as much as is valuable to them and useful”</i>
M2-C	<i>“In my position, no I haven’t received anything”, never created any</i>
S2-L	<i>“No, not seen one, not been on the intranet... [never] had an email”</i>
M3-C	<i>“When it comes to creation, I never did, but I saw such communication, but my opinion is that there were no specific targets mentioned, and it was just info that some decision had been taken, with no further disclosure”</i>
SM3-L	<i>“No. I’ve never seen anything. No, sorry”</i>
M4-L	<i>“I’ve never helped to prepare one, no”</i>
D5-L	<i>“Saw a multitude of communications” within the previous business. Target, time frames and objective communication is “absolutely key to it so if there were 30 things that were involved in the integration then you’d expect as many people to be impacted, or affected; they need to know what we’re trying to achieve”. “I think they should be far more driven by data, far more inclusive, and open in terms of communication”. “There would be a communication plan which looked the same for every acquisition..., then there would be more specific templates, letters, communication documents that would be shared with functional areas, as well as, you know, communication to suppliers, you know, especially around supply chains”</i>
SM4-C	<i>“Targets, time frames and objectives are not well communicated. In the initial stages I would say yes. There are several cases where we’ve done that, for example in Germany. In the initial stages there is communication, then once a country takes over, external European people, then are no longer involved. But certainly from a local point of view there is communication at that level”</i>

Table 19: A Summary of Responses to Q22

Q23 was aimed at gaining an understanding in relation to the assessment of IT systems to enable IT-driven supply chains in an M&A context. The first interviewee, SM1-C, considering his role within the company, was the best positioned person to answer the question. His reply was that the company was “looking at the infrastructure integration and system integration, that’s all”. Nothing was being done in relation to the assessment of IT systems to help supply chains in the case of company acquisitions. For this reason, the three support questions around responsibilities, costs

and task prioritisation were adapted, and asked in relation to the system integration overall, not necessarily focusing on the IT's supply chain enablement during M&As, which, as it turned out, did not happen. SM1-C said that the business knew about "the resources centrally and the cost centrally, because we've done it in the past. However, we don't know the cost local involved, because maybe it's an ERP supported by third party software; we don't know the cost..., that's the piece we don't know". The participant believed that the IT director was responsible for the buy in of IT matters for the supply chain's benefit.

On the local Polish level, D1-L said that such assessment happened, but at a later stage. The initial goal was only to ensure the connection of systems between the acquirer and the acquired business, and provide data visibility "within the same standard", with fine tuning coming later. In relation to the planning and prioritisation, all depends on the size of the acquired business. If it is of considerable size, where costly investment is required, such as new servers, and other cost intensive infrastructure, "then everything is planned", and needs prior approval. Otherwise, there is no planning or prioritisation, things just get done. Locally, the responsible individual to advocate the supply chain IT systems to improve SC's performance was a system administrator who "deals with process introduction and improvements and moving processes to systems". To ensure that the recommended SC systems were as required by the local organisation, the administrator closely worked with the local supply chain director. The other local director from the same subsidiary, D4-L, said that no audit was performed as such, but it more worked on a basis of making "continuous suggestions to the system". Supply chain systems were also in scope, and if there was anything missing or required an update, things were recommended. Normally, costs were understood, but the end state was not clear, and not verified. Things were implemented, without always knowing the final product. D4-L said that the person responsible for the buy in of supply chain systems was the local supply chain director and other internal system users, such as sales people.

The local specialist, S2-L, said that assessments of SC's IT systems were conducted, but only as part of the overall IT assessment initiative. The other centre employee, M3-C, held that cost estimates existed, but they were "in most cases underrepresented". The participant pointed at the company's IT director, who in his opinion was responsible for the buy in of the company's SC IT infrastructure. The local British

senior manager, SM3-L, said that similar assessments of IT systems did not happen. The same view was held by SM4-C, who said that “supply chain and all IT consideration - it’s an afterthought”. Similarly, D5-L said that he had not “seen any evidence of strategic thinking on how the business can take IT forward in the supply chain”. D5-L when referring to his past employer said that IT costs were at times “astronomical, and perhaps not well understood”, although overall the company was very good with acquisitions. In line with most of the other participants, D5-L pointed at the IT director, whose duty was to push supply chain systems within the company, and to recommend upgrades and system introductions.

In relation to Spain, M1-C said that there “was a roadmap with IT actions [developed]..., step by step what has to be done with deadlines”. Just as in the group’s centre, also locally in Spain, the local IT employee was responsible for the supply chain systems. The company’s supply chain director, D3-C, in a reply to the question, said that he did not know whether such assessments were conducted. D3-C said that the IT director was “primarily responsible for all IT systems”; however, he acknowledged that the supply chain department should suggest SC IT software to the IT people. The participants SM2-C, S1-C, M2-C had no knowledge in relation to the question.

Finally, in the last question of the interview, Q24, the participants were asked whether any supply chain projects were either suspended or not pursued due to excessive costs or time requirements. SM1-C, although confirming that there were sometimes project cancellations or suspensions within the company, said they did not touch the supply chain area. However, the other centre senior manager, SM2-C, acknowledged that in fact within the French subsidiary, the business “had suspended the automation within the French warehousing”. The reason for this was high investment costs, said SM2-C. An interesting insight was shared by the same participant in relation to the new private equity owner, who “authorised it straight away”. Previously, the business spent a great deal of time hesitating, whereas the “new acquisition, new owners, just do it”.

Within the Polish market, D1-L said that SC projects under normal circumstances were never cancelled. However, it happened that at times they were delayed, especially if they were cash-intensive, or another more important project took precedence. The

above was the case with the barcodes project in Poland, an initiative already delayed four years, but still on the agenda. The other director from within the same market, D4-L, said that long time frames did not discourage the organisation from pursuing important initiatives, it was always about costs. As D4-L further stated, if important, planned projects turned out too expensive, the business always tried to find other, more economic solutions to reach its goals. The reason behind that thinking was that if any substantial project got through the approval processes, it meant that it was important, so the question rather was when it would be pursued and how, but not if.

In Spain, the local manager M1-L, had no knowledge in relation to the question. However, in the UK, the situation was similar to Poland. According to D2-L, projects might have been delayed, but then “looked at again” at a later stage. The group’s supply chain director provided a straightforward reply to the question, saying that “potential supply chain merger projects are certainly in this company very low down on the priority list”, and that the business “overall has been well underinvested in the supply chain systems for many years”. “The focus was on business development and new initiatives to grow sales..., whereas any investment in back end or warehousing was suppressed”. In the participant’s opinion, this was only very true within the case study organisation, because “many other companies do invest in the supply chain”.

The centre specialist, S1-C, had no knowledge in reference to the question, but expressed her presumptions that projects would have been delayed or cancelled, like the ERP systems. The local UK specialist, S2-L, and the local manager M4-L, said that projects would not have even been considered if it was obvious they would be costly and very risky. As they said, it was not that they were cancelled after being previously approved, simply that they would never even get to this stage. M2-C said, similar to SM2-C, that the warehouse automation was delayed because of high costs, whereas M3-C acknowledged that there was a project to introduce one ERP for the whole group, but it was suspended, “mainly due to costs”. This shows that S1-C’s assumption was accurate, and just as she believed, ERP’s investment was delayed or cancelled. This was also confirmed by SM2-L, the local British senior manager, who said that “certainly ERP systems are suspended because of the cost”.

D5-L, similar to the previous questions, spoke about his experience within the previous company. As he said, projects were “either suspended where we found something in

due diligence that we didn't like or didn't believe" they would deliver enough value. Lastly, SM4-C said that "some projects would be suspended due to the costs, definitely and that's happened earlier within the business". In the next chapter, the discussion is held, and arguments developed relevant to the study's aims and objectives, and to allow the researcher to form conclusions and answer the research questions.

5. Discussion

In this chapter, the findings from the literature review will be compared, discussed, and analysed against the findings from the data collection stage of the study. Additionally, an argument will be developed, and comments provided as necessary, for the successful completion of the study. Similar to the previous chapter, all the discussed concepts will follow the order of the conceptual framework, and thus the interview questions, which were both provided earlier in the study in points 2.15 and 4.1. Such an approach will ensure ease of reference between the chapters, and contribute to the overall transparency and integrity of the work. In the next section the first group of questions will be discussed, i.e. the classification questions, followed by other groups of questions as explained above. The chapter will finish with a summary of the theoretical and empirical findings in the form of a table, and differences between the practice within the case study organisation and the literature review findings will be highlighted.

5.1. Classification Questions

To reiterate the information provided by the interviewees within the replies to Q1, the total experience gathered by the 15 study participants was 261 years in the industrial MRO distribution sector. This provides a good basis for the study, further reinforced by the fact that the participants came from the company's various subsidiaries, and had diverse positions, ranging from specialists, up to senior directors. The participants mostly worked within the departments of operations, supply chain, pricing, procurement, and marketing; therefore, they possessed a good level of knowledge about the company processes around operations and supply chains. All the above taken together made the 15 selected interviewees a great representation, ideally positioned to deliver invaluable insights from the perspective of this study.

A first and very important finding which emerged in the classification questions, corroborates with the literature review finding discussed in the first chapter of the study. This relates to the corporate M&A form utilised by organisations from the discussed MRO industry. As early as the '90s, Anderson and Narus (1990) noticed and reported that larger distributors quickly acquire smaller, often private, family-owned businesses. Furthermore, Baird (2013) two decades later, reiterated that the

market fragmentation was still very high, and there were many small market participants steadily being swallowed by the noticeably bigger MRO distributors, a trend which was foreseen to continue. Similar phenomena were observed in this study, and discussed in point 2.11.2. What was noted is that global distributors consolidate the market almost entirely through acquisitions, and the number of acquisitions often runs to dozens per decade per company.

Exactly the same state of things was confirmed by the interviewees who virtually unanimously stated that within their organisation, numerous acquisitions had been conducted in the past years, with no mergers on the way. Some interviewees acknowledged that a few target companies were smaller family-owned businesses. This was also triangulated through the documentation review, where it was noticed that often old names of the acquired companies featured surnames of their past owners, or abbreviations of surnames of the old partner owners. Only one senior manager believed that one merger was concluded in one of the countries where the company operated. However, this was rejected in the course of the study because when verification was attempted, the information proved incorrect. This shows that the choice of the vehicle i.e. the industrial MRO distribution sector, to test the research level 2 gap in theory was right. Both the literature findings and the empirical findings (the interviews and documentation review) corroborate and reveal that within the industrial MRO distribution market sector, the greatly predominant corporate M&A form is acquisitions.

Although all but one of the interviewees experienced at least one horizontal acquisition within the case study organisation, no single employee was in a position to exactly state how many acquisitions had been concluded in the past years, irrespective of the level of seniority of the participant within the organisation. When triangulating and reviewing the company's documentation, it turned out that in excess of 30 acquisitions had been conducted all across Europe in a period of 15 years. The participants, however, quoted anything between four, and up to 18 acquisitions, but none were correct, with most of them being far off the real number. This shows that the communication related to mergers and acquisitions within the company may not be as expected, a topic which will be discussed later in the study.

Below in Table 20, just as will be the case at the end of every section of the discussion chapter, a summary table with the main discussion points is presented.

No	Emerging Themes (Q1)
1	<i>In the industrial MRO business sector, the most common corporate M&A tool is the acquisition</i>
2	<i>The participants were not in a position to accurately state how many acquisitions their company had conducted in the recent past</i>

Table 20: Emerging Themes from Q1

5.2. Strategies, Processes and Tools & Techniques

In relation to Q2, i.e. the alignment of the supply chain strategy of the merging businesses with the overarching business strategy and/or competitive strategy of the organisation, as presented within the findings chapter, the feedback from the interviewees was predominantly negative. The interviewees reported that things were not done in an organised or clever manner, and that the approach varied from one acquisition to another. It emerged, however, that the supply chain within the company was not treated as a whole, but the procurement function was taken out of the supply chain function and a different set of practices applied to it. It appears that there was an alignment between what happened in various countries, and what was decided at the company's central office. A senior company representative stated that procurement processes were aligned with the company's competitive and business strategies, but that was not the case for supply chains. However, the alignment process of the procurement function was not formal, and was merely a matter of habit - things which were just done.

The above state of things was confirmed within other subsidiaries from different countries, where the local senior directors admitted that the group procurement underwent a level of coordination, but these practices were not written down. Most of the other participants delivered a message similar to a local British senior manager who said that supply chain alignment with the business strategies was an area in which the business was very weak. A similar situation was discussed by Dung and Thanh (2012) who made a reference to Newell and Rubbermaid's merger. As both authors pointed out, the lack of alignment of the supply chain strategy with the company's

business and competitive strategies was the reason for failure in the integration phase of the initiative of the two companies. Nobody recognised the different needs of the supply chains of both organisations, i.e. competing through innovation vs. the low cost, the authors say. Also, Bhardwaj and Mitra (2010) provide examples of companies where a misaligned supply chain strategy that did not go hand in hand with the company's business strategy led to business failures. As the authors contend, the subject is currently very important for both scholars and practitioners.

Interestingly, going back to the case study organisation, one of the participants claimed that the supply chain alignment to other company strategies did happen, and pointed at the company's senior member allegedly responsible for the matter. However, this finding was rejected in this study because the very senior member of the company took part in this research, a fact unknown to the mentioned interviewee, and the insight turned out to be incorrect, simply a wrong assumption made by the interviewee.

When looking at the company's other regions, e.g. Spain, the situation was similar. There was no alignment of supply chains to the company's business strategies in the M&A context, and the organisation was more concerned with its customers rather than other operational matters. However, it appears that the supply chain function was not the only function overlooked in the M&A context within the company. One of the local British directors responsible for the company's marketing matters stated that the business was still more attentive to the company's supply chains and integration of front-end sales than it was to the marketing matters of the growing company. This, and other marketing matters in the M&A context, were not further researched in this study.

However, the situation may be different within other organisations from the MRO industry. As one senior member from the British arm of the company stated, the former owner of the subsidiary he worked for pursued the alignment of supply chains with its competitive and business strategies as part of the so-called 100-day plan. It appears that the practice had been forgotten and employees of the acquired subsidiary were either never asked or never given a chance to contribute and pass on the valuable knowledge and M&A practices of their past owner. According to Herd et al. (2005), one of the enablers of the M&A is to gather employees from both businesses, the

acquirer and the acquired company, and to create mixed teams to extract as much knowledge as possible. This clearly had not happened within the case study organisation, or not to a satisfactory degree. It is recommended for future research to look at other companies from the industrial MRO sector and investigate practices and approaches for managing supply chains during M&As there.

To summarise, within the case study organisation there was no alignment of supply chains in the M&A context with the company’s business and competitive strategies. Only elements of the procurement function were looked at, but this was an informal process, and not a written strategy or policy.

No	Emerging Themes (Q2)
1	<i>Things not done in an organised or clever manner</i>
2	<i>Procurement function taken out of supply chain and a different set of practices applied to it</i>
3	<i>Approach varied from one acquisition to another</i>
4	<i>Employees of the acquired subsidiary were either never asked or never given a chance to contribute and pass knowledge on</i>
5	<i>Procurement processes were aligned with the company’s business and competitive strategies, but things were done out of habit, not formalised</i>
6	<i>Supply chain alignment with the business strategies was an area in which the business was very weak</i>
7	<i>The company was more preoccupied with its customers than other operational matters in the M&A context</i>

Table 21: Emerging Themes from Q2

The following question, Q3, was about the IT enablement of supply chains. The best positioned participant to answer the question due to his position within the company was SM1-C. As he stated, “IT was the last to have any kind of involvement” in the M&A context. Despite the above, this participant was usually asked by the company leadership to visit the newly acquired businesses post-COC, as the first company representative to assess the situation. It may come as surprise that the IT department was ignored in the pre-acquisition stage of the M&A process, but was the first to be involved in the post-acquisition stage of the initiative. The interviewee concluded that it was “a very difficult position for the IT” department to be in.

Although the company did introduce the IT department into the M&A process in the post-acquisition stage of it, this was not through formalised procedures and practices. Simply the software that needed to be introduced to the new acquisitions was installed, and only the necessary integration took place. As confirmed by others, which was the essence of Q3, an IT strategy had no mention of supply chains within its provisions, or as SM2-C said, there was “no direct focus” on supply chains. This stands in opposition to the enabler 9, introduced earlier in the literature review chapter (point 2.14). Jharkharia and Shankar (2005) posit that supply chain matters should be dealt with by organisational IT strategy which would help in resolving various supply chain issues. Also, Stevenson and Spring (2007, p. 696) acknowledge that “the flow of accurate and real-time information in the supply chain is considered by many to be” equally important to the flow of goods and can “provide flexibility and improve the responsiveness of the supply chain”.

The situation at the company’s central office was repeated across the company’s subsidiaries in the region. Certain things happened in Spain, but no strategy specifically dealt with the issue of supply chain enablement by the company’s IT function. Interestingly, there seemed to be a specific IT policy to enable supply chains within the British market for one of the company’s subsidiaries when it was owned by a different entity in the past. However, after the COC, the good practice did not filter through. It appeared that almost all interviewees spoke with one voice in relation to the discussed subject. Overall, as stated by D5-L, the business was merely providing only enough IT infrastructure for supply chains to allow it to function. This may not be enough and may constrain the company’s capabilities and potential. An area of IT enablement for SCs is very important, and as discussed by Li (2014), technological improvements show new ways for supply chain management, examples of which are e-business, and commonly used radio-frequency identification, big data and cloud techniques, also providing directions for researchers to focus upon.

No	Emerging Themes (Q3)
1	<i>The IT department was the last to be involved in the M&A proceedings pre-acquisition</i>
2	<i>IT representatives were the company’s first employees to visit the newly acquired businesses and assess them</i>

3	<i>The old practice of IT enablement for supply chains existed within one of the company's subsidiaries before it was owned by the case study organisation, but after the COC, the practice did not filter through</i>
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Table 22: Emerging Themes from Q3

5.3. Human Factor, Trust & Teams

Q4 opens up a third group of questions around human factor, trust and teams. It provided an opportunity to obtain interviewees' subjective opinions in relation to the importance of supply chain matters in the M&A context. The reason the question is of particular importance is that, as discussed in the literature review chapter, overall, supply chain matters receive very little attention during M&A proceedings across the industry. This holds true for any stage of M&A, whether before, during or after the acquisition. It may be that a contributing factor for such a state of things is an overall poor perception of the supply chain function, and its perceived low value adding potential in the M&A context, thus the need for the question.

Feedback provided by the interviewees demonstrated that the supply chain function within the MRO industry is very highly regarded. As reported in the findings section of the thesis, 15 out of 15 interviewees attached either high or the highest priority to supply chains during acquisitions within the MRO industry. Comments such as "a crucial part of the acquisition", "hugely important", "the crux of the business", "between 1 and 5, where 5 is the highest, this is 5", "absolutely fundamental" were the usual reply. The above shows that the interviewed employees, with no exception, from specialists, through managers to directors, highly valued supply chains, and acknowledged their importance in the M&A context. Furthermore, the interviewees were asked to state, if, in their opinion, supply chain matters had received enough attention during acquisitions within their organisation. More than half of the interviewees strongly stated 'no' or 'probably not'. Others either did not have an opinion, or said that they would have hoped things were looked at, or that things were looked at to a certain degree. Among all the participants, only one believed that things were given enough attention.

The above paragraph shows a clear contradiction within the case study organisation. On one side, there was a very good perception of the supply chain function and its usability in the M&A context, and on the other side a lack of focus on supply chains

during acquisitions. Although James Langabeer and Seifert (2003) argue that supply chain personnel would not support M&A proceedings as they do not appreciate their value in the M&A context, SM1-C believed that the problem was elsewhere. As he claimed, there simply were no expectations ahead of the SC function during acquisitions. What James Langabeer and Seifert noticed in 2003 was however acknowledged by the local Spanish manager. He said that inexperienced supply chain staff with limited or no exposure to M&As in the past might not have been aware of the value they could have brought to the M&A table.

Within the case study organisation, it emerged that the company senior leadership team did not expect its SC personnel to be engaged at an early M&A stage. Therefore, supply chain matters were completely ignored, not looked at, or underrepresented during M&As, and there was nobody from the SC function on the company's board to advocate SCs. In light of the above, an insight provided by a local Polish operations director, D1-L, came as no surprise. The interviewee stated that the case study organisation was not looking at the supply chain matters when acquiring the business he worked for back in 2007. This shows that the supply chain matters were not important at that time. He further added that he was not given an opportunity or asked to contribute or share his knowledge to aid the acquisition processes.

The feedback received from the participants after asking Q4 also showed how the lower level employees were under-informed. S2-L believed that supply chain matters received enough attention during the acquisition of the local British company he worked for. This had not been the case. All the evidence, and the insights delivered by higher-level interviewees, including S2-L's manager, showed that the acquisition was disastrous, especially from the supply chain's perspective. It hugely contributed to the loss of a big chunk of the business, making many customers go away. This was noticed by M3-C who pointed out that poor supply chain integration and management during acquisitions directly affected the company's customers, in such a way that they received an inferior service.

SM4-C accurately concluded that it was "a business niche to integrate other acquisitions", and acknowledged that "there is no strong supply chain representation at the board level" of the company, which was the actual state of things. Similar was noticed by M2-C who stated that there was nobody to represent the SC function across

the company’s board, which did not help, and drove the focus away from the supply chains. According to Boodhoo et al. (2017) supply chain executives play a very important role in corporate mergers and acquisitions, and poor M&A integration, as the authors contend, is often cited as one of the major reasons for M&A failures. Perry and Herd (2004, p. 18) go one step further and, unlike others, argue the need to engage “the reigning leaders of the target” company. As the authors believe, the other side’s leadership team will be crucial when motivating stakeholders, and needs to participate during the preparation of an integration plan and its implementation.

No	Emerging Themes (Q4)
1	<i>15 out of 15 interviewees attached either high or the highest priority to supply chains during acquisitions</i>
2	<i>Within the case study organisation, a majority of interviewees stated that supply chain matters did not receive enough attention; others either did not know, or would have thought things were looked at</i>
3	<i>There was no expectation from the company’s leadership team ahead of its supply chain function to aid M&A proceedings</i>
4	<i>Local senior employees of the target company were not asked to share knowledge and experience upon the acquisition</i>
5	<i>Poor supply chain integration and management during acquisitions directly affected the company’s customers, in such a way that they received an inferior service</i>
6	<i>It is “a business niche to integrate other acquisitions”</i>

Table 23: Emerging Themes from Q4

The subsequent question within the second group of questions i.e. Q5, concerns a subject of trust in relation to the data sharing with supply chain partners in the M&A context and beyond. Duris (2002) argued that companies were missing out and not maximising their technological potential, because people were reluctant to share data e.g. in order not to shift the power to others. Trust, according to the author, or its lack, was not towards the technology, as there was a consensus that it could deliver, but people who can misuse the data. Trust is the major inhibitor and a “number-one barrier to electronic collaboration”, said Sherer (2005, p. 81), whereas Stahl and Sitkin (2010, p. 52) added that it is “a potentially important, but underexplored, variable in the integration process” during M&As.

What Duris (2002) discussed in his work in relation to power and control, was corroborated by SM1-C, the company's head of group data and IT applications. As he stated, the company's key account customers could gain access to the company's rich data, and potentially misuse it. There were technological tools to let others into the company's systems, but if not controlled, they may obtain too much data and use it against the business, said the participant. SM1-C had no concerns in relation to the data sharing in the context of M&As. As he reasoned, once acquired, the acquisition became part of the same company. However, as the interviewee noticed, there could be issues with obtaining the necessary data from the acquired company, but this was more associated with language barriers, misunderstandings, or third party software companies managing ERP systems and the acquired company's data.

As one of the local British directors, D5-L, pointed out, data sharing in the context of mergers and acquisitions was not a problem, because when the company was offered for sale, it held a data room event, and potential buyers were obliged to sign an NDA before gaining access to the proprietary data. Still, M2-C advised caution, and made reference to a competition commission. As he stated, the business needs to stay alert and be careful about what data is shown to the potential buyers. As he said, if the deal is not allowed to go ahead by the authorities, the two businesses at the end of the day would still compete on the market, so this was something that the company leadership needed to keep in mind.

No	Emerging Themes (Q5)
1	<i>In general, there are no threats related to data sharing in the M&A context. NDA agreements are recommended to improve the situation and help to secure the company's interests</i>
2	<i>The difficulty can relate to obtaining data from the acquired companies for reasons such as language barriers or issues with the third party companies managing ERPs or data of the acquired companies</i>
3	<i>Due to a competition commission, caution is advised when sharing data with potential company buyers</i>

Table 24: Emerging Themes from Q5

In Q6, the interviewees were asked to comment upon the involvement of external parties to support the M&A proceedings within the organisation, including its supply chain departments. Also, they were requested to state, if, and if so, what value external

people would bring to the table. The picture that emerged from the interviews is that, in general, the interviewees believed that the introduction of the external parties would benefit the business. However, in the company's operations area, and this is where the supply chain function sits, there were not many consultants, if at all, introduced to support M&As. Some believed that the lack of external eyes was a direct contributor to the poor M&A performance. The business was mostly doing everything using its own employees, and in general, not engaging anybody from the outside.

As reported, it was a common practice within the company to contract legal advisers, and some banking consultants, but never anybody strictly to look after supply chains during acquisitions. On the other hand, as some interviewees stated, it was not an uncommon practice to introduce SC consultants to aid M&A processes within their past employers, but never within the case study organisation. As a couple of interviewees noted, the reason for not involving external people was to save money. This approach, however, may be classed and considered as short-termism. Singh (2009) says that businesses should scrutinise their operations, seek to find non-value adding activities, identify areas for synergies etc. This is exactly what external people would be there to do if involved; instead, the current situation constitutes a barrier to the M&A process. Similar was discussed by Herd et al. (2005) who suggested obtaining insights from external experts. The external people can bring knowledge not accessible within the organisation, which was noted by the study participants.

The words of Herd et al. (2005) found a practical confirmation around the case study organisation, and more precisely, in its British subsidiary before it was acquired by the company. On one occasion, the discussed subsidiary introduced an external supply chain expert to guide the business through the acquisition, and the work of this person was highly rated. Upon COC, when the case study organisation acquired the business, the good practice did not filter through, and many people left the organisation. The overall conclusion is that the business did not manage to make the most of the acquired enterprise. In effect, the current company's state resembles the situation discussed by Tompkins (2011), where businesses sought external help too late, when it became apparent things were not working. Similarly, within the case study organisation, following a series of profit warnings and financial difficulties, a private equity group acquired the company, and only then did numerous external people support the business. As SM2-C said, from the moment of the acquisition, several

teams of consultants were scrutinising various company departments looking at processes, and also supporting and recommending faster supply chain integration, better warehouse automation and optimisation across Europe. It appears that the private equity firm acknowledged the value that external people can bring to the business.

During the interviews, it emerged that the business did not manage to identify individuals with skills to work on the integration projects during acquisitions. Some interviewees had great experience and knowledge in relation to the integration of departments within their past employers during M&A initiatives. Some of them led integration teams and pushed integration efforts for their past employers. They could have been of great value to the business, but they went unnoticed. The interviews revealed that employees would not volunteer or put their skills on display to support poorly performing areas of M&As. Therefore, there should have been a more proactive approach from the side of the company to identify these people and accordingly use their experience, encouraging them to engage more. This was not the case, and as D5-L stated, the first person to ever ask for his M&A integration skills was the researcher of this study.

No	Emerging Themes (Q6)
1	<i>As SM1-C believed, there should have been some “external third party, independent [experts] that look into the process and know the market and the position better than the internal people”</i>
2	<i>The business was not using external consultants to support any of the stages of the M&A process within its operations area</i>
3	<i>No involvement of external experts contributed to the poorly executed M&As</i>
4	<i>Within the company’s subsidiary, before COC, there was an instance when an external SC expert was introduced to aid an M&A from the SC’s perspective, and things worked very well</i>
5	<i>An assumption that the case study organisation understood the target company, led the business to not involve external people</i>
6	<i>A private equity group introduced numerous external experts, almost immediately upon the acquisition of the case study organisation</i>
7	<i>The business did not identify the M&A integration skillsets of its employees</i>
8	<i>Employees would not volunteer or put their skills on display</i>

Table 25: Emerging Themes from Q6

Q7 was aimed at gaining the participants' opinions in relation to the sensitive subject of managerial self-interest, which is generally perceived to be playing a role during M&As (Weitzel & McCarthy, 2011). As Lebedev et al. (2015) pointed out, the remuneration of company leaders can depend on the size of the organisation under management. Furthermore, Jharkharia (2012) discussed cases of businesses within the developing economies which acquired organisations larger than themselves. Similar conduct can be questionable, and at times, can unnecessarily overstretch an organisation's abilities. Q7 helped to obtain feedback from the interviewees, and to obtain their perceptions in relation to the self-interest of company leaders and their keenness to acquire other companies, perhaps more for personal gain than the company's benefit.

Feedback received from the great majority of the participants indicated that they did not believe that the industry leaders would look at their own gain when deciding upon M&As. Some, however, acknowledged that we are all human, and therefore tend to look after our own interests. Even if this was the case, the participants did not see anything wrong with it. As they said, it is the CEO's job to grow the business, and to be accordingly rewarded for it. There are genuine company schemes including options, and shares put in place to exactly align the shareholders' interests to those of company leaders. In general, the study participants did not believe there were issues with CEOs' questionable conduct in this regard. It was believed that CEOs would not put companies at risk and acquire others if doing so was not in the best interests of the companies that they managed.

No	Emerging Themes (Q7)
1	<i>The study participants, in general, did not think CEOs would think about personal gain when deciding upon M&As</i>
2	<i>It was believed that there were genuine schemes to incentivise CEOs to grow companies; these were put in place to align CEOs' interests to those of their shareholders</i>
3	<i>The overall opinion was that incentives would not push CEOs to take risky decisions</i>

Table 26: Emerging Themes from Q7

The penultimate question of the third group of questions, Q8, provided an opportunity to investigate if within the case study organisation, employees from both businesses

participated in the post-merger planning and integration. In the aftermath of the interviews, it turned out that the practices within the company's IT and finance departments were in line with Herd et al.'s (2005) recommendations. As the authors said, team members from both organisations should jointly work on the merger integration. In fact, the authors believed that in order to maximise benefits, the selected employees should work full-time strictly on aspects of the merger, and should not have other day to day responsibilities.

The situation within the SC department of the case study organisation, unlike within the IT or finance functions, was disappointing. For example, employees from companies acquired on the domestic British market were left feeling like "a third citizen", or people that others "did not want to talk to", said SM2-C. One of the interviewed senior managers admitted that there was a wealth of knowledge available within the acquired company, but they were not asked nor given a chance to have their say. This was discussed by Armour (2002, p. 19) who said that team disagreements can become "the final stumbling block in many mergers", and so "the two teams must come to a merger of the minds" in order for the deal to succeed. This is where the case study organisation failed on the group level. However, the situation looked better within the region. As the local management from the Polish market said, "people from both units are taken into consideration; only then does it make sense". A similar approach was adopted within the company's Spanish subsidiary. This shows that two sets, or more, of practices were followed within the case study organisation. If the local subsidiary had sufficient authority to follow its own acquisition processes, they would often do so.

In relation to supply chains, an important point is that, as highlighted by one of the senior directors of the local Polish business, the level of discussion with the acquired company depended on its size and the reason for the purchase of it. If the company was small, then there was not much of a discussion and it was simply aligned to the current structure. This was to avoid creating "a parallel supply chain", said a local director. Things were different if the organisation was of a considerable size, in which case the acquired company, locally, was engaged more. Another situation when the case study organisation, on the local level, might have wanted to engage the acquired business more than usually post-COC was if the reason behind the acquisition was to gain knowledge and obtain expertise and knowledgeable professionals. Then the case

study organisation was willing to listen, and learn. If the reason for the acquisition was simply to do with the market size and geographic expansion, then the acquired companies were not given many opportunities to shape M&As.

In D2-L's opinion, it was very important to gather people together when acquiring another business, but as he said, "it was quite uncomfortable". As he continued, people "spent many years disliking each other's businesses and competing, and now you're asking what are your best-selling products" and asking for other details, that previously were very confidential and inaccessible. Therefore, as soon as possible, after the COC, people need to meet and talk. This was the approach which proved to work within the D5-L's past employer. As he said, drawing from his experience, "one of the key factors for success" was to "get teams round the table" very quickly. The importance of the skill transfer between the merging companies was discussed by Almor, Tarba, and Benjamini (2009, p. 37), who said that "the transfer of knowledge, skills, and capabilities" can be a source of synergies. Along with the acquisition or a merger, there can be a situation where there will be an instant availability of skilled staff, the authors reasoned. This is something that the acquiring business needs to take into account; however, in general, this was not the case within the case study organisation.

No	Emerging Themes (Q8)
1	<i>No supply chain teams were formed to work together on integration</i>
2	<i>The employees of the acquired company in the UK were treated almost like "a third citizen...., people you didn't want to talk to"</i>
3	<i>In theory, there was an opportunity for the acquired company employees to contribute during the M&A proceedings, but in reality, the "input knowledge was kind of eroded from the business"</i>
4	<i>The new leadership team came from the acquirer's side of the business, leaving no employees of the acquired company making their way up in the company's hierarchy</i>
5	<i>In the region, within the company's subsidiaries, the key to success was the retention of the original MD of the acquired company</i>
6	<i>The acquirer came "with its own plan"</i>

7	<i>Locally in Poland “people from both units were taken into consideration; only then did it make sense”, but the motives behind M&A were different i.e. to obtain knowledge, not market size. Smaller organisations were not listened to, just aligned</i>
8	<i>In Spain, if there was any need for an important decision, it was taken by the operations director of the acquiring business</i>
9	<i>Within the Spanish market, certain employees were asked for opinions and input during integration, but not supply chain representatives</i>
10	<i>Joint working teams “were one of the key factors to success”, said D5-L, adding that it was very important to “quickly get teams round the table”. This was the situation within D5-L’s past employer</i>
11	<i>In Nordic countries, both procurement and SC teams worked together on M&A aspects from both businesses, and this process was well executed</i>
12	<i>Two sets, or more, of practices were identified during the interviews</i>

Table 27: Emerging Themes from Q8

The last question within the human factor, trust and team group of questions, Q9, made it possible to obtain a subjective opinion from all interviewees in relation to the supply chain integration of the acquired companies by the case study organisation. The interviewees were given a chance to rate some of their local acquisitions, but also all other acquisitions known to them, that had been pursued by the company’s HQ. The feedback is shown in Figure 16 below.

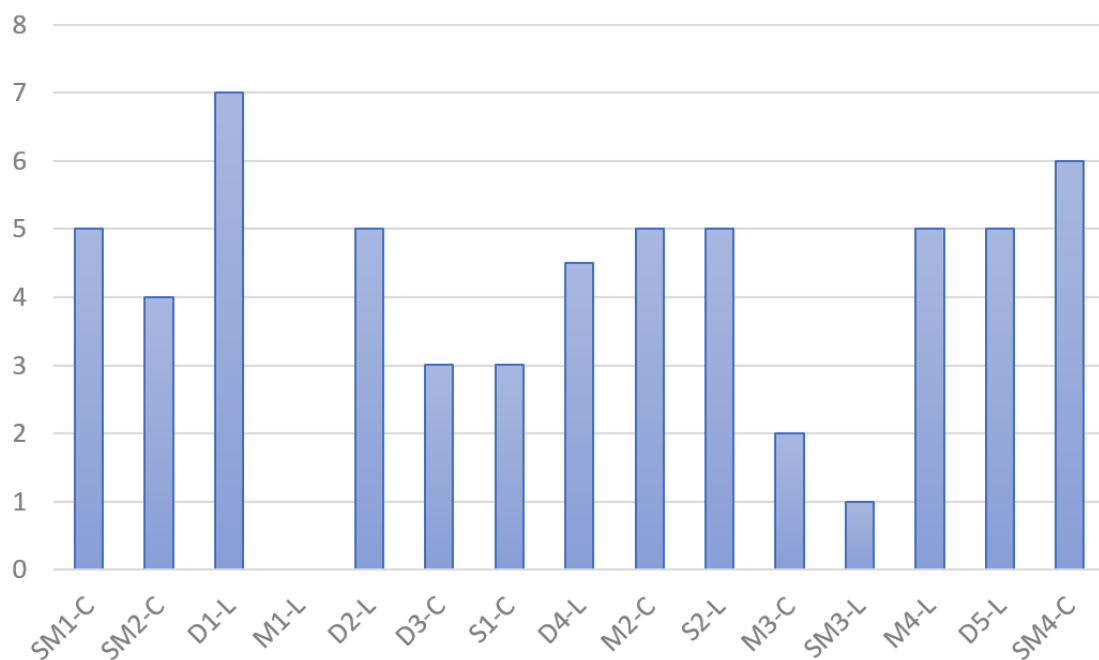


Figure 16: SCI for Acquisitions; Feedback

As presented above, the overall group rate is 4.32, with some interviewees being very critical in relation to the group acquisitions. This is not surprising given the fact that the supply chain management practices in the M&A context were not really looked at or followed by the company management.

In relation to the company's local acquisitions, three participants rated local acquisitions at 10, 8.5, and 7. This clearly shows that directors/managers were keener to rate their local acquisitions more favourably than the group's acquisitions. Having said that, having one overall mark for all acquisitions can be very misleading. This is because there was one high scale acquisition within the British market that was not very successful. Many of the study participants were British and they felt emotionally very attached to the poorly performing acquisition within their domestic market due to the fact that many of their colleagues had left or lost jobs in the aftermath of the M&A initiative. For this reason, the participants tended to be critical and cynical overall, and disapproving of the company's acquisitions practices. Figure 17 below shows the omnipresent low moods towards the local British acquisitions.

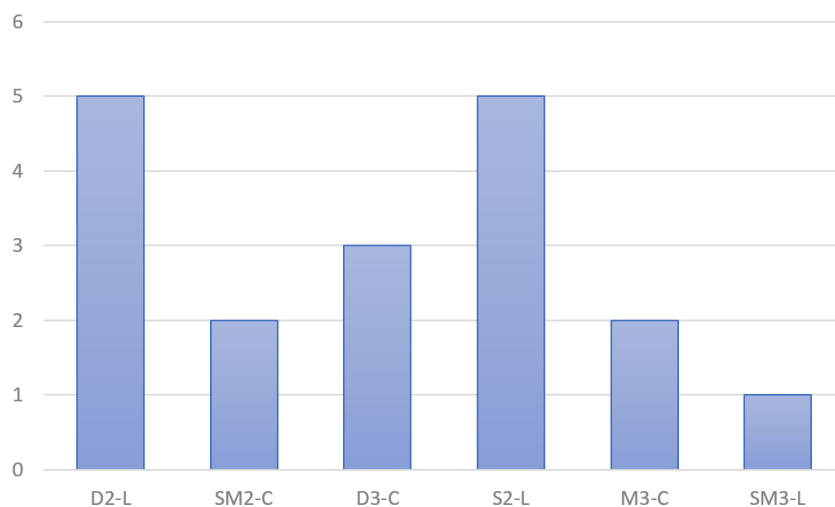


Figure 17: British Acquisitions; Feedback

The above shows a clear disproportion between the local British acquisitions and other group acquisitions. Most of the above participants who delivered feedback for the above table were directly responsible for employees within the acquired company, some of whom were forced to leave the business. All these contributed to the poor perception and subsequently low mark given to the local British acquisitions. Although other and better managed, but smaller scale acquisitions were conducted within the

domestic British market, they were overshadowed by the mentioned major and poorly performing acquisition. Having said this, one long serving company director, D2-L, delivered a more balanced opinion looking at the overall situation. The participant was not simply rating through the prism of the latest acquisition, and gave the company a mark of 5, which is more favourable than most of other interviewees from within the market.

No	Emerging Themes (Q9)
1	<i>Continental European acquisitions, within local subsidiaries received a better overall mark for the M&A integration efforts and outcomes than the group acquisitions</i>
2	<i>Local British acquisitions were badly marked. This was due to the poorly performing local, but high scale acquisition from the past</i>
3	<i>The results showed that participants might have been biased, and emotionally attached to a certain acquisition more than to others, and rated all acquisitions through the prism of that acquisition. This bias was either positive or negative, depending on the participant</i>

Table 28: Emerging Themes from Q9

5.4. Metrics, Objectives and Measurement

Q10 opened up a fourth group of questions around metrics, objectives and measurement and delivered answers on whether the company leaders considered improvements within supply chains to deliver better performance ahead of acquisitions, when formulating initial strategic M&A objectives.

The emerging picture was in line with the statement of SM1-C who said that the business “never looks at the supply chain pre-acquisition”. The situation was similar both in the company’s HQ as well as across the regions. The company’s group supply chain director confirmed that within the case study organisation, supply chain matters were not looked at prior to acquiring other entities. Also, other interviewees acknowledged that the attitude within the company was that SC arrangements were not important at the pre-M&A stage. As pointed out by James Langabeer and Seifert (2003), it is a common mistake amongst organisations that M&A strategic objectives do not take into consideration the supply chain area to improve the acquisition’s performance. It turned out that the case study organisation was yet another entity

proving that James Langabeer and Seifert's (2003) observation was right. As the authors say, a very small number of organisations judge the potential impact of acquisitions on supply chains. This observation was also confirmed by the company's supply chain director who stated that businesses from the whole MRO sector acted similarly.

The above finding stands in contradiction to the general attitude of the study participants who believed that SC matters should have been considered prior to acquiring any entity. The fact that these things were not looked at might have been because the senior management believed SCs were not important, and there was no senior SC representative on the company's board to challenge this. In fact, M&A can significantly impact the overall company performance post-acquisition, both in terms of cost and risk, and therefore requires a careful evaluation (Z. Liu & Nagurney, 2011). Wang and Moini (2012, p. 10) add that "the research field of performance assessment of M&As is a fertile ground and needs to be cultivated" and "more consistency is needed in how M&A outcomes are measured" (Marks & Mirvis, 2011, p. 167).

No	Emerging Themes (Q10)
1	<i>The business never looks at supply chains pre-acquisition</i>
2	<i>The leadership's conviction was that they would be able to put some SC infrastructure in place post-acquisition; therefore, there was no need to look at supply chains ahead of M&As</i>
3	<i>Within the business there were no specialists to advise on how to properly handle acquisitions</i>
4	<i>In the region, the SC function was not necessarily taken into consideration at the pre-acquisition stage, or supply chain matters were low priority aspects</i>
5	<i>Within the whole industry, supply chain matters were not looked into in the pre-acquisition stage of the M&A process</i>
6	<i>The supply chain area was not on the agenda prior to acquiring other entities</i>
7	<i>In general, participants believed that supply chains should have been looked into in the pre-acquisition stage of M&As, but they were not</i>

Table 29: Emerging Themes from Q10

Q11 deals with the measurement systems put in place by the company to look at the progress of integration in the M&A context. A situation within the case study organisation with regard to the question did not instil optimism. Thirteen out of 15

interviewees stated that no measurement system existed, or they had never seen any. The remaining two participants only expressed their assumption that both cost savings and value creation were measured. However, they had not witnessed anything in place. As a result, none of the 15 interviewees had ever seen any measurement system in place supporting M&A initiatives, nor any tool showing the direction or development of integration. Amongst them was the company's group supply chain director who said that he had never seen any supply chain measurement system employed specifically for the purpose of acquisitions. As Adams and Neely (2000, p. 19) argue, sophisticated measurement systems are more suitable than simple balance scorecards, but even these were not used within the company to measure the supply chain's progression in the M&A context. The subject of performance measurement during acquisitions is not an easy area, even for academia. According to Ambrosini, Bowman, and Schoenberg (2011, p. 178) the right selection "of performance measure is recognised as a difficult issue facing acquisition researchers". Keeping this in mind, the inability of the industry to measure its acquisitions properly is not surprising.

Also, Singh (2009) observed that it is a common mistake by organisations to wrongly select indicators, in effect inhibiting a decision-making process. As the local British senior manager, SM3-C, stated, overall the supply chain data is presented very selectively to make things look good, but in fact things were "not as rosy as they look". D5-L provided an insight into his past employer's practices, and as he said, the business was "incredibly KPI-driven" in the M&A context. There was a full integration plan with synergy lists developed, the progress of which was reported to the company's CEO monthly, he said. All teams were measured on outcomes, and both cost savings and value creation were looked at. When asked to provide an example of a value creation KPI, D5-L readily replied; a customer retention ratio. This proved that comprehensive measurement systems were in place within that company, and the participant was not simply trying to show his previous employer in a better light. Unfortunately, as previously found with other practices, the knowledge possessed by D5-L was not used within the case study organisation. It appears that D5-L's past employer got the M&A process right. They were not only pursuing and measuring cost savings but also value creation, which is what organisations should do, according to Byrne (2007).

No	Emerging Themes (Q11)
1	<i>Within the case study organisation, no supply chain metrics were utilised to track the progress of M&As</i>
2	<i>Overall, supply chain KPIs on the local level were used selectively to make the SC function look better</i>

Table 30: Emerging Themes from Q11

The following question, Q12, dealt with the subject of the methods used to gauge if the goals in the M&A context were achievable and accurately forecast. This was to avoid underestimation of the potential or the reduction of morale due to unrealistic targets. As Finley and Bonno (2012, p. 45) say, “setting aggressive but achievable supply chain targets is the primary objective of the due diligence” exercise. Due to the fact that expected synergies from M&As are often deal justifiers (Cheng & Seeger, 2012) i.e. major reasons why acquisitions are approved, if not delivered, M&As can be “viewed as failures because they did not achieve the benefits... cited to justify the deals” (Herd et al., 2005, p. 9). For this reason, it is important for the management to ensure that the projected synergies are accurate, and then delivered, thus the question.

In the course of the study, it emerged that no such verification systems were in place within the case study organisation. The great majority of interviewees confirmed that overall goals and promises made by the company’s functional managers were not challenged. In fact, the situation within the SC function was even worse, as there were no expectations ahead of the supply chain function to deliver anything in the M&A situation; therefore, there was no target to be challenged. The overall impression was that the interviewees were ready to acknowledge the fact that the target verification systems would make sense and add value, but nobody witnessed anything similar within the company. In this particular situation, no system would help the company’s supply chains, because there were no targets for SC function ahead of acquisitions. Therefore, target setting should be the first area to be rectified within the business. As Byrne (2007, para. 10) says, “one size does not fit all” and clear goals need to be identified and linked to M&A’s overall objectives.

No	Emerging Themes (Q12)
1	<i>No verification system is in place within the case study organisation</i>
2	<i>A great majority of interviewees confirmed that goals and promises made by the company's functional managers were not verified</i>
3	<i>There were no expectations ahead of the supply chain function to deliver anything in the M&A situation</i>
4	<i>Due to the lack of targets, even if in place, no system would help as there was no reference point to verify against</i>

Table 31: Emerging Themes from Q12

5.5. Time Aspects and Time Frames

In relation to Q13 i.e. a nomination of the supply chain leader to support M&As, the only interviewee who was able to provide factual information in this regard was the group's supply chain director. Other participants from the company's centre team could either only make assumptions, or comment upon the practices from the past. They had very faint understanding of the current procedures. The group supply chain director, D3-C, stated that the purchasing leader was nominated at the start of the post-acquisition stage of the initiative, but nobody was ever appointed to lead supply chains through M&As.

According to Jharkharia (2012, p. 293) M&As "will go on the expected lines only by the early involvement of supply chain leadership in pre-merger talks" and later in the process. Within the case study organisation, the situation was that there was no supply chain leader assigned at all to support M&A initiatives, not even after COC. As it turned out, in the course of the interviews, only a procurement official participated in the M&A proceedings, but only in the post-acquisition phase of the process. Similar practices may cause serious performance issues, according to James Langabeer and Seifert (2003), because a merger's success depends on the supply chain integration. Since there was nobody to look at supply chains in the M&A context within the organisation, there was nobody in place to drive the performance of integration. In fact, some study participants partially attributed the ineffective SCI to the reduction of the market share, loss of customers, and loss of employees by the business.

The absence of an SC leader for acquisitions can lead to another barrier, i.e. a lack of clarity in relation to the order of tasks set for accomplishment, and not clearly defined responsibilities. James Langabeer and Seifert (2003) posit that companies make mistakes by not clearly prioritising integration tasks. Without a clear SC leadership within the case study organisation, only some random activities were performed, at times touching upon or falling under the SC umbrella. As some of the interviewees stated, employees were not held responsible for their actions or inaction. Herd et al. (2005) stated that it is a company board’s job to identify the supply chain team and nominate the leader, who should turn all his efforts to supporting M&As. In this situation, the case study organisation’s management board failed in this regard. Both Herd et al. (2005) and Byrne (2007) said that the supply chain leader should start working early in the M&A planning phase of the process. Byrne (2007) continues by saying that the nomination of a senior officer responsible for the merger raises the status of the SC function, making it equally important to others. This was all missing within the case study organisation.

No	Emerging Themes (Q13)
1	<i>Locally, there used to be “one person delegated who was responsible for the acquisition and all logistics”</i>
2	<i>There has never been a supply chain leader, “there was nobody assigned and responsible for ensuring it’s all joined up and making sense”</i>
3	<i>When it comes to all supply chain matters “there is nobody really nominated to specifically look after the supply chain”</i>
4	<i>In relation to the purchasing side of the deal, a leader nomination took place soon after the M&A announcement. Even this, however, was already in the post-acquisition stage of the process</i>
5	<i>Locally, if only a small acquisition was at stake, the usual acquirer’s SC executive got additional M&A responsibilities. If the acquired organisation was of a significant size, then “at first this is more on a consultative basis”, however still “there is no such main person nominated from the beginning to the end”</i>
6	<i>With D5-L’s past employer, the SC leader nomination happened “right at the start” in the pre-acquisition stage of the process, and the team was “sworn to secrecy..., right at the due diligence stage”</i>

Table 32: Emerging Themes from Q13

Q14 made it possible to obtain the interviewees’ opinions in relation to the M&A initiatives’ time frames. Bauer and Matzler (2014, p. 275) say that although the “speed

of integration seems to be a key driver of M&A transaction success, it is an underresearched topic and has been addressed by only a handful of academic studies”. Within this study, if any interviewee believed that time scales were aggressive, the participant was further asked to comment on whether that adversely impacted M&As, e.g. by rendering SC matters less important. There are various reasons why organisations may want to rush with their M&A integration, and “from a financial perspective” it simply boils down to the general perception that “time costs money” (Angwin, 2004, p. 419).

Numerous interviewees acknowledged the fact that at times M&As had tight time frames. However, it did not adversely impact the supply chain matters of M&As as supply chains simply were not considered strategic enough within the case study organisation. Whether or not time frames were longer, the SC situation would not improve, nor receive any better treatment. Drawing from his past experience, D5-L stated that in the M&A context it was normal that all functions were rushed, including the company’s supply chains. The problem with the case study organisation was that supply chains were not considered at all, which is in line with the observation made by Tompkins (2011, para. 4), who said that the “M&A process is so time compressed and the initial aspects of integration are so hectic that the whole topic of the supply chain is not even addressed” by organisations.

No	Emerging Themes (Q14)
1	<i>M&A time frames may be too tight</i>
2	<i>More relaxed timeframes would not improve the SC situation for M&As within the case study organisation</i>
3	<i>Supply chains are not strategic enough to be on the M&A agenda</i>

Table 33: Emerging Themes from Q14

5.6. Pre-initiative Considerations & Due Diligence

The following group of questions, number six, consists of three questions about the due diligence aspects of M&As and other pre-initiative considerations. Q15 covered the area of employees’ engagement in a pre-deal due diligence team, their responsibilities, work outcomes, task prioritisation and the cultural aspects of

initiatives. A leading expectation ahead of the question was to establish which employees comprised a due diligence team within the organisation, and importantly, whether there were any supply chain representatives and of what rank. As James Langabeer and Seifert (2003) said, if there is no involvement of the supply chain people in the early pre-initiative stage of the M&A it harms the M&A potential. The authors reason that the supply chain employees are responsible for most of the company's resources; therefore, it makes sense to include them as early as possible, and not doing so is a mistake. Having said this, the authors are aware of the fact that "all too often, supply chain integration and the performance implications of misaligned chains are only afterthoughts in M&A proceedings" (James Langabeer & Seifert, 2003, p. 59).

In fact, the response of D3-C, i.e. the company's group supply chain director, would suffice for the purpose of the question. As the participant said, those who were involved were the company's CEO, operations director and a financial director. D3-C confirmed that despite being the most senior supply chain representative within the group, he was never personally introduced to the pre-initiative team or asked for support. Other senior directors from the British region, e.g. D2-L, spoke in one voice with D3-C, saying that only a handful of people were in the know, including the company's MD and finance director. This is not in line with Byrne (2007), who advocates early involvement of SC executives in the merger planning phase. The author goes a step further by saying that this is actually critical. As it turned out, this was not a practice within the case study organisation. There were elements of SC representation during M&As before the case study organisation acquired a local British subsidiary, but the person representing supply chains was a commercial director, i.e. a non-supply chain employee. This shows that even then, there was no professional full-time supply chain manager dedicated to support acquisitions, and the SC function fell under the responsibility of the commercial director. This was probably better than having no SC representation at all, but still far from the recommended practice.

Another local director, D4-L, from the company's Polish region, similarly stated that only a narrow group was aware about any impending M&A, and that supply chain matters were not really looked into during the pre-initiative stage of acquisitions. As he said, the company was more interested in financial and strategic elements. This is a mistake and constitutes a barrier to successful acquisition, as argued by Bertoneclj

and Kovač (2007). The authors believe that the soft aspects of M&As are also important, and decisions cannot be simply made on the basis of financial considerations. The overall impression upon conducting the interviews was that the participants were supportive of the idea of having a supply chain employee in the pre-initiative team, but as SM2-C said, “it doesn’t happen”.

In relation to the culture aspects, the overall feedback from the company employees was that they were not dealt with at the early stage of the M&A, nor even looked at. The reason cultural aspects are important is that “it is suggested that culture clash has major implications on stress, attitudes, behaviour and turnover” of the business, and the employees of the acquired business can be particularly exposed to it (Weber & Menipaz, 2003, p. 54). The authors add that these problems also relate to domestic as well as international acquisitions; therefore, they should not have been ignored by the case study organisation. Furthermore, according to Weber and Menipaz (2003, p. 55), “culture clash influences the effectiveness of the post-merger integration process” including the company’s systems, and affects the financial performance; therefore, it deserves thorough scrutiny.

In the course of the data collection stage it turned out that only within Poland was a brief culture related inquiry made by the case study organisation when acquiring a local business, but this was of little relevance, and had no bearing on the M&A process. As one of the local directors admitted, the culture aspects should have been looked into because addressing issues here can potentially save a lot of trouble. Also, one of the centre’s managers said that ignorance of culture aspects for M&As leads to the loss of employees after COC. Steigenberger (2016) believes that the culture aspects and social context are important, and if omitted, can lead to the merger’s failure.

The above discussion shows that within the case study organisation there were no supply chain representatives in the pre-merger team, no goals were set ahead for supply chains to achieve in the M&A context, and as a result there was no plan, or roadmap. Likewise, there were no objectives and no prioritisation of the supply chain matters within the company, and in general, the business did not look into culture aspects of M&As.

No	Emerging Themes (Q15)
1	<i>An outcome of the due diligence team's work was a recommendation on whether to buy a business or not, but no detailed plan was developed at an early stage, and no formal document was prepared</i>
2	<i>The group's data and IT applications head was never invited to participate in the pre-acquisition team, nor ever notified about planned acquisitions</i>
3	<i>Locally, prior to acquiring another entity, the main things which were checked were finances and stocked products</i>
4	<i>In the past, the commercial director represented the SC function during M&As within the company's subsidiary prior COC</i>
5	<i>Only a handful of people would be in the know in relation to the acquisition in its pre-initiative stage, and the SC executive was not included in this group</i>
6	<i>The group SC director was never asked to participate in due diligence, so no supply chain representative was present in the team. The group SC director was never informed about planned acquisitions</i>
7	<i>Supply chain matters were not looked into at the early M&A stage, only "financial and strategic elements, and not details related to supply chains"</i>
8	<i>D4-L, acting locally as the company's procurement director, personally never delivered any SC insights in the M&A context</i>
9	<i>The culture aspects were not looked at early in the process, nor later</i>
10	<i>Ignorance of the culture aspects results in people leaving the company upon the acquisition, as was observed by the centre's manager</i>
11	<i>In the past, in another business the local director worked for, M&A initiative was stopped in the aftermath of the culture analysis, being regarded as too risky</i>
12	<i>Many participants had no knowledge in relation to the culture aspects of M&As or the embraced practices</i>

Table 34: Emerging Themes from Q15

The following question, Q16, invited the participants' responses in relation to the level of consideration given to supply chains before M&As. As had already become clear from the previous questions, no supply chain executives participate in the acquisition process. The situation was even more serious during the pre-acquisition stage of the deal, where no supply chain representative was even aware that acquisition was planned. One of the barriers for successful M&A completion is the lack of appreciation of supply chain matters during the pre-merger stage of M&A by the board of directors (Herd et al., 2005). Since there was no supply chain executive on the company's board, and no supply chain representative participated in the pre-acquisition stage of

the deal, there was nobody to professionally advise and cover the supply chain area in the M&A context within the organisation. Possibly the external consultants would provide for this shortfall, but they were not party to M&A proceedings either, as was established within the study. According to Jharkharia (2012), the lack of consideration for supply chains during the final stages of the pre-merger phase of the initiative - this is the deal negotiation and the final sign off stage - adversely affects M&A performance in the later stages post-COC.

Within the case study organisation nobody either from the company's centre or locally across the company's subsidiaries, looks at supply chains pre-acquisition. According to the group's supply chain director, the entire MRO industry was ignorant of these aspects of M&As, and the case study organisation was no exception here, he believed. The same state of things, i.e. no focus on supply chains during the integration planning, was triangulated and confirmed in the course of the document revision exercise. The company's board representative, who was not a participant in the study, disclosed to the researcher an acquisition planning checklist, and within the operational part of it, only purchasing terms featured. Nowhere in the document, which had several sections covering areas such as treasury, human resources, operations, brands, insurance arrangements, finance and admin, was there any reference to supply chains.

Byrne (2007) noticed that successful businesses take due diligence very seriously, enriching it with a strategic approach and prioritisation of tasks. As the author says, the due diligence is especially important for CMAs. Iyer (2016) calculated that organisations which conduct supply chain due diligence professionally are 80% more likely to succeed.

No	Emerging Themes (Q16)
1	<i>Supply chain matters were not important at an early pre-acquisition stage, and no consideration was given to strategic or operational match of supply chains of the merging companies</i>
2	<i>The business would never look at the supply chain pre-acquisition</i>
3	<i>Supply chain matters were not something that the company would lead with</i>
4	<i>The supply chain would never be the top priority during M&As within the organisation</i>

5	<i>Locally, supply chain matters were not planned in advance. There was no advanced network planning</i>
6	<i>Within a past employer of D5-L, there was a special team within the company supporting global mergers and acquisitions, and local teams could ask for support whenever needed. This was considered a good practice because the business needed to get the integration quickly</i>
7	<i>In the whole industry, businesses would not look at supply chains pre-initiative</i>
8	<i>The group supply chain director was not aware about what happened with SCs in the M&A context in the company before COC. Supply chain people were only notified in the post-acquisition phase of the deal</i>
9	<i>Locally, SC matters were low priority issues, and improvements to supply chains were not on the agenda. Supply chain matters would not reach the board</i>
10	<i>Supply chain matters might have been discussed locally, but the process was not formal and no written instructions existed or were produced. Nothing was discussed in detail</i>
11	<i>Supply chain matters would be dealt with by external consultants, and discussed within the reports they would produce</i>
12	<i>Even if the external consultants had managed to adequately cover and assess the potential impact of acquisitions on supply chains post-acquisition, it was unlikely this part of the report would be considered by the company's management and have any bearing on the M&A deal</i>

Table 35: Emerging Themes from Q16

Q17 was looking at supply chain guidelines utilised by the company's management pre-acquisition. The reason the subject is so important is because the lack of due diligence guidelines, according to James Langabeer and Seifert (2003), affects the post-acquisition stage of the process, impacting the effective execution and integration phase. Within the case study organisation, the situation was that no pre-acquisition guidelines existed. This is not surprising, especially in the light of revelations from the previous questions where it was discovered that the business was not focusing on SC issues in the pre-acquisition stage of the process. Almost all interviewees either held that SC guidelines did not exist, or never witnessed anything like them. Only D2-L stated, that if involved, external consultants would normally utilise appropriate guidelines. These, however, were not normally employed by the case study organisation to support the SC function. As was established within the study, within the organisation a supply chain leader was never appointed to look after M&As from the SC side of the business, which justifies the lack of appropriate guidelines.

The situation discussed above introduces additional barriers for M&As, e.g. no supply chain goals to be delivered, missing time frames, no accountability for SC targets, and in effect late identification of SC saving targets. Byrne (2007) advocates clear target identification for SCI. SC teams need to know the way forward from day one after COC, but must also understand requirements 100 days later after COC (Herd et al., 2005). Cost-saving opportunities should be recognised and prioritised accordingly, the authors state. Once again, the observation made by James Langabeer and Seifert (2003) more than a decade ago holds true, i.e. that the supply chain area during M&As is only an afterthought for companies. It appears that the organisation in question is no exception here. Due to the fact there were no due diligence guidelines in use within the case study organisation, the two support questions were not asked.

No	Emerging Themes (Q17)
1	<i>Within the case study organisation, the situation was that no pre-acquisition guidelines existed</i>
2	<i>External consultants, if employed, would utilise SC due diligence guidelines</i>

Table 36: Emerging Themes from Q17

5.7. Acquisition Planning & Assessment

Q18 opens up the penultimate group of questions around the acquisition planning and assessment. Within the remit of the question, the interviewees were asked if those who planned acquisitions within the organisation also executed them. Within the case study organisation, it emerged that at a group level a senior executive was brought in especially to plan acquisitions, but the individual was never responsible for the execution of a plan. James Langabeer and Seifert (2003) argue that if the people who plan the acquisition are different to those that actually execute it, it may prove to be a barrier to any M&A being successful. D3-C, confirmed this and said that the acquisition director was responsible for M&As at their early stage, never executing the plan. It appears that only within the company's Polish subsidiary were there employees who both planned, and executed acquisitions, or more precisely, supervised the execution. Perry and Herd (2004) suggest that managers from the acquired company should also be included, and should both form and implement the plan, simultaneously identifying

and mitigating risks. This practice however, was never encountered within the case study organisation.

In connection with the supply chain assessments in the post-acquisition phase of M&A initiatives, the situation within the Polish subsidiary was that nothing formal existed, but the business looked at things which were not optimal, and tried to improve them. At the company's centre, the business was attentive to suppliers that came along with acquisitions, but less so towards the supply chain arrangements of the target companies. This is in alignment with the previous finding, i.e. that the company nominated the procurement M&A leader, but never an SC leader; therefore, the procurement processes received more attention. According to the individuals from the Polish and British subsidiaries of the company, a form of SC assessment was conducted, but again, this was not a formal process. This corroborates with the words of the company's group supply chain director who said that he was not aware that any post-merger supply chain assessments took place.

Due to the fact that the assessment of supply chains within the company was not a formal process, or simply was not carried out, no formal checklists were utilised to support the process. Singh (2009) said that the lack of assessment or poor practices related to the assessments of supply chains affect the consolidation of support systems, and impact the understanding of opportunities for improvement, or data for rationalisation plan, thereby affecting M&A's performance. Interestingly, one of the senior HQ managers, SM1-C, believed that the group's supply chain director was responsible for the assessment of supply chains during acquisitions, but this was rejected in the study. This SC director was one of the study's interviewees, and he did not confirm these revelations. James Langabeer and Seifert (2003, p. 62) recommend carrying out a final assessment of strategies, employees, systems and processes, and mapping out "all aspects of the supply chain infrastructure, looking for overlaps and inconsistencies in the approaches and strategies" to improve the company's performance post-COC.

No	Emerging Themes (Q18)
1	<i>A senior director on the group level was brought in to conduct acquisitions, but was not in charge of the plan execution</i>

2	<i>The participants believed not all acquisitions were good</i>
3	<i>The group's supply chain officer confirmed he was not aware of any supply chain assessments conducted in the post-M&A phase</i>
4	<i>In Poland, those who planned, also executed, and performed certain post-acquisition supply chain assessments. These were not formal, but involved discussions on what could be improved</i>
5	<i>Locally in Poland, a team member analysed and supported acquisitions</i>
6	<i>Overall, within the company, planning and execution was detached, and various individuals planned M&As, while others executed them</i>
7	<i>In the past, certain subsidiaries of the business used to carry out the assessment of supply chains before they were a part of the case study organisation. This had stopped after COC</i>

Table 37: Emerging Themes from Q18

In Q19 the interviewees were asked about the supply chain roadmap, which was meant to maximise the performance of the M&A deals. Singh (2009) suggests the creation of joint teams, with the supply chain representatives taking the lead. This would allow the identification of areas for improvement, short-term cost-saving initiatives as well as long-term goals. The outcome of the work of such joint teams is the production of roadmaps, consisting of several smaller projects, assigned responsibilities and time frames, the author says. He further adds that importantly, all these projects should deliver a return on investment.

The question posed significant problems for the interviewees and often they delivered contradictory insights. In relation to the company's centre team, SM1-C stated that he had never seen any SC roadmap in place, but SM2-C said that similar plans existed. Nevertheless, SM2-C, could not provide any particulars or discuss the process in detail. Similarly, amongst the directors, D1-L said that similar plans existed, but D4-L stated that there were no plans in place, and nothing was written down. An important statement came from the company's group supply chain director, who said that no supply chain targets were set ahead of the M&A initiatives; therefore, this implies that no roadmaps were developed, since there was nothing to achieve.

None of the interviewees had ever seen any post-merger roadmap in place within the organisation. Some of them only either speculated that similar roadmaps should have existed or had no knowledge in this regard. Just as previously, D5-L delivered an insight from his previous employer, where an integration manager was nominated, and

in charge of the development of roadmaps for acquisitions, supported by the SC representative. As he said, quick supply chain integration delivers quick savings. The statement corroborates with what James Langabeer and Seifert (2003) said more than a decade ago. The authors stated that rapid supply chain integration is a must as it delivers value very early in the process. Also, Pisano, Faraci, Cabiddu, and Picone (2017, p. 67) posit that integration managers “help top management teams to better formulate and implement corporate strategy, particularly in the context of cross-border acquisitions..., and may facilitate acquisition processes, thus making them smoother and more effective”.

It appears that within the case study organisation, similar practices were absent, and could have hindered the M&A process. Missing M&A SC roadmaps, and no appointment of integration managers resulted in a lack of clarity in relation to the officials accountable for the integration of supply chains. These areas should have been addressed by the company’s CEO early in the process, as suggested by James Langabeer and Seifert (2003). A lack of responsible people can lead to the deterioration of the customer service, and extended lead times, which was noticed by one of the interviewees. Both of these symptoms were experienced by the company’s British subsidiary upon its high scale acquisition a few years earlier.

Another issue which links with the lack of roadmap, is that there was no prioritisation of tasks and no assignment of responsibilities, according to James Langabeer and Seifert (2003). Similarly, Herd et al. (2005) argue that having a roadmap, with requirements between day one after COC until day 100, creates a sense of urgency and helps to build momentum. Also, Singh (2009, para. 17) recommends creating a list with detailed steps in relation to system and process consolidation “to increase efficiencies and avoid disruptions”, whereas Finley and Bonno (2012) add that the developed plan should be time-phased, aggressive but realistic. Within the case study organisation, apart from non-formal discussions, especially within the company’s local European subsidiaries, no proper roadmaps were developed at any stage of the M&A process to support supply chains.

No	Emerging Themes (Q19)
1	<i>No plans were developed for the post-acquisition stage of the initiative, specifically to support the supply chain objectives. However, certain participants would recommend them as a good tool. As S1-C said, "it would not be wise of the company's management not to develop one"</i>
2	<i>Locally there was no plan, and supply chain post-acquisition matters were not formal</i>
3	<i>Within the British market, the previous owner of one of the subsidiaries used to develop roadmaps for M&As</i>
4	<i>In Spain, in relation to the IT matters to support supply chains, there was a roadmap in place. This was however more about the database integration. There were plans and objectives for the company's key accounts and customer service optimisation in the M&A context, not regarding SCs</i>
5	<i>Most of the interviewees confirmed there were no precise roadmaps in place; only some less formal, unwritten practices</i>
6	<i>The company's supply chain director said that no objectives were set for supply chains to be delivered; therefore, it was pointless to talk about any roadmap. "I do not think there is any expectation that we will save X amount in the supply chain..., I am not aware of a precise roadmap", he said</i>
7	<i>A local British director, D5-L, made a reference to his previous employer, saying that there was a roadmap, and it was overseen by the integration manager. The integration manager would always have somebody responsible for supply chain integration</i>

Table 38: Emerging Themes from Q19

Q20 i.e. the last question of the seventh group of questions, tackled the M&A's SC contingency planning. The interviewees were asked if their organisation prepared in case things went wrong with M&As, developing plans to alleviate the consequences. The responses to the question revealed that the organisation did not plan for any kind of disruptions. Certain aspects of planning were incorporated within one of the subsidiaries before the case study organisation acquired the business, but at the time no plans were being developed.

Interestingly, even the past employer of D5-L, who got other M&A practices right, did not plan for disruptions. Problems were dealt with as they arose, but were never planned for in advance. James Langabeer and Seifert (2003) observed that across 400 companies they studied, only a very small fraction considered the potential impact of the M&A initiative on supply chains post-merger. Singh (2009) posits that the lack of upfront disruption planning results in cost overruns because problems are identified

late, and so become more expensive to put right. Adams and Neely (2000) concluded that overall, when it comes to M&A initiatives, companies do not plan intelligently.

No	Emerging Themes (Q20)
1	<i>The company did not plan for disruptions</i>
2	<i>Certain aspects of planning were incorporated within one of the subsidiaries before the case study organisation acquired the business, but currently no plans were developed</i>
3	<i>Even the good M&A performers, other businesses, did not plan for disruptions, which is in line with the literature review findings</i>

Table 39: Emerging Themes from Q20

5.8. Post-acquisition Planning & Integration

Q21 opens the last group of questions under the common theme of post-acquisition planning and integration. With the question, the interviewees were asked to comment upon the company's post-acquisition system integration practices, and to advise about the usual time frames for such initiatives. Those more in the know were also asked about other ways of bringing various systems together, to avoid haste and costly integration. Hedman and Sarker (2015) identified four strategies in relation to information system integration: either replace all the target company systems; replace only some parts of the IT infrastructure; undertake system renewal by introducing an in-house built system or off-the-shelf solution; and lastly pursue an IT non-integration path for M&As.

Due to the fact that one of the interviewees, SM1-C, at the time of the interview acted as the company's group head of data and IT applications, there was a good opportunity to hear about first-hand experience, and learn the factual state of things in relation to the system integration within the case study organisation. As he stated, the company had no common ERP system across the group, and the main reasons for this were high costs, limited resources, and no internal expertise to do this. The company only had a practice of introducing a single ERP system within the region, on a smaller scale, if it made business sense. This was the case in Ireland, where the target company did not operate any proper ERP system, and in the Nordic region where the goal was to upgrade to more advanced ERP across all regional subsidiaries.

The company's usual time frames to integrate systems were one year, which was sometimes shortened if there was an internal push from the acquired company.

Upon completion of all the interviews, it emerged that the company's practice was to use bespoke software, which allowed all ERPs to communicate together. The downside of the approach was, as the interviewees often complained, slow integration and poor execution. As a result, only poor quality data was available at the company's HQ, with high system fragmentation across the group and its various subsidiaries adding to problems. On the other hand, there were benefits, such as the lower cost, and quicker assimilation and connection of the newly acquired companies. New acquisitions were still able to use their own systems, ones that they knew, thereby limiting disruption. The disadvantage of the approach was that the systems which came along with acquisitions were often old, sometimes dating back to the eighties, thereby causing issues along the way. This was experienced within the company's French and British subsidiaries. The frequently modified, in-house upgraded ERP systems had changed so much over the years that they barely resembled their original shape, structure or organisation. As a result, there were few IT people able to support them, which further added to integration issues. This could have put the company at risk, making it over-dependent on the IT employees who possessed the specific system architecture knowledge, and its users.

The situation differed on the country level within the company. In general, local acquisitions within the market where the company was already present tended to undergo ERP changes to the system currently used with the reference market. A good practice was observed on the local Polish level where the employees of an acquired company were granted access to the company's ERP a month before COC, to familiarise themselves with the system. As a result, immediately from day one, the new acquisition was ready to work with the company's system. To further facilitate the process, a selected local HQ employee spent a few weeks with the new business after the acquisition, to support the new team. Whether the approach would always be feasible, is an area which is recommended for further research. Before COC, price negotiations may still be under way; therefore granting access to the company's ERP systems may not be possible. However, it can have some validity under certain circumstances.

When looking at the above practices within the case study organisation through the lens of the literature review, it appears that there are several traps that the company's management avoided, but also some that they fell into. A common issue is that many organisations often integrate supply chain systems too quickly, says Singh (2009). This approach often leads to cost overruns and is in effect counterproductive. The case study organisation managed not to repeat this mistake by developing an in-house system to fudge ERP systems together. The company did exactly what was discussed by Hedman and Sarker (2015, p. 118), i.e. the "creation of some sort of linkage between two or more previously separated information systems, which has great relevance in determining M&A success". On the other hand, it appears that the integration was not fully executed, and therefore the available data was not very accurate. On the positive side, the company devised processes to let the acquired companies connect more quickly to the pan-European systems, such as a bespoke transactional system, or the mentioned in-house built data management system. These processes considerably shortened the time required to integrate new acquisitions, simultaneously cutting costs. Similar activities are recommended by Lazenby (2010, para. 4), who says that within IT-smart companies, IT units "develop standard processes, tools, and data so they will be better equipped to absorb" acquisitions.

Apart from the benefits and the better ways the company integrated its acquisitions, especially locally, there were traps that the case study organisation did not manage to avoid. These included a barrier discussed by O'Reilly (2002) related to costs. There were situations in which the company was reluctant to invest locally to fully integrate supply chains in the M&A context. This was the case in the UK where the business kept the disparate ERP systems, significantly impacting local operations. It emerged that most of the interviewees would rather work on the same ERP platform, at least within the same market. Keeping two or more ERP systems within the same country caused numerous operational issues, leading to a situation where the company's branch had to use two different ERP systems to sell to different customers, which often led to the duplication of the infrastructure, and limited manageability. Furthermore, the company was reluctant to seek help from the external specialists to support various IT projects. As Tompkins (2011) identified, this is common amongst businesses. As he said, organisations let their acquisitions carry on without supporting them with external

help, or only let the consultants in when it becomes apparent that things are wrong, which is usually too late. It appears that the case study organisation made a similar mistake.

No	Emerging Themes (Q21)
1	<i>The company developed bespoke software to allow ERPs to communicate together. There were advantages and disadvantages of the approach. Although it lowered costs and provided quick access to main systems, the integration was poorly executed, causing issues with data. Also, the company's HQ had limited ability to access accurate data due to high system fragmentation across numerous subsidiaries</i>
2	<i>The organisation's approach was to often leave the ERPs of the acquired companies in place. These were on a number of occasions modified in-house, and as a result so much changed over time that they barely resembled their original version. There were few IT people able to work with them, and provide support</i>
3	<i>As it emerged, the time frames to integrate inter-company systems were up to one year, but the organisation noticed that if there was an internal push from the acquired company, these were considerably reduced</i>
4	<i>Although, on the group level there was no single ERP system, often the company's approach was to introduce a single ERP within a particular country, although there were exceptions, especially within the large markets</i>
5	<i>A good practice was observed within the Polish subsidiary, when employees of the target company were trained with the ERP system of the acquirer a month before COC. The practice may not always be feasible, but can be very helpful under certain conditions</i>

Table 40: Emerging Themes from Q21

In Q22, the interviewees were asked about the company's communication practices in relation to the merging supply chains in the M&A context. There are numerous publications where various authors advocate sound M&A communications to keep the business and other stakeholders informed in relation to the current and planned projects. Tompkins (2011) believes that early after COC, communication to the wider business speeds up supply chain integration efforts. Also, according to Cheng and Seeger (2012), during the integration, company managers should communicate objectives and expectations.

Bertoncelj and Kovač (2007) believe that a lack of accurate and timely communication lowers staff morale, and as a result can adversely impact the company's shareholders. As the authors say, there should be "no secrets, no surprises, no hype, and no empty

promises” (Bertoncelj & Kovač, 2007, p. 177). Going further, the authors disclosed calculations, and concluded that those who get the communication matters right have a 13% higher chance of succeeding. This is in line with the words of D5-L who said that thorough communication to the entire business, with plans, was crucial to effective M&A integration at his past employer.

The situation within the case study organisation in relation to the communication practices about merging supply chains as a result of M&A initiatives proved very poor. Almost all the interviewees confirmed that they never saw any internal communication messages in this regard, and had never been asked to prepare or help to prepare any communication on a group level. Things were marginally better within the local European subsidiaries. In Poland and the UK, communications were issued to employees about very general matters. These were, however, mostly directed at the SC functional employees, around supply chain area, but never went to the wider business.

The company’s group supply chain director confirmed that no communication was issued in relation to the supply chains in the aftermath of M&A initiatives. Similarly, SM1-C, who witnessed several acquisitions over more than a decade, and participated in the post-M&A integration project on the IT side of the business, had never seen any business communication touching upon supply chains. The above situation explains the participants’ replies to the first question of the interview i.e. how many acquisitions did the company conduct. None of the interviewees was in a position to quote the right figure, with most of them being far away from the true number of acquisitions. Since there was no M&A communication within the business, they simply did not know.

No	Emerging Themes (Q22)
1	<i>No communication issued to the wider business about merging supply chains as a result of M&As</i>
2	<i>Locally some communication was being forwarded to functional managers directly responsible for integration, not to all employees</i>
3	<i>As stated by D5-L, an experience from the past employer showed that target, time frames and objective communication was undeniably key to getting the integration right</i>

Table 41: Emerging Themes from Q22

Q23, although related to the IT's side and practices within the organisation, still touches the company's supply chain systems, a very important aspect of every supply chain department. The interviewees were asked whether, as a general rule, the organisation was conducting assessments of IT systems in the M&A context to IT-enable supply chains. Lazenby (2010) believes that 60% of the cost savings in the post-merger stage of the M&A process are highly dependent on the IT systems, but this is something that organisations cannot grasp. Furthermore, the author posits that IT integration is necessary for the supply chain savings to materialise, but the board people lack understanding of the subject and do not comprehend the impact of IT systems. M&As may change the way business is conducted and this may require "appropriate IT system changes", say Finley and Bonno (2012, p. 50); however, for this to happen, an adequate IT assessment process would need to be carried out.

Within the case study organisation, as was previously discussed, the IT director was not normally introduced to the pre-acquisition stage of the process. Similar held true for the group's supply chain director. This complicated things within the case study organisation, and as a result the supply chain's IT software was overlooked. When analysing the interviewees' replies, especially SM1-C's, who was responsible for the matters in question on a daily basis at his work, it emerged that IT integration projects were running across the company for M&As, but they were not driven by the desire to improve the supply chain's performance. Any improvement of the supply chain's performance in the aftermath of the IT integration projects was simply a positive side effect. The overall conclusion is that within the case study organisation no IT assessments were carried out which would specifically focus on the company's supply chains. There was no strategy in place to tackle this issue. The local subsidiaries merely ensured that the acquired companies could trade together, and that data was exchanged in similar IT standard.

When it comes to costs and resources, as SM1-C said, they were understood, but on the central level, not locally. Another participant stated that costs were often underrepresented. Interestingly, locally in Poland, costs and resources were well understood, but only for the larger acquisitions. Smaller acquisitions requiring less capital investment were simply aligned to the existing business. However, it emerged that in Spain, there "was a roadmap with IT actions developed", various steps described, and deadlines assigned, according to the local employee. The above

implies that the local costs were in fact understood within subsidiaries, but not necessarily fed upwards through the company's structure, and never reached the organisation's HQ. The reason for this state of things may be the lack of IT strategy for M&As, as was established within the study, and so various elements did not form a whole. Poor communication practices further inhibited the process.

In the centre, and across regions, normally IT directors were responsible for the promotion of IT enablement of supply chains, but this was not well organised. As the participant SM1-C said, he was usually the first person from the centre's team to inspect the acquired businesses. Despite this fact, he was never notified about any impending acquisition, let alone notified of short-listed target companies. A concluding statement to the question was delivered by a local director D5-L who said he had not "seen any evidence of strategic thinking on how the business can take IT forward in supply chains". Giacomazzi et al. (1997, p. 289) believe that information systems play "a key role in tactical and strategic management", yet not a lot of "attention has been dedicated to the role of" systems during corporate M&As, which was also evidenced within the case study organisation.

No	Emerging Themes (Q23)
1	<i>The company was "looking at the infrastructure integration and system integration, that's all". There was nothing being done in relation to the assessment of IT systems to help supply chains in the case of acquisitions</i>
2	<i>IT directors were responsible for promoting SC software to improve the performance across countries and on the group level</i>
3	<i>Costs were understood in the centre, but not locally</i>
4	<i>Locally in Poland, the initial goal was only to ensure the connection of systems between the acquirer and the acquired business, and provide data visibility "within the same standard", with fine tuning coming later</i>
5	<i>There were no IT audits locally, but there were continuous suggestions for how to improve systems</i>
6	<i>Locally, things were implemented without always knowing the final product</i>
7	<i>In Spain a detailed roadmap was developed for IT</i>
8	<i>In the centre, IT system costs were underrepresented</i>
9	<i>"The supply chain and all IT considerations – they're afterthoughts"</i>

10	<i>Locally, the supply chain department would suggest SC IT software to the IT people for consideration and implementation</i>
11	<i>Any improvement of the supply chain's performance in the aftermath of the IT integration projects, was simply a positive side effect</i>
12	<i>Locally in Spain and Poland, end costs were understood, but not necessarily fed upwards to higher company levels, and never reached the organisation's HQ</i>

Table 42: Emerging Themes from Q23

The last question of the eighth group of questions i.e. Q24, covered the subject of supply chain project suspension and cancellation, for reasons such as excessive time or cost requirements. No additional questions were asked following the leading question, but the interviewees could elaborate on other, subject-related matters, not being constrained to talk only about the time or cost aspects of the supply chain projects.

Tompkins (2011) believes that time pressures during M&A projects are often so tense that supply chains do not really get onto the main M&A agenda. This results in supply chains not receiving as much attention as they deserve, the author contends. He continues by saying that organisations only seek help when it becomes obvious that supply chains are not working. O'Reilly (2002) adds that although there are many optimisation opportunities within supply chains, businesses either turn a blind eye and skip them or are deterred by the required time investment to accomplish them. The other obstacle blocking SC projects is costs. The cost of the supply chain integration initiatives can at times stop organisations from launching optimisation initiatives, says O'Reilly (2002). This impacts the achieved synergies and minimises cost savings of the merger, the author adds.

A picture which emerged after conducting the interviews is that within the case study organisation, on the one hand, there were no issues related to the time required for SC projects, i.e. time did not act as a deterrent, but on the other hand the company was cautious about costs. Within the Polish market, there were no SC project cancellations at all, but at times projects were postponed, sometimes significantly by over four years. Things which were necessary were done, even if expensive, when the right moment came. As D1-L stated, certain projects would not even have been considered if it was obvious they would have been very expensive. The assumption is

that expensive automation was one of these never proposed, capital intensive projects. The subsidiary's distribution centre was not fully automated, which was observed by the researcher during the site inspection. Within the company overall, SC projects were "very low down on the priority list", as the centre's director said, and this low importance harms the company's performance as discussed within the study.

According to Harrell and Higgins (2002, p. 23), 75% "of merging organisations run into problems – causing delays, lost opportunities, and decreased revenues" when "integrating their information systems". This was also observed within the case study organisation, where some of the acquired businesses had not been fully integrated years after COC.

No	Emerging Themes (Q24)
1	<i>In France the business "had suspended the automation within the French warehousing" due to high investment costs, said the centre's manager</i>
2	<i>A private equity group, the company's new owner, authorised the warehouse investments quickly, unlike it was under the previous ownership</i>
3	<i>In Poland, projects were not normally cancelled, but postponed. However, very expensive projects would not even be considered</i>
4	<i>Long SC project time frames did not discourage the organisation from pursuing important initiatives; it was always about costs</i>
5	<i>In Poland, at times, projects were delayed, especially if they were cash-intensive, or if a different, more important project took precedence</i>
6	<i>Locally, the business always tried to find economic solutions to reach its goals if excessive costs were involved</i>
7	<i>"Potential supply chain merger projects are certainly in this company very low down on the priority list". The business "overall has greatly underinvested in the supply chain systems for many years"</i>
8	<i>"The focus was on business development and new initiatives to grow sales..., whereas any investment in the back end or warehousing was suppressed as a group", said the SC director. "Many other companies do invest in the supply chain" the director concluded</i>
9	<i>Projects would not have even been considered if it was obvious they would be costly and very risky</i>
10	<i>Warehouse automation was delayed because of high costs across the group</i>
11	<i>Within D5-L's past employer, projects were "either suspended when they [integration team] found something in due diligence that they didn't like or if they didn't believe they could drive enough value"</i>

Table 43: Emerging Themes from Q24

5.9. A Comparative Synthesis of the Theoretical and Empirical Findings

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
Group 1: Classification Questions		
<i>Anderson and Narus (1990) noticed and reported that larger distributors acquire at a fast pace smaller, often private, family-owned businesses</i>	<i>Most of the study participants confirmed that within the case study organisation, and the wider MRO industry, acquisitions were the greatly preferred corporate M&A tool</i>	<i>Literature review finding in alignment with the findings from the data collection stage of the study</i>
<i>Baird (2013) reiterated that the market fragmentation within the MRO distribution market was very high</i>	<i>In relation to horizontal acquisitions, the company used to acquire smaller competitors across Europe at a fast pace, and the internal documents confirmed that the market fragmentation was identified as high</i>	<i>Literature review finding in alignment with the findings from the data collection stage of the study</i>
Group 2: Strategies, Processes and Tools & Techniques		
<i>B32: Overarching supply chain strategy not aligned with business strategy and competitive strategy of the two merged companies</i>		
<i>Dung and Thanh (2012) observed that part of the reason for the merger's failure during the integration of Newell and Rubbermaid was the lack of alignment of the supply chain strategy with the company's business and competitive strategies</i>	<i>Procurement processes taken out of the supply chain function and aligned to the company's business and competitive strategies. Supply chain alignment with the business strategies is an area in which the business is very weak. Various practices across the company's subsidiaries</i>	<i>Only procurement processes aligned as a way of habit, not a formal requirement. Supply chain processes not aligned. M&A process missing to ensure the alignment of SC strategy with the competitive and business strategies</i>
<i>E9: Development of a strategy for IT department to support supply chains</i>		
<i>Jharkharia and Shankar (2005) believe that the organisational IT strategy should include the company's supply chains and IT-enable them</i>	<i>Some SC systems were being introduced to the newly acquired companies, but this was an unwritten way of doing things. There was no formal IT strategy to support supply chains</i>	<i>As one of the participants said, the business was merely doing what was necessary to make things work in an M&A context, i.e. to deliver some sort of connection between the disparate systems</i>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>E19: Development of tools and techniques by IT departments to align new acquisitions better and quicker</i>		
<p><i>According to Lazenby (2010), IT departments within well performing organisations develop tools and techniques to more quickly integrate and align new acquisitions</i></p>	<p><i>Inter-company transactional system introduced after the COC to the new acquisitions. System unifying various ERP codes introduced in the post-acquisition phase of the process</i></p>	<p><i>Nothing happens in the pre-acquisition stage of the process. There is no IT assessment of a target company pre-acquisition. Very limited number of tools and techniques introduced in the post-COC. The company went part way through, quickly connecting acquisitions doing the bare minimum only</i></p>
Group 3: Human Factor, Trust & Teams		
<i>B7: Lack of trust for sharing data with partners across the supply chain</i>		
<p><i>Duris (2002) says that organisations are not getting as much as promised from the implemented technology. This is not because technology cannot deliver, but because people do not trust those who could access data thanks to technology. Also, Jharkharia and Shankar (2005) say that trust between partners is essential for IT enablement and to support supply chains</i></p>	<p><i>No threats in relation to data sharing in the M&A context if NDA signed. Issues can arise with obtaining data from third party providers supporting the acquisition. In a non-M&A context, potentially the company's key customers can access too much data not offering their data in exchange</i></p>	<p><i>In line with Duris (2002) some senior data managers identified an issue in relation to technology and found that it can provide access to too rich data. However, within the company it had not stopped the business from letting its partners access it</i></p>
<i>B2: Supply chain personnel not recognising the importance of their role</i>		
<p><i>James Langabeer and Seifert (2003) argue that supply chain personnel are not aware of their own value and how positively they can influence M&As</i></p>	<p><i>No involvement of SC professionals in the pre-acquisition stage of the process. Limited involvement in the post-deal phase of the process</i></p>	<p><i>Although, the involvement of SC people in the M&A context was indeed limited within the case study organisation, it was more because the company's board had no expectation or will for SC professionals to get engaged. Underappreciation of their own value might have only been the case amongst the less experienced SC staff</i></p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>B17: Resistance to seeking help beyond a company's boundaries if the required knowledge does not exist within E10: The inclusion of external experts within supply chain teams to support integration activities</i>		
<p><i>Tompkins (2011) believes that organisations seek external help late in the M&A process, after a year; this is when they realise things are not working. Herd et al. (2005) propose the inclusion of external experts into a supply chain team responsible for integrating a company's disparate supply chains</i></p>	<p><i>No involvement of external SC experts to aid M&A initiatives at any stage of the process</i></p>	<p><i>The company did not seek external help at any stage of M&A, not even late in the process, which, as some believed, contributed to the poorly executed acquisitions. The practice, or lack of it, shows that the situation within the organisation was even worse than that identified by the author</i></p>
<i>E17: Inclusion of experienced employees from both organisations engaging in an M&A initiative</i>		
<p><i>According to Herd et al. (2005) the supply chain team responsible for supply chain integration of the merging companies should consist of experienced professionals from both organisations</i></p>	<p><i>In the region, within certain subsidiaries there were at times mixed SC teams created to work on M&A integration</i></p>	<p><i>The company would rather ignore the acquired side if it was of a much smaller size. At times, the acquired company representatives were invited to fully engage and provide insight, but this was the case when the reason for the acquisition was not to expand the market, but to acquire knowledge or new product ranges that came along with the acquisition etc. Therefore, in specific circumstances, the company did apply the practice recommended by Herd et al. (2005), but in most cases it did not</i></p>
<i>B36: Managerial self-interest</i>		
<p><i>Lebedev et al. (2015) say that CEO's salary can depend on the size of a company. This can incentivise CEOs and make them pursue risky M&As to grow their businesses. Jharkharia (2012) adds that some businesses acquired organisations bigger than themselves, which could bring unnecessary risks</i></p>	<p><i>The study participants, in general, did not think that managerial self-interest would put the company at risk unnecessarily</i></p>	<p><i>Within the company, the participants believed that CEOs were there to grow their businesses, also through acquisitions, and they were paid and incentivised to do so. However, they did not believe that because of this fact, CEOs would unnecessarily overstretch the capabilities of the businesses they managed, to personally benefit</i></p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
Group 4: Metrics, Objectives & Measurement		
<i>B25: Strategic objectives for M&A activities outlined by senior management do not embrace the SC area and its improvements for better performance</i> <i>B14: Late identification of saving targets for SC teams to pursue</i>		
<p>As James Langabeer and Seifert (2003) noticed, M&A strategic objectives do not embrace the SC area, and do not target improvements around the SC function. Herd et al. (2005) say that businesses start late with opportunity identification and recognition. As the authors say, these should be done in advance</p>	<p>The leadership team's conviction was that they would have been able to put some supply chain in place post-acquisition, therefore there was no need to look at supply chains ahead of M&As. There was a lack of specialists to advise on how to properly handle the acquisition</p>	<p>Supply chain matters were never considered prior to acquiring another business, and there were no targets for the SC function to achieve in the M&A context. The situation within the company was no different to what was identified by James Langabeer and Seifert (2003)</p>
<i>E6: Introduction of metrics for the measurement of value creation, and not only cost savings</i> <i>E12: Selection of the right metrics, consistent across both merging businesses</i>		
<p>Byrne (2007) says that it is a mistake not to introduce metrics for capturing value creation. As he adds, instead of only focusing on cost savings and their measurement, integration can also deliver value e.g. better quality, fewer disruptions within the supply chains, improved fill rates etc. Singh (2009) further adds that the selection of the right metrics is a difficult task, because metrics can be different across organisations</p>	<p>Overall, supply chain KPIs are used selectively to make the function look better, or simply not used at all</p>	<p>Within the case study organisation no supply chain metrics were utilised to track the progress of M&As. No value creation in the SC function was measured in the M&A context, and no cost savings were measured</p>
<i>E24: Accurately forecasting potential synergies and setting achievable goals</i>		
<p>According to Herd et al. (2005) numerous mergers fail because the projected savings were not delivered, or goals were not realistic</p>	<p>The great majority of interviewees confirmed that goals and promises made by the company's functional managers were not verified</p>	<p>No verification system is in place within the case study organisation</p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
Group 5: Time Aspect and Time Frames		
<i>B27: Short-termism in the context of mergers and acquisitions</i>		
<i>According to Singh (2009), short-termism in M&A initiatives and a desire to quickly cut costs without considering the possible impact of such actions on supply chains in the longer run is a mistake that is often repeated by organisations</i>	<i>The company overall did not introduce any quick cost-cutting activities upon acquisitions</i>	<i>Lack of integration of ERPs on the group level may seem like short-termism; however, apart from the capital investment required, a big part of the reason for non-integration of ERP was the perceived risk. Lack of warehouse automation is another example where the business tried to save money</i>
<i>E4: Leader nomination and creation of an SC team</i>		
<i>An important task facing a company board is to nominate an SC leader for M&As and decide upon an integration team (Herd et al., 2005)</i>	<i>A supply chain leader has never been nominated to ensure things were joined up</i>	<i>The company used to nominate a leader only for its procurement function, not a wider supply chain</i>
<i>B9: Missing time frames as to when supply chain savings ought to be delivered</i>		
<i>During the prioritisation activity, the responsible officials should specify time frames within which savings and value should be delivered, say Herd et al. (2005). This approach ensures there will be no unnecessary delays. Furthermore, Herd et al. (2005, p. 10) add that “the most successfully merged companies focus on maximising value creation in the first 100 days after COC”</i>	<i>No plans were being developed for the post-acquisition stage of the initiative specifically to support the supply chain objectives. Within one of the British subsidiaries, before COC, the previous owner ran a 100-day plan</i>	<i>The practice recommended by Herd et al. (2005) was not followed within the case study organisation. There were no time frames for when the value should have been delivered. There were no targets for supply chains in the M&A context</i>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>B3: Over-rushed supply chain system consolidation in an M&A context in the integration phase of the merger</i>		
<p><i>Singh (2009) believes that businesses often make a mistake by too quickly integrating and consolidating supply chain systems, which is not productive, and can be costly. Additionally, Wei and Clegg (2017, p. 3) posit that “the effects of integration speed on acquisition performance appear to be controversial”</i></p>	<p><i>The time frames to integrate inter-company systems were up to one year, but the organisation noticed that if there was an internal push from the acquired company, these were considerably reduced. The company did not push for a hasty system integration, and in fact developed an in-house system to let its acquired businesses operate on their old ERPs</i></p>	<p><i>It was not observed that the company was pushing for excessively fast integration of its systems</i></p>
<i>B10: Time pressure when conducting M&As renders supply chain matters unimportant</i>		
<p><i>According to Tompkins (2011) businesses realise with time that their supply chains do not function, and start seeking help late in the process. Organisations work to tight M&A deadlines; therefore, they initially ignore the SC area</i></p>	<p><i>M&A time frames might have been too tight, as confirmed by the interviewees</i></p>	<p><i>Although the organisation worked to tight deadlines, the impression amongst the participants was that even if they were more relaxed, it would not help the SC function as supply chains simply were not considered strategic enough to be on the M&A agenda</i></p>
Group 6: Pre-initiative Considerations & Due Diligence		
<i>B4: Very rarely is any consideration given to the potential impact of an M&A deal on merging supply chains pre-initiative</i>		
<p><i>As identified by James Langabeer and Seifert (2003) businesses very rarely consider the potential impact of the M&A transaction on their supply chains</i></p>	<p><i>The business never looked at the supply chain pre-acquisition</i></p>	<p><i>In line with the observation by James Langabeer and Seifert (2003), also within the company no potential impact of the M&A was considered prior to acquiring other organisations</i></p>
<i>B24: Negligence of the supply chain area through the negotiation phase of an M&A</i>		
<p><i>Jharkharia (2012) argues that the reason why post-M&A results are not satisfactory is that the SC function is forgotten during the deal negotiation phase of the M&A</i></p>	<p><i>Supply chain matters were not important at an early pre-acquisition stage, and no consideration was given to the strategic or operational match of the supply chains of the merging companies</i></p>	<p><i>The business would not look at the supply chain pre-acquisition</i></p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>B26: Exclusion of senior supply chain officials pre-initiative B12: Supply chain personnel not contributing to the pre-merger stage of the process</i>		
<i>Jharkharia (2012) says that no inclusion of SC professionals in the pre-merger stage of the M&A process is a mistake and presents a barrier to success of the initiative. Also, James Langabeer and Seifert (2003) believe that SC personnel do not contribute in the pre-merger stage of a deal</i>	<i>Supply chain people were only included in the post-acquisition phase of the deal, according to the group supply chain director</i>	<i>The company was making a mistake by not engaging its SC professionals early in the M&A process, i.e. pre-COC</i>
<i>B33: Little attention given to cultural and social issues in the M&A context E23: Corporate culture due diligence for M&As</i>		
<i>Steigenberger (2016) believes that in the case of the merger of Daimler with Chrysler, cultural aspects as well as social context were downplayed, and this contributed to the merger's failure. O'Reilly (2002) adds that corporate culture matters may look trivial, but in fact the merger's success may depend on them</i>	<i>Culture aspects were not of any importance during M&As, although some participants noticed that this contributed to the loss of talent, or could have potentially unnecessarily put the company at risk</i>	<i>The lack of appreciation of cultural aspects within the case study organisation was exactly what was observed by Steigenberger in 2016, and is a barrier to success in M&As</i>
<i>B23: Lack of involvement of IT executives in the pre-deal due diligence</i>		
<i>According to Bailey (2001), the IT function is not considered strategic and important enough to be included and decide about M&As in its pre-acquisition stages</i>	<i>"IT was the last department to be asked; they didn't know anything in advance", said the company's head of group data and IT applications</i>	<i>No IT director used to influence early pre-acquisition stages of M&As, which is in line with Bailey's (2001) reflection</i>
<i>B21: Absence of due diligence guidelines to support merging supply chains prior to M&A E2: Due diligence, better prioritisation and a more strategic approach</i>		
<i>Lack of due diligence guidelines and consideration to SCs negatively impacts later stages of M&As (James Langabeer & Seifert, 2003)</i>	<i>Within the case study organisation, the situation was that no pre-acquisition guidelines existed</i>	<i>Lack of guidelines, a barrier to good M&A performance within the company, resulted in lack of accountability and time frames</i>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<p style="text-align: center;"><i>B1: Pre-deal supply chain ignorance at the board level</i> <i>B15: Negligence of the supply chain area when sealing a final M&A deal</i> <i>B5: Lack of appreciation of supply chains during the planning stage by the board directors</i> <i>B29: Negligence of supply chains by the board during the integration phase</i></p>		
<p><i>Boards of directors of companies ignore supply chain function during the pre-COC stages of M&As and during the planning, say Herd et al. (2005). Jharkharia (2012) adds that supply chains are also omitted during the M&A deal conclusion, i.e. on COC</i></p>	<p><i>Supply chain matters were not important at an early pre-acquisition stage, and no consideration was given to the strategic or operational match of supply chains of the merging companies</i></p>	<p><i>Even if supply chain matters were discussed locally, this was not a formal process, and no written instructions were ever produced. Supply chain matters would not be discussed across the board</i></p>
<p>Group 7: Acquisition Planning & Assessment</p>		
<p style="text-align: center;"><i>B11: Businesses define the ultimate shape of supply chains without a road map showing how to get there</i> <i>B34: Lack of clarity in relation to order of tasks set for accomplishment and assigned responsibilities</i> <i>B16: Lack of clarity in relation to the officials accountable for integration efforts</i></p>		
<p><i>Singh (2009) contends that it is a common mistake for businesses to define a final state and shape of their merged supply chains, and then start to replace its systems and processes at the same time, risking unnecessary disruptions. Additionally, no midway steps are developed for how to get to the final and desired state (Singh, 2009)</i></p>	<p><i>No plans were developed for the post-acquisition stage of the initiative, specifically to support the supply chain objectives, not even locally</i></p>	<p><i>No objectives were set ahead for supply chains; therefore, there was no roadmap on how to achieve objectives. The case study organisation was yet another company to repeat the mistake referred to by Singh (2009)</i></p>
<p style="text-align: center;"><i>B31: Not enough attention given to the post-merger planning and supply chain assessment</i> <i>E15: Carrying out a post-merger evaluation of supply chains</i></p>		
<p><i>Singh (2009) reasons that businesses do not assess properly their supply chain capabilities post-merger, and usually limit themselves to the consolidation of transaction systems and systems supporting order taking</i></p>	<p><i>On the group level no supply chain assessment was conducted</i></p>	<p><i>No proper and formalised supply chain assessments were conducted within the company. Only locally, within certain subsidiaries, were some aspects checked in relation to stock, suppliers and pricing</i></p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>B8: Merger planning teams are not the same people who are responsible for the operational side of integration</i>		
<p><i>James Langabeer and Seifert (2003) noted that a significant flaw in the M&A process is that those who are responsible for the merger in the planning stage i.e. finance people and planning teams, are not those who oversee the merger's execution i.e. the supply chain and operations staff</i></p>	<p><i>Overall, within the company, planning and execution was detached; certain individuals planned, while others executed M&As</i></p>	<p><i>Although on the group level the planning and executing team were different people, locally in Poland those who planned, were also executing the plan, and performing certain post-acquisition supply chain assessments. This was not formal however, but just involved discussions on what could have been improved</i></p>
<i>B35: Organisations not planning for an inevitable disruption</i>		
<p><i>Some level of disruption should be planned for, thoroughly considered and acknowledged as a fact in the post-initiative phase of the process, says Singh (2009). However, Adams and Neely (2000) add that smart planning is in short supply during M&As</i></p>	<p><i>Even the good M&A performers did not plan for disruptions, which is in line with the literature review findings</i></p>	<p><i>Only certain aspects of planning were incorporated within one of the subsidiaries before the case study organisation acquired the business, but currently no plans were being developed</i></p>
Group 8: Post-acquisition Planning & Integration		
<i>E7: Bringing inherited disparate transaction systems together, rather than hastily integrating them</i>		
<p><i>Singh (2009) believes that instead of rushing and heavily investing in system consolidation after an M&A initiative, a better idea is to develop a shared database bringing the inherited systems together. As the author argues, modern databases offer tools that can do just that in a relatively short time frame. He also says that in a matter of weeks adequate reporting can be developed, cutting costs and time</i></p>	<p><i>The company developed an in-house system to bring its disparate systems together</i></p>	<p><i>The practice discussed by Singh (2009) was followed by the case study organisation. The system built in-house helped the business to cut cost, and quickly let the acquired businesses trade with their counterparts from within the group. The challenge was the data which ran through the system, i.e. bad quality in and therefore bad quality out</i></p>

Literature Review	Practice or Observation Within the Case Study Organisation	Differences
<i>E13: Communication of expectations and objectives during the integration and implementation phase of the process E5: Company-wide communication in relation to supply chain integration</i>		
Several authors discuss the need of sound communication during M&As. Cheng and Seeger (2012) advocate a communication of the performance expectations and clear objectives. Bertoncelej and Kovač (2007) say that no communication lowers staff morale, whereas proper communication improves the chances of M&A success	No communication was issued to the wider business about merging companies or supply chains, and no expectations were communicated	Only locally was some communication forwarded to functional managers directly responsible for integration, not to the entire business, nor even to all employees locally
<i>B20: Lack of understanding of IT integration costs to enable supply chain saving generation</i>		
Lazenby (2010) posits that up to 60% of post-M&A cost-saving initiatives highly depend on IT systems, and this is not acknowledged across many organisations. IT integration is crucial to realising SC savings, the author believes, yet executives do not really have a clear understanding of the impact of IT upon the deal	The company was only looking at the infrastructure and system integration, nothing beyond this. Nothing was done in relation to the assessment of IT systems to help supply chains in the case of acquisitions	Costs were only understood in the centre, but the local element was not understood by the HQ
<i>B13: High costs attached to the supply chain integration stop companies from launching integration projects</i>		
Businesses assume that proper supply chain network integration requires high capital investment; therefore, they are reluctant to engage in integration activities (O'Reilly, 2002). In effect, the author says, the delivered cost savings are less than expected, and synergies are not as significant	Numerous projects were either cancelled or postponed within the company due to perceived high costs. These included automation and the introduction of a common ERP system	At times, especially locally, the business would not even consider a project if costs were believed to be high. Such a project would not even be discussed
<i>B18: Considerable time investment deters companies from integrating supply chains</i>		
Within organisations there are numerous optimisation opportunities in the SC area, but organisations are either ignorant of these or are put off by the required time investment to suitably optimise their supply chains (O'Reilly, 2002)	Long supply chain project time frames did not discourage the organisation from pursuing its important SC initiatives	Although SC projects were suspended within the company, this was not due to the required time investment

Table 44: Theoretical and Empirical Findings with Differences

6. Conclusion

6.1. Introduction

In the final chapter, there will be a discussion in relation to the aims and objectives of the study and how they were met, and subsequently the research questions will be answered. Then, in the following sections, the originality and contribution to knowledge will be debated, followed by consideration of the limitations of the study and recommendations for further research. Lastly, the thesis will be concluded with a final word, the last section of the chapter.

In the course of the interviews, and documentation revision, it was acknowledged that the case study organisation strictly conducted acquisitions, with no single merger conducted along the way. This is in line with the literature review finding, when, as early as the '90s, Anderson and Narus (1990) observed that organisations would acquire smaller, often family-owned companies. Therefore, the industrial MRO distribution sector, and the case study organisation, proved to be the right choice and provided a good vehicle to test the level 2 gap in theory. This allowed the researcher to meet the study's aims and objectives, and answer the research questions.

6.2. Meeting the Research Aims and Objectives

The aims of the research were to establish the degree and form of considerations given to the supply chains in pre-initiative stages of horizontal acquisitions as well as to explore the practices embraced by organisations in post-initiative stages of horizontal acquisitions in relation to supply chain functions of their businesses within the industrial MRO distribution market. In order to successfully meet the research aims, five objectives were addressed, as discussed in the following paragraphs of the section.

Objective (a)

The first objective was to undertake a literature review to look at current practices and approaches when it comes to supply chain due diligence and planning in the pre-M&A stage of the process. This objective specifically focused on the pre-initiative stage of

the horizontal acquisitions. In order to recognise as many practices and processes as possible, all the relevant publications were reviewed, whether from the industrial MRO market sector or beyond, including business and industry experts' publications.

Objective (b)

The second objective was to undertake a literature review to look at current practices and approaches to post-acquisition supply chain management during horizontal M&As. Similar to the previous objective, the author of the research reviewed a plethora of sources from the established scientific journals as well as renowned industry experts. Again, the author went beyond the industrial MRO distribution sector to collect as much information about the post-acquisition practices as possible.

Objective (c)

The third objective was to identify and critically analyse current issues, including barriers, associated with supply chain practices for M&A initiatives throughout the whole process. In reference to this objective, 36 barriers to successful completion of M&As were identified, which greatly supported the creation of the interview questions.

Objective (d)

The fourth objective was to explore and evaluate how and why these barriers exist and what can be done to overcome them, including an assessment of enablers. The outcome of the exercise was that 24 enablers were identified that potentially can assist scholars, consultants and business people with better M&A process execution, especially from the supply chain's perspective.

Objective (e)

The fifth objective was to synthesise a comparative set of outcomes from the theoretical and empirical research, highlighting differences between the practice and theory. A table with the theoretical and empirical findings was created at the end of the discussion chapter (point 5.9), and the differences between the theoretical recommendations and the practice within the case study organisation were emphasised.

6.3. Answering the Research Questions

In relation to the first research question i.e. are business leaders from the industrial MRO distribution market considering and scrutinising supply chain arrangements and processes of target companies before COC during horizontal acquisitions, and if so to what extent, several areas were investigated, and numerous aspects identified. The main points are recapitulated below:

- In general, the supply chain personnel were aware of the value they might have brought to the M&A table, except for the less experienced SC staff.
- The company did not seek external help, either consultants or industry experts to aid their pre-M&A activities, which contributed to the poorly executed acquisitions.
- CEOs were not believed to be unnecessarily overstressing capabilities of companies they managed, riskily acquiring other businesses in order to benefit personally.
- In line with the literature review findings, also within the case study organisation the supply chain matters were either never considered prior to acquiring other businesses or they were not high on the agenda during the pre-acquisition discussions. Only locally, across subsidiaries, were discussions held in relation to SC aspects of deals, but these were not formal processes, and no formal documents were ever produced.
- The company's board of directors had no expectations of its SC executives ahead of acquisitions; they were not asked to form part of a due diligence team.
- In the pre-initiative stage of the M&A process, no procurement or supply chain leader was nominated to represent the SC function.
- The IT department was not included in the pre-acquisition due diligence team.
- The company had not considered the potential impact of acquisition on its supply chains.
- Culture aspects were not considered in the pre-acquisition stage of M&As.
- No supply chain guidelines were utilised at an early M&A stage.
- No IT assessments were conducted in the pre-acquisition stage of M&As of target companies.

- Locally, with good results, the company trained employees of a target company in how to use its ERP system a month before COC, which greatly simplified the transition process.

As a summary of the above points, in relation to the pre-initiative stage of M&As, the company showed an overall attitude that they understood the industry well enough, which was a mistake. This led to the belief that the business was able to put some supply chain infrastructure in place for every acquisition post-initiative, which resulted in the leadership team not turning its attention to supply chain matters at an early M&A stage. This was acknowledged by the company's senior managers and directors, and verified when triangulating and reviewing the company's acquisition planning checklists, as discussed in the previous chapters.

As concerns the second research question, i.e. what actions are taken, and practices embraced by organisations from the industrial MRO distribution market in the post-acquisition stages of horizontal acquisitions in relation to supply chain areas of their newly enlarged enterprises, the matters presented below were explored:

- Procurement processes were aligned across Europe; however, no written instructions or policies existed in this regard.
- The supply chain strategy was not aligned to the company's competitive or business strategies.
- There was no focus on supply chains within the IT strategy.
- Although the company was aware of the connectivity risks with the outside world, (data sharing with the use of the new technology) it did not stop it from sharing data with its partners.
- On the local level, across subsidiaries, the business would engage the acquired company more actively if the reason behind the purchase was to acquire knowledge and skill. This was not the case if the reason behind the acquisition was simply to grow the market.
- No joint supply chain teams were created to work together on the M&A integration aspects (unless locally across subsidiaries, and in the distant past).
- The case study organisation never had any SC targets to be achieved in the post-initiative stage of the process.

- On the group level, no supply chain metrics were utilised to track the progress of integration, and no M&A cost savings or value creation were measured.
- Due to the fact that there were no specific goals for SCs ahead of acquisitions, there were no verification systems in place to ensure goals were both challenging, but achievable.
- Overall, the company did not try to integrate new acquisitions too quickly.
- Further extension of M&A time frames would not help the SC function of the enlarged business; SCs were simply not high up on the M&A agenda in order for it to make any difference.
- A procurement leader to support M&As was appointed; however, only to support the post-acquisition stage of M&As.
- No supply chain leader nomination took place in the post-COC phase of acquisitions.
- There was no SC executive on the company's board to promote the supply chains.
- No external consultants were used at any M&A stage to look at and support SC integration.
- No supply chain guidelines were utilised by the company in the post-acquisition stage of the process.
- There was no accountability within the business; the employees were never challenged in relation to tasks they were responsible for.
- Due to the fact there were no targets for SCs in the M&A context, no roadmaps were produced in relation to how to achieve objectives.
- In general, across the business, those who planned acquisitions were not responsible for the plan execution. Only locally in Poland did those who made the plans also supervise their execution.
- No supply chain assessments were conducted in the post-acquisition stage of the process; there was no mapping out of processes, only some limited operations on the local level.
- In relation to the system integration and connection of newly acquired companies, the business merely did what was necessary to make things work and deliver some sort of connection between the systems.
- The company managed to develop a way of quickly connecting the new acquisitions; however, the process was not always fully or properly executed.

- In order to save money and avoid risk, the company did not decide to integrate its ERP systems into one pan-European solution.
- On the local level, in general, the company enrolled one system across the market, with a few exceptions.
- The company developed in-house systems to more quickly connect new acquisitions without the need for hasty and costly integration.
- M&A communication on the group level was non-existent. Very limited communication was issued to functional managers on the local level.

In relation to the second research question, the company made numerous mistakes similar to those identified in the literature review chapter. On the other hand, the business managed to cut the costs of acquisition integration, and leveraged its procurement processes early in the process. It emerged that as long as acquisitions were conducted on the local level, more thorough processes were followed and in general, the acquisitions tended to be more successful.

6.4. Originality and Contribution to Knowledge

This study contributed to the development of knowledge in several ways. Fifteen interviews were conducted with employees of one of the leading European industrial MRO distributors. This allowed the author to develop a judgement in relation to the current practices within the case study organisation in the pre-initiative and post-acquisition stages of horizontal acquisitions. To this date only a very limited body of research exists in relation to supply chain practices during horizontal acquisitions within the industrial MRO market sector. Also, a comprehensive theoretical framework was produced which further added to the body of knowledge in the M&A area, and which can assist scholars as well as business practitioners and industry experts with M&A initiative execution. Finally, a summary table was developed with theoretical and empirical findings, and the differences between the theory and the practice were highlighted.

6.5. Limitations of the Study

As with every research project, this one also had certain limitations as listed below:

- a) the study focused on horizontal acquisitions within the industrial MRO distribution market sector. The main limitation of the research is that the findings cannot be generalised to other industries or even organisations from the industrial MRO market, and they may be context-specific,
- b) due to the time scales of the research, only 15 participants from the company's head office, and from three regions, the UK, Poland and Spain, were interviewed. Although this proved enough to deliver a desired outcome, a greater number of participants and from other countries could have further enriched the study,
- c) another limiting factor was that certain key employees who were responsible for the company's M&As left the business before the data collection stage commenced and were not included in the study. Although those who left were not directly responsible for SC matters of M&As, they might have possessed greater knowledge than other participants in relation to the selection of target companies,
- d) some interviews were conducted in another language, not English, and subsequently translated into English. Although great care was given to ensure the accuracy of the translation, it posed a limitation to the study,
- e) a limited number of interviews were conducted with participants whose first language was not English. On a few occasions, the interviewees found it hard to express their thoughts and observations in English, supporting themselves with simpler, but also less accurate language.

6.6. Recommendations for Further Research

Although, this study strictly focused on horizontal acquisitions within the industrial MRO distribution market sector, it still opened up several areas for further research. In the course of the study, the case study organisation was acquired by a cash-rich private equity firm. The initial feedback from the senior members of the organisation was that the private equity firm had sturdier and sounder M&A processes for integrating acquisitions, including supply chain functions. In fact, a similar observation, but in a broader management concept, was noticed by Bloom, Sadun, and Van Reenen (2015, p. 442), who found that companies owned by private equity groups were “typically well managed”, and their management practices were often significantly better “than almost all other ownership groups”. For this reason, it is recommended to conduct a similar study focusing on private equity firms that acquire

industrial MRO distributors, and merge them with other distributors from their portfolios. A future goal would be to identify supply chain management practices recommended or imposed on executives by private equity firms during mergers of their portfolio companies.

Hameri and Weiss (2017) investigated the effect of acquisitions on inventory performance. The authors proposed further research in relation to “the factors affecting pre- and post-acquisition operational performance” (Hameri & Weiss, 2017, p. 308), which this study to an extent addressed. It is a recommendation for further research to also look at other companies from the industry and investigate practices and approaches for managing supply chains during M&As embraced by different organisations.

In relation to a more context-specific finding, and potentially a good way for improving M&A process, a pre-acquisition ERP integration practice observed within one of the subsidiaries of the case study organisation is recommended for further research. The mentioned subsidiary trained a target company’s employees in how to use its ERP system before COC. Although, this can be very sensitive and risky in certain circumstances, e.g. if price negotiations are underway, or there is no formal approval from authorities, it still can have some validity. As noted by M. Myers and Vangerow (2008, p. 506) “the integration of different information systems is one of the most critical challenges that companies face during the whole post-merger integration” effort. Therefore, if there is anything that a company can do in a pre-acquisition stage of M&A with its IT systems to ease post-acquisition integration, it is worth investigating. For this reason, the observed practices of engaging target company employees before COC is an area recommended for further research.

In a study by Zhao et al. (2015) under certain circumstances over-integration (or under-integration) of supply chains can adversely affect a company’s financial performance. Business system consolidation and far-reaching integration of warehouse networks can prove very costly in the future in case of divestment. The area is also recommended for further research.

6.7. Final Word

As revealed in the research, within the case study organisation there was a very informal approach to supply chain practices during horizontal acquisitions, whether pre- or post-acquisition. Although the post-acquisition stage of M&As was given some level of focus, hardly any consideration was given to the supply chains in the pre-acquisition stage of the process. A major reason for concern was the lack of nomination of an SC leader for M&As whose job would be to promote SCs during the proceedings, create an SC team, and develop targets, guidelines and roadmaps. These things had not been done within the case study organisation, greatly impacting the post-acquisition practices in relation to the SC function of the enlarging business. It is believed that the research will add to the body of knowledge around M&As and especially horizontal acquisitions, will show directions for future research, and will assist scholars, business practitioners, and industry experts with their future M&A endeavours.

References

- Adams, C., & Neely, A. (2000). The performance prism to boost M&A success. *Measuring Business Excellence*, 4(3), 19-23. doi:10.1108/13683040010377818
- Ahi, P., & Searcy, C. (2013). A comparative literature analysis of definitions for green and sustainable supply chain management. *Journal of Cleaner Production*, 52, 329-341. doi:10.1016/j.jclepro.2013.02.018
- Aiello, J. R., & Watkins, D. M. (2000). The fine art of friendly acquisition. *Harvard Business Review*, November-December 2000.
- Aktas, N., De Bodt, E., & Roll, R. (2013). Learning from repetitive acquisitions: evidence from the time between deals. *Journal of Financial Economics*, 108(1, (4)), 99-117.
- Alexandrou, G., Gounopoulos, D., & Thomas, H. M. (2014). Mergers and acquisitions in shipping. *Transportation Research Part E: Logistics and Transportation Review*, 61(0), 212-234. doi:10.1016/j.tre.2013.11.007
- Alhenawi, Y., & Krishnaswami, S. (2015). Long-term impact of merger synergies on performance and value. *The Quarterly Review of Economics and Finance*. doi:10.1016/j.qref.2015.01.006
- Almor, T., Tarba, S. Y., & Benjamini, H. (2009). Unmasking integration challenges: the case of Biogal's acquisition by Teva Pharmaceutical Industries. *International Studies of Management & Organization*, 39(3), 32-52. doi:10.2753/IMO0020-8825390302
- Ambrosini, V., Bowman, C., & Schoenberg, R. (2011). Should acquiring firms pursue more than one value creation strategy? An empirical test of acquisition performance. *British Journal of Management*, 22(1), 173-185.
- Anderson, J. C., & Narus, J. A. (1984). A model of the distributor's perspective of distributor-manufacturer working relationships. *Journal of Marketing*, 48(4), 62-74. doi:10.2307/1251511
- Anderson, J. C., & Narus, J. A. (1990). A model of distributor firm and manufacturer firm working partnerships. *Journal of Marketing*, 54(1), 42-58. doi:10.2307/1252172
- Andreou, P. C., Louca, C., & Panayides, P. M. (2012). Valuation effects of mergers and acquisitions in freight transportation. *Transportation Research Part E: Logistics and Transportation Review*, 48(6), 1221-1234. doi:10.1016/j.tre.2012.06.006p
- Andriuškevičius, K. (2015). Opportunities and challenges of value creation through merger and acquisitions in cyclical economies. *Procedia - Social and Behavioral Sciences*, 213, 764-769. doi:10.1016/j.sbspro.2015.11.471
- Angwin, D. (2004). Speed in M&A integration: the first 100 days. *European Management Journal*, 22(4), 418-430. doi.org/10.1016/j.emj.2004.06.005
- Applied. (2016). Applied industrial technologies history. Retrieved 12 January, 2016, from http://web.applied.com/?page_id=1543.
- Arango, T. (2010). How the AOL-Time Warner merger went so wrong. *The New York Times*. Retrieved 18 March, 2015, from <http://nytimes.com/2010/01/11/business>

- Arksey, H., & Knight, P. T. (1999). *Interviewing for social scientists: an introductory resource with examples*: SAGE Publications.
- Armour, E. (2002). How boards can improve the odds of M&A success. *Strategy & Leadership*, 30(2), 13-20. doi:10.1108/10878570210422102
- Azhar, S., Shen, R., & Gus, T. (2015). CMA CGM cements world shipping status with \$2.4 bn NOL deal. *Reuters*. Retrieved 7 December, 2015, from <http://www.reuters.com>
- Bailey, K. (2001). Taking a byte out of M&A failure. *CMA Management*, 75(3), 16-19.
- Baird, R. W. (2013). Industrial distribution; industry update. *M&A Market Analysis*, Summer 2013.
- Banomyong, R., & Supatn, N. (2011). Developing a supply chain performance tool for SMEs in Thailand. *Supply Chain Management: An International Journal*, 16(1), 20-31. doi:10.1108/13598541111103476
- Bauer, F., & Matzler, K. (2014). Antecedents of M&A success: the role of strategic complementarity, cultural fit, and degree and speed of integration. *Strategic Management Journal*, 35, 269-291.
- Bauer, F., Matzler, K., & Wolf, S. (2014). M&A and innovation: the role of integration and cultural differences. A central European targets perspective. *International Business Review*. doi:10.1016/j.ibusrev.2014.07.010
- Becker-Ritterspach, F., & Bruche, G. (2012). Capability creation and internationalization with business group embeddedness - the case of Tata Motors in passenger cars. *European Management Journal*, 30(3), 232-247.
- Beladi, H., Chakrabarti, A., & Marjit, S. (2013). Cross-border mergers in vertically related industries. *European Economic Review*, 59, 97-108. doi:10.1016/j.euroecorev.2013.01.001
- Bertoncelj, A., & Kovač, D. (2007). An integrated approach for a higher success rate in mergers and acquisitions. *Journal of Economics and Business*, 25(1), 167-188.
- Bhardwaj, S., & Mitra, A. (2010). Alignment of supply chain strategy with business strategy. *The IUP Journal of Supply Chain Management*, VII(3), 49-65.
- Bhattacharyya, S., & Nain, A. (2011). Horizontal acquisitions and buying power: a product market analysis. *Journal of Financial Economics*, 99(1), 97-115. doi:10.1016/j.jfineco.2010.08.007
- Blas, J., & Katakey, R. (2015). Shell will buy BG Group for \$70 billion in cash, shares. Retrieved 8 April, 2015, from <http://bloomberg.com/news/articles/2015-04-08/shell-will-buy-bg-group-for-70-billion-in-cash-and-shares>
- Bloom, N., Sadun, R., & Van Reenen, J. (2015). Do private equity owned firms have better management practices? *American Economic Review*, 105(5), 442-446. doi:10.1257/aer.p20151000
- Bomey, N. (2016). Shell completes \$53B deal for BG Group. *USA Today*. Retrieved 15 February, 2016, from <https://usatoday.com/story/money/2016/02/15/royal-dutch-shell-bg-group/80403694>

- Boodhoo, A., Varadarajan, G., Morton, J., Mathew, S., Raghavendra, V., Tennant, M., & Woodcock, P. (2017). Supply chain integration and optimization: the keys to realizing deal value. *Supply Chain [Quarterly]*(2).
- Braithwaite, A. (2016). Analysis: Staples gets EU approval to acquire Office Depot. Retrieved 5 April, 2016, from <http://opi.net/financial/mergers-acquisitions/analysis-staples-gets-eu-approval-to-acquire-office-depot>
- Brammer. (2011). Brammer Plc acquires Buck and Hickman. Retrieved 7 March, 2016, from http://brammer.biz/News/Brammer_plc_Acquires_Buck_and_Hickman.pdf
- Brammer. (2013). Corporate factsheet. Retrieved 13 October, 2015, from <http://investor.brammer.biz/wp-content/uploads/2013/10/Corporate-fact-sheet-final2013>
- Brammer. (2015). Growing Brammer's capabilities to offer customers more services: the key behind Brammer's 15 acquisitions in 18 months. Retrieved 23 March, 2016, from <http://blog.brammer.biz/growing-brammers-capabilities-to-offer-customers-more-services-the-key-behind-brammers-15-acquisitions-in-18-months>
- Brammer. (2016). Brammer Plc. Retrieved 5 March, 2016, from <http://brammer.biz>
- Breidenbach, S. (2000). Managing mergers. *Network World*, 17(23), 68-74.
- Buck&Hickman. (2016). Company information. Retrieved 15 June, 2016, from <https://buckandhickman.com/company-information/company-profile>
- Bunge, J., Benoit, D., & Dulaney, C. (2015). DuPont, Dow Chemical agree to merge, then break up into three companies. *The Wall Street Journal*.
- Burrows, D. (2014). 10 biggest mergers and acquisitions of 2014. Retrieved 22 December, 2015, from <http://investorplace.com/2014/12>
- Bush, J. (2012). Amazon Supply launches - new competition for industrial distributors, Ariba, SciQuest and others. Retrieved 10 January, 2016, from <http://spendmatters.com/2012/04/24/amazon-supply-launches-industrial-distributors-ariba-sciquest-etc-should-plan-for-competition>
- Businesswire. (2006). MSC Industrial Direct Co., Inc. announces completion of acquisition of J&L Industrial Supply. Retrieved 9 January, 2016, from <http://businesswire.com/news/home/20060608005721/en>
- Byrne, P. M. (2007). Unleashing supply chain value in mergers and acquisitions. *Logistics Management*. Peerless Media. Retrieved 15 February, 2016, from <https://highbeam.com/doc/1G1-157945581.html>
- Caiazza, R., & Volpe, T. (2015). M&A process: a literature review and research agenda. *Business Process Management Journal*, 21(1), 205-220. doi:10.1108/BPMJ-11-2013-0145
- Calipha, R., Tarba, S., & Brock, D. (2010). Mergers and acquisitions: a review of phases, motives, and success factors advances in mergers and acquisitions (Vol. 9, pp. 1-24): Emerald Group Publishing Limited.

- Carpenter, G., & Wyman, O. (2008). M&A beyond borders: opportunities and risks. Retrieved 12 July, 2016, from http://graphics.eiu.com/upload/eb/marsh_cross_border_report.pdf
- Cartwright, S., & Schoenberg, R. (2006). Thirty years of mergers and acquisitions research: recent advances and future opportunities. *British Journal of Management*, 17(S1), S1-S5. doi:10.1111/j.1467-8551.2006.00475.x
- Cefis, E., & Marsili, O. (2015). Crossing the innovation threshold through mergers and acquisitions. *Research Policy*, 44(3), 698-710. doi:10.1016/j.respol.2014.10.010
- Chen, C., & Findlay, C. (2003). A review of cross-border mergers and acquisitions in APEC. *Asian-Pacific Economic Literature*, 17(2), 14-38.
- Cheng, S. S., & Seeger, M. W. (2012). Cultural differences and communication issues in international mergers and acquisitions: a case study of BenQ Debacle. *International Journal of Business and Social Science*, 3(3), 116-127.
- Cho, S.-H. (2014). Horizontal mergers in multitier decentralized supply chains. *Management Science*, 60(2), 356-379. doi:10.1287/mnsc.2013.1762
- Christopher, M. (1992). Logistics and supply chain management: strategies for reducing costs and improving services: *Financial Times*.
- Chua, A. Y. K., & Goh, D. H. (2009). Why the whole is less than the sum of its parts: examining knowledge management in acquisitions. *International Journal of Information Management*, 29(1), 78-86. doi:10.1016/j.ijinfomgt.2008.04.010
- Cleanlink. (2014). Motion receives PepsiCo. MRO supplier of the year award. Retrieved 14 October, 2015, from <http://cleanlink.com/news/article/Motion-Receives-PepsiCo-MRO-Supplier-of-the-Year-Award--16828>
- Collis, J., & Hussey, R. (2014). Business research: a practical guide for undergraduate and postgraduate students: Palgrave Macmillan.
- Colombo, M. G., & Rabbiosi, L. (2014). Technological similarity, post-acquisition R&D reorganization, and innovation performance in horizontal acquisitions. *Research Policy*, 43(6), 1039-1054. doi:10.1016/j.respol.2014.01.013
- Connors, W., & Kent, S. (2016). Shell completes acquisition of BG Group, giving energy giant a large footprint in Brazil. *The Wall Street Journal*.
- Coolican, H. (2014). Research methods and statistics in psychology: Taylor & Francis.
- Cooper, M. C., Lambert, D. M., & Pagh, J. D. (1997). Supply chain management: more than a new name for logistics. *The International Journal of Logistics Management*, 8(1), 1-14. doi:10.1108/09574099710805556
- Creswell, J. W. (2007). Qualitative inquiry and research design: choosing among five approaches: SAGE Publications.
- Croxton, K. L., García-Dastugue, S. J., Lambert, D. M., & Rogers, D. S. (2001). The supply chain management processes. *The International Journal of Logistics Management*, 12(2), 13-36. doi:10.1108/09574090110806271
- Dao, M. A., Bauer, F., Strobl, A., Matzler, K., & Eulerich, M. (2016). The complementing and facilitating nature of common ground in acquisitions - why task

and human integration are still necessary in the presence of common ground. *The International Journal of Human Resource Management*, 1-29. doi:10.1080/09585192.2016.1173084

Dauber, D. (2012). Opposing positions in M&A research: culture, integration and performance. *Cross Cultural Management: An International Journal*, 19(3), 375-398. doi:10.1108/13527601211247107

Degbey, W. Y. (2015). Customer retention: a source of value for serial acquirers. *Industrial Marketing Management*, 46(0), 11-23. doi:10.1016/j.indmarman.2015.01.002

Deng, P., & Yang, M. (2015). Cross-border mergers and acquisitions by emerging market firms: a comparative investigation. *International Business Review*, 24(1), 157-172. doi:10.1016/j.ibusrev.2014.07.005

Dent, J. (2011). *Distribution channels: understanding and managing channels to market*: Kogan Page.

Dhar, R. L. (2008). *Strategic human resource management*: Excel Books.

Du, K., & Sim, N. (2015). Mergers, acquisitions, and bank efficiency: cross-country evidence from emerging markets. *Research in International Business and Finance*. doi:10.1016/j.ribaf.2015.10.005

Dulaney, C. (2015). W.W. Grainger to buy Cromwell Group, expanding abroad. *The Wall Street Journal*.

Dung, V. A., & Thanh, T. C. (2012). Realizing the critical of supply chain integration in mergers & acquisitions: from theoretical perspectives to reality. *Paper presented at the International conference: Sustainable Manufacturing and Environment Management*, 2012.

Duris, R. (2002). A matter of trust: want to know why your supply chain systems aren't working? Hint: it's not a technology problem. *Frontline Solutions*, 3(1), 50.

Dutordoir, M., Roosenboom, P., & Vasconcelos, M. (2014). Synergy disclosures in mergers and acquisitions. *International Review of Financial Analysis*, 31, 88-100. doi:10.1016/j.irfa.2013.09.005

Edgar.secdatabase. (2014). MSC Industrial Direct Co., Inc. declares 21% increase in regular quarterly dividend. Retrieved 10 January, 2016, from <http://edgar.secdatabase.com/1023/114420414062384/filing-main.htm>

Edwards, A., & Skinner, J. (2010). *Qualitative research in sport management*: Taylor & Francis.

Electrocomponents. (2014a). Business overview. Retrieved 16 September, 2014, from Electrocomponents.com

Electrocomponents. (2014b). History. Retrieved 4 January, 2016, from <http://electrocomponents.com/about-us/history>

Encyclopedia. (2006). Fastenal company. Retrieved 5 January, 2015, from http://encyclopedia.com/topic/fastenal_company.aspx#1

- Epstein, M. J. (2005). The determinants and evaluation of merger success. *Business Horizons*, 48(1), 37-46. doi:10.1016/j.bushor.2004.10.001
- Eriebearings. (2014). Industrial distribution overview. Retrieved 23 January, 2015, from <http://eriebearings.com/careers/industrial-distribution>
- Eriks. (2011). Eriks grows in USA with two new acquisitions. Retrieved 25 November, 2016, from <http://eriks.co.uk>
- Eriks. (2015). Company profile 2014. Retrieved 6 January, 2016, from <http://eriks.com/eriks/en/mediacenter/annualreport/companyprofile2014-engopt.pdf>
- Ewwweb. (2003). Fastenal sells DIY business. Retrieved 6 January, 2016, from <http://ewweb.com/mergers-amp-acquisitions/fastenal-sells-diy-business>
- Fabbe-Costes, N., & Jahre, M. (2008). Supply chain integration and performance: a review of the evidence. *The International Journal of Logistics Management*, 19(2), 130-154. doi:10.1108/09574090810895933
- Fastenal. (2015). 2014 Annual report. Retrieved 5 January, 2016, from <http://files.shareholder.com>
- Fastenal. (2015). Fastenal to acquire regional distributor. Retrieved 5 January, 2016, from <http://investor.fastenal.com>
- Fastener-world. (2015). Würth Group acquires Des Moines Bolt. Retrieved 21 December, 2015, from http://fastener-world.com.tw/new/news_detail.php?id=4281
- Federgruen, A., & Pierson, M. P. (2011). The impact of horizontal merger and acquisitions in price competition models. 1-17. doi:10.2139/ssrn.2405550
- Feller, A., Shunk, D., & Callarman, T. (2006). Value chains versus supply chains. *BPTrends* (March 2006).
- Figueiredo, R. (2013). Communicating with employees during mergers and acquisitions: how is the use of the authentic communication principles associated with employee outcomes? Retrieved 11 July, 2016, from <http://integrationconsulting.com>
- Finley, F., & Bonno, J. (2012). M&As offer big opportunity for supply chain leaders. *Supply Chain Management Review*, 16(3), 44-50.
- Fontanella-Khan, J. F. S. (2015). Staples to buy Office Depot for \$6.3bn. *Financial Times*. Retrieved 4 February, 2015, from <http://ft.com/cms/s/0/a002d0bc-ac74-11e4-9aaa-00144feab7de.html#axzz3S2u7tfDI>
- Forrester, W. J. (1958). Industrial dynamics: a major breakthrough for decision makers. *Harvard Business Review*, July-August 1958.
- Frazier, G. L. (1999). Organizing and managing channels of distribution. *Journal of the Academy of Marketing Science*, 27(2), 226-240. doi:10.1177/0092070399272007
- Frohlich, M. T., & Westbrook, R. (2001). Arcs of integration: an international study of supply chain strategies. *Journal of Operations Management*, 19(2), 185-200. doi:10.1016/S0272-6963(00)00055-3
- Fundinguniverse. (2003). Adolf Würth GmbH & Co. KG history. Retrieved 21 December, 2015, from <http://fundinguniverse.com/company-histories>

- Gale, T. P. (2017). Brammer and IPH to merge in major European deal. *Modern Distribution Management*. Retrieved 15 July, 2017, from <https://mdm.com/blogs/6-mergers-acquisitions/post/37298-brammer-and-iph-to-merge-in-major-european-deal>
- Ghosh, S. (1998). Making business sense of the internet. *Harvard Business Review*, March-April, 126-135.
- Ghosh, S., & Dutta, S. (2014). Mergers and acquisitions: a strategic tool for restructuring in the Indian telecom sector. *Procedia Economics and Finance*, 11(0), 396-409. doi:10.1016/S2212-5671(14)00207-X
- Giacomazzi, F., Panella, C., Pernici, B., & Sansoni, M. (1997). Information systems integration in mergers and acquisitions: a normative model. *Information & Management*, 32(6), 289-302. doi:10.1016/S0378-7206(97)00031-1
- Gill, J., & Johnson, P. (2010). *Research methods for managers*: SAGE Publications.
- Goenka, H. (2016). Global M&A activity in 2015 worth \$4.28 trillion, highest ever. *International Business Times*. Retrieved 12 February, 2016, from <http://ibtimes.com/global-ma-activity-2015-worth-428-trillion-highest-ever-2256183>
- Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21(2), 135-146. doi:10.1057/ejis.2011.54
- Grainger. (2009). Grainger announces acquisition of Imperial Supplies, LLC. Retrieved 24 August, 2015, from <http://pressroom.grainger.com>
- Grainger. (2010). Grainger announces acquisition of SafetyCertified. Retrieved 23 December, 2015, from <http://pressroom.grainger.com>
- Grainger. (2011). Grainger completes acquisition of Fabory Group. Retrieved 19 October, 2015, from <http://pressroom.grainger.com/phoenix.zhtml?c=194987&p=irol-newsArticle&ID=1602194>
- Grainger. (2012). Grainger enters Brazil through the acquisition of AnFreixo, a Votorantim Company. Retrieved 23 December, 2015, from <http://invest.grainger.com>
- Grainger. (2013). Grainger acquires E&R Industrial Sales, Inc. Retrieved 28 May, 2016, from <http://pressroom.grainger.com>
- Grainger. (2013). Grainger announces acquisition of Safety Solutions Incorporated. Retrieved 18 June, 2016, from <http://invest.grainger.com>
- Grainger. (2015). 2015 fact book. Retrieved 3 March, 2016, from <http://phx.corporate-ir.net>
- Grainger. (2015a). 2015 fact book. Retrieved 22 December, 2015, from <http://phx.corporate-ir.net>
- Grainger. (2015b). November 2015 standard presentation. Retrieved 22 December, 2015, from <http://phx.corporate-ir.net>
- Grainger. (2015c). Welcome to Grainger investor relations. Retrieved 16 January, 2016, from <http://phx.corporate-ir.net>

- Grainger. (2016). Grainger history. Retrieved 21 December, 2015, from <http://pressroom.grainger.com/phoenix.zhtml?c=194987&p=irol-corporatetimeline>
- Grant, J., & Neven, D. J. (2005). The attempted merger between General Electric and Honeywell: a case study of transatlantic conflict. Retrieved 12 March, 2016, from <http://ec.europa.eu/dgs/competition/economist/honeywell.pdf>
- Guan, W., & Rehme, J. (2012). Vertical integration in supply chains: driving forces and consequences for a manufacturer's downstream integration. *Supply Chain Management: An International Journal*, 17(2), 187-201. doi:10.1108/13598541211212915
- Guba, G. E., & Lincoln, S. Y. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.): Thousand Oaks, CA: Sage.
- Gutierrez Gonzalez, E., Aguilar Fernandez, M., & Cordoba Lobo, V. M. (2012). A Lean manufacturing model for reducing dead time on a labels production line. *International Journal of Emerging Technology and Advanced Engineering*, 2(11), 1-7.
- Hair, J. F., Celsi, M. W., Money, A. H., Samouel, P., & Page, M. J. (2015). *Essentials of business research methods*: Routledge.
- Häkkinen, L., Norrman, A., Hilmola, O. P., & Ojala, L. (2004). Logistics integration in horizontal mergers and acquisitions. *The International Journal of Logistics Management*, 15(1), 27-42. doi:10.1108/09574090410700211
- Hameri, A.-P., & Weiss, L. A. (2017). The impact of acquisitions on inventory performance. *Journal of Advances in Management Research*, 14(3), 288-312. doi:10.1108/JAMR-05-2016-0033
- Harrell, H., & Higgins, L. (2002). IS integration: your most critical M&A challenge? *Journal of Corporate Accounting & Finance*, 13(2), 23-31. doi:10.1002/jcaf.1220
- Harrigan, K. R. (1985). Vertical integration and corporate strategy. *The Academy of Management Journal*, 28(2), 397-425.
- Hartley, L. (2014). M&A supply chain integration: an Office Depot, Inc. case study [Webinar].
- Hedman, J., & Sarker, S. (2015). Information system integration in mergers and acquisitions: research ahead. *European Journal of Information Systems*, 24(2), 117-120. doi:10.1057/ejis.2015.2
- Herd, T., Saksena, A. K., & Steger, T. W. (2005). How supply chains drive M&A success. *Harvard Business School Publishing*, 1(8), 9-11.
- Hitt, M. A., King, D., Krishnan, H., Makri, M., Schijven, M., Shimizu, K., & Zhu, H. (2009). Mergers and acquisitions: overcoming pitfalls, building synergy, and creating value. *Business Horizons*, 52(6), 523-529. doi:10.1016/j.bushor.2009.06.008
- Holweg, M., & Helo, P. (2014). Defining value chain architectures: linking strategic value creation to operational supply chain design. *International Journal of Production Economics*, 147, Part B(0), 230-238. doi:10.1016/j.ijpe.2013.06.015
- Hope, K. (2014). When firms get together: the secret of success. Retrieved 19 September, 2015, from <http://bbc.co.uk/news/business-27204716>

- Hsu, J., & Chen, E. T. (2006). The impact of mergers and acquisitions on information systems: a case of a software industry acquisition. *Communications of the IIMA*, 6(1), 57 - 66.
- Humphries, M. (2013). Demand for composites leads to £2.3b record M&A. *Reinforced Plastics*, 57(3), 27-29. doi:10.1016/S0034-3617(13)70090-0
- Imaa-institute. (2018). M&A activity: number & value of announced transactions. Retrieved 10 January, 2018, from <http://imaa-institute.org/statistics-mergers-acquisitions.html>
- Internetretailer. (2015). Say hello to Amazon Business, good-bye to AmazonSupply. Retrieved 11 January, 2016, from <https://internetretailer.com/2015/04/27>
- IPH. (2016). Leading European industrial supply distribution networks. Retrieved 20 November, 2016, from <http://group-iph.com/en/strategy/group-history>
- Ishn. (2015). Würth Group acquires Northern Safety and Industrial. *Safety & Hygiene News*. Retrieved 21 December, 2015, from <http://ishn.com/articles>
- Iyer, G. (2016). The case for a supply chain due diligence. Retrieved 17 April, 2017, from <https://4cassociates.com/case-supply-chain-due-diligence-ma-success>
- Jayaram, J., & Tan, K.-C. (2010). Supply chain integration with third-party logistics providers. *International Journal of Production Economics*, 125(2), 262-271. doi:10.1016/j.ijpe.2010.02.014
- Jharkharia, S. (2012). Supply chain issues in mergers and acquisitions: a case from Indian aviation industry. *International Journal of Aviation Management*, 1(4), 293-303. doi:10.1504/IJAM.2012.050476
- Jharkharia, S., & Shankar, R. (2005). IT-enablement of supply chains: understanding the barriers. *Journal of Enterprise Information Management*, 18(1), 11-27. doi:10.1108/17410390510571466
- Johnson, E. M. (2017). FedEx raises TNT integration costs by \$75 million: filings. Reuters. Retrieved 20 September, 2017, from <https://reuters.com/article/us-fedex-disruptions>
- Johnson, G. (2003). On the Fastenal track. Retrieved 6 January, 2016, from <http://ewweb.com/company-profiles/fastenal-track>
- Johnson, P., & Clark, M. (2006). Business and management research methodologies / edited by Phil Johnson and Murray Clark: London: SAGE, 2006.
- Junnarkar, S., & Hu, J. (2000). AOL to buy Time Warner in historic merger. Retrieved 10 June, 2016, from <http://news.cnet.com/2100-1023-235400.html>
- Kansal, S., & Chandani, A. (2014). Effective management of change during merger and acquisition. *Procedia Economics and Finance*, 11, 208-217. doi:10.1016/S2212-5671(14)00189-0
- Kato, J., & Schoenberg, R. (2014). The impact of post-merger integration on the customer-supplier relationship. *Industrial Marketing Management*, 43(2), 335-345. doi:10.1016/j.indmarman.2013.10.001

- Kendall, B., & Fitzgerald, D. (2015). FTC files lawsuit seeking to block Staples-Office Depot Merger. *The Wall Street Journal*.
- Kielhofner, G. (2006). Research in occupational therapy: methods of inquiry for enhancing practice. F. A. Davis Company.
- Kiliç, M. (2011). Cross-border bank acquisitions and banking sector performance: an empirical study of Turkish banking sector. *Procedia - Social and Behavioral Sciences*, 24(0), 946-959. doi:10.1016/j.sbspro.2011.09.028
- Knowledge@Wharton. (2005). Why do so many mergers fail? Retrieved 9 August, 2015, from <http://knowledge.wharton.upenn.edu/article/why-do-so-many-mergers-fail>
- Krauss, S. E. (2005). Research paradigms and meaning making: a primer. *The Qualitative Report*, 10(4), 758-770.
- Kroes, J. R., & Ghosh, S. (2010). Outsourcing congruence with competitive priorities: impact on supply chain and firm performance. *Journal of Operations Management*, 28(2), 124-143. doi:10.1016/j.jom.2009.09.004
- Lambert, D. M., & Cooper, M. C. (2000). Issues in supply chain management. *Industrial Marketing Management*, 29(1), 65-83. doi:10.1016/S0019-8501(99)00113-3
- Langabeer, J. (2003). An investigation of post-merger supply chain performance. *Journal of Academy of Business and Economics*, 2(1).
- Langabeer, J., & Seifert, D. (2003). Supply chain integration: the key to merger success. *Supply Chain Management Review*, 7(2), 58-64.
- Lauer, J.-P. (2015). Materials and services - indirect; facilities and MRO. Retrieved 14 May, 2016, from <http://accenture.com/Microsites/supplywatch>
- Lazenby, A. (2010). IT-enabled mergers and acquisitions. Retrieved 29 September, 2015, from <http://thebusinesstechnologyforum.com/tag/bpm>
- Lebedev, S., Peng, M. W., Xie, E., & Stevens, C. E. (2015). Mergers and acquisitions in and out of emerging economies. *Journal of World Business*, 50(4), 651-662. doi:10.1016/j.jwb.2014.09.003
- Lee, C. W., Kwon, I. W. G., & Severance, D. (2007). Relationship between supply chain performance and degree of linkage among supplier, internal integration, and customer. *Supply Chain Management: An International Journal*, 12(6), 444-452. doi:10.1108/13598540710826371
- Lee, S., Kim, J., & Park, B. I. (2015). Culture clashes in cross-border mergers and acquisitions: a case study of Sweden's Volvo and South Korea's Samsung. *International Business Review*, 24(4), 580-593. doi:10.1016/j.ibusrev.2014.10.016
- Li, X. (2014). Operations management of logistics and supply chain: issues and directions. *Discrete Dynamics in Nature and Society*, 2014, 7. doi:10.1155/2014/701938
- Lipczynski, J., Wilson, J. O. S., & Goddard, J. A. (2005). Industrial organization: competition, strategy, policy: Prentice Hall/Financial Times.

- Liu, Y., & Kokko, A. (2013). Who does what in China's new energy vehicle industry? *Energy Policy*, 57, 21-29. doi:10.1016/j.enpol.2012.05.046
- Liu, Z., & Nagurney, A. (2011). Risk reduction and cost synergy in mergers and acquisitions via supply chain network integration. *Journal of Financial Decision Making* 7(2), 1-18.
- Lummus, R. R., & Vokurka, R. J. (1999). Defining supply chain management: a historical perspective and practical guidelines. *Industrial Management & Data Systems*, 99(1), 11-17. doi:10.1108/02635579910243851
- Mangan, J., & Christopher, M. (2005). Management development and the supply chain manager of the future. *The International Journal of Logistics Management*, 16(2), 178-191. doi:10.1108/09574090510634494
- Marks, M. L., & Mirvis, P. H. (2011). Merge ahead: a research agenda to increase merger and acquisition success. *Journal of Business and Psychology*, 26(2), 161-168. doi:10.1007/s10869-011-9219-4
- McFarlane, T., & Fleming, I. (2011). Tax efficient supply chain planning for M&A transactions. Retrieved 22 November, 2011, from <http://alvarezandmarsal.com/tax-efficient-supply-chain-planning-ma-transactions>
- McKerchar, M. A. (2008). Philosophical paradigms, inquiry strategies and knowledge claims: applying the principles of research design and conduct to taxation. *eJournal of Tax Research*, 6(1); 5-22.
- McLaughlin, D., & Harris, M., Andrew. (2016). Staples-Office Depot merger collapses after block by judge. Retrieved 10 May, 2016, from <https://bloomberg.com/news/articles/2016-05-10/staples-office-depot-merger-blocked-as-anticompetitive>
- Mdm. (2012). Grainger agrees to acquire Techni-Tool. Retrieved 23 December, 2015, from <http://mdm.com/articles/29581-grainger-agrees-to-acquire-techni-tool>
- Mdm. (2013). Behind the deal: MSC to buy Barnes Distribution North America. Retrieved 10 June, 2016, from <http://mdm.com/blogs/6-mergers-acquisitions/post>
- Mdm. (2014). MSC hints at more acquisitions. Retrieved 14 June, 2016, from <http://mdm.com/blogs/6-mergers-acquisitions/post>
- Mdm. (2015). Is the Sun setting on AmazonSupply? Retrieved 10 March, 2016, from <http://mdm.com/blogs/1-management-strategy/post>
- Media.corporate-ir.net. (2015). Corporate fact sheet. Retrieved 11 January, 2016, from http://media.corporate-ir.net/media_files/IROL/97
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. *Journal of Business Logistics*, 22(2), 1 - 25.
- Mgm. (2012). 2012 MDM market leaders: top industrial distributors no. 9. Retrieved 3 July, 2016, from <http://www.mdm.com/articles/28791-2012-mdm-market-leaders-top-industrial-distributors-no--9>

- Mscdirect. (2016). We are a leading North American distributor of metalworking and maintenance, repair and operations (MRO) products and services. Retrieved 17 April, 2016, from <https://mscdirect.com/corporate/about-msc>
- Mudambi, S., & Aggarwal, R. (2003). Industrial distributors: can they survive in the new economy? *Industrial Marketing Management*, 32(4), 317-325. doi:10.1016/S0019-8501(02)00185-2
- Myers, M. D. (2008). Integration of different ERP systems: the case of mergers and acquisitions. *Association for Information Systems*. AIS Electronic Library. PACIS.
- Myers, M. D. (2013). *Qualitative research in business and management*: SAGE Publications.
- Nagurney, A. (2009). A system-optimization perspective for supply chain network integration: the horizontal merger case. *Transportation Research Part E: Logistics and Transportation Review*, 45(1), 1-15. doi:10.1016/j.tre.2008.02.003
- Nagurney, A., Woolley, T., & Qiang, Q. (2010). Multi-product supply chain horizontal network integration: models, theory, and computational results. *International Transactions in Operational Research*, 17(3), 333-349. doi:10.1111/j.1475-3995.2009.00719.x
- Nasdaq. (2015). Grainger (GWW) grows online MRO model with Cromwell acquisition. Retrieved 6 January, 2018, from <http://nasdaq.com/article/granger-gww-grows-online-mro-model-with-cromwell-acquisition-cm516199>
- Neely, A., Gregory, M., & Platts, K. (1995). Performance measurement system design: a literature review and research agenda. *International Journal of Operations & Production Management*, 15(4), 80-116. doi:10.1108/01443579510083622
- Nelson, L. R. (1959). Merger movements in American industry 1895-1956. *National Bureau of Economic Research*, 66(General Series).
- Officedepot. (2013a). Larry Hartley, senior vice president, supply chain. Retrieved 17 February, 2015, from <http://news.officedepot.com/leadership>
- Officedepot. (2013b). Office Depot and OfficeMax complete merger. Retrieved 15 February, 2015, from <http://news.officedepot.com/press-release>
- Onwuegbuzie, A. J., & Leech, N. L. (2005). Taking the "Q" out of research: teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality & Quantity: International Journal of Methodology*, 39(3), 267-296. doi:10.1007/s11135-004-1670-0
- O'Reilly, J. (2002). Mergers & acquisitions: disparate measures. Retrieved 7 October, 2015, from <http://inboundlogistics.com/cms/article>
- Paipartners. (2012). PAI announces the signing of an agreement leading to the acquisition of IPH from Investcorp. Retrieved 14 December, 2015, from <http://paipartners.com/lib/docs/220149-pressreleaseiphen.pdf>
- Palma-Mendoza, J. A., & Neailey, K. (2015). A business process re-design methodology to support supply chain integration: application in an airline MRO supply chain. *International Journal of Information Management*. doi:10.1016/j.ijinfomgt.2015.03.002

- Palmatier, R. W., Miao, C. F., & Fang, E. (2007). Sales channel integration after mergers and acquisitions: a methodological approach for avoiding common pitfalls. *Industrial Marketing Management*, 36(5), 589-603. doi:10.1016/j.indmarman.2006.03.001
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: integrating theory and practice*: SAGE Publications.
- Perry, J. S., & Herd, T. J. (2004). Reducing M&A risk through improved due diligence. *Strategy & Leadership*, 32(2), 12-19. doi:10.1108/10878570410525089
- Pisano, V., Faraci, R., Cabiddu, F., & Picone, P. M. (2017). Internationalization of firms: revitalizing the board of directors after a cross-border acquisition. *Management Research: Journal of the Iberoamerican Academy of Management*, 15(1), 65-82. doi:10.1108/MRJIAM-10-2015-0614
- Primack, D. (2015a). 2014 was a huge year for M&A and private equity. Retrieved 27 November, 2015, from <http://fortune.com/2015/01/05/2014-was-a-huge-year-for-ma-and-private-equity>
- Primack, D. (2015b). Dow Chemical and DuPont announce mega-merger. Retrieved 14 January, 2016, from <http://fortune.com/2015/12/11/dow-chemical-and-dupont-announce-mega-merger>
- Prnewswire. (2011). MSC Industrial Direct Co., Inc. announces the acquisitions of American Tool Supply, Inc. and its affiliate, American Specialty Grinding Co., Inc. Retrieved 10 February, 2016, from <http://prnewswire.com/news-releases>
- Prnewswire.com. (2012). MSC Industrial Direct Co., Inc. signs definitive agreement to acquire ATS Industrial Supply, Inc. Retrieved 15 February, 2016, from <http://prnewswire.com/news-releases>
- Proper, E. (2015). TNT warns on profit as shareholders approve FedEx buyout. *The Wall Street Journal*.
- Rahim, K. F., Ahmad, N., Ahmad, I., & Rahim, F. A. (2013). Determinants of cross-border merger and acquisition in advanced emerging market acquiring firms. *Procedia Economics and Finance*, 7(0), 96-102. doi:10.1016/S2212-5671(13)00223-2
- Rahman, M., & Lambkin, M. (2015). Creating or destroying value through mergers and acquisitions: a marketing perspective. *Industrial Marketing Management*, 46(0), 24-35. doi:10.1016/j.indmarman.2015.01.003
- Reliableplant. (2010). Industrial distributor MSC acquires Rutland Tool & Supply. Retrieved 9 January, 2016, from <http://reliableplant.com/Read/27403/MSAC-acquires-Rutland-Tool>
- Reuters. (2017). Dow, DuPont complete planned merger to form DowDuPont. Retrieved 14 October, 2017, from <https://uk.reuters.com/article/us-dow-m-a-dupont>
- Roberts, H. (2015). Acquiring businesses enjoy record performance in 2014. Retrieved 7 February, 2016, from <http://www.growthbusiness.co.uk/news-and-market-deals>
- Ross, D. F. (1997). *Competing through supply chain management: creating market-winning strategies through supply chain partnerships*: Springer US.

- Ross, D. F. (2013). *Competing through supply chain management: creating market-winning strategies through supply chain partnerships*: Springer US.
- Sahagian, J. (2013). Can a combined Office Depot and OfficeMax compete with Staples. Retrieved 16 February, 2015, from <http://wallstcheatsheet.com/stocks/can-a-combined-office-depot-and-officemax-compete-with-staples.html/?a=viewall>
- Sarkar, A., & Mohapatra, P. K. J. (2006). Evaluation of supplier capability and performance: a method for supply base reduction. *Journal of Purchasing and Supply Management*, 12(3), 148-163. doi:10.1016/j.pursup.2006.08.003
- Saunders, N. K. M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students*: Pearson.
- Schoenberg, R. (2006). Measuring the performance of corporate acquisitions: an empirical comparison of alternative metrics. *British Journal of Management*, 17(4), 361-370.
- Sherer, S. A. (2005). From supply-chain management to value network advocacy: implications for e-supply chains. *Supply Chain Management: An International Journal*, 10(2), 77-83. doi:10.1108/13598540510589151
- Singh, H. (2009). When supply chains merge: 5 mistakes to avoid. *Supply Chain [Quarterly]*, (Q2). Retrieved 9 February, 2015, from <http://supplychainquarterly.com>
- Smith, A. (2009). Time Warner to split off AOL. Retrieved 13 February, 2015, from http://money.cnn.com/2009/05/28/technology/timewarner_aol
- Smith, G. (2015). FedEx bulks up in Europe, buying TNT Express for \$4.8 billion. Retrieved 7 April, 2015, from <http://fortune.com/2015/04/07/fedex-bulks-up-in-europe-buying-tnt-express-for-4-8-billion>
- Sobh, R., & Perry, C. (2006). Research design and data analysis in realism research. *European Journal of Marketing*, 40(11/12), 1194-1209. doi:10.1108/03090560610702777
- Stahl, G. K., & Sitkin, S. B. (2010). Trust dynamics in acquisitions: the role of relationship history, interfirm distance, and acquirer's integration approach. *Advances in Mergers and Acquisitions*, (pp. 51-82).
- Stahl, G. K., & Voigt, A. (2005). Impact of cultural differences on merger and acquisition performance: a critical research review and an integrative model advances in mergers and acquisitions. Emerald Group Publishing Limited, pp. 51-82.
- Statisticstimes. (2016). GDP (nominal) ranking 2016. Retrieved 2 October, 2016, from <http://statisticstimes.com/economy/countries-by-projected-gdp.php>
- Steigenberger, N. (2016). The challenge of integration: a review of the M&A integration literature. *International Journal of Management Reviews*. doi:10.1111/ijmr.12099
- Stevenson, M., & Spring, M. (2007). Flexibility from a supply chain perspective: definition and review. *International Journal of Operations & Production Management*, 27(7), 685-713. doi:10.1108/01443570710756956

Stowell, D. P. (2013). The best deal Gillette could get?: Proctor & Gamble's acquisition of Gillette. In D. P. Stowell (Ed.), *Investment Banks, Hedge Funds, and Private Equity* (Second Edition) (pp. 495-511). San Diego: Academic Press.

Subramanian, N., & Gunasekaran, A. (2015). Cleaner supply-chain management practices for twenty-first-century organizational competitiveness: practice-performance framework and research propositions. *International Journal of Production Economics*, 164, 216-233. doi:10.1016/j.ijpe.2014.12.002

Swamynathan, Y. B., Diane. (2015). Staples, Office Depot expected second time a charm in merger. Retrieved 15 February, 2015, from <http://reuters.com>

Tarba, S. Y., Ahammad, M. F., Junni, P., Stokes, P., & Morag, O. (2017). The impact of organizational culture differences, synergy potential, and autonomy granted to the acquired high-tech firms on the M&A performance. *Group & Organization Management*. doi:10.1177/1059601117703267

Tashakkori, A., & Teddlie, C. (2010). *SAGE Handbook of mixed methods in social & behavioral research*: SAGE Publications.

The Economist. (1999). How to make mergers work. Retrieved 10 March, 2016, from <http://www.economist.com/node/181198>

Thompson, D. N. (2003). AOL Time Warner, Terra Lycos, Vivendi, and the transformation of marketing. *Journal of Business Research*, 56(11), 861-866. doi:10.1016/S0148-2963(01)00272-7

Timmermans, K., Diaz, A., Gupta, S., Delsaux, L., & Herd, T. (2014). Moving beyond synergies: supply chain keys to a successful merger. Retrieved 23 May, 2016, from <http://accenture.com/SiteCollectionDocuments/PDF/Accenture-Moving-Beyond-Synergies-Supply-Chain-Keys-Successful-Merger.pdf>

Tolossa, N. J., Beshah, B., Kitaw, D., Giulio, M., & Alberto, D. M. (2013). A review on the integration of supply chain management and industrial cluster. *International Journal of Marketing Studies*, 5(6), 164-174.

Tompkins, J. (2011). Acquisition success thrives on supply chain integration: focus on it from the start & avoid uncomfortable phone calls later. Retrieved 27 October, 2016, from <http://www.industryweek.com>

Uhlenbruck, K., Hughes-Morgan, M., Hitt, M. A., Ferrier, W. J., & Brymer, R. (2017). Rivals' reactions to mergers and acquisitions. *Strategic Organization*, 15(1), 40-66. doi:10.1177/1476127016630526

Valentini, G. (2015). The impact of M&A on rivals' innovation strategy. *Long range planning*. doi:10.1016/j.lrp.2015.02.007

Van Tartwijk, M. (2015). FedEx to buy TNT express for \$4.8 Billion. *The Wall Street Journal*. Retrieved 7 April, 2015, from <http://wsj.com/articles/fedex-makes-bid-for-tnt-express-1428384931>

Vieru, D., Rivard, S., & Dutot, V. (2014). Insights from a review of the literature on post-merger information systems/information technology integration. *International Business Research*, 7(7), 23 - 36.

Wade, J. (2010). The failed merger of AOL/Time Warner. *Risk Management*, 54(4).

- Wang, D., & Moini, H. (2012). Performance assessment of mergers and acquisitions: evidence from Denmark. *E-Leader*. Berlin.
- Waldman, D. A., & Javidan, M. (2009). Alternative forms of charismatic leadership in the integration of mergers and acquisitions. *The Leadership Quarterly*, 20(2), 130-142. doi:10.1016/j.leaqua.2009.01.008
- Webb, K. L. (2002). Managing channels of distribution in the age of electronic commerce. *Industrial Marketing Management*, 31(2), 95-102. doi:10.1016/S0019-8501(01)00181-X
- Weber, Y. (2013). Handbook of research on mergers and acquisitions: Edward Elgar Publishing Limited.
- Weber, Y., & Drori, I. (2008). The linkages between cultural differences, psychological states, and performance in international mergers and acquisitions, (Vol. 7, pp. 119-142): Emerald Group Publishing Limited.
- Weber, Y., & Menipaz, D. (2003). Measuring cultural fit in mergers and acquisitions. *Int. J. Business Performance Management*, 5(1), 54-72.
- Weber, Y., & Tarba, S. Y. (2010). Human resource practices and performance of mergers and acquisitions in Israel. *Human Resource Management Review*, 20(3), 203-211. doi:10.1016/j.hrmr.2009.08.007
- Wei, T., & Clegg, J. (2017). Strategic resources: a missing role in understanding integration speed in international acquisition. *Thunderbird International Business Review*. doi:10.1002/tie.21891
- Weitzel, U., & McCarthy, J. K. (2011). Theory and evidence on mergers and acquisitions by small and medium enterprises. *Paper presented at the International Journal of Entrepreneurship and Innovation Management*.
- Wesco. (2015). Customers. Retrieved 14 October, 2015, from <http://wesco.com>
- Wijnhoven, F., Spil, T., Stegwee, R., & Fa, R. T. A. (2006). Post-merger IT integration strategies: an IT alignment perspective. *The Journal of Strategic Information Systems*, 15(1), 5-28. doi:10.1016/j.jsis.2005.07.002
- Williams, S., & Kent, S. (2015). Shell to buy BG Group for about \$70 billion. Retrieved 8 April, 2015, from <http://wsj.com/articles/shell-to-buy-bg-group-1428473660>
- Wsj. (1999). U.K.'s Electrocomponents to buy Allied Electronics for \$380 million. *The Wall Street Journal*. Retrieved 25 March, 2016, from <https://www.wsj.com/articles>
- Wuerth. (2014). The Würth Group's good start to the business year 2014 gives cause for optimism. Retrieved 20 December, 2015, from <http://www.wuerth.com/web/en>
- Wuerth. (2015). Annual report of the Würth Group 2014. Retrieved 21 December, 2015, from <https://wuerth.com/web/media/downloads/pdf/presse/publikationen>
- Wuerth-Phoenix. (2016). The Würth Group - an international success story. Retrieved 24 May, 2016, from <http://wuerth-phoenix.com/en/wuerth-group>
- Yin, R. K. (2009). Case study research: design and methods: SAGE Publications.

Yin, R. K. (2015). *Qualitative research from start to finish*, Second Edition: Guilford Publications.

Zhang, D. (2013). The revival of vertical integration: strategic choice and performance influences. *Journal of Management and Strategy*, 4(1), 1-14. doi:10.5430/jms.v4n1p1

Zhao, G., Feng, T., & Wang, D. (2015). Is more supply chain integration always beneficial to financial performance? *Industrial Marketing Management*, 45(0), 162-172. doi:10.1016/j.indmarman.2015.02.015

Zhu, H., Xia, J., & Makino, S. (2015). How do high-technology firms create value in international M&A? Integration, autonomy and cross-border contingencies. *Journal of World Business*. doi:10.1016/j.jwb.2015.01.001

Zhu, J., Boyaci, T., & Ray, S. (2015). Effects of upstream and downstream mergers on supply chain profitability. *European Journal of Operational Research*. doi:10.1016/j.ejor.2015.08.030

Zorn, M. L., Sexton, J. C., Bhussar, M. S., & Lamont, B. T. (2017). Unfinished business: nested acquisitions, managerial capacity, and firm performance. *Journal of Management*. doi:10.1177/0149206317708855