



**Unlocking Value: Digitisation's Impact on Supplier Capability Visibility in
Heavy Mobile Equipment Engineering OEM's Post Horizontal Mergers and
Acquisitions**



**Mini-dissertation submitted in fulfilment of the requirements for
the degree Master of Business Administration at The
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Abstract

In the context of Heavy Mobile Equipment Engineering Original Equipment Manufacturers (OEMs), this case study examines the impact of digitisation on supplier capability visibility following horizontal mergers and acquisitions (M&A). The research examines two acquisition scenarios: 1) an acquired company operating in an environment with low technological maturity, and 2) an acquired company operating in an environment with high technological maturity. It explores the impact integration of these differing environments on supplier capability visibility post-acquisition, highlighting both the challenges posed by low technology use and the potential benefits and complexities introduced by high technology use.

The study addresses two key research questions: the barriers and constraints in obtaining, digitising, and maintaining supplier capability information post-acquisition, and the added value of enhanced supplier capability visibility for both the acquirer and acquiree. A qualitative approach was adopted, utilising semi-structured interviews with senior supply chain and procurement professionals. A purposive sampling strategy ensured the inclusion of participants with direct experience in post-M&A supply chain integration. Data were collected and analysed using Nvivo software, with an inductive thematic analysis employed to identify key patterns and insights.

Findings reveal that data gaps, fragmented systems, and a lack of planning during the due diligence phase significantly hinder the integration process. Conversely, the adoption of digital tools improved supplier capability visibility, facilitating more efficient procurement and supplier management.

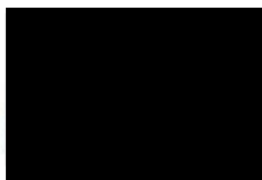
While digitisation enhanced decision-making and operational synergies, the research underscores persistent challenges such as system incompatibility, resource limitations, and the need for better transformation and integration frameworks. The conclusions offer insights into optimising supplier management

through digitisation, with recommendations for further study on addressing technological disparities and improving pre-acquisition planning to realise the benefits of digital integration in post-M&A processes.

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Nomenclature

List of acronyms

AI: Artificial Intelligence

B2B: Business-to-Business

BI: Business Intelligence

BOM: Bill of Material

COVID-19: Coronavirus Disease

ERP: Enterprise Resource Planning

Gen AI: Generative Artificial Intelligence

IoT: Internet of Things

IS: Information Systems

IT: Information Technology

KM: Knowledge Management

KPI: Key Performance Indicators

M&A: Mergers and Acquisitions

NDA: Non-Disclosure Agreement

OEM: Original Equipment Manufacturer

P2P: Procure-to-Pay

PDM: Product Data Management

PDM: Product Data Management

PWC: PricewaterhouseCoopers

S2P: Source-to-Pay

SAICA: South African Institute of Chartered Accountants

SCI: Supply Chain Integration

UK: United Kingdom

ZF: ZF Group (German Automotive Manufacturer)

Description of words

Acquisitions: The purchase of one company by another, typically where the acquiring company takes control of the acquired one.

Big Data: Large and complex data sets that traditional data processing software cannot handle effectively.

Bill of Materials (BOM): A list of all the materials, parts, and components required to produce a product, along with the quantities of each item.

Bullwhip Effect: The phenomenon where small fluctuations in demand at the consumer level cause increasingly larger fluctuations up the supply chain.

Cloud Technology: The use of internet-based computing to store, manage, and process data, as opposed to on-premises systems.

Customer Tracker Tool: A tool developed to track and anticipate parts shortages in supply chains.

Data Redundancy: The duplication of data that can occur in post-merger integrations when systems are not aligned.

Data Sharing: The practice of making data accessible across different departments or firms, critical for supply chain visibility.

Data Visualisation: The representation of data in a visual context like graphs or charts, to make data more understandable.

Digital Proximity: The extent to which a firm's offerings are aligned with digital services or technology within a network.

Digital Transformation: The integration of digital technology into all areas of a business, fundamentally changing how it operates and delivers value to customers.

Digitalisation: The use of digital technologies to improve efficiencies, and is reliant on digitised data.

Digitisation: The conversion of information from an analogue or physical format into an electronic format.

Digitised Supplier Data: Supplier data that has been converted from analogue to digital format for easier processing and integration.

Due Diligence: The comprehensive appraisal of a business to establish its assets and liabilities as well as its digital maturity and data management compatibility, typically conducted before an acquisition.

Economies of Scale: Cost or efficiency advantages achieved by increasing numbers.

eCost: Proprietary software used for managing supplier data.

E-Procurement Systems: Electronic systems used to manage procurement processes, often integrating big data, cloud computing, and analytics.

E-Procurement: The electronic procurement process that involves the use of digital tools for sourcing and purchasing.

Horizontal M&A: A merger or acquisition involving companies at the same level of the supply chain, often competitors.

Information Systems Integration: The process of combining different IT systems and software to ensure they work together efficiently.

Knowledge Management (KM): The process of creating, sharing, using, and managing the knowledge and information of an organisation.

Merger Synergies: The efficiencies or advantages gained by combining two companies, especially in areas like operations, resources, and supply chains.

Mergers: The combination of two companies where both contribute to forming a new entity.

Microsoft Teams: Software used for online communications with the ability to do video conference, and record and transcribe live meetings.

Network Modelling: Creating models to simulate and optimise supply chain networks, often used in the context of mergers and acquisitions.

Nvivo: Software used for analysing qualitative data.

Organisational Information Processing Theory (OIPT): A theory that deals with how organisations process information to address uncertainty in decision-making.

Paperless Office: An office environment where digitised documents replace paper records.

Post-M&A Integration: The process of combining and aligning the operations, systems, and cultures of merging or acquired companies.

Power BI: Microsoft's Business Intelligence platform for data visualisation and analytics.

Procurement: The process of acquiring goods, services, or works from an external source.

Stakeholder Engagement: The process of involving those who have an interest in a project or company, critical for successful M&A integration.

Strategic Sourcing: A procurement process that continually improves and re-evaluates a company's purchasing activities to align with long-term goals.

Supplier Capabilities: The core products, expertise and services a supplier specialises in.

Supply Chain Efficiency: Optimising the movement of goods and services to reduce costs and maximise profitability.

Supply Chain Integration: Coordination of supply chain processes to function as a unified system, often following mergers or acquisitions.

Supply Chain Visibility: The ability to track the status and location of raw materials, work-in-progress, and finished goods as they move through the supply chain.

Supply Chain: The sequence of processes in producing and distributing a commodity.

Synergy: The increased value or efficiency when two companies combine their resources.

Tacit Knowledge: Knowledge gained by experience, and only mentally captured by the individual.

Transparency in Supply Chains: The clarity and openness with which supply chain data is shared and communicated, often across multiple stakeholders.

Tribal knowledge: See tacit knowledge.

Vertical M&A: A merger or acquisition involving companies at different stages of production.

1 Introduction

1.1 Background Information

Supply chains are a complex and critical aspect of a business's success, as companies not only compete based on products and services, but also on effectiveness of their supply chains. An effective, agile and efficient supply chain can set a business apart from its competition. Global supply chains face daily risks that need to be mitigated or managed. A container ship blocking a key commuting channel (Cremaschini et al., 2022); an escalated conflict turning into a full-scale war (Kumar & Kumar, 2023); or a global pandemic restricting trade, have all been logistical challenges faced in the past decade (Irwin, 2022). Each event resulted in a significant knock-on effect on businesses in general.

In the wake of escalating supply chain difficulties that emerged in late 2020 due to COVID-19 related disruptions, the ZF Group, a leading German automotive parts manufacturer, found its conventional methodologies inadequate for navigating the complexities of the global pandemic. According to ZF's Advanced Driver-Assistance Systems and Electronics Division's Vice President of Supply Chain Management, Rebecca Streng, the severity of the disruptions necessitated a more innovative approach (Irwin, 2022). This led to the development of a prototype that would later become known as the Customer Tracker tool. This tool, leveraging existing technologies for data visualisation, was designed to enhance visibility into the supply chain, enabling the company to anticipate part shortages more effectively. Irwin (2022) highlighted the importance of understanding specific challenges in supplier operations using this insight to mitigate impacts across their supply network.

Similarly, Robert Bosch, the world's largest auto supplier, underscored the significance of transparency when dealing with both suppliers and automotive manufacturers (Irwin, 2022). The Executive Vice President of Bosch's Mobility Solutions, Paul Thomas (Irwin, 2022), emphasised that transparency has become

their foremost priority, marking a pivotal shift in how supply chain operations are managed in the automotive industry. These developments illustrate a broader industry trend towards prioritising supply chain visibility and transparency to better navigate the challenges presented by global disruptions (Irwin, 2022).

1.1.1 Established Knowledge of Supply Chain Visibility

Supply chain visibility has long been recognised as a cornerstone of effective supply chain management. Its importance lies in mitigating uncertainties, enhancing coordination, and improving customer satisfaction by enabling access to real-time, accurate data across supply chain partners (Barratt & Oke, 2007).

Digitisation plays a significant role in enabling supply chain visibility, especially in global disruptions. Companies in the automotive sector, such as ZF, have adopted tools like Power BI to enhance transparency and anticipate potential bottlenecks in supply chains (Irwin, 2022). These tools provide actionable insights through predictive analytics and visualisation. Additionally, the integration of IT systems has been shown to play a pivotal role in M&As. Studies emphasise that pre-merger assessments of IT compatibility and the early involvement of IT personnel are critical for achieving synergies and minimising disruptions (Lohrke et al., 2016).

Stroup (2017) defines digitisation, often associated with the Internet of Things (IoT), as "intelligent production integrated with the IoT, cloud technology, and big data". This process involves collecting, sharing, and utilising information to enhance decision-making and increase productivity by decentralising technological processes. Jahan & Sazu (2022), defines big data as vast volumes of data generated from various sources, which are too complex for traditional data processing tools to manage and analyse efficiently. Sikka & Ojha (2021) describe cloud technology as a system that provides quick access to IT resources like computers, applications, networks, and storage. These resources are easily configurable and require minimal service provider and administrator involvement.

The rapid emergence of research focusing on digital procurement systems, electronic supply chain management, and business-to-business (B2B) exchanges signifies a paradigm shift towards internet-enabled business models. Such models are acclaimed for offering substantial advantages, including flexibility and reduced time-to-market; thereby contributing to significant financial gains. At the core of these benefits is the concept of supply chain visibility, which facilitates optimal management of physical and financial flows, essential for informed decision-making processes (Wei & Wang, 2010).

These systems emphasise the importance of digitised data, generally requiring old data to be converted from analogue (paper-based) to electronic. This means creating a digital file that allows for fast and accurate data extraction, which can be repeatedly used in digital processes, known as digitalisation. Digitalisation can be described as the framework that exploits digitised data. For digitalisation to be effective, the digitisation of data needs to have been executed, i.e. the paperless office scenario highlighting the significant importance of digitisation where one is dependent on the other. With that said, digitisation on its own will not provide value as it relies on the extraction of data through digitalised means to create value (Gobble, 2018).

Wei & Wang (2010) further suggests that visibility within the supply chain, defined as the extent to which information concerning operations and management is accessible to partners, is crucial for mitigating uncertainties, improving coordination, and enhancing customer satisfaction. This enables the timely dissemination of information, effectively reducing demand distortion-known as the 'bullwhip effect' – and has been the subject of numerous empirical investigations within the information systems domain. Irwin (2022), Barratt & Oke (2007) and Wei & Wang (2010) all highlight the role of IT in facilitating information sharing and enhancing performance.

Despite the recognised importance of information sharing, the distinction between sharing activities and the resultant visibility, as well as its strategic implications,

remains inadequately addressed in literature (Barratt & Oke, 2007). Visibility not only emerges as a critical capability but also as a potential source of sustainable competitive advantage within supply chains. While previous studies have examined the precursors of supply chain visibility and its link to competitive advantage, the depth of this relationship, especially in fluctuating business environments, necessitates further investigation (Barratt & Oke, 2007).

Irwin (2022) highlighted the growing importance of embracing technologies and provides an example of Microsoft's Power BI (Microsoft Corporation, 2024) data visualisation software being adopted to use digitised data in a visual format and the benefits thereof in improving efficiency and reducing risk. However, what appears to be lacking is an understanding of the impacts this visibility may have on companies that grow their supply chain inorganically at pace through the process of Mergers and Acquisitions (M&As).

Office for National Statistics (2024) describes where the acquisition of another company is achieved by all, or part of, the payment made in shares. A new company is created as a result where the shareholders of the two merging companies become shareholders of the newly created company. Conversely, acquisitions are transactions where one company purchases the ordinary shares of a second company ("target company"); a target company is often smaller than the acquiring company. In the fourth quarter of 2023, the Office for National Statistics (2024) reported that 367 mergers and acquisitions (M&As) had transaction values exceeding one million pounds sterling. The total value of these transactions amounted to £14.5 billion, covering domestic, inward, and outward M&As according to Office for National Statistics (2024).

Companies that grow through M&As strategically identify other companies that will support their goals through either vertical or horizontal M&As. Vertical M&As would be, for example, buying companies in the existing supply chain to secure supply and support an existing product, and strategically block this service to competitors. Horizontal M&As involve acquiring a company that either competes

directly with the acquirer's existing products or offers complementary products (Alnaqbi, Dweiri and Chaagane, 2022). Companies that grow by horizontal M&A may find that the supply chains and services are very similar and that an opportunity exists to improve the efficiency of purchasing power when products of common services and components are combined.

Ironside (2015) highlights the importance of digitised data for the logistic side of supply chains impacted by M&As. In exploring the potential for cost savings that M&As offer, it is crucial not to overlook the associated costs of implementing change. This emphasises the critical role of network modelling, especially for its ability to reconfigure and enhance the supply chain by merging two store networks. Such optimisation efforts are pivotal in augmenting the total value of the merged assets (Ironside, 2015). The digitisation of data exponentially increases the opportunity for efficiency gains, thereby adding value to a M&A (Barratt & Oke, 2007; Irwin, 2022).

Companies are unaware of their suppliers' capabilities, particularly when integrating a new supplier into their existing systems through horizontal M&As. The best source of a supplier's capabilities and services is the suppliers themselves. However, rigid IT systems can inhibit the free flow of such information and result in suppliers being pigeonholed into specific products and services, giving a biased view of their capabilities. The process can also be tedious and manual with information needing to be updated regularly to ensure transparency. Integration of supply chains without visibility, results in duplicate suppliers brought on board through the M&A process. This exposes the acquirer to risks of lost revenue due to inefficient supply routings and missed opportunities for economies of scale through combining common items.

1.2 Problem Statement

In the context of Heavy Mobile Equipment Engineering OEMs, an acquiring company's supply chain, post-horizontal M&A, encounters inefficiencies due to a lack of digitalised visibility into the capabilities and services of newly integrated

suppliers. This limited visibility impedes effective integration and prevents the company from realising the potential value and synergies offered by the M&A.

1.3 The Research Objective

The primary research objective is to identify and develop processes that would enhance the visibility of newly integrated supplier capabilities through effective systems integration and digitisation of data within the heavy mobile equipment engineering sector, specifically addressing the challenges that arise post-horizontal M&A.

Objective 1

Evaluate the alignment of the knowledge management framework with the specific challenges of enhancing supplier capability visibility during the horizontal M&A process in heavy engineering OEMs. This objective is to identify how well the theoretical framework can support the realisation of increased value within the supply chain post-merger.

Objective 2

Identify the critical supplier information that adds value to the acquirer after the M&A process, and develop strategies for the effective retrieval, integration, and maintenance of this information within digitised systems.

1.4 Research Statement

The visibility of supplier capabilities and the lack of digitised data on these, present significant challenges that warrant academic exploration. Lohrke, Frownfelter-Lohrke, and Jr. Ketchen (2016) emphasise the importance of integrating IT considerations, specifically digitalisation, into the initial stages of M&As. The critical question this research addresses is the value created by enhancing supplier capability visibility through digitisation. Neglecting to assess a partner's IT infrastructure can lead to missed opportunities and complicate the integration

process, particularly when there are technological disparities, such as outdated hardware or incompatible proprietary software. IT systems are vital for providing accurate financial and operational data, which are crucial for making informed decisions during M&As. Therefore, evaluating the quality of these systems is essential for ensuring the reliability of the information they produce. Lohrke et al. (2016) demonstrate that strong senior management commitment to IT integration during M&As can significantly enhance system reliability and improve post-M&A performance.

Despite substantial research on supply chain visibility and digitisation, notable gaps remain. A key gap is the limited understanding of the specific challenges in integrating supplier capabilities post-horizontal M&A, particularly in industries characterised by complex supply chains such as heavy mobile equipment. While supply chain visibility is known to create value, its precise impact during supplier integration processes in M&A scenarios has not been thoroughly explored (Lohrke et al., 2016).

Another area requiring further investigation is the scalability and long-term effectiveness of emerging technologies, such as predictive analytics and data visualisation tools, in addressing these challenges. Although companies like Bosch and Toyota have reported initial successes with these tools, there is limited empirical evidence of their application in large-scale supply chains (Irwin, 2022).

A lack of standardised metrics to measure the success of IT integration post-M&A presents another challenge. Such metrics would allow organisations to better assess the long-term value and sustainability of IT-driven synergies (Wei & Wang, 2010).

The primary purpose of this research is to explore processes that can improve visibility into supplier capabilities during M&As. This study specifically aims to address the challenges of inadequate access to digitised data on supplier capabilities and to understand how enhancing this visibility can improve the overall value proposition of the supply chain post-M&A.

1.5 Research Problem

There exists inadequate visibility of the services and capabilities of newly acquired suppliers post-M&A, leading to inefficient use of internal resources. The lack of visibility into supplier capabilities during M&As can introduce risks and opportunities within supply chain management, operational strategy, and IT systems. This inadequacy impedes companies from fully leveraging synergies, optimising supply chains, and achieving a competitive advantage.

1.6 Research Rationale

Santos et al. (2023) highlight that leveraging data digitisation and digital technologies can create a competitive advantage across various sectors. Similarly, Wei & Wang (2010) demonstrate that a supply chain's strategic performance is enhanced by different visibility constructs: including visibility for integration. Visibility for integration, as noted by Lohrke et al. (2016), is crucial during M&As, where the failure to ensure IT infrastructure compatibility and systems integration can result in costly disruptions and underperformance of the merged entities.

The strategic importance of visibility for integration is further supported by Alnaqbi et al. (2022), who demonstrate that value creation is achievable during horizontal M&As, particularly through economies of scale and scope. However, their study does not specifically address the role of digitised supplier information in achieving these outcomes.

This research aims to address this gap by investigating how the digitisation of supplier information can enhance visibility during the post-M&A integration process. By focusing on the heavy mobile equipment engineering sector, this study seeks to determine the specific benefits that digitised data can bring to improving supply chain efficiency and realising the full potential of horizontal M&As. The research will explore the practical mechanisms through which digitised data can be effectively integrated into supply chains to mitigate the risks

associated with inadequate supplier visibility.

1.6.1 Significance of Addressing Research Gaps

Addressing these unknowns is vital to unlocking the full potential of horizontal M&As. Inefficient supplier integration due to limited visibility can lead to missed opportunities for economies of scale and reduced operational efficiency. By investigating the role of digitisation in improving supplier capability visibility, this study aims to provide actionable insights that enhance supply chain integration and resilience (Lohrke et al., 2016).

Understanding the effectiveness of technologies like predictive analytics is also critical for guiding industries in adopting impactful tools. These insights will enable better decision-making and investments in IT systems, ensuring organisations are prepared for future disruptions (Irwin, 2022). Additionally, identifying robust metrics for assessing IT integration success would establish a framework for evaluating long-term benefits and fostering sustainable competitive advantages (Wei & Wang, 2010).

1.7 Research Questions

The research questions under which the study will operate are as follows:

1. What benefits can be realised from both the acquirer and acquiree perspectives after the M&A process, particularly in terms of enhancing the visibility and integration of the additional pool of suppliers into the existing supply chain?
2. What are the limitations and constraints in obtaining, digitising, and maintaining the applicable information needed to effectively assess and integrate supplier capabilities after the M&A process and how do these limitations impact overall supply chain efficiency?

1.8 Conclusion

This research explores the role of digitisation in improving supplier capability visibility following horizontal M&As in the heavy mobile equipment engineering sector. The study aims to identify processes that enhance integration and transparency of supplier data, addressing the challenges posed by limited digital infrastructure post-M&A. By focusing on these improvements, the research seeks to demonstrate how better visibility can unlock value, optimise supply chain efficiency, and drive competitive advantage for companies in this industry.

2 Literature Review

2.1 Introduction

The prominence of digitisation is not limited to standalone businesses; it also plays a pivotal role in the success of M&As. M&As offer organisations the opportunity to gain economies of scale, expand market presence, and enhance competitiveness. However, the integration of supply chains following an M&A presents significant challenges, particularly when unrelated information systems and processes must be unified. Digitisation emerges as a powerful enabler in this context, facilitating smoother post-M&A integration by improving supply chain visibility and operational synergies.

While digitisation holds great potential, existing research overlooks the practical challenges involved, particularly within complex sectors like heavy engineering. Current studies predominantly focus on the benefits of digitisation in supply chains, but few delve into the specific hurdles of integrating different IT systems post-M&A. This literature review explores the impact of digitisation on supply chain efficiency, with a particular focus on post-M&A integration. It highlights both opportunities and obstacles, providing insights into best practices and identifying significant gaps in current knowledge.

While digitisation has been widely acknowledged as a key enabler of supply chain integration (Gunasekaran et al., 2009; Irwin, 2022), existing studies tend to assume a seamless implementation of digital tools, overlooking the complexities inherent to M&A scenarios. For instance, Irwin (2022) focuses on the benefits of digital tools for operational synergies but does not address system incompatibilities or data redundancies that are frequently encountered during M&A integrations (Říhová, 2018). This gap in the literature underscores the need for further exploration of digitisation-specific challenges in heavy engineering contexts, where legacy systems and manual processes are prevalent.

The review takes a hierarchical approach to make the content and process easier to follow, as shown in Figure 1.

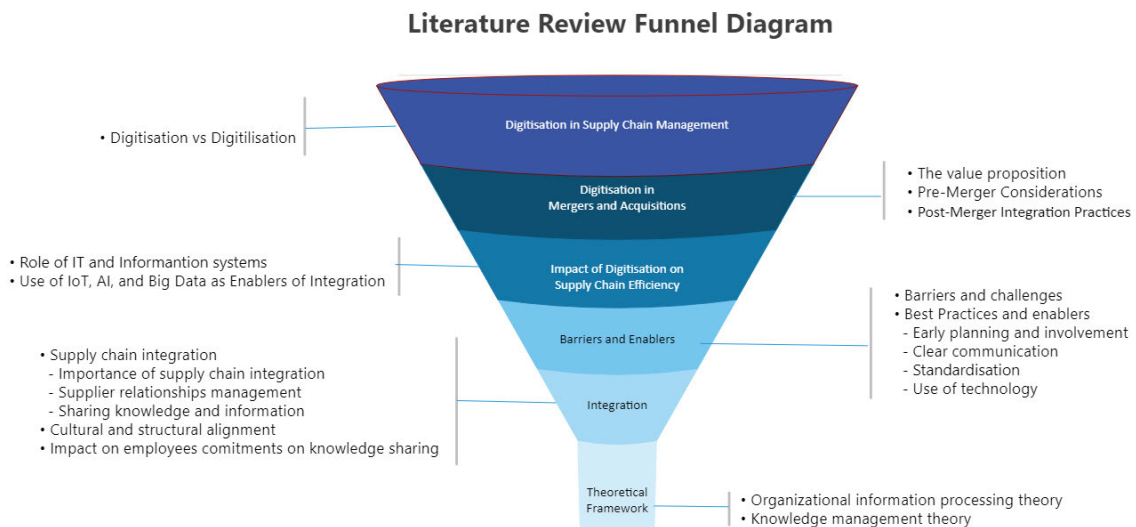


Figure 1 - A funnel diagram depicting the literature review contents and structure.

Figure 1 illustrates the progressive focus of the study, starting broadly with the impact of digitisation in supply chain management and narrowing down to specific integration challenges and theoretical frameworks related to M&As. Each section of the funnel can be unpacked as follows:

2.1.1 Digitisation in Supply Chain Management

Digitisation significantly improves supply chain visibility, flexibility, and decision-making by employing technologies like IoT and AI. Gunasekaran et al. (2009) argue that e-procurement systems streamline procurement activities, particularly in sectors with intricate supply chains like heavy engineering. However, while these benefits are well-documented, there is limited research on the specific challenges faced by industries characterised by large, complex, and often outdated systems, such as heavy engineering.

Much of the literature assumes a seamless application of digital technologies without fully addressing the practical issues of integrating these systems, especially post-M&A. For example, Irwin (2022) and Wei & Wang (2010) identify

digitisation's potential for supply chain enhancement, yet their studies do not fully consider the complexities of post-merger IT system alignment, leaving a gap in understanding how digitisation is implemented in such scenarios. This exposes the need for further exploration into the specific challenges posed by integrating legacy systems with modern digital tools.

2.1.2 Digitisation in Mergers and Acquisitions

In the context of M&As, digitisation plays a pivotal role in integrating supply chains and IT systems. It facilitates value creation through improved visibility of supplier capabilities and operational synergies. Pre-merger due diligence on IT systems is essential for ensuring smooth post-merger integration. Effective digitisation supports seamless supply chain integration, enabling companies to realise potential synergies (Henningsson et al., 2018; Říhová, 2018).

Value Proposition: Digitisation enhances the visibility of supplier capabilities, enabling M&A synergies (Henningsson et al., 2018).

Pre-Merger Considerations: Assessing the compatibility of IT systems before the merger is critical (PwC Greece, 2020).

Post-Merger Integration: Digitisation supports the alignment of supply chain processes and IT systems post-merger (Henningsson et al., 2018; Bienhaus & Haddud, 2018).

2.1.3 Impact on Supply Chain Efficiency

The digitisation of supply chain processes enhances efficiency by automating procurement tasks, fostering stronger supplier relationships, and facilitating real-time access to data. This is particularly important for heavy mobile equipment manufacturers, where high-value parts and machinery necessitate precise procurement management. Ilhan & Rahim (2020) highlight that digitisation reduces transaction costs and increases transparency, both of which are crucial in this sector.

Häkkinen et al. (2004) emphasise that effective logistics integration during mergers is vital, especially in industries with complex supply chains such as heavy engineering. Managing logistics effectively after a merger can result in significant cost savings and improved operational outcomes.

2.1.4 Barriers and Enablers

Despite the clear benefits, digitisation in the heavy engineering sector faces several barriers, including the incompatibility of legacy IT systems and resistance to change within organisations. Říhová (2018) points out that inefficiencies following M&As often arise from challenges in integrating disparate IT systems, a common issue in heavy engineering where legacy systems are prevalent.

Overcoming these barriers requires strategic investment in technology and workforce skills, as Bienhaus & Haddud (2018) suggest. Addressing these challenges ensures that industries like heavy engineering can fully realise the benefits of digitisation, particularly in managing complex supply chains.

2.1.5 Integration

Supply chain integration is critical for the success of M&As, as it facilitates operational efficiency, reduces costs, and enhances visibility. The standardisation of processes and the use of digital technologies ensure that newly merged entities function cohesively, optimising the benefits of the merger (Wojtak, 2018; SAICA, 2023; Henningsson et al., 2018).

2.1.6 Theoretical Framework

The final stage of the funnel focuses on the theoretical underpinning of the study:

Organisational Information Processing Theory (OIPT): This theory helps explain how organisations manage information to deal with uncertainty and interdependence during decision-making processes (Galbraith, 1973; Srinivasan & Swink, 2015).

Knowledge Management (KM) Theory: This framework emphasises the importance of knowledge sharing and collaboration, especially in the post-M&A integration phase, where aligning supplier data and processes is vital (Tzortzaki & Mihiotis, 2014; Bienhaus & Haddud, 2018).

2.2 Digitisation and Digitalisation

E-procurement systems represent the digitalisation of procurement processes, integrating advanced analytical tools such as big data, cloud computing, and data mining (Srai & Lorentz, 2019). These systems extend traditional procurement methods by automating transactions and improving internal efficiencies. While e-procurement systems promise both operational and strategic benefits, the realisation of these advantages depends on their effective implementation (Ilhan & Rahim, 2020).

Digitalisation has become a strategic priority for procurement departments, especially regarding cost reduction and process efficiency. According to a survey by PwC Greece (2020), procurement departments set ambitious targets for digitalisation, aiming to achieve an average of 72% digitalisation by 2025. However, due to disruptions such as the COVID-19 pandemic, the actual digitalisation rate in 2020 was approximately 41%, revealing a gap between expectations and reality. The focus on digitalisation is driven by objectives such as improved risk management, compliance, and enhanced control over procurement processes (Bienhaus & Haddud, 2018).

Digitisation plays a critical role in transforming supply chains by enabling real-time data access, improving decision-making, enhancing transparency, and boosting operational efficiency (Bienhaus & Haddud, 2018). It aligns procurement strategies with broader organisational goals through the adoption of technologies such as the IoT and Big Data. Digitisation goes beyond automation - it incorporates strategic elements that drive innovation and offer competitive advantages in evolving global markets (Bienhaus & Haddud, 2018).

Capgemini (2024) underscores the growing role of digitisation in procurement processes, particularly the application of AI and other digital tools to enhance efficiency and decision-making. For instance, Generative Artificial Intelligence (Gen AI) has emerged as a noteworthy trend, aiding procurement activities by automating complex tasks such as contract generation, compliance monitoring, and data analysis. Gen AI facilitates the management of legal documents, the conduct of tenders, and the identification of cost-saving opportunities, thus transforming procurement into a more data-driven and automated function (Capgemini, 2024).

However, as Říhová (2018) indicated, the integration of information systems and digitisation is often overlooked during M&As, leading to post-M&A inefficiencies. Companies may encounter issues such as data redundancy and system incompatibility only after the M&A process is complete, which can hinder the full realisation of M&A benefits (Říhová, 2018).

Santos et al. (2023) concluded that digital technologies are transforming companies, making them more agile, flexible, and resilient. This shift represents a departure from the historically stable, linear, and discrete models described by Nambisan (2017). Companies are now better equipped to respond to unpredictable and rapidly changing circumstances, such as global pandemics, with increased flexibility. This transformation underscores the importance of using digital technologies to expose, evaluate, and exploit opportunities in a timely manner (Santos et al., 2023).

Wei & Wang (2010) highlight trends in business collaborations and integrated partnerships, emphasising the growing importance of leveraging synergistic resource combinations through digital means. Cross-organisational information system collaborations are pivotal in harnessing market knowledge for competitive advantage, particularly within the field of supply chain management (Wei & Wang, 2010). The integration of IT is a key enabler of successful inter-organisational collaborations, reinforcing the strategic role of digital platforms in improving

operational efficiency and market responsiveness.

The rapid emergence of research into digital procurement systems, electronic supply chain management, and business-to-business (B2B) exchanges indicates a paradigm shift towards internet-enabled business models (Wei & Wang, 2010). These models offer significant advantages, such as increased flexibility and reduced time-to-market, contributing to financial sustainability. A central concept in this shift is supply chain visibility, which enables optimal management of physical and financial flows - an essential factor in informed decision-making processes (Wei & Wang, 2010).

These systems underscore the importance of using digitised data, data converted from an analogue format into an electronic format. Digitised data can be used repeatedly with unparalleled accuracy and speed in digitalised processes. Digitalisation is the framework that exploits digitised data to create value. The effectiveness of digitalisation depends on the successful execution of digitisation, exemplified by the concept of the paperless office. Digitisation alone does not generate value; it requires the extraction of data through digitalised processes to realise its potential (Gobble, 2018). For the consideration of this study, the interest in digitisation in M&As becomes the focus point.

2.3 Digitisation in Merges and Acquisitions

2.3.1 The Value Proposition

Factors that drive M&As are:

Efficiency Gains: M&As are often motivated by the prospect of increasing economic efficiency, particularly through economies of scale, which allow companies to reduce costs in areas like production, marketing, and research and development (SAICA, 2023). Additionally, Häkkinen et al. (2004) highlight the role of improved logistical integration as a key enabler of these gains.

Market Power: M&As can enhance a company's market power by reducing

competition and combining complementary assets, which strengthens the merged entity's competitive position (SAICA, 2023). Guan & Rehme (2012) further elaborate that this enhanced market power often creates opportunities for optimising supplier relationships and achieving broader operational synergies.

Financial and Risk Reduction: M&As are also financially motivated by opportunities to increase shareholder value and reduce risks by diversifying operations across different markets or sectors (SAICA, 2023).

Henningsson et al. (2018) emphasise that information systems integration plays a critical role in realising value during M&As, with up to 60% of the anticipated benefits being directly tied to successful information system integration. Similarly, Done (2011) asserts that knowledge alignment across the supply chain is critical for achieving these synergies, particularly when integrating disparate supplier data. However, poor integration often leads to M&A failures, underscoring the importance of well-executed digitisation efforts to capture the full value potential (Henningsson et al., 2018).

M&A activities often involve integrating disparate procurement systems, a process that can either enhance or hinder value creation. According to the survey by PwC Greece (2020), digital transformation initiatives, such as integrating Source-to-Pay (S2P) and Procure-to-Pay (P2P) solutions, play a crucial role in achieving the value proposition of M&As by streamlining procurement operations and increasing visibility across the supply chain. The survey also highlights that successful post-M&A integration of digital tools requires a deep understanding of procurement processes and strong stakeholder buy-in (PwC Greece, 2020).

Digitisation in M&As supports value creation by improving the visibility of supplier capabilities, enabling supply chain synergies, and reducing operational inefficiencies (Bienhaus & Haddud, 2018). By incorporating digital tools like Big Data and IoT into post-M&A activities, organisations can automate procurement functions, contributing to long-term profitability and efficiency gains (Bienhaus & Haddud, 2018).

The primary goal of M&As is to achieve financial success, increase market power, and enhance shareholder value through positive synergies. The integration of information systems is key to realising these synergies, particularly by standardising processes and consolidating IT functions without disrupting core business operations (Říhová, 2018).

Horizontal M&As, in particular, are often evaluated in terms of their impact on market power and competitive dynamics. These M&As include companies at the same stage in the production chain and are assessed based on their potential to increase market concentration, exert market power, and achieve efficiency gains (CADE, 2016; Häkkinen et al., 2004; Wojtak, 2018). Rahmati et al. (2021) expand on this by discussing how strategic digitisation fosters market power through improved digital proximity, enabling companies to streamline operations and maintain competitive advantages. While the positive effects of horizontal M&As can include productivity gains, enhanced product variety, and improved quality, there are potential downsides, such as reduced competition and higher prices for consumers. Ultimately, the evaluation of horizontal M&As hinges on their overall impact on economic welfare and consumer benefits (CADE, 2016; Häkkinen et al., 2004; Wojtak, 2018).

Wojtak (2018) explains that M&As are a vital strategy for corporate expansion and accelerated growth in the global economy. The combined value of companies engaging in M&As often exceeds their standalone values, boosting market confidence and reflecting broader economic strength (Hsu & Chen, 2015; Wojtak, 2018). For instance, the global value of M&As in 2015 reached \$4.28 trillion, underscoring the scale of these activities (Rahman & Lambkin, 2015). Horizontal M&As account for about 80% of all M&A transactions, primarily driven by the motive to increase market share and competitive edge through rapid expansion (Rahman & Lambkin, 2015; Wojtak, 2018). However, the complexity of post-M&A integration often complicates the realisation of expected synergies, with integration issues frequently contributing to M&A failures (Kato & Schoenberg, 2014; Steigenberger, 2017).

Overpaying for acquisition targets is a common reason many M&A deals fail, as highlighted by Calandro (2020). While overpayment may not pose significant risks during economic booms, it can have severe consequences when market conditions deteriorate, which is an inevitable occurrence in economic cycles (Calandro, 2020). To reduce risks associated with M&As it becomes necessary to consider pre-M&A due diligence where possible.

2.3.2 Pre-M&A Considerations

Pre-M&A considerations are critical for ensuring successful transition, particularly when it comes to information systems integration and supply chain management. According to Říhová (2018), a thorough feasibility study of information systems should be conducted before the M&A. This study should include gap analyses, functional specification alignment, and the development of risk mitigation strategies (Říhová, 2018). Proper information systems planning can prevent disruptions and ensure that the merged entities operate seamlessly.

Another key pre-M&A consideration involves understanding the market dynamics and potential overlaps between the merging firms. This process typically includes a detailed examination of the relevant market, encompassing both product and geographic dimensions (CADE, 2016). Factors such as customer demand, supply-side substitution, and market entry conditions are scrutinised to define the relevant market and assess the competitive effects of the M&A. Quantitative methods, such as critical loss analysis, are often used to predict the potential impact of the M&A on prices and competition (CADE, 2016).

In addition to market analysis, thorough supply chain due diligence is essential before an M&A. As Häkkinen et al. (2004) emphasise, understanding the logistics and supply chain practices of the target company is crucial for identifying potential obstacles that could impact the initiative. Pre-M&A supply chain assessments help uncover possible integration challenges early on, allowing for the development of strategies to address these issues and improve the chances of a successful integration.

Rigorous due diligence before the M&A also focuses on the financial, operational, and legal aspects of the involved entities. This step is essential for identifying potential risks and ensuring that both companies are well-prepared for post-M&A integration (SAICA, 2023). Financial due diligence involves assessing the company financial position, ensuring that the projections are reasonable, and evaluating any financial risks (SAICA, 2023).

Pre-M&A due diligence not only identifies potential risks but also lays the groundwork for successful integration of operations, supply chains, and information systems; essential for realising the full benefits post-M&A (Wojtak, 2018).

Effective pre-M&A due diligence and integration minimises inefficiencies by creating a unified procurement process, as demonstrated by the Australian city council's use of Oracle's e-procurement system to streamline operations across various departments (Ilhan & Rahim, 2020).

2.3.3 Post-M&A Integration Practices

The integration of e-procurement systems is essential for aligning procurement activities across newly merged entities after an M&A (Ilhan & Rahim, 2020). This integration plays a critical role in streamlining operations, ensuring that the combined entities operate on unified platforms. In particular, information systems integration is key during the post-M&A phase, as it ensures seamless functioning across merged supply chains, which are often complicated by the challenge of unifying different IT systems (Henningsson et al., 2018). By reducing disruptions, a unified system supports the continuity of operations, and helps the merged organisation operate more efficiently.

The digitisation of procurement processes post-M&A offers significant advantages, such as enhanced visibility and operational efficiency. Digital platforms facilitate the management of newly integrated supply chains, providing improved coordination and maximising the value derived from the merger

(Bienhaus & Haddud, 2018). These tools contribute to transparency across the supply chain, ensuring that procurement processes align with the strategic objectives of the new entity. In this context, e-procurement systems play a pivotal role in ensuring that these digital tools are fully utilised to optimise procurement activities (Ilhan & Rahim, 2020).

A critical decision in post-M&A information systems integration involves determining whether to maintain existing systems with necessary connections, or fully migrate to a common platform. This decision must be guided by pre-M&A studies and align with the business processes of the newly formed organisation (Říhová, 2018). By carefully evaluating these options, the merged entity can minimise disruptions while ensuring that the chosen system supports its strategic goals.

In addition to the operational focus on systems integration, strategic considerations, such as rivalry analysis, are also crucial for post-M&A success. For example, horizontal M&As often lead to increased market concentration, necessitating careful management to avoid the risk of market power abuse. Rivalry analysis, which includes evaluating market share variance, cross elasticity of demand, and access to distribution and logistics services, ensures that competitive dynamics remain healthy (CADE, 2016). This strategic evaluation is necessary to safeguard the competitive position of the merged entity while maintaining operational efficiency.

Successful post-M&A integration practices extend beyond system consolidation to encompass the integration of supply chains. The integration of supply chains is essential for realising the synergies that drive M&A success. As Wojtak (2018) notes, an effectively integrated supply chain can help the newly formed organisation achieve early operational success, contributing to growth and improved efficiency.

Achieving operational efficiencies during the post-M&A phase often requires consolidating production facilities, reducing downtime, and eliminating

redundancies. Harmonising production processes and standardising operations across the merged firms are essential steps in this direction (SAICA, 2023). The use of digitised data through e-procurement systems further enhances these integration efforts, allowing the organisation to maximise the benefits of the merger by driving cost savings and improving operational alignment (Ilhan & Rahim, 2020).

E-procurement systems, as described by Ilhan & Rahim (2020), facilitate the digitalisation of procurement functions, resulting in significant improvements in supply chain efficiency. These systems help reduce transaction costs, shorten order cycles, and enhance control over procurement activities by automating and integrating processes that were previously manual and prone to error (Gunasekaran et al., 2009). The operational and strategic benefits of e-procurement include reduced paperwork and real-time information access, increasing supply chain visibility (Ilhan & Rahim, 2020).

Digitisation in procurement is critical for enhancing supply chain efficiency, enabling real-time data access, and improving decision-making. A survey conducted by PwC Greece (2022) revealed that 80% of companies that successfully implemented digital solutions reported significant improvements in supply chain efficiency, primarily driven by better data availability and the digitalisation of end-to-end procurement processes. Additionally, the integration of CO2 emissions monitoring into digital transformation roadmaps has improved operational transparency and sustainability (PwC Greece, 2022).

The impact of digitisation on supply chain efficiency is evident in improved transparency, strengthened buyer-supplier relationships, and enhanced real-time data processing. This enables the optimisation of procurement strategies and operational processes, leading to cost reductions and performance improvements (Bienhaus & Haddud, 2018). Digital tools such as AI and Big Data play a critical role in elevating the strategic importance of procurement within supply chain ecosystems, enabling predictive analysis of supply chain disruptions and

enhancing operational efficiency (Capgemini, 2024).

Additionally, the integration of IT systems in M&As is vital, as it facilitates real-time data sharing, streamlining processes, and supporting efficient decision-making (Říhová, 2018). In such cases, digitisation becomes a key enabler of supply chain efficiency, particularly when IT systems are leveraged to aggregate data across newly merged entities.

The transformation of supply chains due to digitisation is marked by enhanced interconnectedness and responsiveness across various components. This transformation is driven by the concept of digital proximity, which refers to a firm's strategic positioning within a network of digital products and services. For example, in the automotive industry, the digitisation of car components has shifted strategic resources from traditional manufacturers to software and digital technology producers, facilitating better synchronisation between production processes and product enhancements (Rahmati et al., 2021)

Digitisation offers multifaceted benefits, including better coordination, improved transparency, and enhanced decision-making. Firms that strategically position themselves within networks of complementary digital technologies are more likely to achieve significant efficiency gains across their supply chains.

2.3.4 Role of IT and Information Systems

IT systems play a fundamental role in facilitating procurement processes by automating the exchange of procurement-related documents and integrating these systems with back-end IT infrastructure (Ilhan & Rahim, 2020). By streamlining data flows and enhancing accuracy, IT systems contribute improved decision-making and operational efficiency in supply chain management.

In the context of M&As, information systems are essential for facilitating knowledge sharing and managing organisational learning across merged entities. Henningsson et al. (2018) note that leveraging IT platforms for knowledge dissemination enhances the M&A process by fostering smoother integration and

collaboration.

The pivotal role of IT systems in automating procurement processes is further highlighted by Bienhaus & Haddud (2018), who argue that IT facilitates the collection, processing, and dissemination of critical data throughout supply chain ecosystems. These systems support more effective decision-making and operational coordination. Capgemini (2024) also identifies information systems and digital tools - such as AI, IoT, and digital procurement platforms - as foundational elements for improving procurement processes, enhancing supply chain visibility, and driving strategic decision-making.

In M&A scenarios, the integration of IT systems is crucial for ensuring the smooth transition of business processes and the seamless flow of information between merging entities. Říhová (2018) and Henningsson et al. (2018) highlight that IS integration is often the most complex aspect of M&A and requires meticulous planning and execution to align operations effectively.

2.4 Barriers and Enablers

This section explores the barriers and enablers of digital procurement and supply chain integration.

2.4.1 Barriers and Challenges

One of the significant barriers to e-procurement implementation is the lack of organisational competency, hindering the effective integration of digital systems into procurement processes (Dhillon, 2008). Staff resistance to IT-enabled organisational change, as well as inadequate supplier training, further complicates the successful implementation of e-procurement systems (Ilhan & Rahim, 2020). Despite the recognised benefits of digital transformation, such as increased efficiency and supply chain visibility, several obstacles impede the effective integration of these systems within supply chains.

A major challenge identified by a PwC Greece (2022) survey is the shortage of

skilled resources, and the high costs with implementing advanced digital solutions like blockchain and artificial intelligence. Additionally, many companies struggle with the complexity of these technologies and their often-unclear value propositions. These barriers prevent organisations from fully realising the potential benefits of digital transformation, particularly in procurement and supply chain management.

Capgemini (2024) highlights several key challenges in procurement, such as inflation and decoupling of global supply chains due to geopolitical tensions. Inflation significantly drives procurement costs, necessitating new strategies to manage price increases (Capgemini, 2024). Additionally, the decoupling of supply chains requires companies to adopt strategies like supplier diversification and enhanced supply chain visibility to mitigate risks associated with geopolitical instability (Capgemini, 2024).

In the context of M&As, information systems integration faces multiple barriers, including system incompatibility, data redundancy, and underestimation of the time required for full integration. These issues can lead to lost business opportunities and substantial post-M&A costs, thereby reducing the anticipated benefits of the M&A (Říhová, 2018). The complexity of integrating disparate systems often causes delays and increases costs, exacerbating post-M&A challenges.

Barriers to entry play a crucial role in shaping the competitive landscape post-M&A. According to CADE (2016) and Hakkinen et al. (2004), common barriers include sunk costs, legal or regulatory obligations, economies of scale, and brand loyalty. These barriers prevent new competitors from entering the market, diminishing the effectiveness of competition and potentially leading to higher prices and reduced innovation (CADE, 2016; Rahman & Lambkin, 2015). Understanding and mitigating these barriers are essential to ensuring that the merged entity does not exploit its market position to the detriment of consumers. (CADE, 2016)

In addition to technical challenges, post-M&A integration faces cultural barriers, incompatible IT systems, and workforce resistance to change (Henningsson et al., 2018; Steigenberger, 2017). These factors can prevent the realisation of the full benefits of a M&A unless addressed proactively (SAICA, 2023). Wojtak (2018) highlights that failure to address such barriers can lead to suboptimal integration, negatively impacting the overall success of the M&A. Cultural differences and resistance to change can cause friction between merging entities, leading to operational inefficiencies and missed synergy opportunities.

Despite the importance of supply chain integration in achieving M&A success, it faces numerous challenges. These include cultural differences between merging organisations, incompatible IT systems, and resistance to change among employees. Addressing these barriers is crucial for ensuring successful integration and achieving the anticipated operational and financial synergies from the M&A (Wojtak, 2018).

The barriers identified, such as IT system incompatibilities and data redundancy (Říhová, 2018), directly correspond to Research Question 1, which explores the limitations and constraints in obtaining, digitising, and maintaining supplier information post-M&A. These barriers highlight the need for robust pre- and post-M&A strategies to ensure seamless integration. For example, addressing IT incompatibility through phased migrations to unified systems could mitigate data redundancies and inefficiencies, aligning with Objective 1's focus on process optimisation.

2.4.2 Best Practices and Enablers

The barriers to digitising supply chains are multifaceted and include infrastructure limitations, unclear digital strategies, and insufficient employee resources and capabilities (Ilhan & Rahim, 2020). These challenges can significantly impede the successful integration of digital tools within supply chain operations. Overcoming these barriers requires robust leadership support, substantial investment in technology, and the development of digital skills among employees (Bienhaus &

Haddud, 2018). Strong leadership is essential to driving digital transformation, while investing in the appropriate technology infrastructure ensures that the digital systems are well-supported and scalable. Additionally, equipping employees with the necessary digital skills is crucial for enabling effective adoption and integration of these tools across the organisation (Bienhaus & Haddud, 2018).

Similarly, the enablers discussed, such as early planning and technology adoption (Bienhaus & Haddud, 2018), provide actionable insights into Research Question 2 by showcasing mechanisms that can enhance supplier visibility and operational synergies post-M&A. These enablers align with the study's objective to develop strategies for leveraging digitisation to create value within supply chains.

2.4.2.1 Early Planning and Involvement

One of the best M&A practices is the early involvement of information system teams during planning phases, ensures smoother integration of systems post-M&A (Henningsson et al., 2018). Engaging IT personnel early in the planning process allows for the identification of potential integration challenges and ensures that adequate resources and timelines are allocated to address them effectively (Říhová, 2018).

Similarly, early planning and stakeholder involvement are crucial enablers for the success of digital procurement transformation. According to a survey by (Srai & Lorentz, 2019), procurement departments that prioritise stakeholder engagement and process re-engineering tend to achieve higher success rates in their digital transformation initiatives. This early engagement ensures that all aspects of the transformation are aligned with organisational goals and that the necessary resources are in place for successful implementation.

Ilhan & Rahim (2020) emphasises the importance of proactive planning in procurement, particularly in mitigating disruptions such as inflation and geopolitical risks. Early planning, including the development of a well-structured category strategy and the establishment of robust governance structures, is critical for addressing these challenges (Palma-Mendoza & Neailey, 2015). For

example, a proactive category strategy can help organisations better manage inflation risks by ensuring that procurement processes are adaptable and resilient to external pressures (Capgemini, 2024).

In the M&A context, proactive planning before the M&A is critical for ensuring a smooth transition and integration. Firms are encouraged to submit detailed reports, market studies, and strategic plans to relevant authorities as part of the M&A review process, which helps facilitate a more efficient review (Henningsson et al., 2018). Establishing clear communication channels between the merging firms and regulatory bodies also contributes to a smoother process (CADE, 2016).

Early engagement of key stakeholders, including supply chain leaders, ensures that their insights and expertise are incorporated into the integration strategy. This approach helps to address operational, cultural, and strategic alignment between the two entities, minimising disruptions and maximising the potential for synergy realisation (Häkkinen et al., 2004; SAICA, 2023; Wojtak, 2018).

2.4.2.2 Clear Communication

Effective communication is a critical factor in the success of information systems integration during M&As. Henningsson et al. (2018) emphasise the importance of rich communication in managing emotions and reducing resistance among stakeholders during the integration process. By fostering an open dialogue, organisations can better address concerns and ensure smoother transitions.

Bienhaus and Haddud (2018) highlight the significance of communication tools, such as supplier collaboration platforms, in enhancing transparency and improving decision-making in supply chains.

The importance of effective communication between IT teams and other departments cannot be overstated. Říhová (2018) argues that clear and continuous communication ensures all stakeholders are informed of progress and potential challenges during IS integration. This helps to mitigate issues early and fosters a collaborative environment that supports the overall success of the

integration.

Steigenberger (2017) emphasises the necessity of transparent communication between merging firms and regulatory bodies to ensure that market impacts are understood and that risks are mitigated during the M&A process.

Maintaining open lines of communication between management, employees, and stakeholders is crucial for aligning organisational goals with integration efforts. SAICA (2023) points out that companies that prioritise transparency and communication throughout the integration process are better positioned to manage changes and maintain alignment with strategic objectives.

Transparent and continuous communication is key to managing expectations and reducing resistance to change. Wojtak (2018) highlights that keeping all stakeholders informed and engaged can significantly reduce opposition and foster a more cohesive integration process.

2.4.2.3 Standardisation

Bienhaus and Haddud (2018) and Ilhan and Rahim (2020) both promote the use of digital tools to standardise procurement activities, improving transparency, control, and efficiency across supply chains. These platforms streamline procurement operations and improve supplier management by enhancing transparency and control. Standardisation within procurement not only simplifies operations but also contributes to the broader alignment of procurement strategies across an organisation.

In the context of M&As, the integration of information systems and the standardisation of data and processes are critical for achieving a streamlined post-M&A environment. Říhová (2018) emphasises that prioritising standardisation during information systems integration reduces the likelihood of inefficiencies and redundancies, which often emerge when systems from different entities fail to align.

The post-M&A integration process significantly benefits from the standardisation of processes and the harmonisation of systems across merging entities. According to SAICA (2023), standardisation minimises operational complexity, while harmonisation ensures that the merged entities function cohesively under a unified structure, thereby fostering a more efficient and effective post-M&A environment.

Wojtak (2018) similarly asserts that standardising processes and systems across merging entities can reduce complexity and facilitate smoother integration. The adoption of consistent processes allows for greater predictability and control, which is essential during the often-turbulent post-M&A phase.

2.4.2.4 Use of Technology

In post-M&A environments, the integration of technology is crucial for achieving seamless supply chain operations. Key enablers such as the IoT, artificial AI, and big data play a pivotal role in real-time data sharing, strengthening supplier relationships, and facilitating automated decision-making (Bienhaus & Haddud, 2018). These technologies enhance supply chain visibility, improve operational efficiency, and significantly reduce the likelihood of disruptions during integration.

Ilhan and Rahim (2020) elaborate on the application of AI and IoT in procurement, with AI automating processes such as cost optimisation and contract management, while IoT provides real-time tracking to improve supply chain visibility.

The role of technology in M&As extends beyond immediate supply chain functions, as flexible and standardised IT infrastructures are essential for streamlining operations and achieving successful integration (Henningsson et al., 2018). Rahman and Lambkin (2015) support the use of procurement-specific technologies such as S2P and P2P systems in M&As, highlighting how they optimise costs, manage risks, and drive innovation during integration.

Successful integration of information systems in M&As also requires strategic

alignment of technology with the merged entities' goals, thorough planning, and ongoing evaluation of IT architectures (Říhová, 2018). Henningsson et al. (2018) emphasise the strategic role of flexible and standardised IT infrastructures in facilitating M&A integration, while tools such as quantitative simulations help assess M&A impacts on pricing, demand, and competition. Leveraging technology in this way ensures smoother transitions, reduces transaction times, and eliminates redundancies across the merged supply chains (SAICA, 2023; Steigenberger, 2017).

2.4.3 Supply Chain Integration

Supply chain integration is vital for M&A success, impacting both performance and synergy realisation (Wojtak, 2018). It involves unifying the supply chain processes of merging organisations into a cohesive system. Effective integration ensures smooth transitions, minimises operational disruptions, and helps achieve strategic M&A objectives (Wojtak, 2018).

By consolidating procurement, logistics, production, and distribution processes, integration optimises efficiency and fosters cost synergies. Without it, organisations risk inefficiencies, increased costs, and misaligned operations, which undermine the merger's benefits (Häkkinen et al., 2004). Beyond cost savings, integration enhances strategic alignment and operational efficiency, making it essential for M&A goals (Guan & Rehme, 2012; Palma-Mendoza & Neailey, 2015).

2.4.3.1 Importance of Supply Chain Integration

Effective supply chain integration not only drives cost synergies but also ensures strategic alignment with broader business goals (Guan & Rehme, 2012; Palma-Mendoza & Neailey, 2015). Integration of information systems plays a crucial role in enabling smooth operations and reducing disruptions during M&As (Henningsson et al., 2018). Done (2011) underscores that successful supply chain knowledge management is essential for capturing and leveraging collective

expertise, particularly in post-M&A integration, where aligning knowledge systems can lead to competitive advantage.

Digital tools, like source-to-pay solutions, improve procurement processes and foster real-time visibility, making integration more efficient (PwC Greece, 2022; Bienhaus & Haddud, 2018).

2.4.3.2 Supplier Relationship Management

E-procurement systems significantly impact supplier relationships, with firms adopting different approaches based on relationship style. Arms-length relationships focus on efficiency, while collaborative ones involve joint planning (Ilhan & Rahim, 2020). Effective supplier management fosters innovation through collaboration platforms and digital tools (Bienhaus & Haddud, 2018).

2.4.3.3 Sharing Knowledge and Information

Knowledge sharing is critical for maximising M&A benefits across the supply chain. Aligning knowledge bases fosters innovation and improves operational efficiency (CADE, 2016). Done (2011) emphasises that leveraging both explicit and tacit knowledge within the supply chain can create significant synergies. This process helps in eliminating inefficiencies, optimising processes, and enhancing performance in the post-merger phase.

Sharing information between merging entities enhances operational efficiency, streamlines processes, and mitigates integration disruptions (Wojtak, 2018). Effective data sharing, especially during M&A, is essential for aligning business processes and achieving synergies. Mismanagement of data can hinder decision-making and M&A success (Říhová, 2018; SAICA, 2023). Trust and confidentiality play crucial roles in ensuring secure data exchange during integration (Wojtak, 2018).

The digitisation of procurement enhances knowledge sharing by providing platforms for seamless information exchange, fostering collaboration and

innovation within the supply chain (Bienhaus & Haddud, 2018).

2.4.3.4 Cultural and Structural Alignment

The digital procurement transformation requires not only technological adoption but also cultural and structural alignment. PwC Greece (2022) highlights that successful transformation requires upskilling employees and fostering a digital mindset.

In M&As, addressing cultural differences is crucial for preventing disruptions in knowledge sharing and ensuring smooth integration (SAICA, 2023). Proactively managing cultural and operational nuances ensures knowledge is shared effectively, leading to successful integration (Wojtak, 2018).

2.4.3.5 Impact of Employee Commitment on Knowledge Sharing

Employee commitment significantly affects the success of information systems integration and knowledge sharing during M&As (Henningsson et al., 2018). Equipping employees with the necessary digital skills enhances information exchange (Bienhaus & Haddud, 2018).

Commitment to the newly merged entity fosters a more engaged knowledge-sharing process, which is essential for seamless integration (SAICA, 2023). Swart et al. (2014) emphasise that organisational commitment positively influences knowledge-sharing behaviours, which are critical for achieving operational synergies and minimising disruptions. Done (2011) also points out that creating an environment conducive to continuous knowledge sharing fosters collaboration and innovation, crucial for post-merger success.

2.5 Theoretical Frameworks

2.5.1 Organisational Information Processing Theory

Organisational Information Processing Theory (OIPT) provides a comprehensive framework for analysing how organisations manage information to address

uncertainty and interdependence within decision-making processes. Galbraith (1973) proposed that organisations need to efficiently handle information to cope with the complexities and unpredictabilities they face. Such coordination often involves resolving issues triggered by unexpected events, which may render traditional mechanistic approaches insufficient (Srinivasan & Swink, 2015).

OIPT proposes that organisations can either reduce their information processing demands or enhance their information processing capabilities. To reduce information processing requirements, firms might create slack resources or establish self-contained tasks, such as holding additional inventory to buffer against fluctuations in supply. Conversely, organisations can increase their information processing capacity by improving lateral relations and adopting vertical information systems (Srinivasan & Swink, 2015).

The theory highlights that, in order for organisations to remain sustainable or maintain competitive parity during periods of uncertainty, they must effectively process larger volumes of information. This necessitates strategic foresight in determining how to execute this additional information processing. Key strategies include identifying what information to process, where to process it, and how to source this additional information effectively.

2.5.2 Knowledge Management Theory

The theoretical framework of this study will be based on KM theory, which, in a business context, explores the benefits of profitability and efficiency derived from an organisation's ability to learn and adapt to changing environments through the effective use of knowledge (Tzortzaki & Mihiotis, 2014).

KM plays a vital role in procurement, particularly in the context of digital transformation. KM theory emphasises the importance of effective knowledge sharing across the supply chain, enhancing collaboration and creating value (Bienhaus & Haddud, 2018). By leveraging digital tools such as AI, Big Data, and IoT, organisations can transition procurement into a more strategic function,

fostering innovation and developing long-term buyer-supplier relationships built on trust and transparency (Bienhaus & Haddud, 2018).

KM theory provides a critical framework for addressing the challenges of supplier capability visibility post-M&A by promoting efficient knowledge sharing and collaboration. In the context of Objective 1, KM theory emphasises capturing and integrating tacit and explicit supplier knowledge into digitised systems (Tzortzaki & Mihiotis, 2014). For example, tacit knowledge from supplier relationships must be digitised to enable transparent and accessible information sharing across the acquirer's organisation. However, integrating such knowledge requires overcoming cultural and operational barriers, such as resistance to change and insufficient digital skills (Bienhaus & Haddud, 2018). KM theory also supports the establishment of processes to transform raw data into actionable insights, a necessity for improving supplier visibility in complex M&A environments. By linking KM practices to digitisation strategies, this research aims to demonstrate how the alignment of knowledge frameworks can unlock supplier synergies post-M&A.

2.6 Conclusion on Literature Review

This review highlights several gaps in the current literature, particularly the lack of practical frameworks for integrating digitised supplier data into existing IT systems during M&As and the limited application of KM theory in addressing post-M&A integration challenges. These gaps directly align with the study's objectives, which aim to develop actionable strategies for enhancing supplier capability visibility through digitisation. By addressing these gaps, this research contributes to bridging the disconnect between theoretical models and their practical application in the heavy engineering sector. Moreover, the synthesis of OIPT and KM frameworks offers a robust theoretical foundation to tackle the complexities of data integration and knowledge sharing, aligning with both research objectives and advancing the understanding of digitisation's role in M&A processes.

3 Research Questions

This study aims to address two core research questions that support the research objectives, focusing on the impact of digitisation on supplier capability visibility following horizontal M&A within the heavy mobile equipment engineering sector. The study fills a gap in the current literature, where limited research exists on the intersection between digitisation and post-M&A supplier integration in this industry. Research in this field has primarily focused on general supply chain management, leaving the unique challenges of post-M&A supplier integration in heavy engineering underexplored (SAICA, 2023). Current literature overlooks how digitisation can enhance supplier visibility and streamline integration in post-M&A scenarios within this sector (Říhová, 2018). This research addresses these gaps, aiming to explore the specific benefits of digitisation in this context.

Research Question 1:

What are the limitations and constraints in obtaining, digitising, and maintaining the applicable information needed to effectively assess and integrate supplier capabilities after the M&A process?

This question focuses on the challenges companies face in accessing and managing supplier capability data post-M&A. Literature suggests that IT system incompatibilities often obstruct seamless supplier integration, but the specific limitations within the heavy mobile equipment sector remain under-researched (Ironside, 2015; Henningsson et al., 2018).

Research Question 2:

What benefits can be realised from both the acquirer and acquiree perspectives after the M&A process, particularly in terms of enhancing the visibility and integration of the additional pool of suppliers into the existing supply chain?

This question explores the potential operational and strategic benefits of

integrating supplier capabilities post-M&A. Horizontal mergers in heavy engineering often involve overlapping supplier bases, presenting opportunities for consolidation and efficiency gains, though these benefits have not been sufficiently explored in the literature (Alnaqbi et al., 2022; Wei & Wang, 2010).

4 Research Methodology

Recognising the exploratory essence of the research objectives, a qualitative research methodology was adopted to acquire context in the subject matter. This approach is appropriate due to its ability to explore complex, context-specific phenomena in detail. A qualitative framework facilitates an understanding of subjective perspectives and experiences, particularly suited for addressing the nuanced challenges of digitisation and supplier visibility in post-M&A scenarios.

Saunders (2009) suggests using the Saunders onion model, applied in the context of this proposed research (Figure 2) as a visual representation of the research approach.

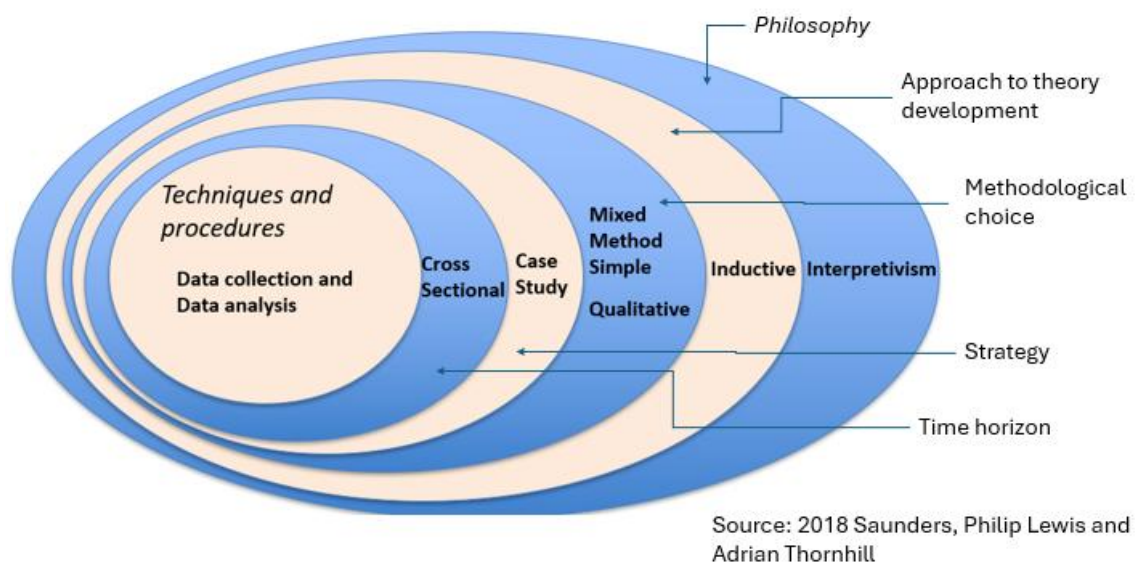


Figure 2 - 2018 Mark Saunders, Philip Lewis and Adrian Thornhill

Using the Saunders onion model according to Figure 2, a visualisation of the research methodology approach is depicted where the research philosophy of an interpretivism nature with an epistemological positioning was adopted to allow for the consideration of knowledge and perspectives in the individuals being interviewed. The approach to theory development was inductive as there was no hypothesis to prove or disprove. The methodological choice for this study was

qualitative, relying primarily on semi-structured interviews to generate rich thematic data. The inclusion of three Likert-style questions, and their subsequent descriptive statistics, was intentionally designed to offer supplementary context. These statistics were not intended to form the core of the analysis but rather to provide a summarised view of participant trends. This approach aids in illustrating patterns that align with the qualitative findings, enhancing interpretative depth without detracting from the qualitative focus.

A case study of a Global OEM, operating in the mobile heavy engineering equipment sector, was unpacked where two different M&As occurred with a common acquirer, this allowed for two company acquisitions to be studied in the same environment and eliminated variability that could be introduced through other factors, thus supporting the conceptual framework identified in Chapter 4.2. The time horizon of the study was cross-sectional as data from interviews were taken at a single point in time. The interviews were semi-structured and were used for all data collection. Respondents were selected using a purposive sampling approach where twelve respondents were identified and invited to participate in the study – of which ten agreed. An invitation to participate example can be seen in Appendix B. The research instrument was also shared to inform the respondent on expectations. All interviews were conducted online and were recorded and automatically transcribed using the built-in record and transcribe functionality of Microsoft Teams. Redundant content was removed during natural conversations as well as scanned over for any identifiers that were renamed to unidentifiable descriptions. Transcripts were analysed using Nvivo, a qualitative data analysis software. Codes were derived from the content and themes emerged from the codes which have been used as the structure of Chapter 5.

4.1 Framework for Research

The investigation took a case study approach, focusing on a single OEM within the heavy mobile equipment engineering sector involved in horizontal M&As. The selection of a case study as the primary research design was defended by the

ability to enable a contextually grounded investigation of intricate issues within their authentic settings. This choice was further justified as it facilitates a thorough exploration of the digitisation of data systems and its impact on value to supply chain visibility post-M&As within a single entity eliminating multiple factors that could influence results.

4.2 Conceptual Framework

The conceptual framework approach for the study was to identify two M&As where there was a distinct difference in the use of digitised data of supplier chain details. That is, 1) an environment in which technology was evident and embraced compared to 2) an environment where the lack of technology was evident. These independent variables were assessed to see how they integrate within the acquiring company's data management systems and the impact this integration has on the visibility of supplier capabilities. Figure 3 displays the independent and dependent variables which defined the focus of the data-sourcing activities. While these terms are traditionally associated with quantitative research, their use in this qualitative study aligns with the conceptual framework to delineate factors influencing the research phenomena (independent variables) and the outcomes being investigated (dependent variables). This terminological choice supports analytical clarity and facilitates structured exploration of the relationships within the study.

Independent Variable

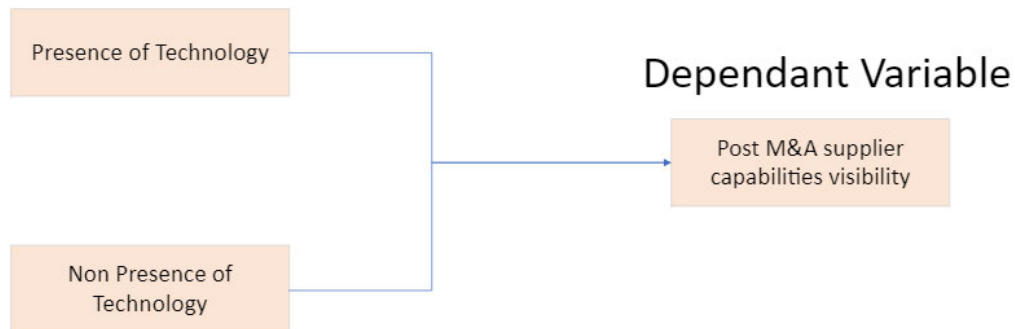


Figure 3 - Conceptual Framework - Independent and dependant variables.

4.3 Execution Strategy for Research

Sample selection: Purposive sampling is a non-random technique designed to ensure the inclusion of specific categories of participants within a sample. This approach is particularly beneficial when researchers have prior theoretical knowledge of the subject matter, as it enables the selection of individuals who can offer unique or pertinent viewpoints (Robinson, 2014). Unlike random sampling, which includes any member of the population, purposive sampling aims to gather in-depth, valuable insights from participants most suited to contribute to the understanding of the research topic (Robinson, 2014).

This method is especially compatible with qualitative research approaches, such as thematic analysis, which prioritise the depth and richness of data over representativeness. Purposive sampling ensures that cases relevant to the research questions are included, which is vital for collecting meaningful data (Robinson, 2014). Furthermore, it narrows the focus of the research to individuals or groups with direct experience or specific insights into the research topic, thereby enhancing the value of the analysis (Robinson, 2014).

4.4 Techniques for Data Collection

4.4.1 Semi-Structured Interviews

The selection of semi-structured interviews as a data collection technique reflects the qualitative orientation of the study. This method provides the flexibility to probe deeper into participants' responses, thereby uncovering context-specific insights related to the stated research objectives (Bezuidenhout & Strydom, 2014). The open-ended nature of the questions allowed participants to articulate their experiences with supplier visibility challenges and integration issues in their terms, aligning closely with the research objectives' focus on exploring barriers, enablers, and outcomes of digitisation.

The process involved conducting semi-structured interviews with senior supply chain and procurement professionals, aiming to explore supplier capability visibility, digitisation initiatives, and the related challenges and benefits during integration. Of the twelve targeted participants based on purposive sampling, ten agreed to participate, one declined, and one did not respond.

Saturation was observed in respondents' responses which is discussed in detail in Chapter 5.

4.4.1.1 Data Analysis Techniques

For this research, an inductive approach to thematic analysis was adopted, which is widely used in qualitative studies to explore emerging patterns and themes from raw data without relying on a predefined theoretical framework. Inductive thematic analysis allows for a deep engagement with the data, enabling themes to surface organically through careful analysis, rather than being imposed based on existing literature (Bezuidenhout & Cronje, 2014).

4.4.1.2 Analysis Software

Nvivo software was used to organise, code, and identify themes within the data,

while Microsoft Excel assisted with basic analysis of the three Likert-style questions.

4.4.1.3 Data Collection Method

Semi-structured interviews were conducted online via Microsoft Teams, using the built-in transcription feature and recording the sessions with prior participant consent. The interviews lasted between 30 to 60 minutes. A presentation screen displaying the current question was shared during the interview to help respondents stay on topic. This same presentation was shared with participants at the time of the invitation, allowing them to familiarise themselves with the discussed content.

4.5 Data Gathering Process

This section describes the process followed to gather the data that was discussed in Chapter 5.

4.5.1 Overview of the Sampling Strategy

As previously mentioned, the selection of interviewees was conducted to ensure that participants had the relevant experience and knowledge to provide meaningful insights into the research topic. A purposive sampling method was chosen to focus on individuals who could offer the most relevant information based on their roles, experiences, and perspectives within the organisation.

4.5.2 Extending Invitations to Participate

With a list of suitable participants identified, the process of extending invitations was initiated. This involved:

Communication of Purpose and Expectations: Emails were sent to inform potential participants about the study's objectives, their role, and the expected time commitment.

Confirmation of Participation: Follow-up communications were conducted to confirm interest and availability, addressing any questions or concerns participants had regarding their involvement.

4.5.3 Ethical Considerations

Throughout this process, ethical considerations were carefully observed. All potential interviewees were informed about the voluntary nature of their participation, the confidentiality of their responses, and their right to withdraw from the study at any point without consequence.

4.5.4 Limitations

Several limitations were identified based on the research methodology employed in this study. Despite these limitations, trustworthiness was ensured through methodical rigor and a participant-centered approach. Participants engaged in the interviews with informed consent, knowing that their responses would be anonymised. All interviews were conducted online using Microsoft Teams, with each question displayed on the screen during the session. Participants consistently highlighted that this visual aid was helpful in ensuring their responses directly addressed the questions. Additionally, feedback was solicited at the end of each interview to refine the process further; all participants expressed satisfaction and noted no improvements were necessary.

Participants were carefully selected through an invitation process that aligned their job roles with the study's objectives. The research topic and interview questions were shared in advance, providing potential participants the opportunity to decline if they felt they did not meet the criteria. This purposive sampling approach ensured that only individuals with relevant expertise contributed to the study, enhancing the credibility of the findings. Furthermore, data collection and analysis were systematically executed, with all interviews recorded, transcribed, and analysed using Nvivo software to ensure consistency and minimise researcher bias. Collectively, these measures demonstrate the rigor and

transparency underpinning the trustworthiness of this research.

Experience in conducting semi-structured interviews and analysing qualitative data was limited to this project. To mitigate this, participation in formal research methodology workshops and regular consultations with a supervisor ensured alignment with the research objectives and methodology.

Second, since the interviews were conducted online, the ability to capture non-verbal cues was constrained. Observations were limited to participants' word choice and tone, potentially overlooking subtle indications of discomfort or hesitation around particular topics.

Finally, the respondents represented diverse cultural backgrounds and operated in various geographical regions. This diversity introduced the risk of misinterpreting cultural nuances and mannerisms, which could impact the interpretation of responses.

4.5.5 Trustworthiness

Trustworthiness is a crucial criterion for evaluating the credibility and reliability of findings (Koonin, 2014). To enhance the trustworthiness of this research, the following measures were implemented:

Credibility: The credibility of the findings was strengthened through triangulation, as data was collected from different groups in different settings performing the same functions. This cross-verification allowed for an understanding of the impacts of digitisation on the visibility of suppliers capabilities. Additionally, data accuracy was ensured through the use of Microsoft Teams' AI transcription services, which were manually reviewed and validated against audio recordings.

Transferability: The research context involved participants from roles within supply chain which of the findings to similar contexts may be applicable.

Dependability: A systematic approach to data collection and analysis was

followed. Transcriptions were cleaned and validated manually, ensuring the integrity of the data. The use of NVivo for coding and thematic analysis further supported the reproducibility of the study.

Confirmability: The researcher held no authoritative role over participants, eliminating the influence of power dynamics. All participation was voluntary, and data analysis was conducted using software tools to minimise bias.

4.6 Research Instrument

Table 1 - The research instrument

Question Alignment	Semi-Structured Interview Questions	Explanation of How the Question Supports the Study
The problem statement: In the context of Heavy Mobile Equipment Engineering OEMs, an acquiring company's supply chain post-horizontal M&A encounters inefficiencies due to a lack of digitalised visibility into the capabilities and services of newly integrated suppliers.	1. What challenges have you faced in understanding and integrating the capabilities of suppliers after the acquisition?	This question identifies the primary challenges related to the visibility and integration of supplier capabilities post-M&A, which is central to the problem statement. It allows respondents to describe their experiences without assuming a technological presence or absence, capturing perspectives from both acquiring and acquired sides.
The research objective: The primary research objective is to identify and develop processes that would enhance the visibility of newly integrated supplier capabilities through effective systems integration and digitisation of data.	2. Can you describe any methods or tools that were used (or could have been used) to enhance supplier visibility and integration post-acquisition? 3. On a scale of 1 to 5, where 1 represents 'not digitised at all' and 5 represents 'fully digitised,' to what extent are your processes for assessing and integrating supplier capabilities digitised? Please provide reasons for your rating.	This question explores existing or potential methods and tools for enhancing supplier visibility, directly supporting the objective of identifying processes to improve integration. It is relevant for respondents from both perspectives, as it allows them to share their insights on what has been or could have been effective. This Likert-style question quantifies the degree of digitisation in current processes, which is a core aspect of the research objective. It helps assess whether the lack or presence of digitisation impacts integration efficiency and visibility, supporting the study's aim to evaluate digital solutions in post-M&A supplier management. The explanation provides context to the numerical rating, revealing deeper insights.
Objective 1: Evaluate the alignment of the knowledge management framework with the specific challenges of enhancing supplier capability visibility during the horizontal M&A process.	4. Have there been any changes in your access to information about new suppliers and their capabilities since the acquisition? If so, what changes have you observed in how this information is managed? 5. Has information related to supplier capabilities been accurately assessed, shared, and utilised across the entire group	These questions address the knowledge management framework's role in handling information about supplier capabilities, assessing whether the acquisition impacted the availability or flow of this information. It supports Objective 1 by uncovering how information management practices changed or could be improved post-M&A.

	after acquisition. can you provide context to your answer.	
Objective 2: Identify the critical supplier information that adds value to the acquirer during an M&A process and develop strategies for the effective retrieval, integration, and maintenance of this information within digitised systems.	6. What types of supplier information has been most valuable to you in your role post-acquisition, and how was this information accessed or managed? 7. On a scale of 1 to 5, where 1 represents 'very poor' and 5 represents 'excellent,' how would you rate the current processes used to assess and integrate the capabilities and services of your suppliers after acquisition? Please explain the reasoning behind your rating.	This question focuses on identifying the types of supplier information that are most critical and valuable, which aligns with Objective 2. It also prompts the respondent to discuss how this information was managed, providing insight into strategies for effective information retrieval, integration, and maintenance. The Likert-style question helps assess the effectiveness of existing processes used for managing legacy suppliers. It provides a quantitative measure that complements qualitative insights, allowing the study to gauge current practices and identify areas for improvement. The reasoning behind the rating offers further qualitative depth to understand specific challenges or successes.
Research Question 1: What are the limitations and constraints in obtaining, digitising, and maintaining the applicable information needed to effectively assess and integrate supplier capabilities after the M&A process?	8. Can you provide examples of any limitations or constraints you faced when attempting to digitise or maintain information about supplier capabilities post-acquisition? 9. On a scale of 1 to 5, where 1 represents 'very poor' and 5 represents 'excellent,' how would you rate the current processes used to assess and integrate the capabilities and services of suppliers added through an acquisition? Please explain the reasoning behind your rating.	This question directly addresses the research question by asking respondents to reflect on specific challenges related to digitising and maintaining supplier information. It ensures responses are grounded in real experiences or observations, providing insight into practical barriers and how they align with the literature on the limitations of digitisation in M&As. The Likert-style question focuses on the processes used specifically for suppliers added through M&As, allowing for a comparison between the treatment of legacy suppliers and newly integrated ones. It provides a metric to evaluate how well post-M&A integration processes are functioning and helps identify gaps or areas of friction that can be explored further in qualitative questions.

Research Question 2: What benefits can be realised from both the acquirer and acquiree perspectives after the M&A process, particularly in terms of enhancing the visibility and integration of the additional pool of suppliers into the existing supply chain?	10. Can you describe any impacts that have occurred due to the integration of suppliers following the acquisition? Has visibility into supplier capabilities influenced these impacts?	This question allows respondents to discuss the impacts realised from the integration of suppliers post-M&A. It captures insights from both the acquiring and acquired sides, exploring how visibility into supplier capabilities has contributed to these impacts, thereby linking to the research question and the literature on the advantages of supply chain integration and visibility post-M&A.
Closing	11. Is there anything else you believe is important to share about your experience in assessing and integrating supplier capabilities post-M&A that we haven't covered?	This allows the respondent to offer further insight that may provide value and not considered within the existing questions.

5 Results and Discussions

This chapter presents the findings derived from the research process, designed to address the core research questions introduced in Chapter 3. The research was centred on two primary objectives: first, to explore the challenges and constraints involved in digitising and integrating supplier capabilities after M&As in the Heavy Mobile Equipment Engineering sector; and second, to assess the benefits, from both the acquirer's and acquiree's perspectives, in enhancing supplier visibility and integration through digitisation post-M&A.

The study was driven by two key research questions: (1) What are the limitations and constraints in obtaining, digitising, and maintaining necessary information for assessing supplier capabilities post-M&A? and (2) What benefits can be realised from improved visibility and integration of the additional supplier pool after M&A? These questions were developed based on gaps identified in existing literature and informed the research design and methodology. The findings presented here stem from semi-structured interviews with ten senior supply chain and procurement professionals who were involved in post-M&A integration efforts within the organisation.

Data collection and analysis were carefully structured to maintain alignment between the research questions, the interview guide, and the analytic approach. Chapter 4 described the methodology in detail, which involved conducting interviews online through Microsoft Teams. Each session was transcribed using the platform's automatic transcription function. The researcher personally reviewed and cleaned the transcripts to remove irrelevant content and anonymise participants. Subsequently, qualitative analysis software NVivo was employed to organise and code the data.

The coding process adhered to an inductive thematic analysis approach, allowing key themes and patterns to emerge directly from the data. Each piece of data was assigned to a specific code, which was later grouped into broader themes

addressing the main research questions. This process ensured that each theme was unique and represented the relevant data without overlap. These themes and their associated sub-themes provide a clear structure for understanding both the challenges of supplier visibility and the potential benefits of digitisation post-M&A.

This chapter begins with a description of the participant sample in Section 5.1 to provide context for the findings. In Section 5.4, a flow diagram is provided to unpack the data in a visual format. The findings related to Research Question 1 are presented in Section 5.6, outlining the limitations and constraints identified in the digitisation and integration of supplier capabilities. Section 5.7 then focuses on Research Question 2, showcasing the benefits experienced by the acquirer and acquiree in terms of enhanced supplier visibility and integration.

Throughout the analysis, frequency counts were based on the number of participants contributing to each theme, ensuring that repeated mentions of a topic by the same participant did not skew the results. This approach prioritises participant experiences and insights, ensuring a balanced and accurate representation of the data.

5.1 Sample Introduction

The sample of respondents was identified and categorised as per the conceptual model displayed in Chapter 4.2, Figure 3. 12 respondents were invited to participate, 1 did not respond, and 1 declined, allowing for a total of 10 interviews to be conducted. The sample was divided into three distinct groups for the study.

- **Group 1:** Respondents representing **Company A**, the acquiring company.
- **Group 2:** Respondents from **Company B**, the acquired company, which was perceived to have limited technology adoption before the acquisition.
- **Group 3:** Respondents from **Company C**, the acquired company, which was recognised as having significant technology presence prior to the acquisition.

The distribution of respondents across these groups is illustrated in Table 2 below.

Table 2 - List of respondents

Respondent	Years experience	Group representation
P1	20+	Company A
P2	20+	Company B
P3	20+	Company A
P4	15+	Company A
P5	20+	Company C
P6	15+	Company C
P7	10+	Company C
P8	5+	Company B
P9	15+	Company A
P10	20+	Company B

5.2 Conceptual Model Validation

The case study's foundation depended on selecting two acquisitions that met specific criteria related to the independent variable. These criteria involved identifying one acquisition where the company lacked the use of digitised data and technology for managing supply chain capability visibility (Company B), and another where the company was advanced in use of technology (Company C). The initial step of the research was to ensure that the selected acquisitions fulfilled these conditions, confirming that the sample was appropriate for the study.

To confirm the appropriateness of the acquisition case studies, a Likert-style question was presented to all respondents:

"On a scale of 1 to 5, where 1 represents 'not digitised at all' and 5 represents 'fully digitised,' to what extent are your processes for assessing and integrating supplier capabilities digitised?"

The results revealed distinct perspectives, likely shaped by the benchmarked experiences of the respondents within their respective environments.

Respondents from Company A had the advantage of comparing their experience with both Company B and Company C during the integration process, while respondents from Companies B and C could only draw comparisons from their pre-acquisition states.

Table 3 - Ratings or presence of technology used.

	How the company rated themselves	Company A rating of company B & C
Company B	3	1.5
Company C	1.83	2.83

Shown in Table 3, Company B, despite being categorised as lacking in technology, rated their digitisation level higher than their assessment of Company A. Conversely, Company C, considered more technologically advanced, rated themselves lower than Company A's assessment of them. A reason for this could be that the benchmark for validating this answer is perceptive and based on knowledge and skills. Company B has not used technology and therefore is unaware of the severity of their lack thereof, whereas company C is aware of the potential and the gaps they still need to fill.

Since these results revealed differing perspectives, likely influenced by non-uniform benchmarks, further validation of the acquisition samples was necessary. This was achieved through additional coding and tagging of interview transcripts, with the results presented in Table 4.

Table 4 - Company B vs Company C data availability

Technology & Digitisation Use - Company B	No. of respondents
Data not available	7
Inadequate technology	6
Technology & Digitisation Use - Company C	No. of respondents
Data not available	1
Inadequate technology	2

Given the clear distinctions between Company B and Company C digitisation

levels, both companies were considered valid and suitable for the study. This conclusion was further supported by qualitative feedback from respondents. For example, Respondent P9 remarked, “Company C was more advanced. They had much better quality data compared to Company B.” Similarly, Respondent P4, when discussing the integration process, stated: “Company B, it's hard for me to even give an assessment. I would say we haven't yet managed to integrate them fully.” These comments reinforced the decision to include both companies in the research.

5.3 Interpreting the Descriptive Statistics

A dashboard display in Figure 4 was created in Microsoft PowerBI using the coded data extracted from Nvivo. The meaning behind each colour and variable will be discussed later.

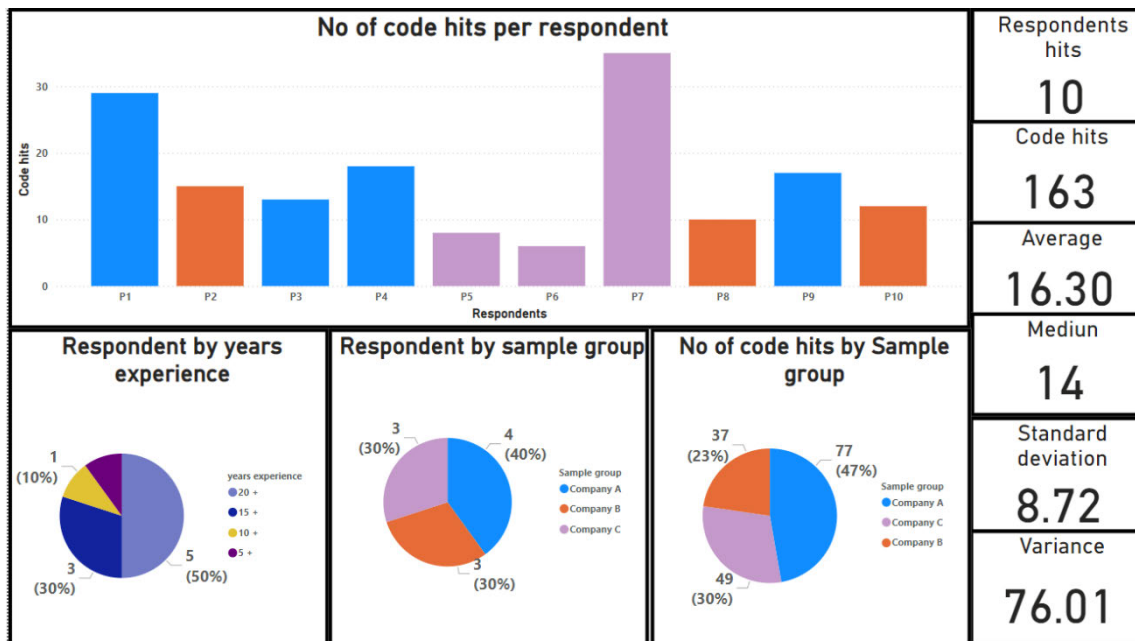


Figure 4 - Dashboard used to visualise findings.

The content in Figure 4 is representative of how the data will be presented in Chapter 5.6 and 5.7 and unpacked for clarity in Chapter 5.3.1.

5.3.1 Colour Codes and Chart Detail

The column chart titled *“No of code hits per respondent”* Figure 4 displays how many times the respondents’ comments align with the identified codes during the thematic analysis of the recorded transcripts:

- Blue: Company A (Respondents P1, P3, P4, P9)
- Purple: Company C (Respondents P5, P6, P7)
- Orange: Company B (Respondents P2, P8, P10)

The pie chart titled *“Respondent by years experience”* Figure 4 displays the distribution of years of experience on the specific code being analysed:

- Dark Blue: 15+ years of experience
- Purple: 20+ years of experience
- Yellow: 10+ years of experience
- Light Blue: 5+ years of experience

The pie chart titled *“Respondent by sample group”* Figure 4 displays the distribution of contribution between Companies A, B and C to the specific code being analysed based:

- Orange: Company B
- Purple: Company C
- Blue: Company A

The pie chart titled *“Number of code hits by sample group”* Figure 4 represents how the summed contribution of all participants in the representative groups:

- Orange: Company B

- Purple: Company C
- Blue: Company A

5.3.1.1 Value definitions

In this section, key values related to respondent behaviour in the data analysis are defined.

Respondent hits refer to the number of participants that were tagged with a specific code. This helps in identifying how widespread a particular response or behaviour is within the group. On the other hand, code hits represent the total occurrences a tag was aligned with a specific code, providing insight into the frequency of a particular theme or behaviour.

The average gives a central value that summarises the typical behaviour across the group. In this case, an average of 16.30 suggests that each respondent had about 16.30 code hits, offering an idea of the general expectation.

The median is the middle value when the data is arranged in order. For example, a median of 14 means half of the respondents had more than 14 code hits, and the other half had fewer. This metric is particularly useful when there are outliers, as it shows the midpoint without being influenced by extreme values.

Standard deviation measures the dispersion of code hits around the mean. A standard deviation of 8.72 indicates that, on average, respondents' code hits vary by about 8.72 from the mean. This helps us understand how much the data points deviate from typical behaviour, providing insight into consistency across respondents.

Variance, closely related to standard deviation, gives an indication of the overall spread in the data. A variance of 76.01 suggests a significant

variation in the number of code hits between respondents, offering a broader perspective on the diversity of responses.

5.4 Thematic Findings to be Discussed

Figure 5 is a breakdown of the codes into themes that are discussed in that chapters that follow.

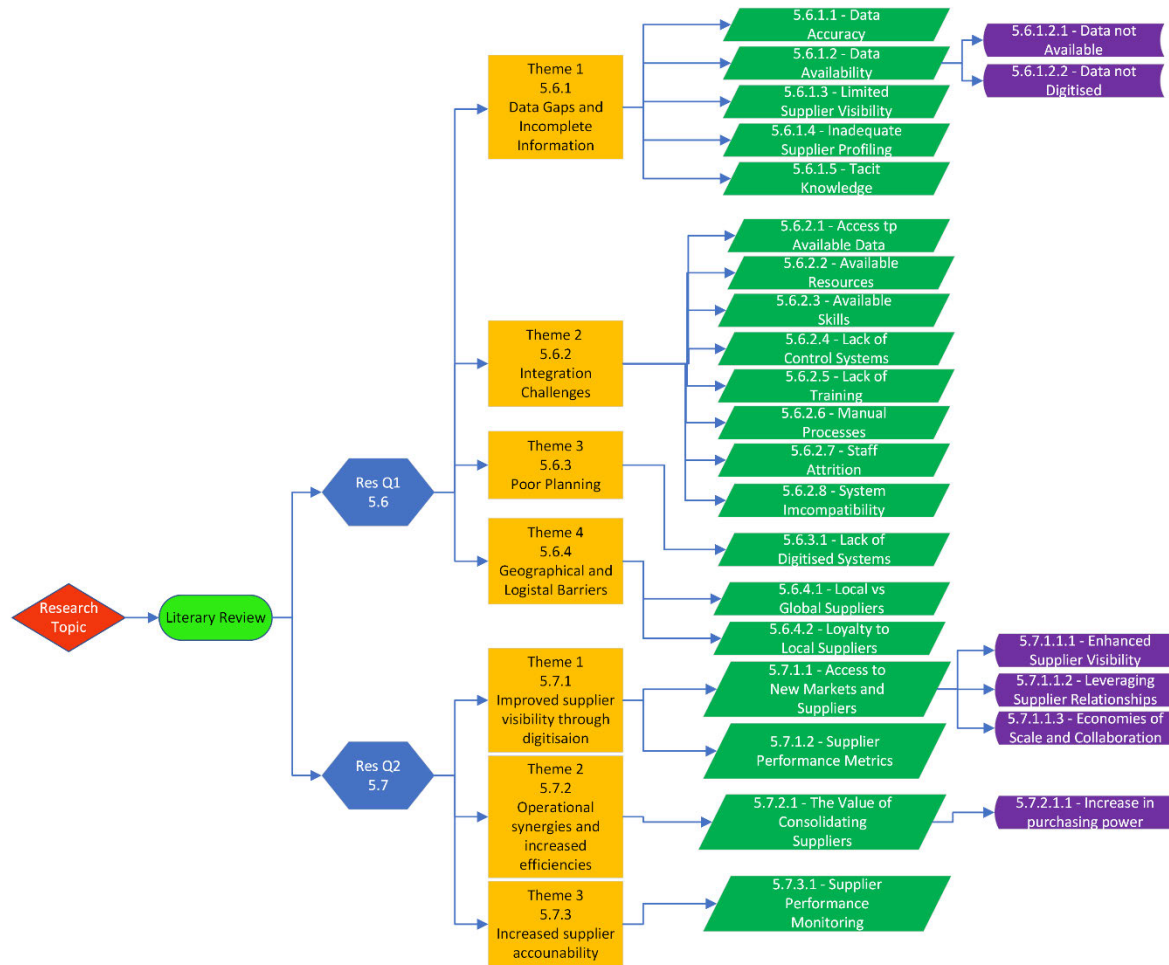


Figure 5 - Thematic view of results.

5.5 Data Saturation

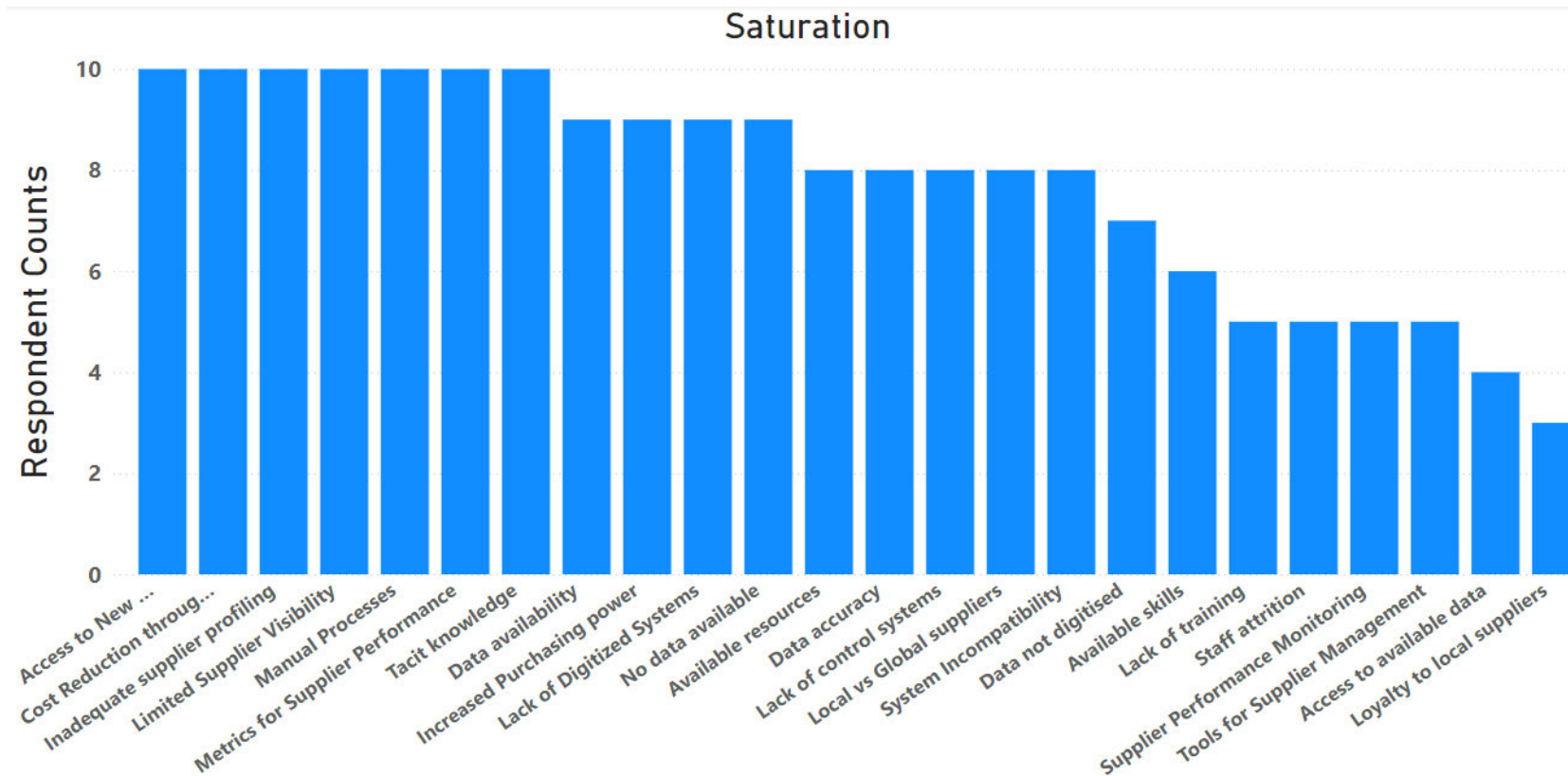


Figure 6 - Number of respondents per code.

The bar chart in Figure 6 shows the distribution of respondents across various thematic codes identified during the analysis of data gathered, using thematic analysis. This method was employed to explore recurring themes related to the study. This distribution supports the process of reaching data saturation, where no new themes emerge despite additional data collection (Fusch & Ness, 2015). The analysis helps to confirm that the sample size was sufficient to identify all relevant issues within the study's scope.

5.6 Results for Research Question 1

Research Question 1: What are the limitations and constraints in obtaining, digitising, and maintaining the necessary information to effectively assess and integrate supplier capabilities after the M&A process?

After analysing the data that was linked to this research question, it was determined that four themes emerged, which are discussed in detail in the chapters that follow.

5.6.1 Theme 1 – Data Gaps and Incomplete Information

The integration of newly acquired suppliers into a digitised system during mergers and M&A's presents significant challenges, particularly in the context of ensuring visibility into supplier capabilities. The digitisation process, crucial for effective supply chain management, is often restricted by data gaps and incomplete information. These limitations are especially evident when contrasting companies with varying degrees of technological maturity at the time of acquisition. In the case of Company A's acquisition of Company B and Company C, stark differences in data availability and technological infrastructure underscore the difficulties in achieving seamless integration.

Company B, with its limited technological infrastructure, relied heavily on informal practices, "tribal knowledge", and manual processes. This lack of structured, digitised data made it difficult to assess supplier capabilities. Much of the information needed to understand supplier operations was stored in the minds of employees or recorded manually, leading to inefficiencies and potential errors during integration. The absence of comprehensive part-level data, supplier classifications, and procurement histories added complexity to the integration process. As a result, the acquisition of Company B highlighted the challenges of relying on non-digitised systems, where even basic supplier information, such as lead times and reorder points, was either incomplete or inaccessible.

On the other hand, Company C, with a more advanced technological foundation, experienced fewer issues related to data visibility. However, even in this case, certain aspects of supplier capabilities were not fully captured by existing systems. There remained gaps in understanding the full extent of suppliers' competencies, which could only be addressed through direct communication or site visits. These differences between Company B and Company C illustrate the broader challenges faced by organisations attempting to digitise and integrate supplier information during the post-acquisition phase.

By highlighting the discrepancies in data availability and the reliance on informal knowledge-sharing practices, this theme underscores the need for robust digital integration processes to support the visibility of supplier capabilities.

5.6.1.1 Data Accuracy

The results from the interviews displayed in Figure 7 highlight data accuracy as a significant challenge in the digitisation and integration of supplier capabilities post-acquisition, particularly for Company A's systems following the acquisition of Companies B and C. The accuracy of supplier data plays a pivotal role in achieving effective visibility and integration of the additional pool of suppliers.

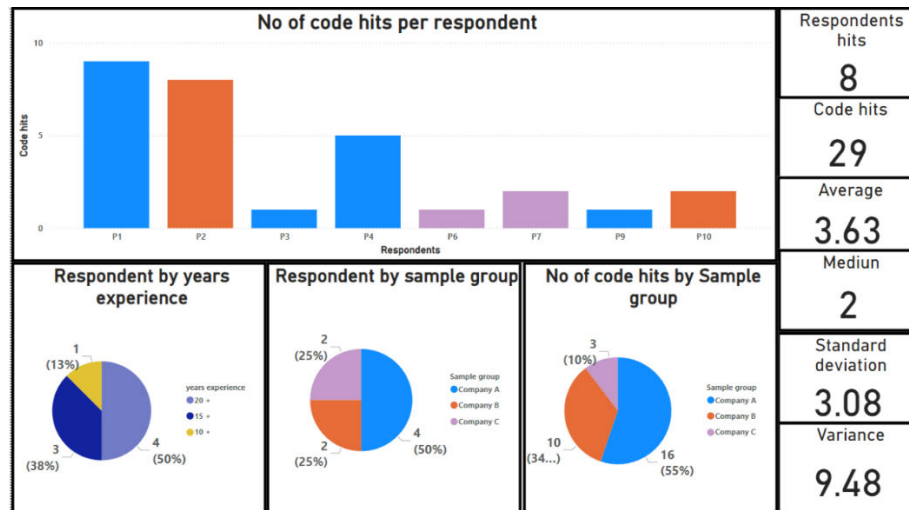


Figure 7 - Data accuracy respondent data.

Considering the data displayed in Figure 7, it was a point commented on by 8 of the 10 respondents, all of Company A's respondents recognised this to be a critical component of a successful visibility of supplier's capabilities. A common issue reported by all respondents from Company A and across both Company B, which had limited technological infrastructure, and Company C, which had a more advanced system, was the misalignment between the actual capabilities of suppliers and the data available in Company A's systems. For instance, several interviewees noted that suppliers were often "pigeonholed" based on incomplete or outdated information, limiting the understanding of their full capabilities. This lack of comprehensive data was compounded by inconsistencies between what suppliers delivered and the specifications on file. One respondent stated, "What's supplied by the supplier and what's on the system can be completely... they can be three or four years apart" (P1).

Moreover, post-acquisition data integration suffered due to the challenges in transitioning from non-standardised, often manually recorded data into a digitised system. Company B, with its limited use of technology, struggled more with these transitions, facing difficulties in translating its supplier data into Company A's integrated system. For example, duplicate vendor profiles were frequently created due to minor data entry errors, such as misspellings, which necessitated

substantial manual efforts to cleanse the data. This issue delayed the integration process and caused confusion in identifying the correct vendor, as highlighted by another interviewee: “We had to go in and clean that up so when we put it on the Company A side... they wouldn’t see four of the same companies listed and wonder which one to use” (P2).

Additionally, digitisation challenges were exacerbated by the lack of consistent data formats between the companies, which often resulted in delays. These issues were compounded by organisational inefficiencies in implementing shared data entry standards across newly acquired suppliers. For instance, the absence of a structured onboarding process for digitisation meant that key supplier information was often delayed or entirely missed during the integration. This gap highlights the need for robust digitisation protocols to streamline supplier data integration and ensure consistency across systems.

Inaccuracies also emerged from the reliance on “tribal knowledge” – undocumented information held by long-standing employees that was not codified into the system. Such gaps in data capture posed significant obstacles to digitising and systematising supplier capabilities. One respondent described how the lack of consistent knowledge transfer added complexity to the procurement and engineering processes: “That ‘tribal knowledge’ of how the part is actually made is very challenging” (P1).

Technological discrepancies further hampered data accuracy. Mismatches in measurement systems (e.g., imperial versus metric) were common, particularly when suppliers from different regions were involved. Such issues often led to the rejection of files or discrepancies between the data provided by suppliers and Company A’s system requirements.

Thus, the findings underscore that data accuracy is not merely about correct entry but extends to the standardisation of processes and the alignment of technological systems. These issues are critical to address in order to ensure that the benefits of enhanced visibility and integration of supplier’s post-acquisition are

realised. Improving data accuracy through rigorous cleansing and aligning both internal and external systems is fundamental to overcoming the barriers identified in the research.

5.6.1.2 Data Availability

The data availability for assessing and integrating supplier capabilities post-acquisition was characterised by several limitations and challenges across the companies.

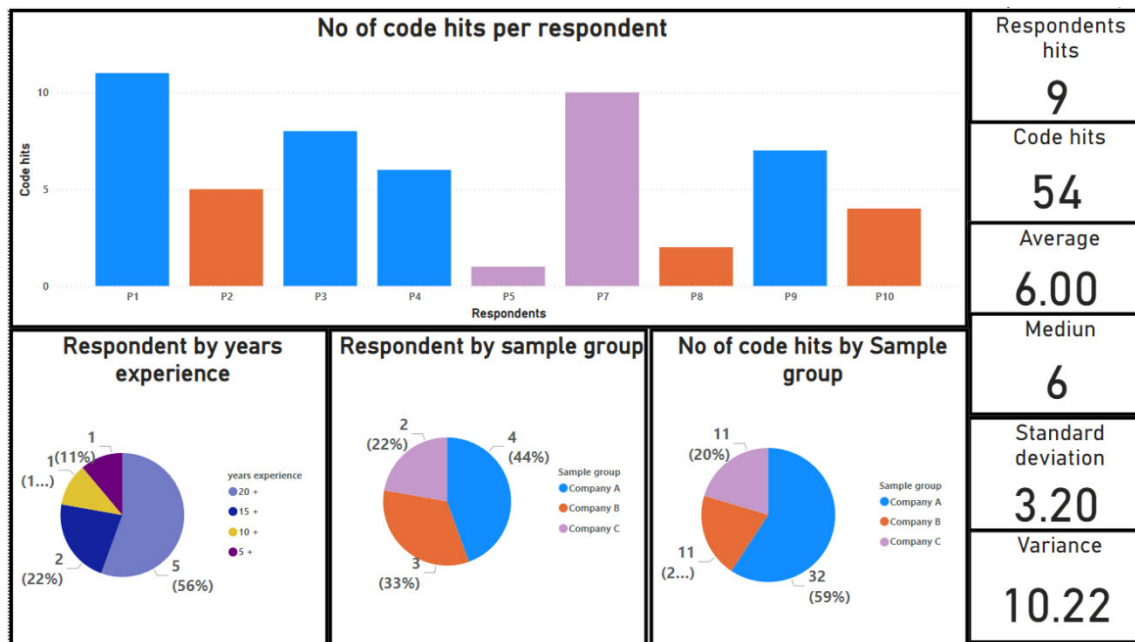


Figure 8- Data availability respondent data.

The research revealed that data gaps and incomplete information were prevalent, primarily due to the different levels of digital maturity between the acquired companies. As per Figure 8, 90% of the respondents reported data availability to be a challenge. Company B, at the time of acquisition, operated with a limited technological framework, resulting in a heavy reliance on manual processes, verbal communication, and undocumented “tribal knowledge”. This created significant data visibility issues and restricted efforts to systematically assess and digitise supplier capabilities. Company C, while having a stronger technological foundation, still faced challenges related to data classification and integration.

5.6.1.2.1 No Data Availability

With a variance of 2.25 in results captured across 90% of the respondents in Figure 9, it was highlighted as a common challenge experienced by all the respondents with an average of 3.44 mentions per respondent.

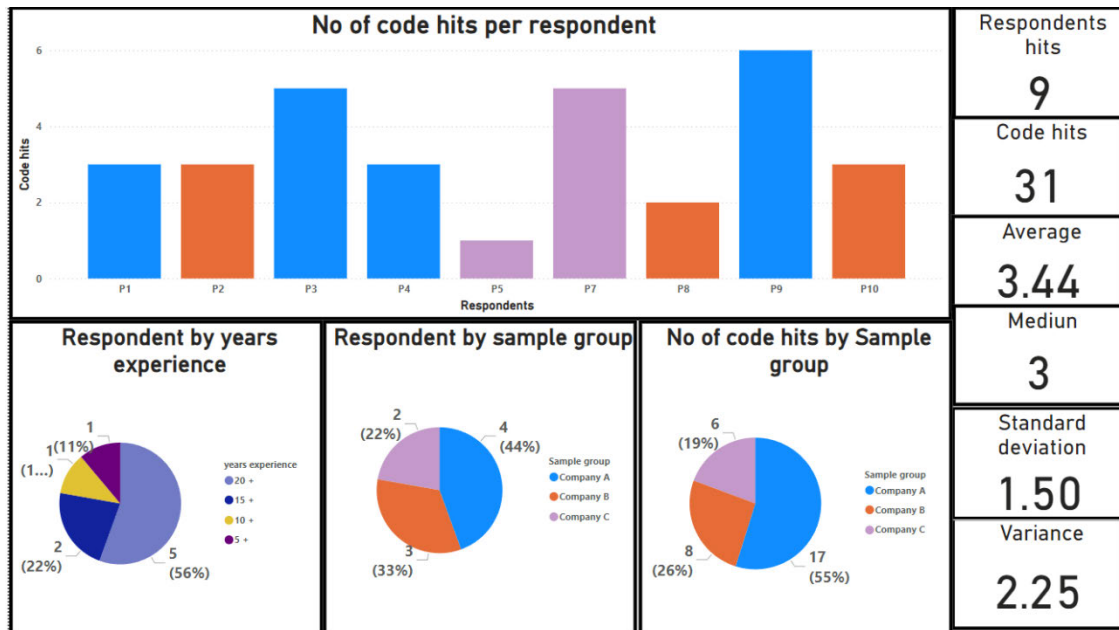


Figure 9 - No data available respondent data.

A recurring issue highlighted in the research was the absence of certain critical data needed to evaluate supplier capabilities. In many cases, particularly with Company B, key supplier data such as part numbers, supplier performance metrics, and specific competencies were either incomplete or non-existent. For example, Company B relied heavily on "tribal knowledge" – Informal, undocumented information held by individuals – rather than systematically recording and storing data. This lack of formal data meant that many competencies were not captured at all, and suppliers were often pigeonholed into limited roles based on incomplete records. As a result, understanding the full range of supplier capabilities required physical visits to supplier sites or direct conversations with long-standing employees.

Moreover, basic operational data, such as part-level information, supplier usage,

and purchasing history, was either missing or insufficient in Company B’s systems, limiting the ability to assess suppliers comprehensively. Company C, while more advanced, also faced data gaps, particularly when trying to align newly acquired supplier data with Company A’s more sophisticated systems.

5.6.1.2.2 Data Not Digitised

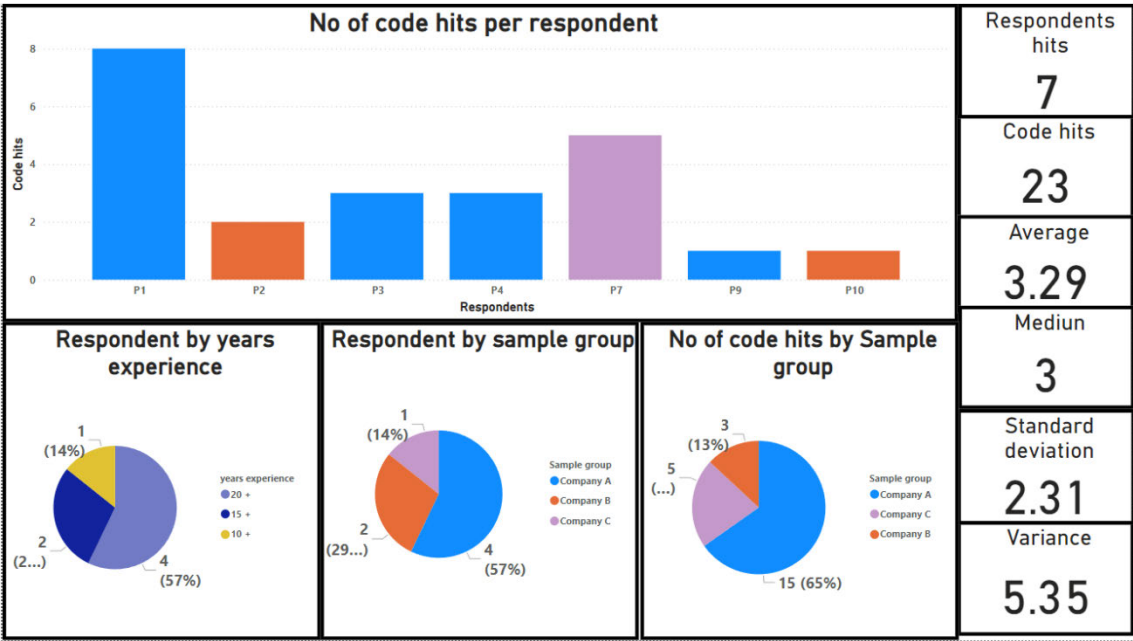


Figure 10 - Data not digitised respondent data.

Another major challenge was the lack of digitisation, even where some data existed. All respondents from Company A had experienced this issue as shown in Figure 10, whereas not all respondents from Company B and Company C identified it as a pain point. This highlights the complexities of managing data versus the value it provides, as Company A uses data for value-adding purposes that are unfamiliar to both Company B and Company C. Company B’s reliance on manual processes, verbal communication, and non-digitised formats such as manual paperwork made it difficult to efficiently integrate supplier information into Company A’s systems. For instance, much of the supplier data was not readily available in digital formats, which significantly slowed down the post-acquisition integration process. The absence of automated systems led to delays and

inconsistencies in retrieving, processing, and maintaining supplier information.

Although Company C had a stronger technological infrastructure, many aspects of its data were not fully digitised or aligned with Company A's existing digital tools. This included difficulties in classifying and categorising part numbers, as Company C's system did not match the taxonomy used by Company A. Furthermore, even though efforts were made to adopt digital tools such as eCost, a proprietary software used for managing supplier data and spend, these were not fully implemented across all newly acquired suppliers, leading to a reliance on manual processes such as in-person visits and virtual supplier walkthroughs to gain a full understanding of supplier capabilities.

In both cases, the limited use of digitised systems meant that Company A's attempts to standardise and centralise supplier information were restricted. The reliance on non-digitised methods further exacerbated inefficiencies, preventing the timely capture and analysis of critical supplier data.

5.6.1.3 Limited Supplier Visibility

The acquisition of Companies B and C by Company A revealed significant limitations in the visibility of supplier capabilities, particularly in the context of Company B's underdeveloped technological systems. With a medium of 3 on the results spread across all respondents and a variance of 19.44 displayed in Figure 11 this indicated that certain respondents had experienced significant challenges in this area and spoke heavily to this topic.

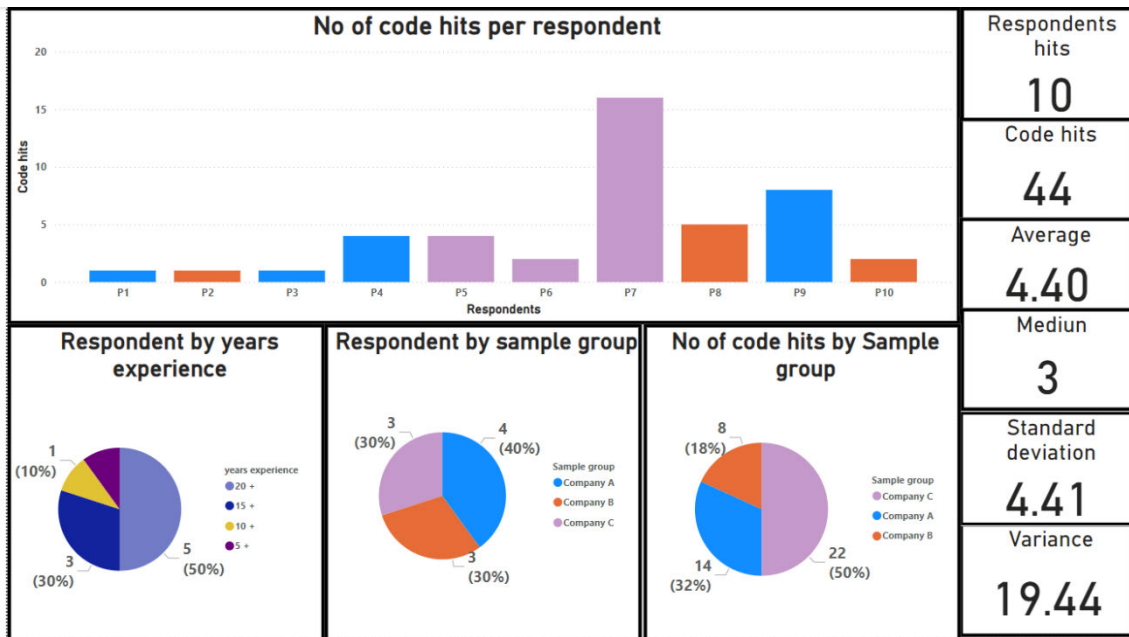


Figure 11 - Limited supplier visibility data.

This lack of visibility restricted the effective integration of suppliers post-M&A. As the research indicates, Company B's reliance on outdated methods such as "Excel spreadsheets for orders" (P10) substantially delayed the process of understanding and digitising its supplier capabilities. This created inefficiencies in the ability to integrate Company B's supplier data into Company A's systems, with one respondent P10 noting that the group sourcing team "was blind as to what Company B was doing really".

Furthermore, while Company C had a more robust technological foundation, challenges persisted in aligning their systems with those of Company A. Company A's reliance on the eCost system, though functional, did not provide adequate supplier profiling beyond basic information such as supplier names and addresses according to P5. One respondent P7 highlighted that "it's easy to get some of the information about the suppliers except for what is it that they do". This gap demonstrates that even when digitisation tools are in place, they may not be fully equipped to capture the complete spectrum of supplier capabilities required for efficient integration post-M&A.

In both cases, Company A lacked a comprehensive system to assess the capabilities of the newly integrated suppliers. Respondent P7 expressed frustration, stating, "there isn't really a system in place for Company A to accurately assess the capabilities of a supplier". This issue was more pronounced for Company B, which had limited technical data and classified supplier information that required significant time to organise and digitise. As a result, the slow pace of visibility improvements hampered the potential for streamlined sourcing initiatives.

In contrast, Company C benefitted from some degree of digitisation, with processes such as online virtual tours allowing for supplier assessments. However, despite these digital interventions, it was noted that the assessments were often based on another team's judgment rather than direct visibility into the supplier's full capabilities. Respondent P7 summed this up by saying, "we assess based on someone else's assessment", highlighting the indirect nature of these processes.

5.6.1.4 Inadequate Supplier Profiling

One of the core challenges faced by Company A during the post-acquisition integration was the inadequate profiling of suppliers, particularly from Company B. Inadequate supplier profiling resulted in limited visibility into key supplier capabilities, which significantly affected the efficiency of sourcing and supplier management. Respondent P1 from Company A mentioned that basic supplier information such as "supplier names, addresses, and contact details" was available through systems like eCost, but more critical details about the suppliers' specific capabilities were lacking. This limitation made it difficult for sourcing teams to assess which suppliers could meet the company's evolving needs. Further adding that, respondent P4 highlighted "eCost only holds information on what we are currently doing with that supplier" "if we are only buying electronic components from Joe Blogs, but Joe Blogs also has a hydraulics division, if we don't purchase from that hydraulics division, eCost has no information on it", this

is a lost opportunity to fully exploit a suppliers' capabilities.

The absence of a formal system for capturing detailed supplier profiles exacerbated the issue, with respondent P7 pointing out that "...there isn't really a system in place for Company A to accurately assess the capabilities of a supplier". Even in cases where supplier information was available, it often lacked depth, meaning the company had to rely on direct conversations or physical visits to assess the suppliers' actual capabilities. Respondent P7 noted that in some cases, suppliers were assessed only after "physically visiting the company to understand their capabilities".

This lack of a structured profiling system led to inefficiencies and missed opportunities. Without adequate supplier profiling, sourcing initiatives were delayed, and opportunities to leverage supplier strengths were overlooked. Respondent P4 commented that Company A "still doesn't have visibility" into critical aspects of its suppliers' operations, even after the M&A process was underway.

These limitations highlight the need for more sophisticated and digitised supplier profiling systems to ensure that all relevant supplier capabilities are visible and can be integrated into the acquirer's operations efficiently. As the research shows, the absence of such systems creates bottlenecks in both assessing and leveraging supplier capabilities, particularly during the M&A integration phase.

5.6.1.5 Tacit Knowledge

Tacit knowledge was a common theme across all respondents with a medium hit rate of 3 and a relative low variance of 4.64 shown in Figure 12 indicating a fairly universal opinion on its impacts on supplier capability visibility.

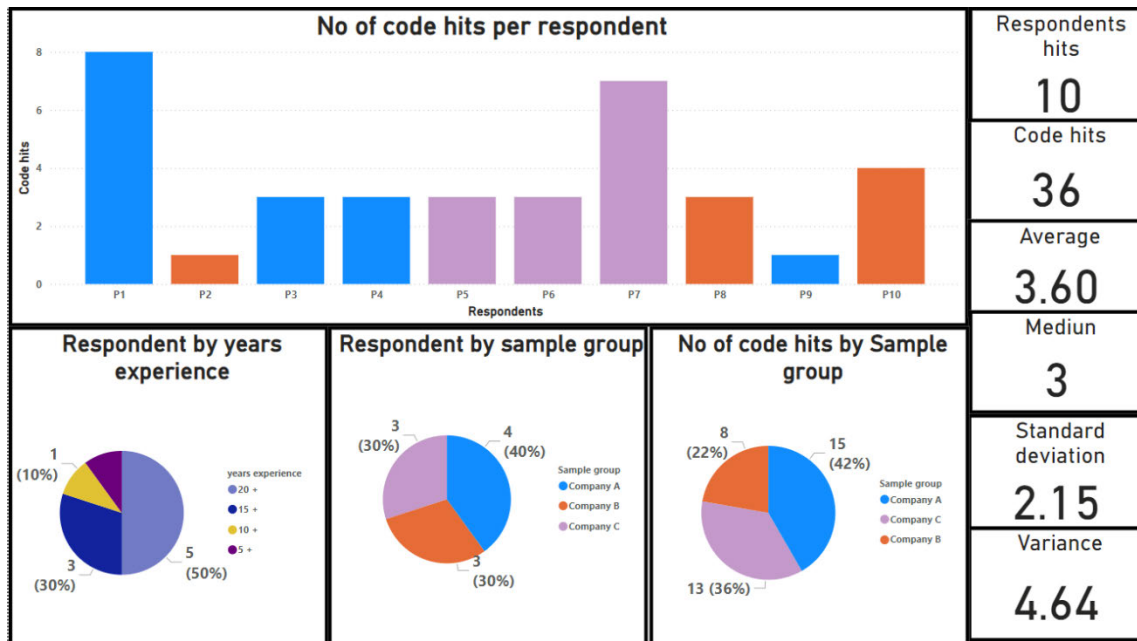


Figure 12 - Tacit knowledge respondent data.

The role of tacit knowledge, or the unspoken and experiential knowledge that individuals hold, was highlighted as a key challenge in integrating supplier capabilities post-acquisition in the context of Companies B and C. Tacit knowledge is not easily captured by digital systems, making it difficult to integrate into the more structured and data-driven approaches of Company A. Several respondents noted that much of the supplier knowledge, particularly in Company B, was deeply embedded in personal expertise and informal processes.

Organisational culture played a significant role in perpetuating the reliance on tacit knowledge. Company B's informal practices created resistance to adopting digitisation processes, as employees were accustomed to verbal and manual methods of recording supplier information. This cultural disconnect between Company A's structured processes and Company B's informal knowledge-sharing practices resulted in slower integration. Similarly, Company C, while more technologically mature, faced challenges in aligning its autonomous, decentralised practices with Company A's centralised approach. These differences illustrate the impact of cultural dynamics on the ability to effectively integrate and digitise supplier capabilities.

For example, P1 emphasised the reliance on personal experience and informal interactions in smaller companies: "Smaller companies rely more on verbal conversations, and that's been a big challenge in my experience". This form of tribal knowledge, often passed down through verbal or undocumented means, was common in Company B, which had limited technological infrastructure at acquisition. The challenge was exacerbated by the lack of digitisation, as key competencies of suppliers remained confined to the knowledge of individuals, making it difficult for Company A to access and standardise this information.

A significant issue arose when trying to translate this tacit knowledge into structured systems. As P10 mentioned, Company B's operations heavily relied on informal processes such as Excel spreadsheets and individual expertise: "Everything else was just pure Excel and relied on people knowing what they were doing and working off lists... It was quite basic". This informal system meant that a significant amount of knowledge was tied to individual staff members, which, when lost due to staff turnover or other disruptions, created substantial gaps in operational continuity and understanding.

Additionally, P8 highlighted the difficulty in moving from manual to digital processes: "There was a lot of tribal knowledge... it was just very manual processes". This reflects a broader issue where companies like Company B, with limited technological frameworks, struggled to transition to fully integrated systems that capture and codify supplier capabilities. The tacit knowledge around legacy products and processes often remained inaccessible within these new systems, creating barriers to visibility and efficiency.

In contrast, Company C had a stronger technological foundation, and while tacit knowledge still played a role, the reliance on it was less acute. However, even in this context, tacit knowledge was noted as a factor in supplier relationships. P7 remarked on the importance of personal knowledge in making decisions regarding supplier capabilities: "If I'm looking for casting, for example, and there's a good supplier within Company A, I have to ask the sourcing team for names". This

reliance on personal networks and internal conversations, rather than digitised supplier databases, highlighted the limits of current systems in providing comprehensive visibility into supplier capabilities.

Overall, the findings suggest that while digitisation can greatly enhance the visibility of supplier capabilities, tacit knowledge continues to present a significant challenge. The inability to fully capture this knowledge within digital systems means that in many cases, informal communication and personal expertise remain critical to understanding supplier competencies. This underscores the need for enhanced knowledge management frameworks that not only digitise explicit knowledge but also create mechanisms for integrating tacit knowledge into formal systems, ensuring that the full scope of supplier capabilities is visible post-acquisition.

5.6.1.6 Key Findings from Theme 1 – Data Gaps and Incomplete Information

The findings in Theme 1 underscore the pervasive challenges associated with data gaps and incomplete information when integrating newly acquired suppliers into a digitised system post-acquisition. These issues are particularly acute in contexts where the technological maturity of the acquired companies varies, with Company B serving as a prime example of the complications arising from reliance on non-digitised, informal processes.

In the case of Company B, the absence of structured, digitised data presented a significant barrier to achieving visibility into supplier capabilities. As noted in the literature, the integration of digitised systems post-M&A is often hindered by legacy systems and informal data practices, which impede the seamless flow of information across supply chains (Říhová, 2018). Supplier information in Company B was frequently embedded in "tribal knowledge," held by long-serving employees and passed on through informal means such as verbal communication or manual records (P1). This scenario aligns with the observations of Bienhaus & Haddud (2018), who highlight that the lack of formalised, digitised procurement data contributes to inefficiencies and inaccuracies in evaluating supplier

capabilities. Specifically, the absence of crucial data such as supplier classifications and procurement histories created significant delays in the integration process, mirroring the challenges identified in prior research where incomplete or informal data lead to operational inefficiencies (Říhová, 2018; Henningsson et al., 2018).

Conversely, Company C, which had a stronger technological foundation, encountered fewer visibility issues. However, even in organisations with more advanced systems, gaps in supplier information remained, requiring direct interaction or site visits to gain a comprehensive understanding of supplier competencies. This finding is supported by Gunasekaran et al. (2009), who argue that while digitisation improves supply chain visibility, it does not entirely eliminate the need for direct supplier engagement to fill data gaps. This suggests that even within a digitised framework, challenges in achieving full data visibility can persist, as the literature points out the complexities of post-M&A IT system integration (Irwin, 2022).

These findings directly address the first research question by revealing core limitations in obtaining, digitising, and maintaining supplier information during the post-acquisition integration process. The reliance on incomplete or informal data, coupled with the misalignment between existing systems, exacerbated these limitations. This supports Henningsson et al. (2018), who argue that up to 60% of anticipated M&A benefits are tied to the successful integration of information systems. The case of Company A highlights these inefficiencies, as one respondent explained: "We had to go in and clean that up so when we put it on the Company A side... they wouldn't see four of the same companies listed and wonder which one to use" (P2). Such inefficiencies, including duplicate vendor profiles and mismatched data, significantly delayed integration, necessitating substantial manual intervention, a situation also noted by Říhová (2018) regarding the complexity of integrating disparate systems post-M&A.

This theme reinforces the critical importance of data accuracy, availability, and

digitisation in gaining visibility into supplier capabilities post-acquisition. As noted by Ilhan & Rahim (2020), the digitisation of procurement processes is crucial for reducing transaction costs and increasing transparency, particularly in sectors where high-value parts and machinery are involved. The findings from this study suggest that enhancing data integration processes and moving beyond reliance on informal knowledge-sharing practices are key to overcoming the barriers identified. Addressing these gaps is essential for ensuring that digitised visibility of suppliers can be effectively utilised to meet the evolving needs of the acquirer. This is encapsulated in P7's observation: "There isn't really a system in place for Company A to accurately assess the capabilities of a supplier," reflecting the broader challenge of aligning procurement systems across merging entities, as noted by PwC Greece (2020).

5.6.2 Theme 2 – Integration Challenges

In this section of the research report, the integration challenges faced by Company A when attempting to incorporate Companies B and C into its existing systems following acquisition is explored.

A critical theme that emerges from the analysis is the disparity between the technological infrastructures of the two acquired companies. Company B, with its minimal use of technology, presents significant challenges in terms of data integration and visibility. Much of Company B's operations, including procurement, were managed manually via Excel spreadsheets making it difficult to efficiently integrate into Company A's more sophisticated systems. The reliance on outdated systems restricted the ability to digitise and centralise supplier information, thus impeding efforts to streamline processes and assess supplier capabilities effectively.

In contrast, Company C had a technological foundation at the time of acquisition, yet challenges still arose. The ERP system in place at Company C was misaligned with Company A's requirements, particularly regarding its compatibility with manufacturing processes. This mismatch necessitated extensive manual work to

classify and migrate data between systems. Even where systems were present, the lack of integration and the complexities of aligning part numbers, transaction IDs, and lead times across ERP platforms led to inefficiencies and delays in achieving the desired visibility into supplier capabilities.

The results underscore the broader issues of resource limitations, data management challenges, and system compatibility that Company A encountered post-acquisition. For both Companies B and C, the challenges in integrating supplier information into a unified digital platform reflect the limitations of the existing knowledge management frameworks. These findings provide insight into the critical supplier information needed and highlight the necessity of effective strategies for retrieval, integration, and maintenance within digitised systems, as outlined in the research objectives.

This section addresses the core research question by showcasing the constraints and limitations in system integration, particularly the inefficiencies caused by the manual processes and incompatible systems that hinder the assessment and visibility of newly integrated supplier capabilities.

5.6.2.1 Access to Available Data

The findings highlight several challenges related to the accessibility of supplier data, particularly in the post-acquisition period for Companies B and C. These challenges affect the ability of Company A to digitise and integrate crucial supplier information, ultimately restricting the visibility into supplier capabilities. However, what was clear in the data was although company B was integrated and using Company A systems to access data, not all data required was accessible. No respondents from Company A expressed any difficulties in accessing Company A available data. However, Company C expressed challenges in this regard more so than Company B, as highlighted in Figure 13 in the pie chart *respondent by sample group* indicating 75% of the respondents coming from Company C. The reason for this is that Company B is yet to be fully integrated in Company A systems and so is unaware of the data that is available.

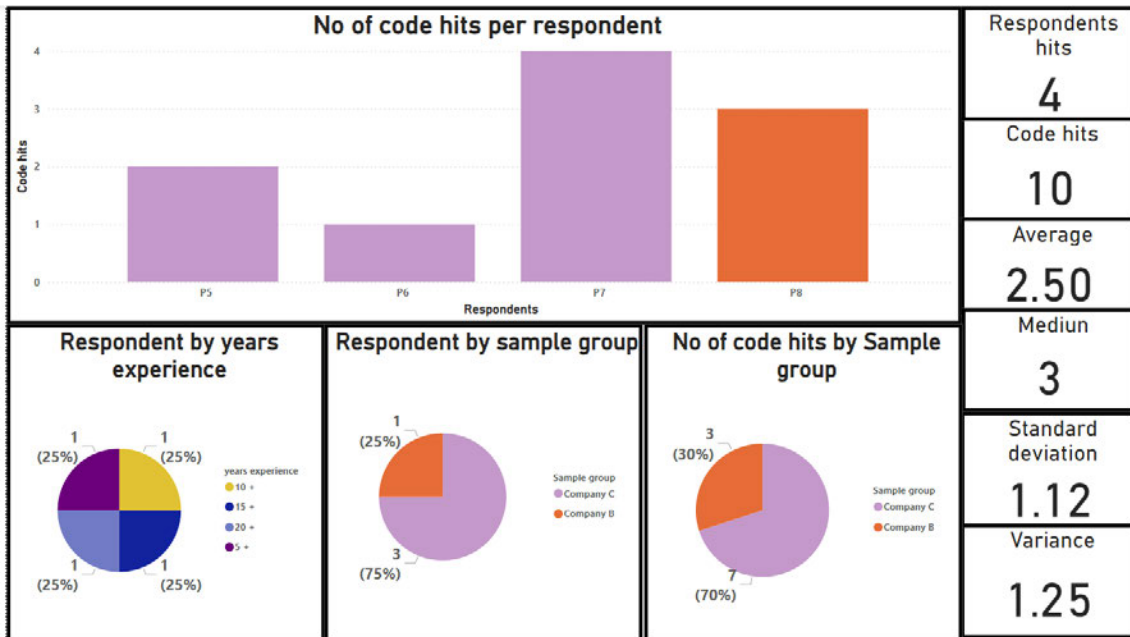


Figure 13 - Access to available data respondent data.

5.6.2.1.1 Data Availability vs. Accessibility

While data related to supplier capabilities often existed within the systems of the acquired companies, Company A frequently encountered issues in gaining access to this information. For instance, respondent P5 described the difficulty in retrieving supplier data "as of yesterday, it was like pulling teeth trying to get it. They flat out weren't going to. They wouldn't give it to me... The information is available but it's not necessarily accessible."

This reveals a fundamental disconnect between the presence of data and the ease of accessing it, with internal organisational barriers playing a significant role. Even though senior-level intervention could expedite access, it was often not readily available to key personnel who required it to facilitate the integration process. These experiences suggest inefficiencies in data-sharing practices within the acquired companies, which Company A needed to address post-M&A.

5.6.2.1.2 Fragmentation of Data Sources

Another recurring theme was the fragmentation of data across various platforms and formats, further complicating integration efforts. In some cases, supplier data

was maintained manually, as noted by Respondent P7: "For now I keep an Excel spreadsheet with notes on each supplier and prospective suppliers."

This reliance on ad hoc solutions, such as spreadsheets or SharePoint, reflects the limitations of formalised, centralised digital systems. Without streamlined data integration, crucial supplier information could be siloed within individual teams or even lost when employees left the organisation as Respondent P7 explained, "If you leave, that information goes with you basically."

This underscores the need for robust knowledge management systems that capture supplier information in a way that remains accessible to all relevant stakeholders, regardless of individual staff turnover.

5.6.2.1.3 Inconsistent Data on Supplier Capabilities

In terms of supplier capabilities, many respondents expressed frustration over the lack of comprehensive data. Although basic details about suppliers were often available, key information such as their full capabilities remained elusive. Respondent P7 explained: "There isn't a whole lot of supplier information beyond their name... they record a bunch of information but not much that's easily accessible to me."

This gap in data accessibility made it difficult for Company A to fully assess and integrate the capabilities of newly acquired suppliers, especially in cases where digitised records were incomplete or lacking. Such limitations directly impact Company A's ability to achieve the research objective of improving visibility into supplier capabilities post-acquisition.

5.6.2.1.4 Confidentiality Constraints

It was also noted that, in some instances, access to data was restricted due to confidentiality concerns. Respondent P6 mentioned "With reason of course, certain data will be limited for confidentiality." This indicates that even when supplier data was available, certain legal or contractual obligations could limit how

much of that information could be accessed and digitised. These confidentiality constraints add another layer of complexity to the process of integrating and assessing supplier capabilities.

5.6.2.1.5 Time Delays in Data Access

In addition to the accessibility challenges, respondents highlighted the delays in obtaining the necessary data, further impeding integration efforts. As respondent P8 remarked "I think really the only challenge was just the time that it took to get that visibility."

Such delays point to inefficiencies within the data retrieval process, further slowing the digitisation and integration of supplier information. The longer it takes to access critical data, the more challenging it becomes for Company A to effectively integrate suppliers' post-acquisition and fully leverage their capabilities.

5.6.2.2 Available Resources

The disparity in resources available for integrating and digitising supplier capabilities post-acquisition between Company B and Company C is evident, with challenges stemming from their differing levels of technological readiness at the time of acquisition.

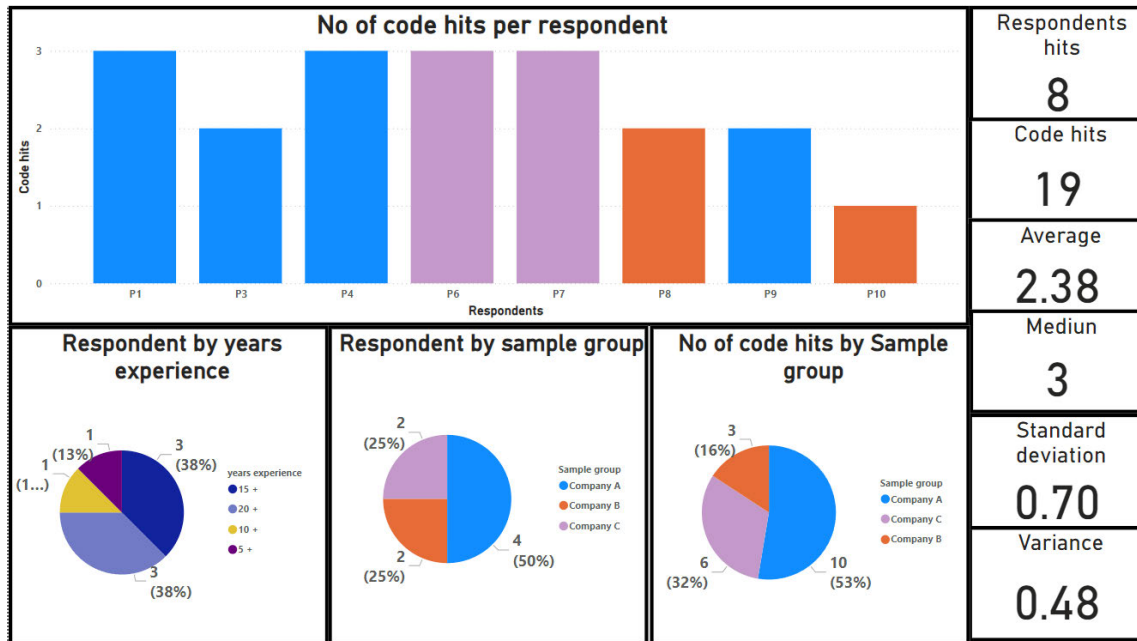


Figure 14 - Available resources respondent data.

Company C had a strong technological foundation, whereas Company B faced significant challenges due to its limited use of technology. The data from the chart titled “No. of Code Hits per Respondent” in Figure 14 supports this disparity, where Company C respondents show more engagement compared to Company B, suggesting a deeper integration of digital tools and resources within Company C.

One key issue highlighted by respondents was the lack of sufficient resources dedicated to integrating Company B. Respondent P1 remarked, "Larger companies with more resources and processes are easier to integrate than smaller companies," emphasising that the limited technological and human resources of Company B hampered efficient integration. This is further supported by the pie chart data on the “No. of Code Hits by Sample Group”, where Company B only accounted for 16% of code hits, lower than Company C at 32% illustrating the lower level of digital engagement and integration within Company B.

Similarly, respondent P10 expressed frustration with resource limitations, stating, "Company B thought there was going be a team to send on the factory integration

team...but we said no – that's not going happen." This remark underscores the gap between expectations and the reality of resource constraints, placing pressure on the internal teams at Company B that leads to delays in obtaining and digitising the necessary supplier data. The average code hits per respondent in the data is 2.38, but Company B's Respondents P2, P8, and P10 each had fewer hits compared to the respondents from Company C, indicating that Company B was less active in the digital integration process.

The absence of a robust ERP system at Company B also limited the digitisation of their supplier information. Respondent P3 noted: "These are often small businesses with a limited number of people in the supply chain and poor ERP systems, which makes it difficult to gather and maintain accurate information." This lack of efficient systems made it challenging to integrate supply chain data into Company A's centralised platform, essential to enhancing supplier capabilities visibility after acquisition.

In contrast, Company C had access to extensive data at acquisition. However, the manual process of categorising and integrating this data still posed resource burdens. Respondent P4 reflected, "For Company C this year, we had maybe 2000 part numbers... all those 2000 part numbers would have had to be classified. And that is just physically someone going through the list and doing it." The respondents' years of experience chart reveals that respondents from Company C tend to have more experience, which may have been beneficial in handling these resource-intensive tasks, but the process still required significant manual effort, further underscoring the need for more automated and streamlined solutions to ensure efficient integration.

The challenges related to resource shortfalls were exacerbated by a lack of dedicated IT resources, as several respondents highlighted. Respondent P6 explained, "The technical side could have been done more efficiently with more IT manpower. We didn't have a dedicated IT department, just two people trying to manage everything." This shortage of IT resources not only slowed down the

digitisation process but also contributed to inefficiencies in updating critical supplier information in real time. The standard deviation of 0.7 in code hits between respondents reflects this variation in engagement levels, with those from Company B appearing to be less digitally engaged compared to their peers in Company C.

Further highlighting the resource constraints, Respondent P7 mentioned the limited use of existing tools like eCost, noting, "Only eCost is used when we have the time... if you're talking about a tool, only eCost when we do have time to go through this stuff." Even though Company C was more technologically advanced, the pressure on human resources limited the full utilisation of available tools, reflecting broader challenges in ensuring consistent supplier visibility. This point is corroborated by the median code hit count of 3, indicating that while some respondents were actively contributing to the process, others were constrained by resource limitations.

In addition, the lack of sufficient resources and systems integration continued to be a major hurdle. Respondent P9 commented, "The issue is with the resource capability of the eCost team... the work has been a lot slower." This sentiment is reflected across several respondents from both Company A and Company B, with the latter especially struggling to meet the demands of digital integration due to resource constraints.

5.6.2.3 Available Skills

In exploring the available skills across Companies A, B, and C, it becomes evident that the levels of technological proficiency and digital integration differ significantly between these entities, which has directly impacted the post-acquisition integration process.

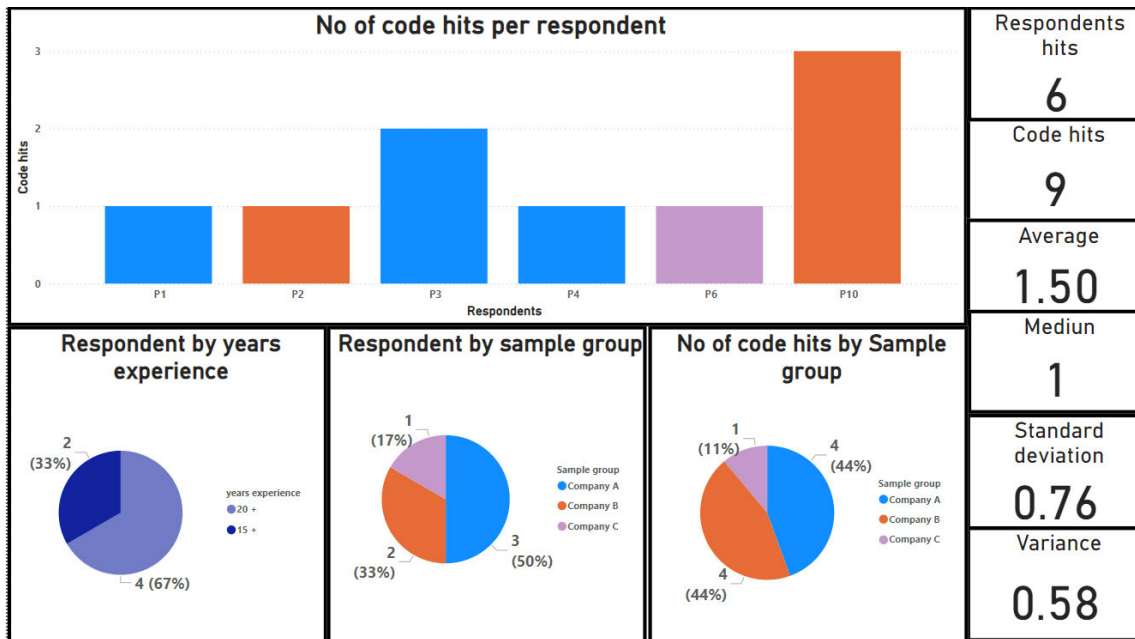


Figure 15 - Available skills respondent data.

Company B, prior to acquisition, was characterised by its limited use of technology. As Respondent P1 highlights, “they’re buying everything using Excel spreadsheets – small company, maybe 20 people they’ve grown to 40 people but they’re still buying everything in Excel.” This points to a significant skills gap due to a lack of advanced systems such as Enterprise Resource Planning (ERP) or Material Requirements Planning (MRP), constraining their ability to manage data efficiently or scale operations within a digitalised environment. Respondent P10 further confirms this gap, stating: “skills were lacking. They didn’t have knowledge of 3D systems ERP or Product Data Management (PDM).” This reinforces that the pre-existing workforce was not equipped to handle the digital requirements necessary for enhancing supplier capability visibility.

The bar chart titled “No of code hits per respondent” in Figure 15 reveals that Respondent P10 (representing Company B) had the highest number of code hits, reflecting the challenges they faced with skills and technology integration. This is significant when compared to Respondents P2 and P8 from Company B, whose contributions were lower, potentially indicating a lesser degree of direct involvement or insight into the post-acquisition integration challenges.

The challenge was exacerbated by the lack of knowledge transferal or structured support from Company A. As Respondent P10 notes, “Company B thought there was going to be a team to send on the factory integration team. And we also said no that’s not going to happen. So really they had to just sort of find their own way.” This disconnect in skills alignment and lack of support further slowed the integration process. The pie chart in Figure 15 displaying “*Respondent by sample group*” shows that Company B made up 33% of the respondent pool, yet their feedback indicates a higher level of struggle compared to the other companies.

In contrast, Company C had a stronger technological foundation. Respondent P6, representing Company C, acknowledged, “I can’t judge the full capability of Syspro because I don’t think it’s optimised on our end. So, there may be some things in there that we could better integrate and track.” While Company C’s systems were more advanced than Company B, there were still opportunities for further optimisation, particularly in system integration and tracking capabilities. This underscores that even companies with a strong technological framework can face difficulties adapting to the specific demands of a new corporate structure, especially in supply chain visibility.

Despite Company C’s relative technological advantage, the bar chart shows that Respondent P6 had fewer code hits compared to others, such as Respondent P10 from Company B. This suggests that, while the foundation was stronger, the challenges identified were less acute or more focused on optimisation rather than foundational skills or technology deficits.

For Company A, the acquisition brought its own set of challenges. Respondent P4 expressed frustration with system misalignment, stating, “Unfortunately, the ERP system that they are on we do not have in-house capabilities for.” This highlights, not only a technical mismatch, but also a skills gap within Company A; hindering effective integration post-acquisition. Similarly, Respondent P3 emphasised that the acquisition’s success relied on “the ability to maintain key people’s skills, system skills, and overall capabilities in the acquired company

post-acquisition.” Without this, visibility into supplier capabilities remained limited, affecting the overarching goal of digital integration and efficiency.

This misalignment is further demonstrated in the pie chart showing “*No of code hits by sample group*” in Figure 15, where Company A and B accounts for 44% of code hits, reflecting their greater involvement and awareness of the integration challenges. Yet, the variance in systems and skills across all companies prevented the seamless digital integration necessary for enhanced supply chain visibility.

The integration of Companies B and C into Company A’s operations revealed significant disparities in available skills and technological readiness. The limited use of advanced systems in Company B, compounded by a lack of support from Company A, caused delays and inefficiencies in the post-acquisition process. In contrast, Company C’s more robust systems provided a stronger foundation, but required optimisation to achieve full visibility into supplier capabilities. Overall, the misalignment of skills and systems across all three companies restricted the seamless digital integration critical for achieving improved supply chain visibility post-acquisition.

5.6.2.4 Lack of Control Systems

The absence of robust control systems within the acquired companies significantly impacted the efficiency of integrating supplier capabilities post-acquisition, as noted by multiple respondents. This was particularly evident in Company B, where the lack of an ERP system and reliance on outdated tools such as Excel restricted the visibility and management of supplier data. As Respondent P10 highlights: “There was no ERP system to actually contain the data. It was all just on Excel and people’s knowledge of what’s needed,” underscoring the reliance on manual systems and the difficulty faced by Company A in integrating supplier data into its digitised framework.

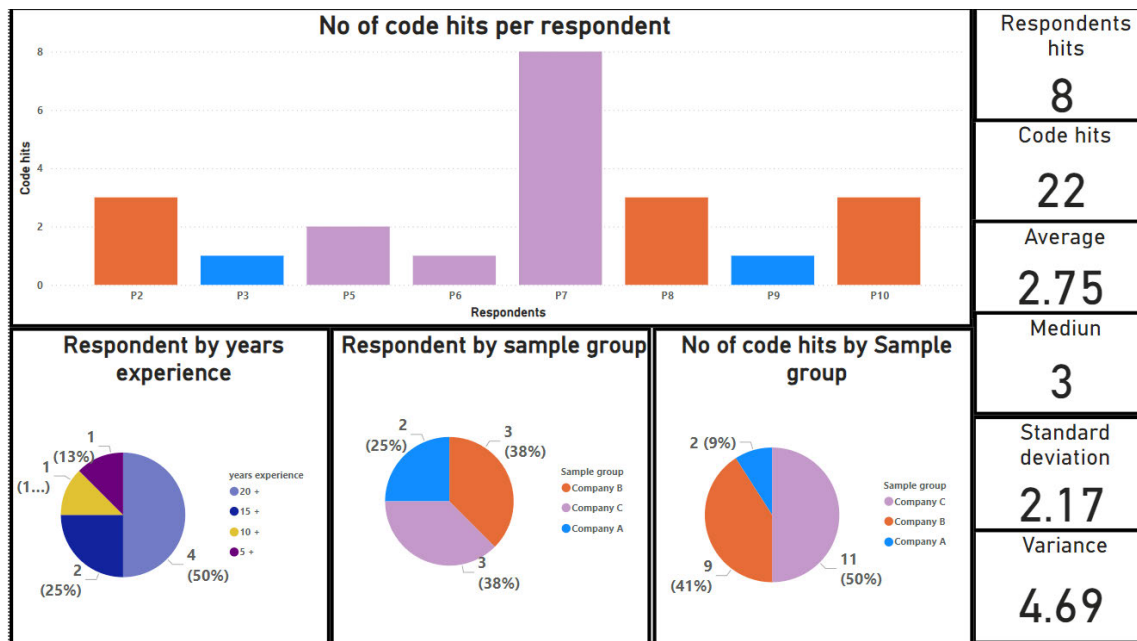


Figure 16 - Lack of controlled systems respondent data.

The challenge in Company B is further illustrated in the “No of code hits per respondent” chart in Figure 16, where Respondents P2, P8, and P10 (orange bars) have fewer hits, indicating a lack of digital processes. In contrast, Company C (purple bars), which had a stronger technological foundation, shows higher code hits for Respondent P7, which suggests more engagement with digital processes despite other integration challenges.

The core issue in Company B lay in the absence of structured parts systems, which resulted in inefficiencies in data matching and communication with suppliers. As Respondent P2 reflected, “What would happen is engineering would go and set up new part numbers for us but when we’d go to order those parts, the vendor would ship them to us under the old part numbers. We had a difficulty matching it up in the system when the parts came in to be received.” This manual data management, compounded by the miscommunication with suppliers, caused delays in production and restricted overall supply chain responsiveness.

Moreover, post-acquisition changes introduced by Company A, such as the standardisation of part numbers, created further confusion for Company B's vendors. This resulted in significant operational delays, as many vendors were

not informed of the changes. Respondent P2 elaborated: “After Company A took us over, our engineering department decided to change all the part numbers, but our vendors didn’t know about those changes. So, we had to spend time working with the vendors explaining that this is what the new part number is, and asking them to reference that on their invoices.” These issues highlight the difficulties Company B faced in synchronising with its new parent company's digitised systems.

Company C presented a different set of challenges. Although it had a more advanced technological foundation at the time of acquisition, there were still issues due to fragmented communication and the absence of a unified control system. Respondent P7 from Company C noted the disorganised nature of internal communication: “Too many different people were reaching out from various different sides of the company asking for different things and saying that they were all mandatory. So, it was a little bit disorganised.”

Despite these technological advantages, Company C also faced gaps in integration, particularly in terms of visibility into supplier capabilities. Respondent P8 acknowledged, “Maybe I haven't found it yet, but that part's not quite clear to me,” suggesting that even with better tools, there were still limitations in accessing and understanding supplier data.

The lack of effective control systems in all the Companies in these specific instances presented barriers to the smooth integration of supplier capabilities post-acquisition. In Company B, manual and ad hoc data management approaches, such as those noted by Respondent P10 and Respondent P2, resulted in inefficiencies and delays. In Company C, despite better tools, the absence of a unified system and disorganised communication led to difficulties in fully assessing supplier capabilities, as highlighted by Respondent P7.

These challenges align directly with the research objective to enhance visibility into newly integrated supplier capabilities through improved systems integration and digitisation. Addressing these control system deficiencies would not only

streamline data management but also support more efficient supplier capability assessments and improve overall supply chain visibility.

5.6.2.5 Lack of Training

One of the critical challenges identified in the integration of Company B and Company C into Company A's systems post-acquisition was the lack of sufficient training. This issue, cited by several respondents and notably only from Company B and C as seen in Figure 17, directly impacted the efficiency of digitising supplier information and maintaining visibility into supplier capabilities.

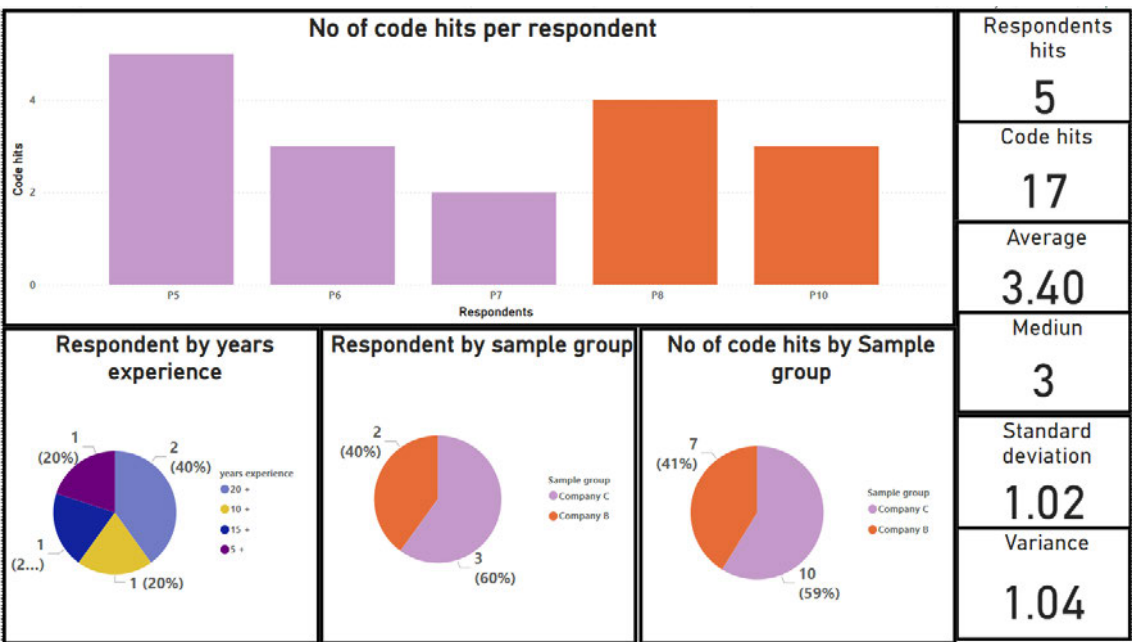


Figure 17 - Lack of training respondent data.

A recurring theme from the responses is the steep learning curve faced by employees due to insufficient training, especially in the context of new systems being implemented. Respondent P10 from Company B illustrated this clearly by stating, “We brought in somebody new, and they might have been a good production leader but if you don’t know what you need to know, there’s a very steep learning curve.” This suggests that the absence of adequate training programmes not only delayed integration but also left employees to navigate complex systems with minimal guidance.

Moreover, the lack of internal knowledge transfer about critical systems restricted progress. Respondent P10 further pointed out that “We had an ERP system that nobody within Company A had any knowledge of so you couldn’t call someone and ask, ‘How do you do this?’” This emphasises that without having knowledgeable staff who can mentor or assist others, the process of learning new systems becomes significantly more challenging and time-consuming.

In Company B’s case, the expectation was that a dedicated team would be in place to support the integration of their systems into Company A’s framework. However, this did not materialise. “Company B thought there was going to be a team to send on the factory integration team. And we also said no that’s not going to happen,” shared Respondent P10. This lack of planned assistance further compounded the difficulties in understanding and implementing the new digital systems.

The immediate impact of the lack of training was evident in the integration challenges that arose. In Company C, while there was an initial focus on aligning processes with Company A’s systems, the momentum waned, and the lack of ongoing support became apparent. Respondent P7 commented, “There wasn’t a whole lot of support,” underscoring the perception that after the initial push, employees were left to navigate the systems on their own.

The struggle to implement and optimise the new ERP systems, as described by Respondent P8 from Company B, showcases the tangible consequences of insufficient training. “Implementing the ERP system has been a struggle to say the least,” they noted, adding that they were “still learning” long after the system had been introduced.

The data reflects these challenges as well, Company B, which had a limited technological foundation, experienced the highest number of issues related to system integration and training. Respondent P8 also remarked, “I don’t think that’s really related to the company, the people in it, or the acquisition. It’s just the system that was chosen for our site,” implying that part of the issue was systemic

rather than purely due to a lack of individual effort.

Additionally, the lack of training extended beyond just the technical aspects of system use. Respondent P5 from Company C noted, “There has been a bit of a lack of training when it comes to utilising tools like eCost and understanding how to read some of the reports.” This highlights how not only system usage but also the broader understanding of digital tools and data interpretation was lacking.

The lack of training was a key factor that restricted the integration of Company B and Company C into Company A’s systems. Without adequate training support, employees faced steep learning curves and prolonged struggles with the new ERP systems, which delayed the full digitisation of supplier information and restricted visibility into supplier capabilities.

5.6.2.6 Manual Processes

Manual processes and integration challenges at the time of acquisition, Company B operated with limited technological infrastructure, relying heavily on manual processes. Respondent P10 highlighted the absence of an ERP system, describing the organisation’s dependence on Excel and individual knowledge for managing supplier information: “It was all just on Excel and people’s knowledge of what’s needed.” This dependency on tacit knowledge created significant challenges during the post-acquisition integration phase, as supplier information was scattered across multiple spreadsheets, making it difficult to centralise and digitise.

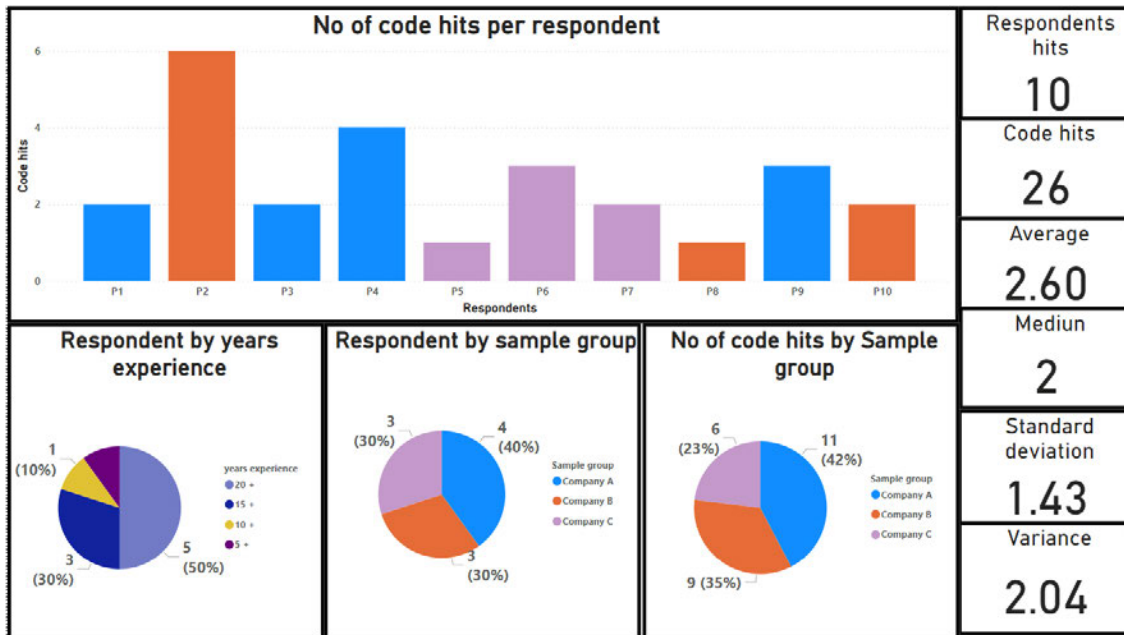


Figure 18 - Manual processes respondent data.

The chart “No of code hits per respondent” in Figure 18 reflects that all respondents had experience this challenge to varying degrees as indicated by the varying number of number of code hits, Respondent P2 from Company B stood out having a very strong opinion on the impact manual process have on productivity. Respondent P10 described the complexity of “the old Access program” used for quoting, which further contributed to integration challenges. The manual data input into this outdated system introduced risks of human error, potentially leading to misquotes: “They had an old Access program for quoting which relied on somebody feeding in data at the plant level for purchase part pricing.”

Data Cleanup and Standardisation Efforts One of the primary hurdles in integrating Company B’s supplier data into Company A’s digital systems was the extensive data cleanup required. Respondent P2 emphasised the lengthy and involved nature of this process: “it’s a very long involved process,” explaining that significant efforts were needed to standardise vendor data to avoid duplication and confusion within Company A’s systems. These comments are evident and align with the “No of code hits by respondent” bar chart in Figure 18, indicating

that respondent P2 was heavily represented in the discussion of code hits, reflecting the prominent role its data challenges played in the integration process.

The manual cleanup process, as described by Respondent P2, involved tasks such as correcting multiple spellings of the same vendor to streamline supplier data entry: “We had to go in and clean that up so when we put it on the Company A side... they wouldn’t see four of the same companies listed.” This example demonstrates the inefficiencies and potential for errors in managing supplier data manually, delaying digital integration.

Although Company C had a more advanced technological infrastructure compared to Company B, it encountered manual processing challenges during integration. Respondent P3 noted that despite the better systems at Company C, “It still involved a lot of manual data crunching to pull in the data.” The pie chart shows a similar trend, where all respondents were impacted from manual processes, suggesting that while the infrastructure was more robust, manual efforts were still necessary to ensure data integration.

Particularly, Company C faced issues with classifying parts and components, as Respondent P4 explained: “A very time-consuming task,” with thousands of part numbers requiring manual classification each year.

The data highlights the significant impact of manual processes on the integration of supplier capabilities post-acquisition. Company C, despite having a better technological foundation, continued to face issues related to manual data processing. These findings underscore the importance of data standardisation and digitisation to eliminate manual processing to aid in overcoming inefficiencies and achieving effective supplier visibility post-acquisition.

5.6.2.7 Staff Attrition

Staff attrition emerged as a significant barrier to effective systems integration post-acquisition, particularly affecting Company A's ability to maintain continuity in the integration of Companies B and C. The loss of key personnel led to delays

and inefficiencies in digitising supplier capabilities, a core focus of the research.

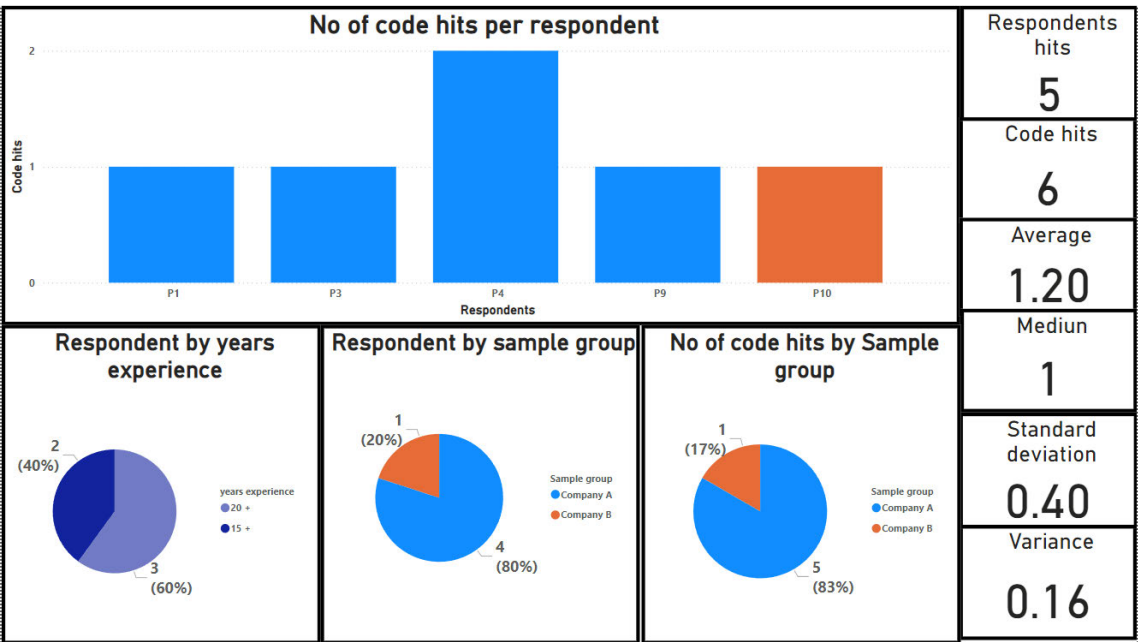


Figure 19 - Staff attrition respondent data.

From the bar chart titled “No of code hits per respondent” in Figure 19, it is evident that respondents from Company A recorded a higher frequency of responses, particularly Respondent P4, indicating heightened involvement in the challenges around integration.

The reliance on key individuals for supplier data management at both Companies B and C magnified the effects of staff attrition. For example, the departure of long-tenured employees at Company B led to gaps in operational continuity, as critical knowledge was not transferred into digital systems before their exit. Respondents highlighted that efforts to document and digitise this ‘tribal knowledge’ were sporadic, leaving the integration process vulnerable to further disruptions. Furthermore, high turnover during the transition caused repeated delays in implementing standardised data practices, undermining Company A’s efforts to establish supplier visibility across its network. Addressing staff retention during post-M&A transitions is thus critical to sustaining momentum in digitisation initiatives.

Company B showed lower engagement, with Respondent P10 being the only respondent reflecting on these issues, further supporting the narrative that Company B's reliance on key individuals, rather than robust systems, exacerbated the impact of staff departures. This aligns with Respondent P10's observation that "due to personal circumstances, the main production site manager left the business, and that exposed a lot of cracks". This departure highlighted the fragility of Company B's systems that were heavily dependent on individual expertise rather than digital infrastructure.

Further, the pie chart titled "*Respondent by years of experience*" in Figure 19 reveals that 60% of respondents had 20+ years of experience, while 40% had 15+ years, indicating that the respondents were seasoned professionals. Despite their vast experience, their feedback highlights how staff turnover undermined the integration process. For instance, Respondent P3 from Company A noted that "the ability to maintain key people's system skills and overall capabilities" was critical for successful integration. This reinforces the importance of retaining staff who possess deep knowledge of the systems and supplier networks post-acquisition.

The findings illustrated in the pie chart "*No of code hits by sample group*" in Figure 19, where Company A contributed 83% of the code hits, demonstrate the significant negative impact on integration efforts when knowledgeable staff departed from Companies B and C. This disruption is not limited to technical and operational aspects but also affects the overall momentum of integration projects. This aligns with the literature, which emphasises the critical role of employee retention in ensuring the successful implementation of post-M&A integration processes. Henningsson et al. (2018) note that staff turnover can lead to a loss of organisational knowledge, particularly when key employees leave, thereby affecting the continuity and momentum of integration projects. The knowledge that employees possess, often described as "tribal knowledge," is vital for maintaining the smooth operation of supply chains and systems post-acquisition (Říhová, 2018).

The impact of staff attrition on organisational knowledge and integration momentum is further supported by Bienhaus & Haddud (2018), who suggest that disruptions caused by staff changes can hinder the digitisation of procurement processes and lead to inefficiencies, as new staff may lack the expertise needed to manage complex supply chain integrations. Tzortzaki & Mihiotis (2014) emphasise the importance of knowledge management in maintaining continuity, especially during periods of organisational change, such as M&As. As seen with Company A's integration efforts, staff turnover not only resulted in the loss of technical skills but also affected the strategic alignment needed to keep projects on track, reflecting P9's comment: "we've seen a lot of people changes, so that's also part of it... maybe that causes the projects to lose momentum as well."

The literature reinforces the finding that staff attrition poses a significant risk to M&A integration, as the loss of knowledgeable staff disrupts both operational effectiveness and the broader objectives of post-M&A projects (Říhová, 2018; Bienhaus & Haddud, 2018).

For Company C, which had a stronger technological foundation, the challenges were less about systems and more about the loss of tacit knowledge. As Respondent P4 observed, "somebody understanding what's going on with that particular supplier has left the business, and the data shows what happened, but nobody understands why it happened". This underscores a key limitation in digital systems - while data capture is essential, it cannot fully compensate for the deeper, often undocumented insights held by staff, which ties back to Objective 2 of this study, identifying critical supplier information that can add value post-acquisition.

5.6.2.8 System Incompatibility

The integration of Companies B and C into Company A's digital systems was restricted by system incompatibility, creating inefficiencies and delays in post-acquisition digital integration. A core issue was the absence of a unified ERP system across all companies, complicating the merging of data, transaction

management, and supplier visibility. The challenge was particularly acute when attempting to harmonise Company A’s digital framework with the less technologically advanced systems of Company B and the more sophisticated systems of Company C.

Company B, which had limited technology use at the time of acquisition, relied on tools like Excel and a system integrated with a simplistic accounting package. This rudimentary setup posed substantial barriers to integrating with Company A's more advanced systems. Respondent P10 highlighted that the decision to implement a subpar ERP system was financially driven due to its alignment with the existing accounting package. However, as Respondent P10 noted, the system lacked the necessary capabilities for effective factory manufacturing: “Our system didn’t have the capability to do what we wanted from a factory manufacturing perspective.”

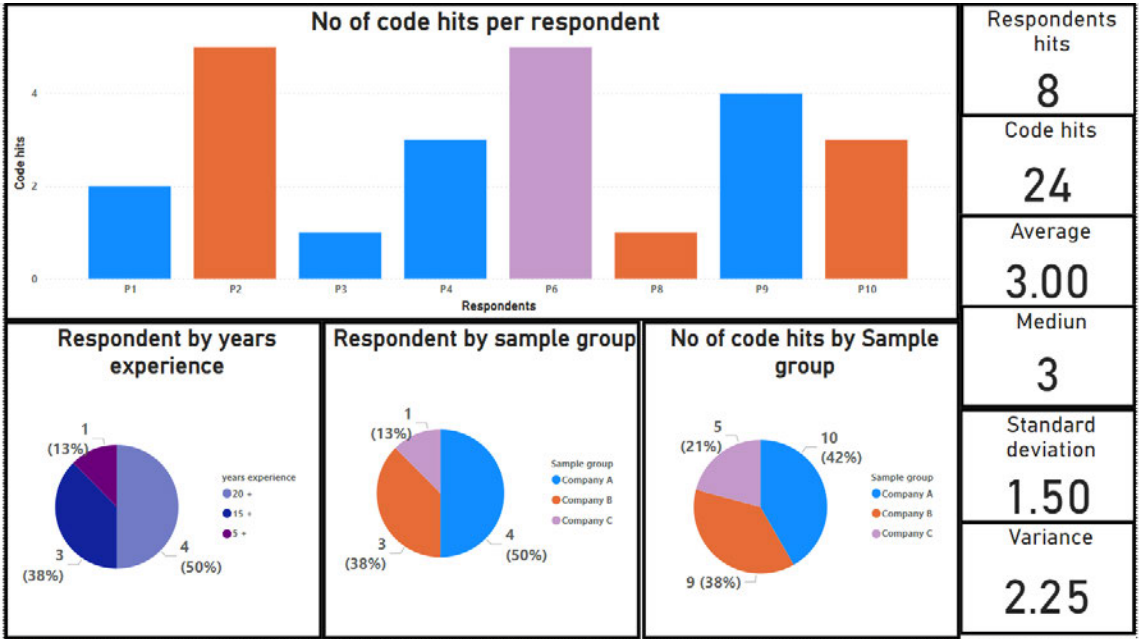


Figure 20 - System compatibility respondent data.

This is further supported by the “No of code hits per respondent” bar chart in Figure 20, where all Respondents from Company A & B recognised this issue. In contrast, only one respondent from Company C aligned with the subject.

Respondent P9 further highlighted the inefficiencies caused by the lack of data visibility from Company B, stating that "Company B is also involved, but due to the limited amount of data, the process isn't as smooth or well-oiled as it is with Company C." This lack of integration slowed down the process of sourcing initiatives and synchronising costs, limiting Company A's ability to gain timely insights into the capabilities of newly integrated suppliers.

Conversely, Company C had a stronger technological foundation, utilising a more advanced system that provided higher levels of automation and structure. However, integration into Company A's digital framework still faced challenges. Respondent P6 from Company C explained that migrating data into Company A's eCost system was laborious and required significant manual work: "It was a tedious process with a lot of downloading and cutting over to eCost." While Company C's ERP system offered more functionality than Company B, the absence of a unified ERP system across the companies delayed critical business functions. As Respondent P6 noted, "It's not one ERP across the system, so you have to wait for everything to cut over into eCost."

One of the most significant consequences of system incompatibility was the lack of consistent and transparent visibility into the capabilities of newly integrated suppliers. Respondent P9 emphasised this point: "Unless we have visibility of the data and it's available to their sourcing teams, it becomes difficult to carry out sourcing initiatives and projects." The failure to merge the different systems from Companies B and C into Company A's digital infrastructure resulted in fragmented views of supplier performance, leading to lost opportunities in sourcing and procurement efficiency.

The pie chart in Figure 20, illustrating the number of code hits by sample group shows that while Company A, had the highest number of code hits, indicating its central role in managing the integration. Company B in particular also contributed significantly to the challenges discussed. Company B's technological limitations and Company C's complex, but incompatible systems, were key contributors to

the fragmented supplier capability visibility.

The integration of Companies B and C into Company A's digital systems was restricted by system incompatibility, affecting visibility into supplier capabilities. The lack of a unified ERP system, reliance on manual processes, and challenges with data migration delayed the integration process and limited Company A's ability to fully leverage the capabilities of its newly acquired suppliers. These issues underscore the need for a harmonised approach to digital integration, especially in post-M&A scenarios where supplier capability visibility is critical to operational efficiency. Without the ability to merge and streamline the diverse systems of acquired companies, inefficiencies will continue to obstruct strategic sourcing initiatives and supplier visibility.

5.6.2.9 Key Findings from Theme 2 – Integration Challenges

The integration challenges faced by Company A in incorporating Companies B and C reveal significant obstacles in achieving the research objective of enhancing visibility into supplier capabilities through digitisation and systems integration. These issues align closely with the literature, particularly regarding the technological disparities that frequently complicate post-M&A integration efforts. Říhová (2018) emphasises the difficulties of integrating disparate IT systems post-acquisition, particularly when there is a lack of digital readiness, as seen in Company B's reliance on manual processes, such as Excel spreadsheets. This aligns with P10's comment: "It was all just on Excel and people's knowledge," highlighting the challenge of aligning such manual systems with Company A's more advanced digital infrastructure. Henningsson et al. (2018) also underscore that poor system integration can prevent companies from realising up to 60% of the anticipated benefits of an M&A, further exacerbating the difficulties in obtaining and maintaining critical supplier information.

Although Company C was more technologically advanced, the misalignment between its ERP system and Company A's requirements highlights the challenges outlined in the literature on IT system incompatibility post-M&A. Irwin

(2022) notes that even in cases where the acquired company has digital systems in place, integration is often hindered by system misalignment, necessitating manual interventions, such as data classification and migration. Respondent P4's description of handling "2000 part numbers" illustrates this problem, reinforcing the importance of well-planned digitisation processes to ensure seamless integration. This finding also aligns with Henningsson et al. (2018), who highlights the importance of robust information systems integration for post-M&A success.

The fragmentation of data across platforms, as illustrated by P7's comment: "I keep an Excel spreadsheet with notes on each supplier," further complicates the integration process and supports the view of Bienhaus & Haddud (2018), who identify that the lack of centralised data management can lead to inefficiencies and undermine supply chain visibility. This fragmentation also ties into the core limitations addressed in Research Question 1, which highlights the difficulties of maintaining supplier visibility when data is scattered across non-integrated systems.

Resource limitations, particularly in Company B, further restricted progress toward integrating supplier data and achieving the visibility objective. Respondent P1's observation that "Larger companies with more resources are easier to integrate," aligns with PwC Greece (2020), which emphasises that successful post-M&A digitisation efforts require significant IT and human resources. The lack of adequate support, both in terms of IT infrastructure and skilled personnel, directly impacted Company A's ability to meet its integration goals.

A skills gap in using advanced systems like ERP and PDM further delayed the integration process. Bienhaus & Haddud (2018) argue that insufficient employee skills in digital tools can significantly hamper the digitisation process, which is consistent with Respondent P10's comment on the lack of knowledge in these systems. This skills gap relates directly to Objective 1, which focuses on aligning Company A's knowledge management frameworks with post-M&A challenges, echoing Tzortzaki & Mihiotis (2014), who emphasise the importance of knowledge

management in navigating complex integrations.

5.6.3 Theme 3 – Poor Planning

The challenges faced by Company A during its acquisition of Companies B and C are consistent with the barriers highlighted in the literature regarding system integration and the digitisation of supplier capabilities post-M&A. In particular, the lack of advanced preparation and foresight in integrating supplier capabilities through digital systems, as seen in the acquisition of Company B, mirrors the difficulties outlined by Říhová (2018). The literature emphasises that inefficiencies often arise from the integration of disparate IT systems, particularly in industries where manual processes, such as the use of Excel spreadsheets, prevail (Říhová, 2018). Company B's lack of an ERP system and Product Data Management system further complicated its integration with Company A's more sophisticated systems, reinforcing the need for strategic investment in technology, as noted by Bienhaus and Haddud (2018).

Although Company C had a stronger technological foundation, the integration process was still hindered by poor planning, particularly in managing data integration. This aligns with Henningsson et al. (2018), who argue that effective IT integration is crucial to realising post-M&A synergies. The absence of detailed due diligence and inadequate system planning, resulting in unorganised data and the absence of a proper bill of materials, reflects the operational challenges associated with system misalignment post-M&A. As highlighted by Říhová (2018), companies often encounter data redundancy and system incompatibility, which limit the full realisation of integration benefits.

The lack of strategic forethought in how supplier information would be maintained and accessed post-acquisition further underscores the importance of pre-merger IT system assessments. Both acquisitions revealed a reliance on outdated or non-existent digital tools, leading to delays in critical decision-making processes. As noted by Bienhaus and Haddud (2018), overcoming such barriers requires a structured approach to digitisation and supply chain management, which was

evidently lacking in these cases. The absence of dedicated teams to oversee integration processes, such as factory integration, led to suboptimal outcomes, reflecting the broader point made by Wojtak (2018) about the importance of early planning and stakeholder involvement.

Poor planning and the failure to adequately digitise and integrate supplier capabilities significantly impeded post-acquisition efficiency in both cases. The findings from Company A's acquisitions reinforce the literature's emphasis on the need for robust planning and digital readiness to ensure successful post-M&A integration (Henningsson et al., 2018; Říhová, 2018).

5.6.3.1 Lack of Digitised Systems

A significant limitation identified during the acquisition process, particularly concerning Company B, was the absence of digitised systems to manage supplier information. The lack of integrated digital platforms created substantial barriers to effectively assess and integrate supplier capabilities, thus reducing visibility into critical operational data post-acquisition. Respondent P1 of Company A highlighted the difficulties associated with integrating smaller companies without professional systems, stating, "It's never a straight path especially when taking over smaller companies that might have their own systems which aren't always as professional or well-developed as larger companies."

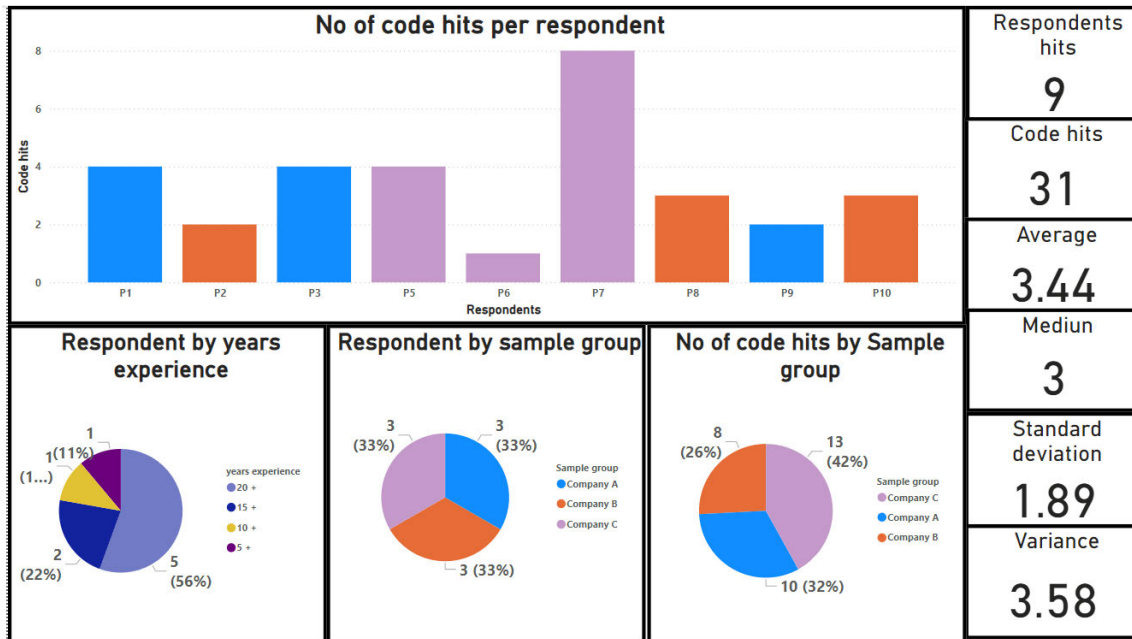


Figure 21 - Lack of digitised systems respondent data.

The absence of a digitised framework in Company B is evident from the data. The chart titled "No of code hits per respondent" in Figure 21 shows that respondents from Company B had fewer code hits compared to respondents from Company C and Company A. This was due to the discussions and responses concerning Company B, which focused on challenges rather than the advanced technological solutions highlighted by Company C.

Before the acquisition, Company B relied heavily on manual processes, using basic tools like Excel spreadsheets rather than an Enterprise Resource Planning (ERP) system. Respondent P10 confirmed this, noting, "there was no ERP system to actually contain the data. It was all just on Excel and people's knowledge of what's needed." This limitation is reflected in the inefficiencies encountered when transitioning Company B into Company A's more advanced digital framework. Without a proper Bill of Materials (BOM), managing inventories became particularly challenging. As Respondent P10 pointed out, "You need a BOM to feed into an ERP system. But they didn't have a proper BOM. It was all just basics."

In contrast, Company C benefitted from a stronger technological foundation prior

to its acquisition. Company C's respondents had significantly more code hits, particularly Respondent P7 with 8 hits, as depicted in the *"No of code hits per respondent"* chart in Figure 21. This indicates that Company C's discussions were more focused on advanced digital tools and solutions. Respondent P7 elaborate on the advantages of having a digitised Request for Quotation (RFQ) system, stating "A system where our suppliers are able to submit quotes for when we have a bidding process does not exist here... A lot of potential suppliers don't have visibility because we don't have a tool to point them to when they want to bid." This highlights the smoother integration into Company A's digital systems due to Company C's ability to embrace and appreciate the value of technology and infrastructure.

Moreover, Company B's lack of digitisation extended to areas such as Product Data Management (PDM) systems, further complicating the integration process. Respondent P10 noted that design information was often stored in outdated formats, stating that "They had started to get to a parametric design package doing better assemblies but again it was all manual part numbers, manual storage, no revision control." This manual approach led to delays in aligning Company B's supplier capabilities with Company A's more streamlined and automated systems.

The pie chart titled *"Respondent by years of experience"* in Figure 21 shows that respondents with over 15 to 20 years of experience, played a significant role in recognising the limitations of non-digitised systems in Company B.

The research clearly demonstrates that Company B's lack of digitised systems severely impacted Company A's ability to gain visibility into supplier capabilities. Critical supplier information in Company B was often fragmented, inconsistently maintained, and difficult to retrieve – all creating delays and inaccuracies in assessing supplier performance. Respondent P9 echoed this sentiment, noting that the integration process with Company B was not smooth, particularly when compared to Company C.

In contrast, Company C's stronger technological base, provided Company A with better access to digitised supplier information, facilitating a smoother integration. The disparities between Company B and Company C underscore the importance of investing in digital infrastructure to streamline post-acquisition processes.

5.6.3.2 Key Findings from Theme 3 – Poor Planning

The analysis of Company A's acquisitions of Companies B and C highlights the role poor planning played in limiting the effective digitisation and integration of supplier information, a key point in Research Question 1. The lack of foresight and inadequate preparation during the M&A process directly impacted the ability to assess and digitise supplier capabilities, aligning with Research Objective 1, which focuses on evaluating the alignment of the knowledge management framework with the challenges of enhancing supplier capability visibility.

In the case of Company B, the absence of digitised systems, such as ERP or Product Data Management, underscores a major limitation in acquiring and managing supplier information. Říhová (2018) discusses the significant challenges posed by legacy systems in post-M&A integration, particularly when manual processes dominate. Company B's reliance on Excel spreadsheets, as highlighted by Respondent P10, "There was no ERP system to actually contain the data. It was all just on Excel and people's knowledge of what's needed," reflects these issues, making it difficult to achieve the necessary visibility to effectively assess supplier capabilities. This limitation directly addresses the challenges identified in Research Objective 2, which involves developing strategies for retrieving and integrating supplier information into digitised systems (Říhová, 2018).

The failure to plan adequately during the due diligence phase exacerbated these issues, as a lack of structured system integration strategy meant that Company A struggled with fragmented and manually stored data from Company B. As noted by Bienhaus and Haddud (2018), proper planning is essential for ensuring smooth post-M&A transitions, particularly when it comes to managing supplier

information. The absence of a proper BOM in Company B, described by Respondent P10 - "You need a BOM to feed into an ERP system. But they didn't have a proper BOM. It was all just basics" - further illustrates the critical need for digitising essential supplier information to prevent inefficiencies in system integration (Bienhaus & Haddud, 2018).

While Company C had a stronger technological foundation, the acquisition still faced challenges due to poor planning in data integration, which again aligns with research objective 1. Even with advanced systems, detailed planning is required to successfully align supplier information with the acquiring company's frameworks. As Respondent P7 noted, "A system where our suppliers are able to submit quotes for when we have a bidding process does not exist here," which points to Company A's lack of a cohesive integration strategy, despite Company C's readiness for digital integration (Henningsson et al., 2018).

The analysis confirms that poor planning at the outset of the M&A process restricts the ability to integrate supplier information into digitised systems, as also highlighted by Říhová (2018). Comprehensive planning and investment in digital infrastructure are essential, as indicated in research objective 2, for preventing inefficiencies and ensuring smoother transitions during mergers and acquisitions (Bienhaus & Haddud, 2018).

5.6.4 Theme 4 – Geographical and Logistical Barriers

The acquisition of Companies B and C presented distinct geographical and logistical challenges that directly influence the post-acquisition integration process. Company B, with its minimal technological infrastructure at the time of acquisition, relied heavily on local suppliers with limited reach and lower technological sophistication. This localised supply chain, while effective for the basic structural products of Company B, proved inadequate when Company A's more complex products required a broader supply base with increased technological capabilities. Attempting to source new suppliers within the United States proved cost-inefficient, and logistical challenges arose when reverting to

established Company A suppliers located in Northern Ireland and India. These supply chain shifts introduced complexities in importing parts, leading to delays and inefficiencies in the integration of supplier capabilities.

In contrast, Company C, with its robust technological foundation, faced different challenges. Its long-established relationships with local and international suppliers created friction when Company A sought to centralise and streamline its supply chain across global operations. Geographical isolation, particularly in regions such as Canada, presented barriers to integrating Company A's global supplier network. Suppliers' proximity often outweighed the cost efficiencies of sourcing from distant Company A approved vendors, particularly for urgent or just-in-time needs. Furthermore, cross-border complexities, especially between the United States and Canada, exacerbated logistical barriers as local preferences and national supply policies clashed with Company A's global sourcing strategies.

These geographical and logistical barriers not only affect the operational efficiency of integrating supplier capabilities, but also highlight the limitations of Company A's digital systems in managing region-specific supplier needs. As the findings suggest, the digital visibility into local and global suppliers was constrained by geographical factors, underscoring the need for enhanced systems to address the unique requirements of both local and global supply chains post-acquisition.

5.6.4.1 Local versus Global Suppliers

The integration of local and global suppliers post-acquisition introduced several challenges, particularly in terms of logistics, cost, and capability alignment. These issues were more pronounced for Company B, which relied on local suppliers for simpler, less technologically advanced products. As Respondent P10 from Company B explained, "They really have their own little supply base... ringing up their local hydraulic store." This localised, informal supply chain approach was effective for Company B's pre-acquisition needs but proved to be a significant limitation when aligning with Company A's more advanced and global supplier

network.

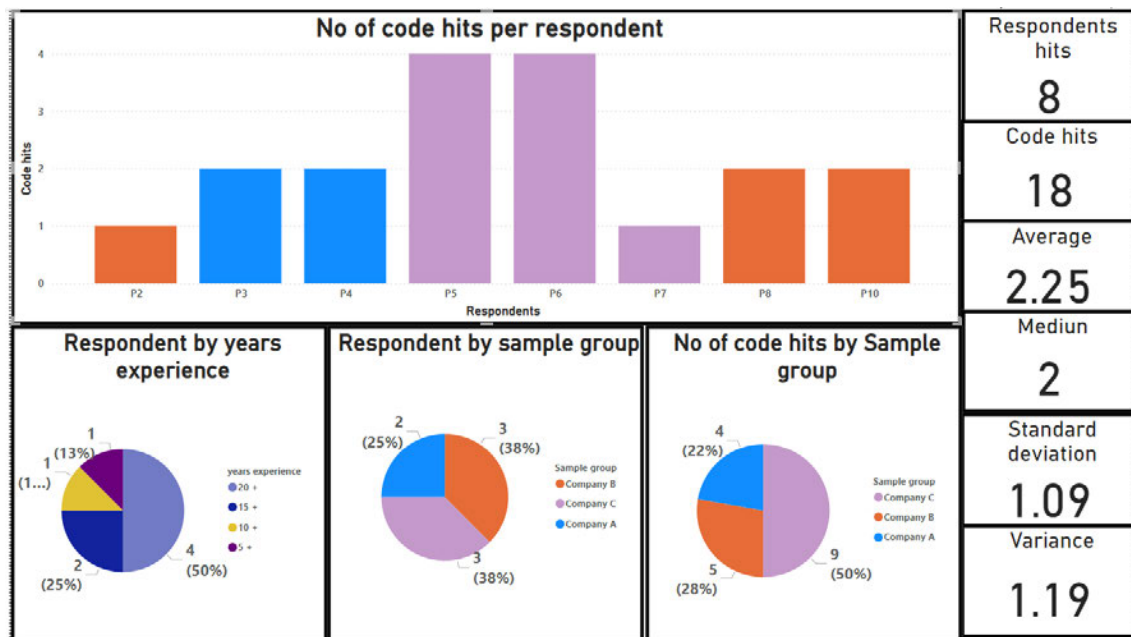


Figure 22 - Local versus global suppliers respondent data.

The pie chart titled “*Respondent by sample group*” in Figure 22 indicate that both Company B and Company C unanimously highlighted the difficulties they faced when attempting to integrate their local suppliers with Company A's global supply chain. Respondent P10 noted, “The capabilities of the supply base that Company B had weren’t sufficient... we tried to source a new supply base in America, but then cost was a challenge.”

Similarly, all respondents from Company C, which had a more technologically advanced supply base pre-acquisition, also identified this transition as a challenge. Company C’s respondents contributed 50% of the total code hits shown in Figure 22, and their feedback focused on the complications introduced by global suppliers. Despite their advanced systems, Company C found that local suppliers were still critical for urgent, and just-in-time needs due to their remote location. Respondent P6 commented, “We back off sometimes because there are situations where we need something urgently, and a local supplier just 50 minutes away can deliver right away.”

Only two respondents from Company A recognised the move from local to global suppliers as a significant issue. This disparity suggests that Company A, having already established a global supply base, was more familiar with and accustomed to challenges that Companies B and C were now encountering. Nonetheless, the feedback from Respondents P3 and P4 observed in Figure 22 indicates that the reliance on global suppliers introduced some inefficiencies in operational flexibility, particularly when local suppliers were better suited for certain urgent needs.

The *"No of code hits by Sample group"* in Figure 22 chart further supports this, with 50% of responses coming from Company C and 28% from Company B, both groups largely aligning their recognition of the difficulties in balancing local and global supply chains. Respondent P7 from Company C reflected on the disruption this caused, noting that Company A's focus on global suppliers led to the severance of long-standing local supplier relationships – some spanning 25-30 years.

Conversely, Company A showed less concern regarding this transition, with only 22% of the code hits coming from its respondents. This further underscores the point that Company A's supply chain, already globalised, did not encounter the same level of disruption as experienced by Companies B and C who were still finding their way through the challenges of importing and exporting goods.

In addition to the operational challenges posed by global suppliers, the integration process revealed significant limitations in terms of data visibility and digitisation – issues that were particularly prominent for Company B.

5.6.4.2 Loyalty to Local Suppliers

The integration of suppliers post-M&A, particularly in the context of Companies C, has revealed complex dynamics regarding loyalty to local suppliers. These issues are deeply rooted in both geographical and historical relationships, as well as the technological capabilities of the suppliers. Company C respondents described

their location as being remote and all respondents from company C highlighted this as a challenge when merging with a global company as displayed in the data shown in Figure 23.

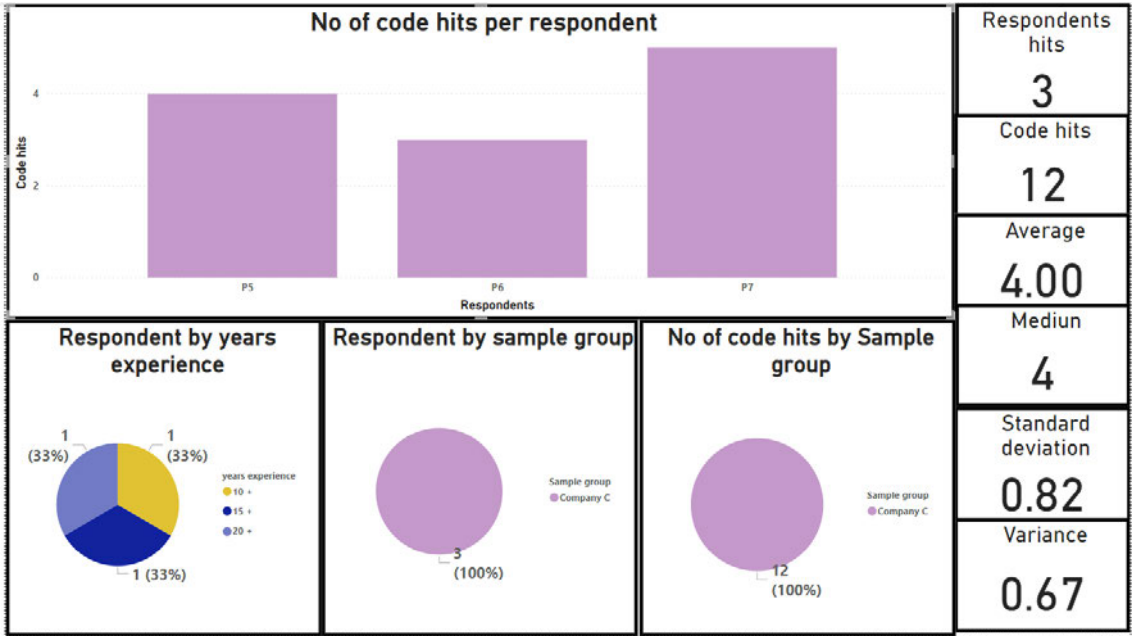


Figure 23 - Loyalty to local suppliers respondent data.

Company C, having a technological foundation at the time of acquisition, found that long-standing relationships with local suppliers presented significant challenges during the integration process. As Respondent P7 highlighted, “Company C, as a private company, was doing a lot of deals with local vendors for distributorships...some of them were 25-30 years old relationships.” When Company A took over, it initiated efforts to replace these suppliers with global alternatives, leading to the termination of many local partnerships. This shift caused friction between Company C’s established supply chain and Company A’s procurement strategies, as Company A did not fully appreciate the historical significance and depth of these local supplier relationships.

Similarly, Respondent P6 noted the strategic importance of local suppliers for swift responses to operational needs, saying, “We have a lot of local suppliers that we could go to if something happens...It wouldn’t take more than a couple of

minutes or hours to go and get that.” This emphasises how local suppliers can provide critical, time-sensitive solutions that may be difficult to replicate with distant or newly introduced suppliers.

However, despite the clear benefits of maintaining local supplier relationships, economic pressures also play a role in the shifting loyalties. As mentioned by Respondent P6, “we had to move away from some of our rubber manufacturers because of pricing issues.” This decision-making process underscores the tension between cost management and maintaining long-standing local relationships, especially when the price differences between local and global suppliers are minimal.

Moreover, the disruption of local supplier relationships has led to a sense of disillusionment among some suppliers. As Respondent P5 noted, “You kicked me to the curb. Why should I help you?” This comment reflects the deteriorating loyalty and support from local suppliers who feel sidelined in favour of Company A’s global vendors.

The post-acquisition integration process in Companies C in particular highlight significant challenges regarding loyalty to local suppliers. While local suppliers offer agility and have deep-rooted relationships with the acquired company, economic pressures and global procurement strategies often take precedence, causing friction and a loss of support from local vendors.

5.6.4.3 Key Findings from Theme 4 – Geographical and Logistical Barriers

The geographical and logistical barriers encountered during the post-acquisition integration of Companies B and C exposed significant limitations in Company A's ability to digitise and maintain visibility into supplier capabilities, directly addressing Research Question 1. As highlighted in the case of Company B, the reliance on local suppliers and limited technological infrastructure presented challenges when expanding to a broader, more complex supply base. Respondent P10’s remark, “They really have their own little supply base... ringing

up their local hydraulic store," underscores how localised supply chains restricted Company B's ability to align with Company A's global network. This scenario reflects the operational challenges noted by Říhová (2018), who identified that inefficiencies often stem from the integration of misaligned IT systems and processes post-M&A, particularly when manual and localised processes are involved.

Company C's advanced technology however did not fully resolve logistical issues, especially when dealing with cross-border complexities and urgent needs. As Respondent P6 pointed out, "We need something urgently, and a local supplier just 50 minutes away can deliver right away," which demonstrates that geographical isolation posed challenges for Company A's global sourcing strategy, even when more sophisticated systems were in place. This finding aligns with the literature, where Bienhaus and Haddud (2018) emphasise the importance of supply chain visibility and digitisation in overcoming logistical barriers, although the continued reliance on local suppliers highlights the practical limitations of fully digitised systems.

These findings directly support Research Objective 1, which focuses on the alignment of the knowledge management framework with supplier visibility challenges during M&A processes. The case of Company B illustrates the difficulties in balancing local versus global suppliers, a critical aspect of effective supply chain integration. Similarly, Objective 2 is reflected in the need to develop strategies that enhance digital integration and data visibility, while still respecting the value of long-established local supplier relationships, a point also emphasised by Bienhaus and Haddud (2018). Henningsson et al. (2018) further support the idea that IT integration plays a critical role in overcoming such challenges, particularly when managing complex cross-border supply chains.

The geographical and logistical barriers identified in both cases highlight the necessity of refining digital systems to better manage region-specific supplier

needs, ensuring smoother post-acquisition integration (Říhová, 2018; Bienhaus & Haddud, 2018; Henningsson et al., 2018). This reflects Wojtak's (2018) argument that addressing both operational and logistical challenges is essential for the success of post-M&A integration.

5.6.5 Conclusion for Research Question 1

The findings across the various themes discussed up to this point underscore the limitations and constraints faced by Company A in obtaining, digitising, and maintaining supplier information during the post-acquisition integration of Companies B and C. These challenges, which are integral to Research Question 1, highlight both technological and operational barriers that inhibit the visibility of supplier capabilities and hinder the seamless integration of newly acquired suppliers.

A key limitation identified was the differences in the technological maturity of the acquired companies. Company B, with its reliance on non-digitised processes and manual data management, exemplified the challenges posed by incomplete and fragmented data. This mirrors Říhová's (2018) assertion that inefficiencies following M&As often arise from the challenges in integrating disparate IT systems, particularly when outdated or legacy systems are involved. The absence of centralised systems, such as an ERP, resulted in inefficiencies and inaccuracies in assessing supplier capabilities, as noted by Bienhaus and Haddud (2018), who highlight the critical role of digital tools in automating procurement functions. Much of the critical supplier information in Company B was embedded in informal, unstructured formats, leading to significant delays in integration. This reliance on tacit knowledge and manual record-keeping obstructed efforts to streamline and digitise supplier information, reflecting a major constraint in post-M&A integration (Říhová, 2018).

On the other hand, Company C, despite its stronger technological foundation, also faced issues related to incomplete supplier data. While more advanced systems were in place, the misalignment of its ERP framework with Company A's

requirements, along with persistent data gaps, revealed that even technologically mature organisations struggle to achieve full visibility into supplier capabilities. This aligns with Henningsson et al. (2018), who emphasise that poor system integration often leads to M&A failures, even when digital tools are in place. These challenges necessitated manual interventions, such as site visits and direct supplier interactions, to bridge the information gaps. This finding reinforces the argument by Bienhaus and Haddud (2018) that digital tools are essential for supplier management but must be aligned with strategic integration processes to be effective.

The integration of dissimilar systems and the handling of fragmented data across platforms also highlighted a critical limitation: the incompatibility of systems between the companies. This resulted in duplicated vendor profiles, mismatched data, and a need for significant manual intervention to resolve these issues, supporting the findings of Henningsson et al. (2018), who point out that up to 60% of M&A benefits are tied to successful information systems integration. Such limitations not only delayed the integration process but also impacted Company A's ability to efficiently assess and leverage supplier capabilities in real time (Bienhaus & Haddud, 2018).

Logistical barriers and a lack of comprehensive planning were significant constraints in the integration process. Localised supply chains and cross-border complexities added another layer of difficulty to the digitisation and integration of supplier data, particularly in aligning regional supplier relationships with Company A's global sourcing strategies. Häkkinen et al. (2004) stress the importance of effective logistics integration during mergers, particularly in industries with complex supply chains. Poor planning during the due diligence phase further exacerbated these issues, particularly in terms of system compatibility and the absence of a clear data integration strategy (Říhová, 2018).

The research highlights the multifaceted limitations faced in post-acquisition integration, which directly address Research Question 1. The reliance on

incomplete data, system incompatibilities, and logistical challenges all present significant obstacles to obtaining and maintaining digitised supplier information. These findings underscore the need for more robust digital integration processes, comprehensive planning, and investment in digital infrastructure to overcome these barriers and achieve the research objectives. Addressing these challenges is crucial for ensuring that digitised visibility into supplier capabilities can be fully realised in future M&A processes (Henningsson et al., 2018; Bienhaus & Haddud, 2018; Říhová, 2018).

5.7 Results for Research Question 2

Research Question 2: What benefits can be realised from both the acquirer and acquiree perspectives after the M&A process, particularly in terms of enhancing visibility and integration of the additional pool of suppliers into the existing supply chain?

After analysing the data that was linked to this research question, three themes emerged and are discussed in detail in then following chapters.

5.7.1 Theme 1 – Improved Supplier Visibility Through Digitisation

The integration of suppliers following Company A's acquisition of Companies B and C revealed distinct challenges and opportunities regarding visibility into supplier capabilities. This section explores how digitisation has enhanced this visibility and its subsequent impact on supply chain efficiencies. The results address the core Research Question 2.

The research highlights how, prior to the acquisition, Company B exhibited limited technological infrastructure, contributing to inefficiencies in managing supplier data and performance. In contrast, Company C's advanced digital systems provided a foundation for supplier management. The transition towards digital integration within Company A's systems, particularly through the adoption of tools such as eCost and MPX, significantly improved visibility into supplier capabilities,

delivery times, and pricing structures.

Key findings demonstrate that digital tools like eCost facilitated the consolidation of supplier information, enabling Company A to leverage better pricing and streamline procurement processes across its newly integrated suppliers. For instance, Company B's integration benefited from enhanced visibility, allowing for cost savings and better supplier performance tracking. On the other hand, Company C's existing digital foundation accelerated the alignment with Company A's procurement strategies, reinforcing the advantages of digitised supply chain management.

This improvement in supplier visibility aligns with the primary research objective of enhancing supplier capability transparency through effective systems integration. The findings also support Objective 1, emphasising the importance of aligning knowledge management frameworks to address visibility challenges during the M&A process and Objective 2, focusing on the identification and integration of critical supplier information into digitised systems.

5.7.1.1 Access to New Markets and Suppliers

The acquisition of Companies B and C by Company A has expanded access to new suppliers and markets, primarily due to the enhanced visibility provided by digital integration. Figure 24 "*Respondent hits*" highlights how this access has been improved post-acquisition and its impact on procurement strategies as all 10 respondents recognised this benefit.

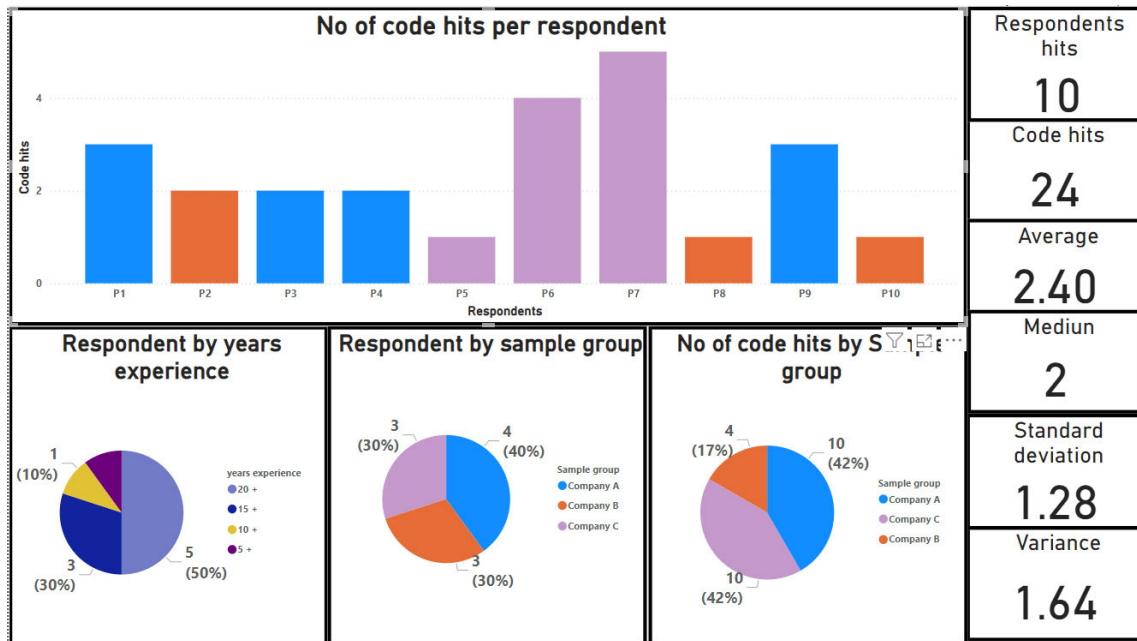


Figure 24 - Access to new markets and suppliers respondent data.

Figure 24 indicates a clear consensus that the acquisition has benefitted all sample groups and, in particular Company C displayed in the bar chart “No of code hits per respondent”, indicating a higher number of hits compared to Company B. This can be attributed to the integration and easier sharing of data between Company A and C as a result of better aligned technologies. It also exposes an opportunity to be exploited when Company B has improved its data compatibility with Company A.

5.7.1.1.1 Enhanced Supplier Visibility

Digital systems like eCost are crucial in increasing visibility into supplier capabilities across Companies A, B, and C. Respondent P1 explained: “we can see all their purchasing power and begin to integrate it with eCost, getting them to leverage Company A’s suppliers.” This has allowed for clearer insights into pricing and supplier performance. Respondent P10 highlighted a specific case where visibility into Company B’s suppliers allowed for a cost reduction in key materials like steel, leading to savings across the group.

For Company C, the technological integration further expanded their global

sourcing options. As Respondent P6 noted, “we’ve been introduced to new suppliers... and can look at everything about them, from on-time deliveries to pricing,” shifting their focus from local to global sourcing. This improved visibility has been critical in optimising supplier selection and enhancing procurement efficiency.

5.7.1.1.2 Leveraging Supplier Relationships

Being part of Company A has provided Companies B and C access to a broader supplier network. Respondent P7 observed that after the acquisition, previously inaccessible suppliers were now eager to work with them: “Now that Company A’s name is attached to us, they’re like, ‘Oh, you guys are interesting. Come over. Do you want to come for a tour?’” This change has opened doors to improved pricing and favourable terms.

Similarly, Respondent P2 emphasised the importance of brand leverage, noting, “we’re owned by Company A... which allows us to get Company A pricing on materials”. This brand association has streamlined supplier negotiations, securing better pricing and terms.

5.7.1.1.3 Economies of Scale and Collaboration

The consolidation of supplier data post-acquisition has allowed for better collaboration and cost efficiency across all three companies. Respondent P3 highlighted that integrating supplier information enabled direct purchasing from OEMs, bypassing costly third-party distributors. This has led to both individual and group-wide benefits, whilst maximising purchasing power. Furthermore, respondent P9 pointed out that the visibility provided by eCost led to resourcing and renegotiation opportunities with Company C’s suppliers, improving their supply chain management.

The acquisition and digital integration of Companies B and C have greatly enhanced access to new suppliers and markets. Improved supplier visibility through systems like eCost, combined with the leverage of Company A’s supplier

relationships, has optimised procurement strategies and driven cost efficiencies. These advancements highlight the role of digitisation in supplier management post-acquisition.

5.7.1.2 Supplier Performance Metrics

In the post-acquisition integration of Companies B and C, Company A's supplier performance metrics focus on three core areas: cost, lead times, and on-time delivery. These metrics are crucial in assessing how well suppliers meet the strategic needs of Company A. They also serve as indicators of the effectiveness of digital integration systems implemented post-M&A.

5.7.1.2.1 Lead Time and On-Time Delivery Performance

Delivery performance, particularly lead times and on-time delivery, was critical for all companies as 9 respondents aligned with this metric - seen in Figure 25. Company B, with limited pre-integration technology, struggled to capture accurate delivery data. Respondent P3 noted the importance of comparing deadlines with actual delivery dates, which was improved after integration through enhanced tracking systems. In contrast, Company C had a more robust technological setup, and Respondent P6 emphasised that “on-time deliveries, price, and availability” were key drivers of supplier performance. The new digital systems allowed for

data granularity, improving decision-making and supplier visibility.

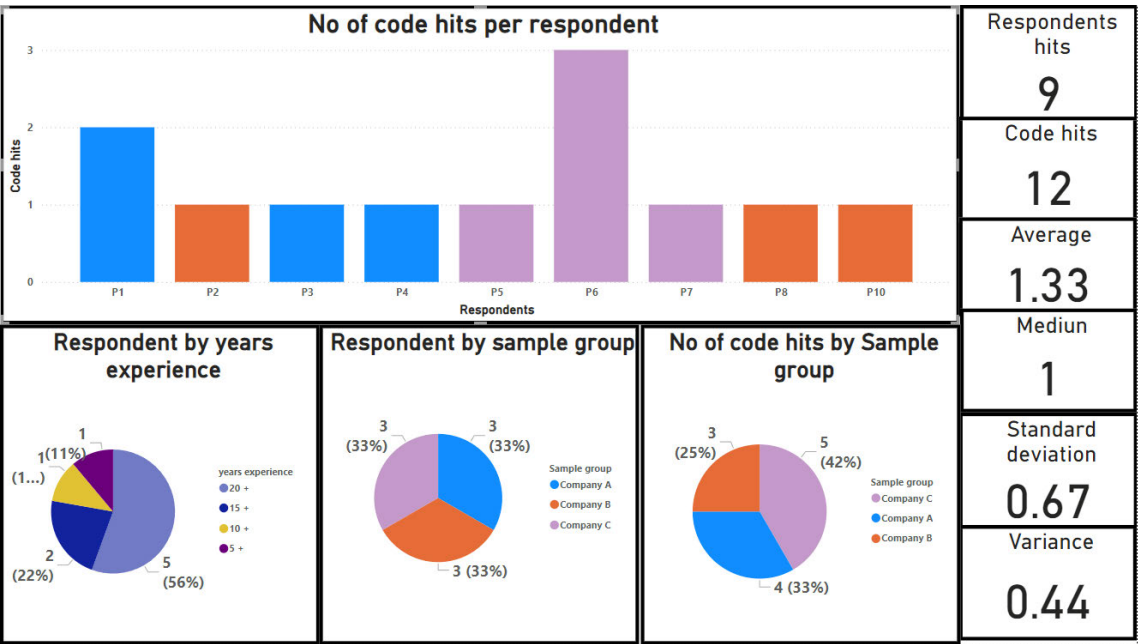


Figure 25 - Lead time and delivery respondent data.

The availability of real-time delivery information further impacted supplier reliability. As Respondent P10 pointed out, availability was sometimes more critical than logistics, with decisions driven by “who had it” when needed. These improvements in digital systems helped resolve pre-existing inefficiencies, aligning with the objective of enhancing supplier capability visibility.

5.7.1.2.2 Cost Performance

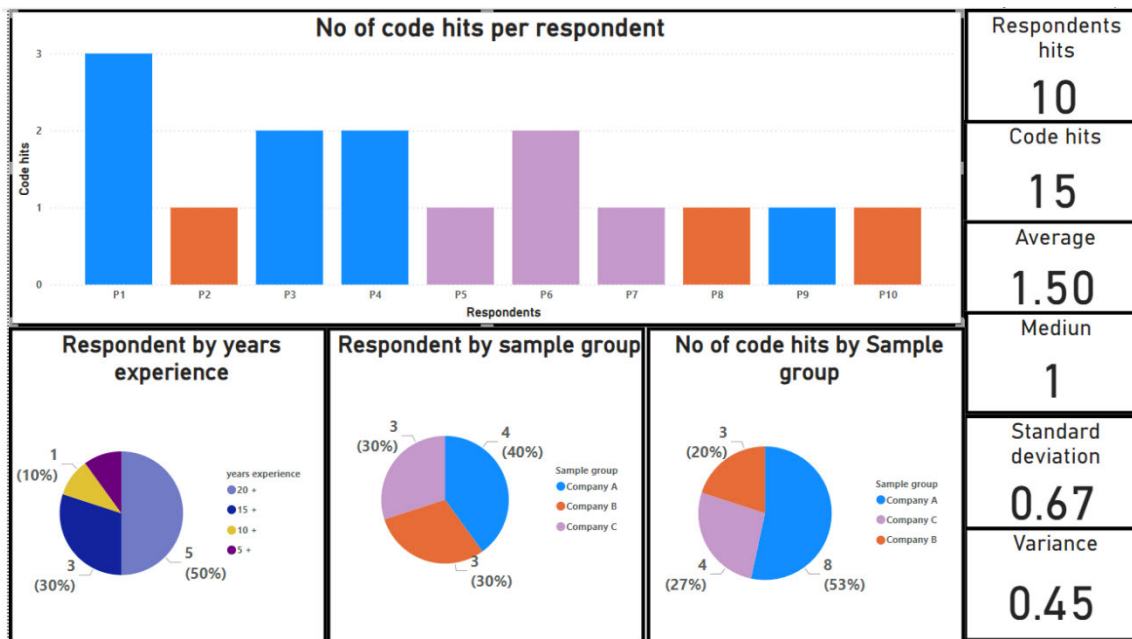


Figure 26 - Cost performance respondent data.

Cost, including pricing and financial transparency, was another important metric. All respondents consistently highlighted, as can be seen in Figure 26, that supplier performance was assessed based on “cost, delivery, and quality.” Company B initially faced challenges in retrieving cost data due to limited technology. Post-integration, systems like eCost provided Company A with full visibility into purchase orders, quantities, pricing, and suppliers, as described by Respondent P4. This transparency aligns with the goal of integrating and maintaining critical supplier information, supporting the research objective of improving financial visibility.

5.7.1.3 Key Findings from Theme 1 – Improved Supplier Visibility through Digitisation

The findings from the post-acquisition digital integration align with key themes highlighted in the literature. Specifically, the integration of tools like eCost and MPX has significantly enhanced supplier visibility, which supports Research Objective 1 by effectively integrating supplier capabilities into Company A's

systems. This finding supports the work of Henningsson et al. (2018), who emphasised the critical role of information systems in realising M&A synergies through improved visibility of supplier capabilities. The benefits realised from both the acquirer and acquiree perspectives, such as access to new suppliers and better procurement efficiency, further support Research Question 2, aligning with Bienhaus & Haddud (2018), who noted that digitisation enhances supply chain synergies and reduces inefficiencies post-M&A.

In the case of Company C, its advanced technological foundation facilitated a seamless integration into Company A's systems, providing global sourcing opportunities and optimising supplier selection. This aligns with research objective 2 and supports the literature's emphasis on the importance of digitisation in retrieving and utilising supplier information efficiently (Ilhan & Rahim, 2020). The observations of Respondent P6 "We've been introduced to new suppliers... and can look at everything about them, from on-time deliveries to pricing" are consistent with findings by Bienhaus & Haddud (2018), who highlighted that digital tools like e-procurement systems improve supply chain visibility and strategic decision-making.

However, Company B's limited pre-existing digital infrastructure posed challenges to the integration process, underscoring the findings of Říhová (2018), who identified legacy system incompatibilities as a common barrier in M&A integrations. Despite these hurdles, tools like eCost have gradually improved visibility into supplier capabilities, which aligns with the primary research objective of enhancing supplier capability visibility post-acquisition. Respondent P4's comment "eCost allowed for full visibility into purchase orders, quantities, pricing, and suppliers" reflects the gradual but important role digitisation plays in overcoming these integration challenges, as noted by Gunasekaran et al. (2009).

Improvements in supplier performance metrics such as lead times, cost, and delivery reliability, driven by real-time data access, align with Research Objective 2. These metrics demonstrate the optimisation of supplier management and cost

efficiencies across the group, a finding supported by Häkkinen et al. (2004), who stressed the importance of logistics integration during mergers. As Respondent P9 observed, "Once systems like eCost are in place, we do see an improvement in access to information... The process becomes more structured," which ties into Henningsson et al. (2018)'s findings on the structured nature of post-M&A processes following successful system integration.

The digital integration following the acquisition has led to substantial improvements in supplier visibility, addressing inefficiencies in the supply chain, and supporting the research objectives of better retrieval, integration, and maintenance of critical supplier information, thus effectively addressing Research Question 2. The role of digitisation in improving procurement strategies and supply chain transparency reflects the broader literature's consensus on the value of digital tools in post-M&A supply chain integration (Bienhaus & Haddud, 2018; Ilhan & Rahim, 2020)

5.7.2 Theme 2 – Operational Synergies and Increased Efficiency

The acquisition of Company B and Company C by Company A provided an opportunity to examine the operational synergies created through digital integration, specifically focusing on the visibility of supplier capabilities. The post-acquisition period highlights how differing technological foundations in the acquired companies impact integration efficiency. Company B, characterised by limited technological adoption at acquisition time, contrasted sharply with Company C, which had a strong technological foundation. The integration process aimed to harness the full potential of each company's supplier base by improving visibility through digitised systems. This digitisation allowed Company A to streamline supplier management, consolidate purchasing power, and achieve economies of scale across all companies involved.

The research addressed the benefits realised from both acquirer and acquiree perspectives, exploring how enhanced visibility into supplier capabilities post-acquisition can improve supply chain efficiency. By integrating Company B and

Company C into Company A's systems, the potential to leverage shared suppliers and negotiate better terms became an operational advantage. For example, Company A was able to leverage its existing cost structures, particularly through the use of systems like eCost, to create a unified approach to supplier management. The increased transparency enabled identification of common part numbers across each business, enabling consolidated purchasing decisions and improved payment terms – improving cost savings and operational efficiency.

This section explores how these operational synergies led to improved efficiency, with tangible outcomes in cost reductions, improved supplier negotiation power, and enhanced supply chain flexibility. The findings also address the broader implications for similar M&A processes in the heavy mobile equipment sector, providing valuable insights into the role of digitisation in fostering operational success post-acquisition.

5.7.2.1 The Value of Consolidating Suppliers

The consolidation of suppliers of Company B and Company C by Company A has resulted in operational synergies, particularly in improving visibility into supplier capabilities and achieving cost efficiencies through economies of scale. This aligns with Research Question 2, which explores the benefits realised from both the acquirer's and acquirees' perspectives, especially regarding the integration and visibility of the newly added supplier base. Respondents from Companies A, B, and C identified several key outcomes, with the primary benefit being the consolidation of purchasing power and improved supplier visibility through digitised systems which is discussed further based on data in Figure 27.

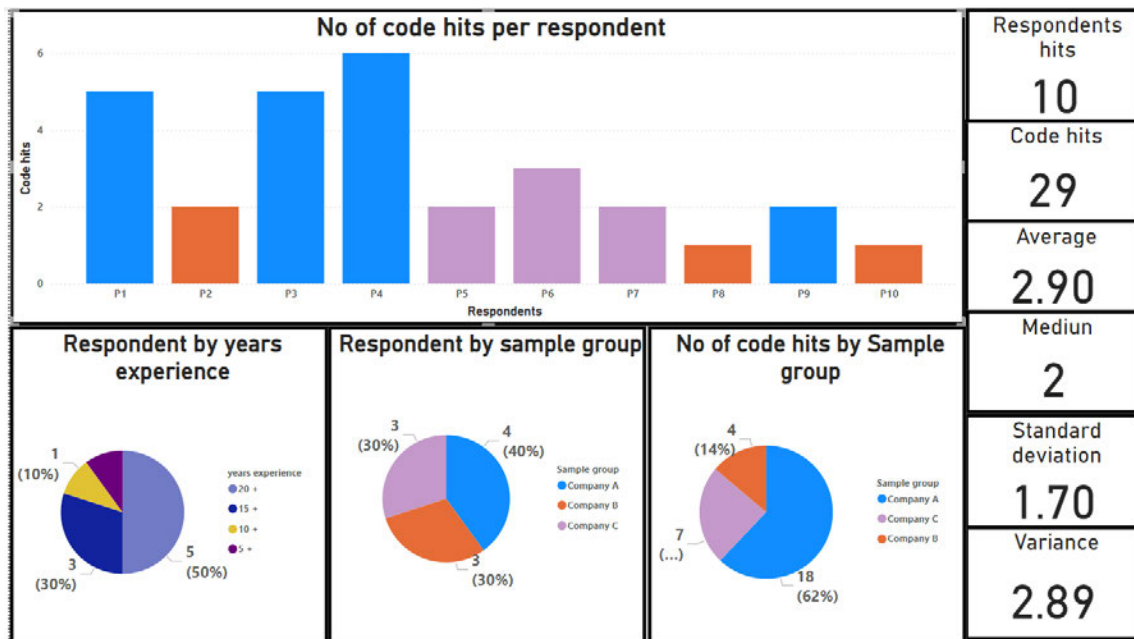


Figure 27 - The value of consolidating suppliers respondent data

Figure 27 demonstrates the importance of added value when consolidating suppliers across multiple companies. All respondents agreed on the benefits of this approach, with Company A accounting for 62% of the total responses. This suggests that respondents from Company A are particularly focused on maximising value through their acquisitions. Both Company B and Company C also recognise the value gains achieved through supplier consolidation.

Purchasing power emerged as one of the most valuable benefits realised after integration, facilitated by the digitisation of systems across the companies. Respondent P3 noted that post-acquisition, Company A could “identify opportunities for consolidation of supply and other commercial advantages,” enhancing their bargaining power with suppliers. This allowed the organisation to negotiate more effectively, securing better terms and reducing overall costs. Respondent P10 further described how group renegotiation with suppliers, supported by enhanced visibility into supplier data, led to cost reductions such as a 6% saving from one supplier.

The use of systems like eCost promoted these advantages. According to respondent P1, through eCost, the organisation could “leverage Company A’s

suppliers” and integrate purchasing across business units more efficiently. The visibility provided by this digital platform has been instrumental in identifying cost-saving opportunities and aligning purchasing decisions with real-time data on supplier capabilities.

The integration also allowed for more strategic negotiation with suppliers. Respondent P4 illustrated this with an example where Company C initially saw price increases after moving to the Company A steel programme. However, they later benefited from price reductions as the system enabled the company to monitor and negotiate prices in line with market trends, ensuring better control over procurement costs. The system’s visibility and data capabilities were central to achieving these results.

5.7.2.1.1 Increased Purchasing Power

Another benefit of the acquisition was the increase in purchasing power for both Company A and the acquired entities. The scale and collective bargaining power gained through supplier consolidation had an impact, as confirmed by multiple respondents. In Figure 28 all Company B respondents addressed the topic of increased purchase power, highlighting inefficiencies that are associated with smaller entities who have a small voice when it comes to bargaining power.

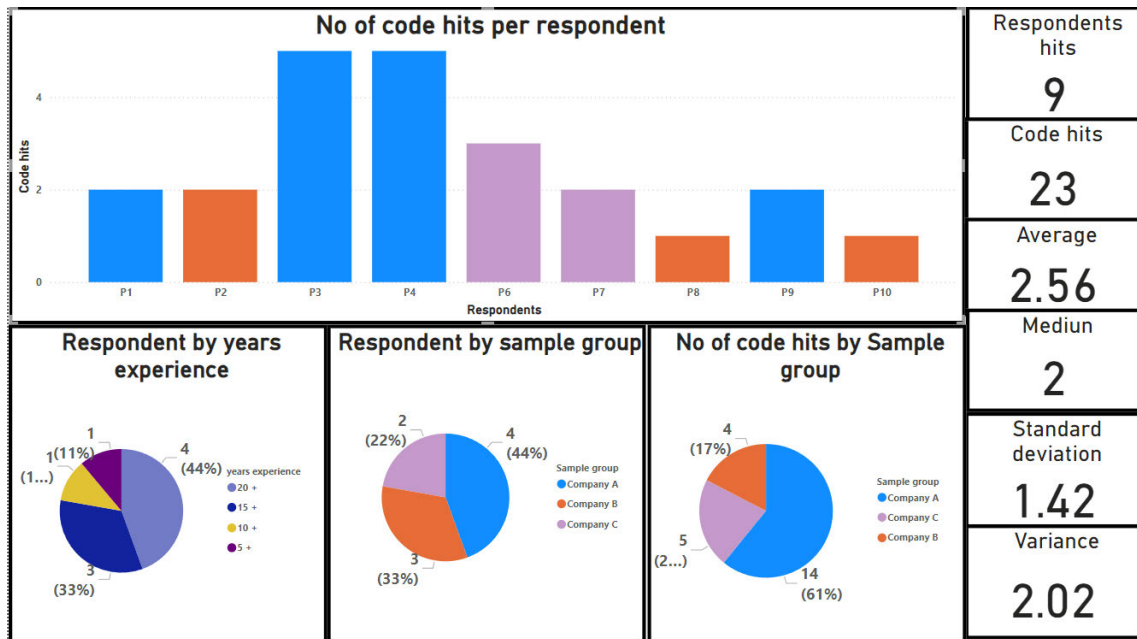


Figure 28 - Increased purchasing power respondent data.

Respondent P7 stated that their purchasing power “went through the roof” after being integrated into Company A. The increased leverage enabled them to revisit pricing with suppliers, as they were now part of a larger group: “We used eCost to identify which suppliers we were already doing business with. We went back to them requesting repricing because we’re now part of a larger group with more purchasing power.” This newfound ability to negotiate more favourable terms was a direct result of the scale brought by the acquisition and the use of digital tools like eCost.

Respondent P6 also highlighted the flexibility that came with this increased purchasing power. They explained that being part of a larger organisation allowed them to avoid being “...locked into an unfavourable contract...” and instead benefit from quarterly pricing reviews. This flexibility enabled more efficient negotiations, leading to cost savings and improved logistical coordination. Respondent P8 confirmed these benefits by mentioning the “huge, huge savings” that were realised due to the increased visibility and purchasing power.

In addition to cost savings for Company A, this increased purchasing power also benefitted suppliers, as Respondent P9 noted. Smaller suppliers, previously

dealing with individual, smaller entities, found themselves in a more advantageous position after integration into Company A's supply chain. They could now participate in larger contracts, creating a situation where all Companies A, B and C benefitted from improved leverage.

The consolidation of suppliers following the acquisition of Companies B and C brought about cost efficiencies and enhanced visibility into supplier capabilities. The substantial increase in purchasing power, facilitated by digital integration, enabled Company A to negotiate better terms and strengthen supplier relationships. Tools like eCost have not only reduced procurement costs but have also created opportunities for better supply chain coordination, resulting in a more efficient organisation.

5.7.2.2 Key Findings from Theme 2 – Operational Synergies and Increased Efficiency

The integration of Companies B and C into Company A clearly demonstrated the operational synergies achieved through digitisation. The role of digitisation in improving visibility, as supported by the adoption of systems like eCost, reflects the findings of Bienhaus and Haddud (2018), who emphasise that digital tools enhance visibility and decision-making in procurement by integrating real-time supplier data. Through increased visibility into the newly acquired supplier capabilities, Company A was able to leverage its purchasing power, engage in more strategic negotiations, and make more informed decisions, supporting the benefits described in the literature (Bienhaus & Haddud, 2018; Ilhan & Rahim, 2020). Respondent P3's mention of identifying "opportunities for consolidation of supply and other commercial advantages" highlights the practical outcomes of these efforts, aligning with the theoretical propositions on the benefits of digital procurement integration (Henningsson et al., 2018).

In relation to Research Objective 1, which focuses on aligning the knowledge management framework with the challenges of enhancing supplier visibility, the integration of suppliers from Companies B and C into a unified, digitalised system

directly addresses these challenges. The literature highlights that knowledge management frameworks, when combined with digitisation, support better visibility and operational efficiency (Tzortzaki & Mihiotis, 2014). Respondent P1's comment about eCost facilitating the integration of purchasing across business units is consistent with the findings of Bienhaus and Haddud (2018), who argue that digitised procurement systems improve supply chain visibility and enable faster access to critical supplier data, which was realised in this case through shared supplier access across the newly integrated entities.

The findings also strongly support Research Objective 2, which aimed to identify and integrate critical supplier information into digitised systems for effective retrieval and maintenance. The consolidation of part numbers across the three companies, as well as the optimisation of purchasing decisions, aligns with the documented benefits of digital procurement tools (Bienhaus & Haddud, 2018). As Respondent P10 noted, enhanced visibility led to cost reductions, achieving a 6% saving from a single supplier, demonstrating how effective supplier integration can generate significant financial benefits (Ilhan & Rahim, 2020). This reinforces the importance of digitisation in driving cost efficiencies in post-M&A supply chain management.

The increased purchasing power post-acquisition, as highlighted by Respondent P7, showcases the ability of digital integration to negotiate more favourable terms due to the consolidated supply base. This aligns with Říhová (2018), who stresses that the successful integration of IT systems post-M&A is crucial for unlocking synergies such as improved supplier negotiation capabilities. The flexibility gained from quarterly pricing reviews, as emphasised by Respondent P6, is a direct result of enhanced supplier visibility, further aligning with the literature's emphasis on the strategic benefits of digitisation in procurement (Henningsson et al., 2018).

These outcomes underline the critical role of digitisation in post-M&A supply chain integration, demonstrating clear links to enhanced operational efficiency, cost savings, and strategic procurement management as outlined in the literature.

5.7.3 Theme 3 – Increased Supplier Accountability

The integration of Companies B and C into Company A's supply chain following the M&A process has highlighted a significant increase in supplier accountability. This is evident through the digitisation of supplier monitoring and the enhanced visibility into supplier performance and capabilities. Prior to the acquisition, Company A faced challenges in efficiently managing and accessing supplier performance due to the varied levels of technological maturity between the two acquirees.

Company B, with its limited use of technology, required a foundational overhaul to align with Company A's digital processes. Conversely, Company C, which had a robust technological infrastructure at the time of acquisition, integrated easier into Company A's systems, specifically the eCost platform. As Respondent P4 noted, "Company C has been fully integrated onto the eCost platform... we do variance analysis on everything they purchase, including price monitoring. We do full monitoring on their price movements". This integration provide Company A with valuable insights into supplier pricing, savings, and any additional costs, contributing to a higher degree of supplier accountability – this is evident in the results in Figure 29 where none of Company B's respondents aligned with this benefit due to incomplete integration with Company A's technology.

The implementation of digitised systems such as Oracle and MPX has enabled Company A to rationalise and scrutinise supplier data to the "Nth degree" as explained by Respondent P4. This not only improves visibility but also provides detailed metrics on key performance indicators such as on-time delivery, pricing evolution, and performance tracking. As Respondent P1 highlighted, "That information comes from Oracle, and it's collected for every supplier so we can see all suppliers' on-time delivery performance over the last month." This access to performance data across the entire supply base allows Company A to hold suppliers to a consistent standard and align them with its reporting frameworks.

The increase in supplier accountability is a direct outcome of enhanced visibility

through digital integration, aligning with the primary research objective of improving the management of newly integrated supplier capabilities post-acquisition. The findings emphasise that this digital visibility not only supports supplier scrutiny but also fosters an environment where suppliers are consistently held accountable to the established KPI's and performance benchmarks.

5.7.3.1 Supplier Performance Monitoring

Supplier performance monitoring is another area where digitisation has proven valuable in improving visibility post-acquisition. Figure 29 displays that Company B did not contribute to this theme, exposing the benefit Company B is realising being an advanced user of digital data. With the implementation of systems such as eCost, Company A has developed a clearer understanding of supplier performance across a range of metrics, including cost efficiency and delivery reliability. Respondent P1 remarked, “We have excellent eCost capabilities in understanding the supplier's capabilities along the cost element.” This platform allows for the tracking of baseline costs, price variances, and supplier price evolution on a monthly basis.

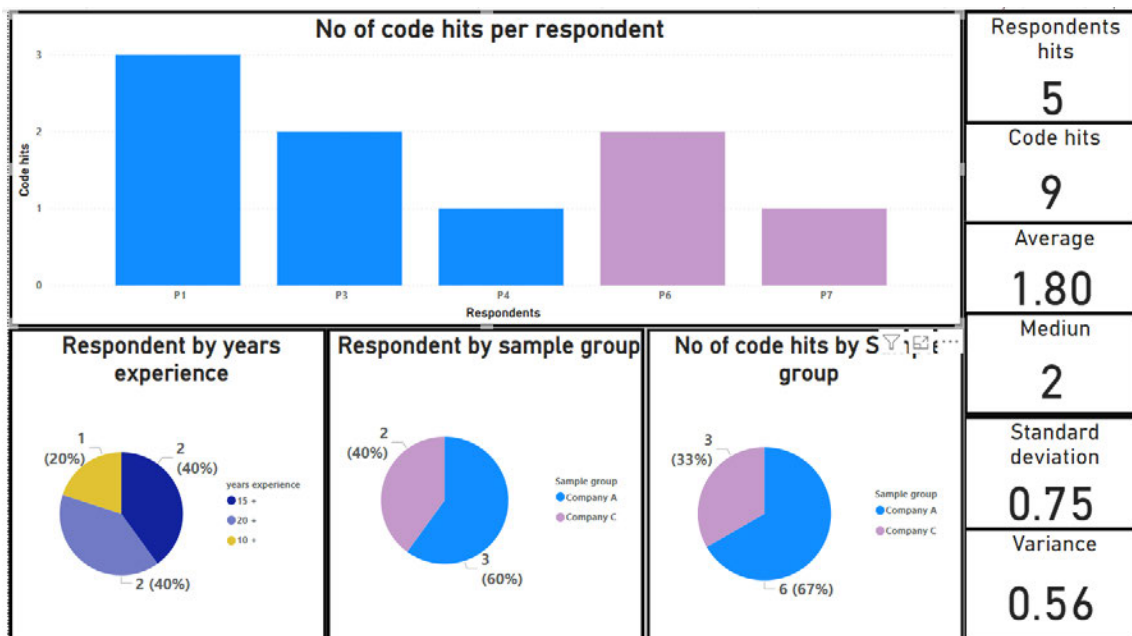


Figure 29 - Supplier performance monitoring respondent data.

The ability to categorise supplier information by part number, business line, and supplier further strengthens Company A's oversight. This data is not only centralised but is also regularly reviewed across all business lines to ensure alignment with Company A's overall strategic goals. As Respondent P3 explained, "We are a centralised group; we have regular business reviews with all the individual business lines. We have standard KPI's that we work to, and these acquisitions must comply with that reporting".

The performance data collected through these systems allows Company A to make informed decisions when managing supplier relationships identifying potential cost-saving opportunities. For instance, Respondent P6 mentioned how the eCost platform helps avoid "risky spending habits" by providing insights into price anomalies and supplier performance. This capability to monitor spending and supplier performance in real-time has significantly improved Company A's ability to hold suppliers accountable and ensure continuous improvement in supplier contributions to the supply chain.

5.7.3.2 Key Findings from Theme 3 – Increased Supplier Accountability

The integration of digital platforms such as Oracle, MPX, and eCost following the acquisition of Companies B and C has improved supplier accountability, directly addressing Research Question 2 by enhancing visibility and integration across the expanded supplier base. This aligns with the broader goal of improving the management of newly integrated supplier capabilities through digitisation. The literature supports the role of digital tools in facilitating supply chain transparency and improving supplier performance management. As Ilhan and Rahim (2020) highlight, e-procurement systems contribute to real-time visibility into procurement processes, which is essential for monitoring supplier activities, such as cost efficiency, on-time delivery, and pricing evolution. This visibility is crucial in complex industries, where precise procurement management is necessary for maintaining high-value supply chains, as noted by Häkkinen et al. (2004).

The integration of Company C into the eCost platform exemplifies the benefits of

such systems. As Respondent P4 remarked, “Company C has been fully integrated onto the eCost platform... we do variance analysis on everything they purchase, including price monitoring.” This reflects Bienhaus and Haddud’s (2018) observation that digital platforms enhance transparency and control in supply chains, thus improving supplier accountability. In contrast, the delayed integration of Company B, due to its lower technological maturity, underscores Řihová’s (2018) findings that challenges in post-M&A IT integration often lead to inefficiencies and hinder the realisation of anticipated benefits.

The second research objective, identifying and retrieving critical supplier information, has also been addressed through digitised systems. These platforms enable real-time monitoring and analysis of supplier data, as Respondent P1 explained: “That information comes from Oracle and it’s collected for every supplier.” This aligns with Henningsson et al.’s (2018) argument that information systems integration is key to unlocking post-M&A synergies, as access to performance data supports the standardisation of practices across an organisation’s supply base. By doing so, Company A ensures that suppliers meet established KPI’s, thereby fulfilling the first research objective, which focuses on aligning knowledge management frameworks with the need to improve supplier visibility.

These digital tools facilitate cost-saving and risk mitigation opportunities. As Respondent P6 noted, “The eCost platform helps avoid risky spending habits” by identifying price anomalies and enforcing supplier compliance. This mirrors Bienhaus and Haddud’s (2018) findings that digitisation strengthens accountability and enhances decision-making by providing organisations with the necessary data to monitor and control supplier behaviours effectively. Consequently, these systems not only support informed decision making but also contribute to maintaining supplier compliance and mitigating risks throughout the supply chain.

5.7.4 Conclusion for Research Question 2

The findings from the post-acquisition digital integration of Companies B and C into Company A's systems reveal substantial benefits, particularly in enhancing the visibility and integration of supplier capabilities. These outcomes directly address Research Question 2 and align with both Research Objective 1 and Research Objective 2.

For Company C, its advanced technological infrastructure facilitated smoother integration into Company A's digital systems, laying the groundwork for global sourcing opportunities and improved supplier selection processes. This directly supports Research Objective 2, which focuses on the retrieval and effective use of supplier information. As the literature notes, digitisation enhances supplier visibility, enabling organisations to streamline procurement activities and optimise supplier relationships (Bienhaus & Haddud, 2018; Henningsson et al., 2018). Respondent P6's comment, "We've been introduced to new suppliers... and can look at everything about them, from on-time deliveries to pricing," illustrates how Company A utilised digital tools to integrate and optimise supplier data, improving procurement decisions. This reflects the literature's emphasis on digitisation's role in creating synergies through improved visibility of supplier capabilities (Henningsson et al., 2018).

Company B, however, lacked robust digital systems at the time of acquisition and initially faced challenges with visibility. Despite this, tools such as eCost gradually improved supplier visibility, albeit with a reliance on interpersonal communication to address inefficiencies. This aligns with research objective 1, which focuses on adapting knowledge management frameworks to enhance visibility of supplier capabilities. The literature emphasises that digitisation can help overcome such challenges by integrating procurement systems and improving real-time access to supplier data (Ilhan & Rahim, 2020). Respondent P4's comment, "eCost allowed for full visibility into purchase orders, quantities, pricing, and suppliers," demonstrates progress in improving transparency into supplier operations,

although further efforts are needed to fully integrate and optimise these systems for Company B. This is consistent with the findings of Říhová (2018), who highlights the challenges of integrating legacy systems post-M&A.

The research also reinforces Research Objective 2 by illustrating how consolidating supplier data across all three companies into digitised systems, such as eCost and Oracle, enabled more effective retrieval and maintenance of critical supplier information. This aligns with the literature, which suggests that digital systems enable more efficient data management and supplier performance monitoring, contributing to better decision-making (Bienhaus & Haddud, 2018; Henningsson et al., 2018). Respondent P1's statement, "That information comes from Oracle and it's collected for every supplier," underscores how real-time access to supplier performance metrics, such as lead times and on-time delivery, supports consistent monitoring of supplier capabilities across the expanded supply base.

The digital integration has yielded operational synergies and increased purchasing power for Company A. As Respondent P7 highlighted, the consolidated supplier information has led to improved negotiation outcomes, supporting Research Objective 2. The literature corroborates this by showing how digitisation enables organisations to leverage data for enhanced procurement strategies and cost efficiencies (Ilhan & Rahim, 2020; Henningsson et al., 2018). The tangible financial benefits are evident from Respondent P10's comment: "The enhanced visibility led to cost reductions, with a 6% savings from a single supplier." This reflects the broader consensus in the literature that enhanced supplier visibility through digitisation drives cost savings and operational efficiency (Bienhaus & Haddud, 2018).

5.8 Conclusion and Recommendations

The findings of this research highlight the challenges and opportunities associated with digitising and integrating supplier capabilities following the acquisition of Companies B and C by Company A. These conclusions are well-aligned with the research objectives, particularly regarding limitations in obtaining, digitising, and maintaining supplier information, as well as the benefits of enhanced visibility and integration post-acquisition.

One of the primary challenges identified was the presence of data gaps and incomplete information, particularly in Company B, which lacked structured, digitised data systems. Reliance on non-digitised, informal processes, such as manual data entry and tacit knowledge, led to inefficiencies that limited visibility into supplier capabilities and delayed integration (Říhová, 2018; Bienhaus & Haddud, 2018). Even though Company C had a foundational technological base, it also faced challenges in capturing and integrating the full scope of supplier capabilities, illustrating that digitisation alone does not ensure complete visibility or data accuracy (Ilhan & Rahim, 2020; Santos et al., 2023).

Another significant challenge involved integration difficulties due to technological disparities, resource constraints, fragmented data, and system incompatibility. Company B's reliance on manual processes, including Excel spreadsheets and the absence of an ERP system, presented obstacles to the digitisation and integration of supplier data. In contrast, despite its relative technological advancement, Company C faced hurdles in aligning its ERP system with Company A's requirements, further complicating visibility improvements into supplier capabilities. These challenges underscore the complexities inherent in post-acquisition integration, especially when disparate systems and varying levels of technological maturity are involved (Henningsson et al., 2018; Bienhaus & Haddud, 2018; Říhová, 2018).

Poor planning emerged as a major factor exacerbating these difficulties. The absence of thorough preparation for integrating non-digitised systems, particularly

in Company B, led to delays and inefficiencies. Without a structured approach to data integration, aligning supplier information with Company A's systems proved challenging. This inadequate planning during the due diligence phase resulted in mismatched data, inefficiencies, and limited visibility into supplier capabilities (Häkkinen et al., 2004).

The notable impact of staff attrition on post-acquisition integration highlights the importance of effective strategies for retaining key personnel, particularly those with critical operational knowledge or technical skills. Addressing attrition through tailored incentive structures, career development opportunities, and supportive measures could promote staff continuity, which is crucial to smoother integration and mitigating knowledge loss (Wojtak, 2018; Henningsson et al., 2018). The retention of both tacit and explicit knowledge is vital; thus, implementing robust knowledge transfer mechanisms and digital knowledge repositories could be valuable for capturing and preserving essential organisational knowledge, particularly in environments with high attrition rates (Tzortzaki & Mihiotis, 2014; Bienhaus & Haddud, 2018).

Despite these challenges, the research underscores the positive impact of post-acquisition digital integration, particularly through tools like eCost and MPX. These systems significantly enhanced supplier visibility, particularly within Company C, by providing greater access to crucial supplier information such as pricing, lead times, and delivery performance. This improved visibility supported procurement efficiency and supplier management, directly addressing research objectives related to enhancing supplier capability visibility (Ilhan & Rahim, 2020; Bienhaus & Haddud, 2018).

The interplay between organisational culture and staff retention emerged as a significant factor influencing M&A success. A dependency on individual expertise rather than systematic processes, particularly in instances of cultural misalignment, exacerbates the effects of attrition. Cultural alignment may influence retention by fostering a sense of belonging or shared mission, which

could be crucial for the retention of highly skilled personnel, ultimately shaping the success of post-acquisition integration (Henningsson et al., 2018; Wojtak, 2018).

Operational synergies and increased efficiency gained through digitisation were further evident in this research. The integration of systems like eCost improved supplier visibility, generated cost savings, and strengthened supplier accountability, thereby supporting decision-making, supplier consolidation, and enhanced sourcing strategies. The increased purchasing power and flexibility derived from enhanced supplier visibility illustrate the broader benefits of digital integration in post-acquisition processes (Bienhaus & Haddud, 2018; Henningsson et al., 2018).

While this research provides insights into the challenges and benefits of post-acquisition supplier integration through digitisation, several gaps remain that could guide future study. One key gap involves the issue of incomplete digitisation. For instance, although Company C had a digital framework, it still faced challenges in achieving complete visibility into supplier capabilities. Further research could explore effective strategies for bridging data gaps and ensuring that all supplier competencies are captured and fully leveraged (Häkkinen et al., 2004; Wei & Wang, 2010).

The technological disparity between Companies B and C also suggests the need for further exploration into standardising supplier data integration across companies with differing technological infrastructures. Studies could examine best practices for harmonising systems and processes during mergers and acquisitions (Henningsson et al., 2018). Additionally, Company B's reliance on informal knowledge underscores the necessity for formalising tacit knowledge through structured systems to ensure critical supplier information is effectively retained and integrated (Říhová, 2018).

The issue of inadequate planning during the M&A process presents another opportunity for further study. Research could focus on developing comprehensive frameworks for assessing technological and data readiness during the pre-

acquisition phase, providing valuable insights into better preparation for post-acquisition integration (Häkkinen et al., 2004; Wojtak, 2018).

Lastly, while improvements in supplier accountability and visibility were noted, the long-term effects of digitisation on supplier relationships and performance remain underexplored. Research could investigate the sustained impacts of digital integration on supplier collaboration, trust, and innovation, providing a deeper understanding of the broader benefits of digitisation in M&A contexts (Bienhaus & Haddud, 2018; Wojtak, 2018).

This research reinforces the critical role of digitisation in improving visibility into supplier capabilities post-acquisition while identifying challenges and gaps that need to be addressed for effective integration. Through further research and enhanced planning, organisations can harness the full potential of digital tools to optimise supplier management and integration in M&A transactions (Bienhaus & Haddud, 2018; Říhová, 2018; Wojtak, 2018).

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Appendix A: Ethical Clearance



Our Ref: M. 470924
Enquiries: research@iie.ac.za

10 September 2024



Outcome of Ethics Clearance Application for Master of Business Administration



Student name: Colin Douglas Miles Marshall
Student number: [REDACTED]
Brand and campus: IEMSA



Dear Colin Douglas Miles,

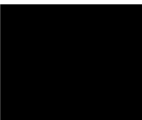
Thank you for submitting the ethics clearance application for the study: *Unlocking Value: Digitization's Impact on Supply Chains in Heavy Engineering Post Horizontal Mergers and Acquisitions*.



We are pleased to inform you that your ethical clearance application has been approved with minor revision. This means that you may proceed with data collection once you have addressed the issues raised by the Higher Degree Committee to the satisfaction of your supervisors.

You are reminded to inform the IIE's Higher Degrees Committee of any changes made to the research methodology or title of the research prior to examination. Kindly ensure that all ethical considerations are duly applied whilst collecting, analysing and interpreting the data for the completion of your research. If you have any questions, please feel free to contact your programme team or supervisor directly.

All the best with your research.



Dr Willy Engelbrecht
Chair: Higher Degrees Committee



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Appendix B: Respondent Invitation and Informed Consent Letter



Annexure H – PARTICIPANT OR RESPONDENT INFORMED CONSENT FORM

Explanatory information sheet and consent form for participants
To whom it may concern, My name is Colin Douglas Miles <u>Marshall</u> and I am a student at The IIE's MSA Campus. I am currently conducting research under the supervision of Dr. Dirk van Vuuren and Dr. Pieter le Roux about How digitisation of supplier capabilities data may support and provide value the after a horizontal merge or acquisition process. I hope that this research will enhance our understanding of the mechanisms required to extract the best outcomes from suppliers post horizontal mergers and acquisitions. I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.
What will I be doing if I participate in your study?
I would like to invite you to participate in this research because your current work responsibilities and job title indicates experience that would align well with the field of interest, and I believe your contribution would provide valuable insight on the subject. If you decide to participate in this research, I would like to provide you perform a interview via Microsoft Teams to allow for recording and transcribing the interview that would last approximately 60 minutes, answering approximately 20 questions related to the subject. All personal identifiers would be anonymized when compiling the final document. You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.
Are there any risks/ or discomforts involved in participating in this study?
Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your contribution towards this research study on Unlocking Value: Digitisation's Impact on Supplier Capability Visibility in Heavy Mobile Equipment Engineering OEM's Post Horizontal Mergers and Acquisitions. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating. All participants identifiers, be it their name, Job title, Department or Product will be anonymised and unidentifiable in any published documents.
Do I have to participate in the study?
- Your inclusion in this study is completely voluntary; - If you do not wish to participate in this study, you have every right not to do so;

• Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.
Will my identity be protected?
I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at The IIE MSA, will have access to your interview information. I would like to use quotes when I discuss the findings of the research, but I will not use any recognisable information in these quotes that can be linked to you.
What will happen to the information that participants provide?
Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my Masters of Business and Administration. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.
What happens if I have more questions about the study?
Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate. You should not agree to participate unless you are completely comfortable with the procedures followed. My contact details are as follows: Colin Marshall [REDACTED] The contact details of my supervisors are as follows: Dr. Dirk van Vuuren [REDACTED] Dr. Pieter le Roux [REDACTED]
Participant or respondent Informed Consent – Audio and Visual Recordings.
I agree to participate in the research conducted by Colin Douglas Miles Marshall about Unlocking Value: Digitisation's Impact on Supplier Capability Visibility in Heavy Mobile Equipment Engineering OEM's Post Horizontal Mergers and Acquisitions This research has been explained to me and I understand what participation in this research will involve. I understand that: • I agree to participate in this research and be recorded for the purpose of data collection.

- My confidentiality will be ensured. My name and personal details will be kept private and confidential.
- My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research.
- I may choose not to answer any of the questions that are asked during the research interview.
- I may be quoted directly when the research is published, but my identity will be protected.

Signature

Date