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The microfoundations of strategic agility in digitalized business planning: a qualitative case study in a Finnish insurance company

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ABSTRACT:

Increasing competition and volatility in the business environment highlight the need for strategic agility and responsiveness even in stable industries. The study addresses gaps in existing strategic agility and digitalization literature while also expanding the microfoundations literature. Strategic agility research is limited in stable industries and incumbent organizations. The literature also does not clarify how digitalization impacts strategic agility and lacks a microfoundational explanation of how micro-level practices aggregate into the meta-capabilities of strategic agility. Therefore, the purpose of this study is to explain how digitalized business planning forms strategic agility through its microfoundations in a stable incumbent organization.

The study addresses the following research question: How does digitalized business planning influence strategic agility through its microfoundations in an incumbent organization operating in a stable industry? Additional sub-questions are used to further clarify the interplay between digitalization and strategic agility. A mechanism-based framework is used to illustrate how the micro-level practices aggregate into macro-level capabilities. The research is conducted as a qualitative single-case study within a large and incumbent Finnish insurance company. Data is collected through ten semi-structured interviews.

The findings indicate that digitalized business planning shapes strategic agility through specific microfoundational mechanisms. Digital tools and data enhance managerial cognition and strategic sensitivity by increasing shared situational awareness and transparency, and by improving data-driven planning discussions. Digitalization also improves operational agility by accelerating planning cycles and enabling faster resource reallocation. However, operational agility does not translate into full strategic agility, but provides a foundation for it. Insufficient data interpretation, predictive analytics, and resource fluidity constrain the development of the meta-capabilities of strategic agility. Limited predictive capabilities weaken strategic sensitivity, while structures and resource scarcity hinder resource fluidity and strategic commitment to initiatives.

The study provides a microfoundational explanation of how digitalized business planning conditionally enables the formation of strategic agility in a stable incumbent organization, extending strategic agility research beyond volatile contexts. As a single-case study, the findings are context-specific and provide a basis for future comparative and longitudinal research.

KEYWORDS: strategic agility, microfoundations, digitalization, dynamic capabilities, strategic sensitivity, leadership unity, resource fluidity, incumbents

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ABSTRACT:
Liiketoimintaympäristön lisääntyvä kilpailu ja epävarmuus korostavat strategisen ketteryyden ja reagointikyvyn merkitystä myös vakailla toimialoilla. Tämä tutkielma vastaa aukkoihin strategista ketteryyttä ja digitalisaatiota koskevassa kirjallisuudessa sekä laajentaa mikroperustoja käsittelevää kirjallisuutta. Strategista ketteryyttä on tutkittu rajallisesti vakailla toimialoilla ja vakiintuneissa organisaatioissa. Lisäksi nykyinen kirjallisuus ei selitä, miten digitalisaatio vaikuttaa strategiseen ketteryyteen tai miten yksilötason ilmiöt mikrotasolla muodostavat strategisen ketteryyden metakyvykkyyksiä. Tämän työn tarkoituksena on selittää, miten digitalisoitu liiketoimintasuunnittelu muodostaa strategista ketteryyttä mikroperustojensa kautta vakaassa ja vakiintuneessa organisaatiossa.

Tutkimus vastaa seuraavaan tutkimuskysymykseen: Miten digitalisoitu liiketoimintasuunnittelu vaikuttaa strategiseen ketteryyteen mikroperustojensa kautta vakiintuneessa organisaatiossa, joka toimii vakaalla toimialalla? Lisäksi tarkentavien alakysymysten avulla syvennetään ymmärrystä digitalisaation ja strategisen ketteryyden välisestä vuorovaikutuksesta. Tutkimuksessa hyödynnetään mekanismipohjaista viitekehystyökalua havainnollistamaan, miten mikrotason käytännöt kumuloituvat makrotason kyvykkyyksiksi. Tutkimus on toteutettu laadullisena yksittäistapaustutkimuksena suuressa ja vakiintuneessa suomalaisessa vakuutusyhtiössä. Tutkimusaineisto on kerätty kymmenen puolistrukturoidun haastattelun avulla.

Tulokset osoittavat, että digitalisoitu liiketoimintasuunnittelu vaikuttaa strategiseen ketteryyteen tiettyjen mikrotason mekanismien kautta. Digitaaliset työkalut ja data vahvistavat johdon kognitiota ja strategista herkkyyttä parantamalla yhteistä tilannetietoisuutta, läpinäkyvyyttä ja datalähtöisiä suunnittelukeskusteluja. Digitalisaatio edistää myös operatiivista ketteryyttä nopeuttamalla suunnittelusyklejä ja mahdollistamalla resurssien joustavamman kohdistamisen. Operatiivinen ketteryys ei kuitenkaan yksinään johda strategiseen ketteryyteen, vaan toimii sen perustana. Riittämätön datan tulkinta, ennakoivan analytiikan rajallisuus sekä resurssien heikko liikkuvuus rajoittavat strategisen ketteryyden metakyvykkyyksien kehittymistä. Puutteelliset ennakointikyvykkyydet heikentävät strategista herkkyyttä, kun taas rakenteelliset tekijät ja niukat resurssit estävät resurssien liikkuvuutta ja strategista sitoutumista aloitteisiin.

Tämä tutkimus tarjoaa mikrotason selityksen sille, miten digitalisoitu liiketoimintasuunnittelu ehdollisesti mahdollistaa strategisen ketteryyden muodostumisen vakaassa ja vakiintuneessa organisaatiossa ja laajentaa strategisen ketteryyden tutkimusta epävakaiden toimintaympäristöjen ulkopuolelle. Yksittäistapaustutkimuksessa tulokset ovat kontekstisidonnaisia, mutta ne tarjoavat perustan tulevaisuuden vertailu- ja pitkittäistutkimuksille.

AVAINSANAT: strateginen ketteryys, mikroperustat, digitalisaatio, dynaamiset kyvykkyydet, strateginen herkkyys, johtoryhmän yhtenäisyys, resurssien liikkuvuus, vakiintuneet yritykset

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Abbreviations

AI = artificial intelligence
CEO = chief executive officer
CRM = customer relationship management
ERP = enterprise resource planning
IT = information technology
KPI = key performance indicator

1 Introduction

Organizations are increasingly dependent on digital infrastructures, data, and global technology ecosystems. Recent geopolitical developments have highlighted how strongly European nations and organizations rely on American digital systems and cloud services, raising concerns about technological dependence (Yle, 2026). Digital tools and systems are no longer merely operational but form a critical foundation for organizations to operate and survive. As digitalization deepens and organizations become more dependent on it, they must be able to respond rapidly to changing conditions. The current volatility of the global environment highlights the need for strategic agility. Strategic agility remains an evolving research domain and is attracting increasing interest from both scholars and practitioners (de Diego Ruiz et al., 2023).

For example, digital infrastructure enables real-time monitoring of claims and churn data in large and stable insurance companies. Changes in claims patterns or churn rates become visible through digital dashboards and analytical systems, allowing managers to detect emerging issues and opportunities earlier than before. Even in stable industries, such digital systems and tools shape how quickly organizations detect and react to changes and take strategic actions based on facts. However, detecting potential changes from the data alone is insufficient and requires additional organizational capabilities to translate them into coordinated action.

In addition, increasing competition forces organizations to react and adapt faster to maintain competitiveness. Strategic planning and decision-making are becoming increasingly data-driven and digitalized to keep up with fast-paced competition. For example, Kappelman et al. (2014) emphasize that cloud computing is a critical investment to develop strategic agility. However, accelerated strategy processes do not automatically translate into strategic agility, which highlights the need to understand how digitalized business planning affects strategic agility.

Digital development has revolutionized how businesses and customers operate. Leaps in digitalization have enabled the rise of digitalized business planning. It consists of data-driven management, utilizing tools, dashboards, analytics, and AI. Digitalized business planning enables faster decision-making and ensures that decisions are justified by data, reducing reliance on managerial intuition. Digitalized business planning may enhance strategic agility, but alone it is insufficient to achieve it.

Traditionally, many insurance companies have relied on annual strategic planning cycles and stable forecasting assumptions. However, the development of digital planning tools now enables more reactive, rolling forecasts and continuously updated planning processes. For example, changes in claims development or market conditions can be quickly included in planning dashboards and financial forecasts. While such digitalized planning practices accelerate planning cycles and improve organizational responsiveness, they do not necessarily lead to faster strategic decision-making or resource reallocation within large and stable organizations. This highlights the need to better understand how digitalized business planning contributes to the micro-level formation of strategic agility in practice.

De Diego and Almodóvar (2022) define strategic agility as the capability enabling organizations to anticipate, react, and seize changes by redefining strategies to survive and create value. A key challenge lies in understanding how strategic agility emerges in practice. Doz and Kosonen (e.g., 2008) describe the three meta-capabilities forming strategic agility, yet empirical knowledge of how these meta-capabilities are formed at the micro-level remains limited. Research on strategic agility within incumbent organizations operating in stable industries remains limited, as it has traditionally been associated with organizations operating in volatile environments. Furthermore, the link between digitalization and strategic agility is unclear, and a limited understanding exists regarding how digitalized business planning practices shape strategic agility.

The study aims to address gaps in strategic agility, microfoundations, and digitalization research. Prior literature has paid limited attention to how organizations achieve strategic agility in practice (de Diego Ruiz et al., 2023), and empirical knowledge of the micro-level mechanisms forming strategic agility remains scarce. In particular, research on strategic agility within incumbent organizations in stable industries is limited. In addition, the mechanisms through which digitalization shapes strategic agility are insufficiently understood.

Responding to these gaps, this thesis examines how digitalized business planning practices influence the formation of strategic agility at the micro-level. The study responds to the call from Felin et al. (2015), who argue that strategy research has often overlooked the individual-level mechanisms that support organizational capabilities, by examining how digital tools, data practices, and planning routines shape strategic agility in a Finnish insurance company. By doing so, the study seeks to uncover the mechanisms through which digitalization affects the development of strategic agility in practice.

The thesis consists of five sections. The introduction presents the contextual background, research purpose, and research questions. The second chapter focuses on the theoretical background of the thesis. Its subsections separately review existing literature on strategic agility, microfoundations, and digitalization concepts. The third chapter describes the research methodology, explaining qualitative case study design, the case company, how data was collected and analyzed, and addressing the validity and reliability of the research. The fourth chapter presents the empirical findings, while the fifth and last chapter discusses the findings and highlights the theoretical and managerial contributions of the study, as well as the limitations and potential future research recommendations.

1.1 Research questions

To address the objective of this thesis, the study examines the following research question:

How does digitalized business planning influence strategic agility through its microfoundations in an incumbent organization operating in a stable industry?

Three sub-questions further clarify how digitalized business planning influences strategic agility in practice:

How does digitalized business planning influence sensing, decision-making, and coordination?
How do digital tools and data practices shape the microfoundations of strategic agility?
What factors enable or constrain strategic agility in digitalized business planning environments?

2 Theoretical background

This chapter aims to create a solid background and understanding of the main themes in this thesis. The main themes are strategic agility, microfoundations theory, and digitalization.

2.1 Strategic agility

Strategic agility is closely related to the broader concept of enterprise agility, which is defined as *"the ability of firms to sense environmental change and respond readily"* (Overby et al., 2006, p. 121). From a dynamic capability perspective, strategic agility can be understood as an organizational capability to sense and seize opportunities and to reconfigure resources accordingly (Teece, 2007). Building on these broader perspectives, the concept of strategic agility focuses specifically on how organizations can renew and adapt their strategic direction in response to environmental changes.

A comprehensive definition of strategic agility is *"a meta-capability that enables organisations to anticipate, react and seize rapid changes in the environment by redefining their corporate strategies and adapting their competitive and functional strategies to survive and create value."* (de Diego & Almodóvar, 2022, p. 230). Doz and Kosonen (2008) express that strategic agility enables firms to continuously redirect or reinvent their core business without losing momentum.

Strategic agility results from the combination of three meta-capabilities: strategic sensitivity, leadership unity (often referred to as collective commitment), and resource fluidity (Doz & Kosonen, 2008). Although it consists of three distinct capabilities, strategic agility is only realized when all three are functioning together. Doz and Kosonen (2008b, p. 9) give an example of this crucial interdependency: *"Intelligence and commitment without rapid resource deployment in fast-developing strategic situations bring no advantage."* There is no benefit of having superior foresight and commitment if there are no resources to act accordingly. Similarly, organizations can have a high level

of leadership unity with proper resource fluidity, but are unable to perform if they lack strategic sensitivity and direction. Finally, even with high levels of strategic sensitivity and resource fluidity, the absence of leadership unity can paralyze decision-making and stall proper execution. Hence, it is necessary to understand that strategic agility cannot be selectively adopted, but all three meta-capabilities must function together to create a truly agile organization. According to Doz and Kosonen (2008c), focusing too much on one meta-capability can be harmful. For example, a great emphasis on resource fluidity can lead managers to neglect strategic sensitivity, as they believe they are able to react quickly enough when facing changes. Likewise, a high degree of resource fluidity without leadership unity can cause internal tensions and fighting over resources.

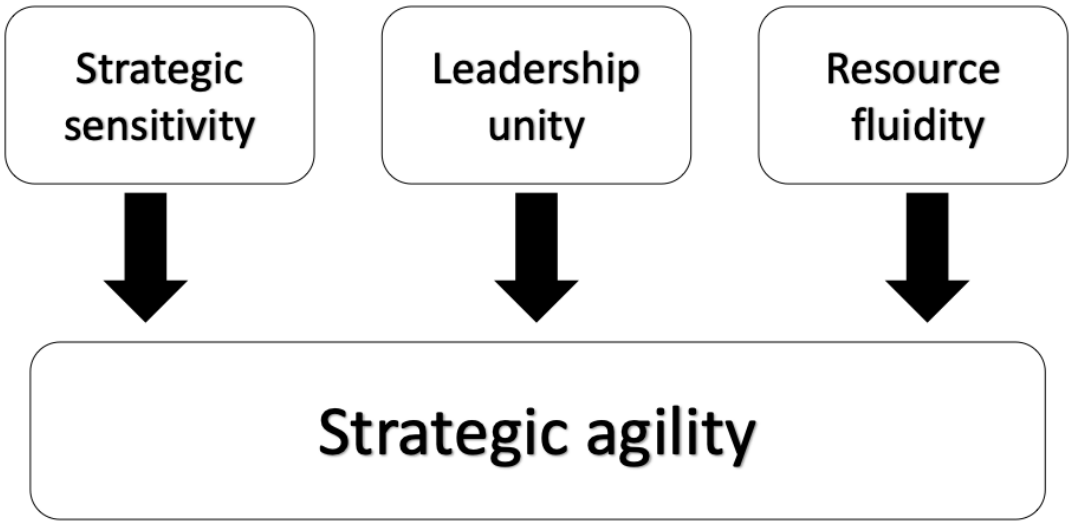

Figure 1. Strategic agility (adapted from Doz & Kosonen, 2008).

Achieving strategic agility can be difficult in mature organizations because of the strategic agility conundrum (Doz & Kosonen, 2008a). It is a paradox in which maintaining agility can prevent companies from building a strong strategic advantage, which can lead to permanent mediocrity and decline in performance. Eisenhardt et al. (2010) also note that organizations face a challenge in balancing between efficiency and flexibility, as they should simultaneously be able to react to changes while gaining traction

through efficiency. Reed (2020) underlines that changing strategy too often can cause issues, such as added costs and loss of market traction. It is therefore critical to sense when change is necessary, and when the organization must endure the turbulence without significant reactions. Reed argues that strategically agile firms perform well in low to moderate turbulence but worse in high turbulence because of the "dithering effect". If firms dither between strategies too much, it causes change costs without the gained benefits from the strategy. The dithering effect is a more common problem with older firms, as they often spend more money on a new strategy compared to younger firms.

There are multiple factors contributing to strategic agility. According to Reed (2020), firm age correlates with its strategic agility. Older firms are less agile and tend to be more rigid for many reasons. One explanation is that pursuing operational excellence often creates rigidities (Doz & Kosonen, 2008). Eisenhardt et al. (2010) argue that as organizations grow and age, they tend to become more structured, aiming for efficiency. They also focus more on exploitation than exploring new opportunities (de Diego Ruiz et al., 2023). De Diego Ruiz et al. also identify structural inertia and firm size as negative indicators of strategic agility. They observe that large companies tend to be more rigid. However, in their research, they also point out that large firms were able to adapt better to sudden changes in the environment as they have more financial resources. Organizational maturity, structure, and size can either constrain or enable strategic agility depending on how these characteristics are managed.

Strategic agility is positively related to business model innovation (Clauss et al., 2021). It improves the firm's performance and responsiveness in turbulent environments (Tallon & Pinsonneault, 2011). Turbulent environments can change or eliminate competitive advantages, which often require the business model to be updated to form a new competitive advantage. Clauss et al. also highlight that the higher the environmental turbulence is, the stronger the effect of strategic agility is on business model innovation. They further extend by noting that strategically agile companies are more likely to adopt

new business models when operating in the midst of environmental turbulence. For example, digitalization acted as a trigger for many businesses to renew their business models.

2.1.1 Strategic agility as a dynamic capability

Dynamic capabilities refer to an organization's ability to sense opportunities and threats, seize opportunities, and reconfigure tangible and intangible assets in changing environments (Teece, 2007). Dynamic capabilities are used to explain how organizations adapt and maintain competitiveness over time. Eisenhardt and Martin (2000) argue that the dynamic capabilities concept extends the resource-based view by explaining how organizations renew and adapt their resources under changing environmental conditions. The dynamic capabilities perspective shares strong conceptual foundations with strategic agility. While dynamic capabilities include a broader theoretical framework, strategic agility can be conceptualized as a specific dynamic capability that emphasizes strategic-level responsiveness.

Teece's (2007) definition of dynamic capabilities is close to the definition of the meta-capabilities of strategic agility by Doz and Kosonen (2008). Sensing relates to strategic sensitivity, seizing to leadership unity, and reconfiguring to resource fluidity. These similarities suggest that strategic agility can be understood as a manifestation of dynamic capabilities at the strategic level. Sensing, seizing, and reconfiguring are continuous processes that shape strategic renewal through managerial action and organizational routines (Teece, 2018). In addition, managerial capabilities are considered critical for dynamic capabilities (Helfat & Martin, 2015). For example, managerial cognition, managerial social capital, and managerial human capital are identified as key micro-level foundations of dynamic capabilities. Furthermore, Helfat and Peteraf (2003) emphasize that dynamic capabilities do not automatically emerge but must be developed. They describe the capability lifecycle as consisting of the founding stage, development stage, and maturity or maintenance stage.

2.1.2 Strategic sensitivity

Strategic sensitivity, described as *"the sharpness of perception and the intensity of awareness and attention"* (Doz & Kosonen, 2008a, p. 96), is a critical capability for organizations to be prepared and stay ahead of the competition. The goal is to become proactive instead of reactive, and strategic sensitivity is proactive in nature (Reed, 2020). It is a combination of early detection with rapid sense-making in strategic situations. Strategic sensitivity develops through a strategy process that is externally focused and internally participative. High levels of tension, attentiveness, and dialogue also support achieving strategic sensitivity. Dialogue should be open and, most importantly, ongoing (Doz & Kosonen, 2008a). Overby et al. (2006) also highlight the importance of sensing capabilities to detect and interpret changes in the environment. For example, Sambamurthy et al. (2003) suggest that digital technologies can improve sensing significantly by enabling real-time data processing. This highlights that achieving strategic sensitivity requires more than an appropriate managerial approach, but also technological capabilities that support effective sensing.

Doz and Kosonen (2010) identify five building blocks of strategic sensitivity: anticipating, experimenting, distancing, abstracting, and reframing. Anticipating refers to developing strategic foresight that enables deliberate and proactive changes to maintain strategic advantage. Experimenting helps organizations explore future possibilities through methods such as scenario planning and probing. Distancing or viewing the organization from the outside creates a more objective understanding of the overall situation and the next strategic steps, for example, through the use of external consultants or new hires. Abstracting enables managers to generalize and identify the core features of the strategy beyond its context. Combining distancing and abstracting allows reframing, which means reinterpreting the business environment to imagine and sense completely new opportunities.

Doz and Kosonen (2008c, p. 6) argue that *"strategic agility is about the capability to think and act differently".* It is not sustainable to keep doing everything the same way because

of the nature of competitive advantages and the changing environment. Thinking and acting differently leads to business model innovations that support strategic agility and create competitive advantage. They encourage organizations and managers to question the cause of their success and think ahead. In their 2008b article, they also recommend "being paranoid" and remaining strategically alert even when the status quo is satisfactory. (Doz & Kosonen, 2008c). Healthy paranoia leads to heightened strategic sensitivity, which allows firms to identify opportunities and act on time (Doz & Kosonen, 2010).

It is not enough to gather information and claim it as strategic sensitivity. The quality and intensity of external sensing are vital (Doz & Kosonen, 2008c). The process must be continuous, as sudden changes and signals often appear unexpectedly. An example of strategic sensitivity is Nokia, which sensed the implications of consumerization more clearly than its competitors (Doz & Kosonen, 2008a). Nokia recognized that mobile phones would expand from business use to ordinary consumers as personal communication devices. This insight allowed the company to capture a major share of the market and gain a significant competitive advantage.

2.1.2.1 Enablers

Strategic sensitivity requires an understanding and foresight of emerging realities, which can be recognized through pattern recognition (Y. Doz, 2020). Doz and Kosonen (2008c) identify fast pattern recognition as a key enabler of strategic sensitivity, for example, because it enables managers to quickly make sense of weak signals. Pattern recognition also supports the development of strategic insight, which Doz and Kosonen (2008c, p. 20) define as *"an ability to perceive, analyse and make sense of complex strategic situations as they develop, and to be ready to take advantage of them."* Gaining and utilizing strategic insight efficiently requires heightened strategic sensitivity. Without heightened sensitivity, many potential signals and valuable cues are left undetected, weakening the decision-making capabilities.

Doz (2020) emphasizes that the intellectual curiosity of leaders and managers should be encouraged and nurtured. Methods like hypothesis reasoning (creating multiple hypotheses about possible situations and their causalities), and scenario-planning can be helpful tools in improving intellectual curiosity and strategic sensitivity, both on a personal and organizational level. These methods encourage systematic and well-founded thinking and also help to identify potential weak signals and even possible triggers for organizational responses. Doz also highlights that, along with intellectual curiosity, intellectual restlessness is needed. Managers cannot be too satisfied with the current situation, as complacency causes intellectual inertia. Restlessness makes managers seek continuous improvement, which makes their work more meaningful and more beneficial for the organization. The combination of intellectual curiosity and restlessness creates *positive opportunity-seeking strategic alertness*, as explained by Doz. However, Doz also warns that alertness and restlessness should not lead to mindless action. It is vital to understand that strategic opportunities may not always be present but arrive at a certain point in time, highlighting the importance of patience.

While curiosity and restlessness improve individual alertness, strategic sensitivity also benefits from the ability to view the organization from an external point of view. The ability to look at one's own situation from the outside (or distancing as referred to by Doz and Kosonen, 2010) allows managers to sense opportunities and areas of improvement (Doz & Kosonen, 2008c). Distancing allows one to see beyond what is currently happening and also provides fresh views for the company. However, changing the perspective can be difficult. Hence, Doz and Kosonen (2010) recommend utilizing external consultants or new hires who have not yet been accustomed to current views of the organization. They can see the situation with a fresh perspective, avoiding groupthink and looking through the same lens as current managers. In addition to this outward perspective, associative thinking further enhances the ability to connect different ideas to create new ones and identify emerging opportunities (Y. Doz, 2020). Doz highlights its benefits in framing new opportunities in more creative ways. Doz and Kosonen (2008c) also emphasize the importance of new cognition to overcome issues of

tunnel vision and strategic myopia. Even if the status quo is satisfying, organizations must remain alert and look for new opportunities to strengthen their position amidst future turbulence. New cognition should not be in the direct path of the core business, but it should scout the future and provide insights and options. To utilize future orientation, Doz and Kosonen recommend creating internal consultancy teams or even shadow management teams to enhance strategic sensitivity. Internal consultancy teams can be assembled from former external consultants and high-potential employees across the organization to challenge prevailing assumptions and provide fresh views. A shadow management team can be created to challenge the actual top team and its decisions. Its analyses can later complement those of the top team, improving strategic sensitivity through multiple perspectives. More importantly, shadow management teams serve as a training ground for high-potential employees aiming for top management roles.

Strategic sensitivity requires understanding and analyzing potential signals. Including more people in the strategy process allows more insights to be shared, increasing the number of signals noticed (Doz & Kosonen, 2008b). Doz (2020) also emphasizes the value of an open strategy process in enhancing strategic sensitivity. This is important to ensure that every option and opinion is understood so the top team can make clear and well-founded decisions. An open strategy process also requires high-quality dialogue. Doz underlines that open dialogue needs to be both context-sensitive and concept-rich to capture the best ideas most fitting for the organization, while avoiding the dialogue becoming overly abstractive and narrow local bias. Furthermore, effective knowledge exchange throughout the organization strengthens the open strategy process. Doz and Kosonen (2008c) suggest maximizing the knowledge exchange to ensure that the best possible building blocks for strategic sensitivity are in use across all levels of the organization. Knowledge exchange can be boosted, for example, through open dialogue, experiments, shared key scenarios, ideas, and assumptions. Strategic sensitivity sharpens when multiple parties discuss these things and gain valuable insights and perspectives. This helps to avoid groupthink and harmful patterns, where new ideas and insights do not flourish. Doz and Kosonen also recommend including customers and even

non-customers in knowledge exchange to gain valuable information. Peer-to-peer connections between top-level executives can also help to provide new insights (Doz & Kosonen, 2008c). Having these mutually beneficial connections also promotes potential future collaboration and leadership unity. A shared perception of the organization's situation is also beneficial. Doz and Kosonen (2008c, p. 139) promote the value of a shared organizational identity in guiding strategic focus, noting, *"how an organization is defined and self-perceived helps direct and focus cognition"*. Strategic focus can be directed in multiple ways, for example, with measurements and incentives.

In addition to openness in the strategy work, technological infrastructure also acts as a critical enabler of strategic sensitivity. De Diego Ruiz et al. (2023) recognize information systems and information technology as key enablers of strategic sensitivity. As strategic sensitivity needs a lot of high-quality data, investments in these capabilities are essential for improving strategic sensitivity. These alone are not enough, but the capability to utilize the information is a crucial factor, as data is useless if it cannot be exploited. Hence, it is important to understand that information systems and information technology only provide the means to utilize data and, by doing so, improve strategic sensitivity.

Doz and Kosonen (2008c) highlight that under extreme uncertainty, trying is better than guessing. Organizations should favor experimentation over excessive analysis and delayed attempts to achieve full understanding. Action enables faster learning and helps the organization adjust its strategy based on results rather than guesses. Additionally, Doz and Kosonen argue that there should be a different process for strategic issues and new opportunities, in order to avoid jumping to wrong conclusions. One common issue with new opportunities is that they are evaluated using overly ambitious targets or inappropriate performance metrics. If the bar is set too high or metrics are unfit, potentially valuable opportunities can be dismissed as unprofitable. In prevention, Doz and Kosonen (2008c, p. 69) propose a useful principle: *"learn and reflect first, perform later"*.

Contrary to what is later discussed under leadership unity, contradictory goals can enhance strategic alertness. Doz and Kosonen (2008b, p. 7) explain this, noting *"Beyond stretch goals, creative tension through contradictory goals helps to keep people attentive, intellectually mindful, and intensely preoccupied."* Managers cannot rely on current ways of working, but are actively pushed to challenge their thinking and reinvent. It can lead to discoveries or at least improvements that are also beneficial. In some cases, organizations can even create and use deliberate crises, such as contradictory or difficult goals, to trigger change (Doz & Kosonen, 2008c). However, maintaining a balance between tensions and complacency within the organization is important. Doz and Kosonen suggest that the top management should make the present look fragile enough to promote alertness, but not too fragile for it to be paralyzing. Ideally, people are happy but remain alert and hungry for more.

2.1.2.2 Barriers

Current literature recognizes several constraints negatively impacting strategic sensitivity. The barriers can be structural, cultural, or cognitive barriers that hinder the organization's ability to sense and respond to environmental changes.

According to de Diego Ruiz et al. (2023), older firms focus more on exploitation than exploration. They don't feel the need to reinvent, but further improve and leverage their core capabilities. This leads to a decline in strategic sensitivity, as it is not deemed important for the organization's success. Notably, de Diego Ruiz et al. found that the failures of older firms are often because they are not capable of reacting to a changing environment. While it is understandable that successful established organizations focus on efficiency, they should also remain at least slightly strategically alert. In addition to firm age, Doz (2020) notes that achieving strategic sensitivity is even more difficult in large organizations. This is mostly because collective mindsets and routines are biased toward stability and predictability, which often hinders awareness of external changes. Doz further extends this by pointing out that large organizations tend to dull the potential strategic sensitivity of individual members instead of encouraging it.

Furthermore, Doz and Kosonen (2008c) recognize that success and good firm performance can harm sensitivity. When business is going well, it can be difficult to see the need for change or improved foresight, as the status quo is satisfactory. However, situations can quickly change, and with the lack of strategic sensitivity, organizations are left vulnerable to these sudden changes. It is therefore vital to remain alert and proactive while simultaneously enjoying the ongoing success. Doz and Kosonen also emphasize that organizations should not seek short-term wins but focus on long-term thinking to avoid strategic disasters.

In addition, cognitive and behavioral biases also limit sensitivity. A common and natural barrier in the pursuit of strategic sensitivity is that it is difficult to make decisions against current habits and evidence (Y. Doz, 2020). Managers must learn to deal with the uncertainty of making choices about the future, as the environment is changing fast. When strategic sensitivity is heightened, managers can make better, clearer, and well-grounded decisions about the future. In addition, top management must be capable of making changes and decisions during the height of success to avoid ending up in situations where you have to react instead of proact.

Another issue in strategic sensitivity is the difficulty of collecting information from a wide enough range to gain useful insight (Doz & Kosonen, 2008c). Organizations tend to fall prey to proximate sensing, where they are not able to look far enough or into new and unfamiliar directions. In these situations, organizations look too closely at what is familiar and safe, instead of exploring unfamiliar areas. In addition to proximate sensing, focusing fully on the core business creates tunnel vision, which erodes strategic sensitivity. Managers may often think that their core business is the only right answer and belittle other opportunities. This impacts all three meta-capabilities of strategic agility, as without strategic curiosity, leadership unity, and resource allocation are unlikely to follow.

2.1.3 Leadership unity

Doz and Kosonen (2008a, p. 96) describe leadership unity as *"the ability of the top team to make bold decisions fast, without being bogged down in 'win-lose' politics at the top."* A well-functioning top team reaches decisions quickly after the overall strategic situation is understood and the potential options have been discussed. When the team is working properly, there are no slowdowns because of insecurities, harmful politics, or personal agendas. Business units and managers understand the need to work toward common goals, rather than competing against each other internally.

Doz and Kosonen further unpack leadership unity into five dimensions in their 2010 article. They propose that leadership unity consists of dialoguing, revealing, integrating, aligning, and caring. Most top teams debate against each other instead of having constructive, open dialogue. Open dialogue is a necessity that allows the motives to become visible and transparent. It also mitigates the risk of "win-lose" debate as decisions are reached together and there are no individual winners. Revealing refers to the activity of making personal motives known. It builds trust among managers who perhaps have earned their position by competing with others and, therefore, are not used to trusting others. Integrating is about building interdependencies and strategic integration across business units to create better alignment, shared purpose, and coordinated decision-making within the top team. Aligning interests, goals, and incentives is the most common method of building leadership unity. Aligning on a deeper, more meaningful level, for example, on shared values, can further improve leadership unity. Doz and Kosonen also found that care among top managers enhances leadership unity. Caring enables managers to empathize and better understand the needs and expectations of others. This creates a sense of safety, allowing managers to be themselves and even playful, which can improve innovation. Regarding the benefits of playfulness, Doz and Kosonen (2010, p. 378) point out that "*Many innovative organizations are playful, willing to change and experiment.*"

Decisions must be made with the whole company in mind (Doz & Kosonen, 2008c). A well-functioning top management team can make the best decisions for the whole organization, instead of decisions that suit the most ambitious managers, a common outcome when the top management team lacks unity. Valuable resources are misplaced in these situations, and more promising and important activities are left with little to no resources. A successful top management team is able to work together to find the most important activities and manage strong personalities that might hinder unity, hence avoiding pitfalls caused by poor leadership unity.

2.1.3.1 Enablers

Strategic agility literature identifies several factors that enable the development of leadership unity.

CEOs set the standard of leadership. Doz and Kosonen (2008b) extend this by arguing that the adaptive leadership style supports building leadership unity. Simply put, the CEO shows an example through their own behavior, which often influences other managers easily. Following an example is often easier and more motivating than obeying orders. When CEOs and other managers lead by example, it creates trust and unity within their respective teams. As Doz and Kosonen (2010) note, leadership unity requires high levels of mutual trust and transparency. To support this, goals need to be transparent and processes fair to mitigate possible resistance to strategic choices (Doz & Kosonen, 2008c). Despite fairness, Doz and Kosonen highlight that equality is not strategic, meaning one must make choices that best support the organization's strategic direction. People across the organization must understand the strategic reasoning behind these decisions to minimize problems within the organization.

Promoting openness and informality produces the best results for building leadership unity (Doz & Kosonen, 2008a). Doz and Kosonen (2008c) recommend that top management should "play an open hand", meaning they are transparent and communicate actively about their decisions. It is also important that top management

discusses their personal goals and expectations, as managers' hopes, dreams, and fears are well known in unified teams. It helps other managers to understand the motives behind each other's actions and how they can best help those around them. Doz and Kosonen also emphasize the importance of separating position and person. This allows people to agree and disagree with the subject in question instead of a person, leading to less tension and blind loyalty. Openness also builds trust, which is critical in working successfully together (Y. Doz, 2020). People must feel free to be authentic so they can focus on key issues. It allows faster and more unified decision-making without losing time on playing a role. The combination of openness, trust, and authenticity also ensures that no opinion is left unheard, which enables the best decisions to be made as every possible viewpoint is considered.

Openness can be nurtured by high-quality open dialogue, previously discussed under strategic sensitivity, and is recognized as a critical enabler of leadership unity as well (Doz & Kosonen, 2008b). Doz (2020) emphasizes the importance of quality dialogues over debates, highlighting that the goal is to create a deeper collective understanding to find the best innovative solution. Compromises should be avoided as they result in mediocre outcomes that limit progress and innovation. Doz also points out that the language used in these dialogues plays a key role. Open dialogue is most beneficial when it is casual enough and is not too tied by formalities, therefore creating a safe and low-barrier environment for open conversation without the fear of being judged (Doz & Kosonen, 2008c). Doz and Kosonen also emphasize in their book that every idea is valuable and should not be left unheard because of potential fears or hierarchy. Hence, they recommend embracing conflicts. Constructive conflict in a safe environment enables better outcomes, as every opinion is expressed and no stone is left unturned. Personal disagreements should be quickly resolved, creating energized action and preventing silent disengagement.

Fostered by openness and open dialogue, Doz and Kosonen (2008c, p. 28) underline collective decision-making as a critical enabler, stating that *"collective decisions are likely*

to be less conservative and more self-confident than individual decisions." They extend this by explaining that collective decisions work as a safeguard against the bias toward the current situation and non-commitment. At the same time, they protect from reckless decisions made by single executives. Collective decision-making also improves the quality of decisions, as multiple managers with cognitive diversity tackle the issues together. Altogether, collective decisions ensure that executives are sincerely trying to achieve the same goals and are committed to giving support in the implementation phase. When the whole team is included in decision-making, they push together as a team afterwards. Doz and Kosonen further extend this idea, noting that a corporate-wide agenda makes executives focus on common strategic key issues instead of specific subunit issues. This supports leadership unity, as the top management team is committed to solving strategic issues together instead of pushing their own agenda and undermining those of others. Incentives are shared on a corporate level instead of a subunit level, which also ensures people are committed to the same goals. These together enable collaboration and further mitigate the risk of competing against each other.

Leadership unity can also be enhanced through structural mechanisms. Doz and Kosonen (2008b) argue that mutual dependency between top-level executives also supports leadership unity. Mutual dependency means that executives are dependent on each other and on their progress. They are working together towards a common goal, not competing against each other. Doz and Kosonen mention interdependent incentives as a form of fostering mutual dependency. These incentives guide their work and efforts toward the same goal. When these strategically chosen goals and incentives are reached, both the organization and managers benefit. Supporting common goals prevents managers from pursuing personal agendas and ensures the organization moves forward together. They highlight that supporting common goals is highly effective in avoiding multiple managers pursuing their own agendas at the expense of the organization. Organization is not pulled apart but rather pushed forward together. In addition to mutual dependency between managers, Doz and Kosonen highlight that the ability to

work as a team is a crucial enabler of leadership unity. Fortunately, teamwork can be enhanced in many ways. One option is to utilize a multidimensional organizational structure, which supports strategic agility in many ways. It supports leadership unity as it continuously forces top management to work together as a team instead of bilateral relationships. This type of restructuring can support leadership collaboration by also creating mutual dependencies. Another form of restructuring top teams is the rotation of roles within the top team. It improves the overlapping expertise and diminishes the rigidly formed pecking order that can be harmful. New roles can create a spark of energy and motivation as people face different challenges in their work. Doz (2020, p. 2) later critically reminds that restructuring is not the only way, noting "*strategic agility results from consistent and coherent behaviors and skills in the senior management more than from a structure or from a duality."* Top managers and their behaviors are not replaceable just by restructuring the organization, but rather their abilities must be challenged and improved to create change. Doz also stresses negotiating, partnering skills, and the acceptance of mutual dependency as vital skills that enable building leadership unity. These are critical in allowing managers to achieve the best possible results for the organization while remaining motivated and in good relations. Managers must be able to negotiate their own necessities and where they can be more flexible and still perform well enough to achieve the common goals. Partnering skills are valuable, as managers must negotiate and work together closely daily.

In addition to actively communicating personal ideas and agendas, it is important for managers to understand different viewpoints and contexts. Doz (2020) highlights the benefits of "T-shaped expertise", which combines deep knowledge in one's own area with a basic understanding of other areas. This helps managers connect their expertise with the work of others and see the interaction between them. T-shaped expertise enables a more complete understanding of the organization's overall situation and how each part contributes to it. Doz also emphasizes the importance of diversity in leaders, and especially in their leadership styles and experience. Different leaders and backgrounds complement one another and ensure that decisions are made based on

multiple perspectives, helping the organization remain open, adaptive, and less likely to fall into collective bias. Beyond improving decision quality, diversity also strengthens leadership unity by broadening mutual understanding and respect within the top team. Heterogeneity in age, sex, and cultural background further ensures that the team does not fall easily on groupthink and that as many perspectives as possible will be brought up.

Although the literature identifies multiple enablers of leadership unity, change is difficult to initiate. Doz and Kosonen (2008c, p. 171) promote emotions as a strong change lever, noting, *"emotions can achieve faster change than other leadership levers"*. Emotions are contagious and easily visible. Positive emotions, such as pride, can quickly energize the organization and create momentum. However, Doz and Kosonen warn that emotional levers need specific conditions, such as trust. Without trust, using emotions can seem manipulative, and it can produce the opposite effect. Collective involvement in strategy work can also create a spark to boost emotional energy. When everyone has the opportunity to voice their opinion and strategic choices are made based on this open strategy process, it results in a more cohesive sense of importance and direction.

2.1.3.2 Barriers

Although the concept of leadership unity appears simple, achieving it in practice is difficult. Barriers to leadership unity can be structural, behavioral, or cultural, often intertwined and mutually reinforcing.

Doz and Kosonen (2008a) found that the size of Nokia hindered its leadership unity. As the company grew, attention shifted toward managing its core businesses, leaving less focus on fostering cohesion within the top team. Along with size, de Diego Ruiz et al. (2023) found that the quality of corporate governance suffers in older companies due to board size. Larger and older organizations face natural difficulties in building leadership unity within their large and complex top management teams. This can, for example, weaken problem-solving capabilities as coordination and unity suffer.

In addition to these structural barriers, behavioral and cultural factors also hinder leadership unity. For example, Doz and Kosonen (2008c) found that key executives often avoid new business models and changes, as they are used to operating with their existing business model and expertise. Current leaders often tend to oppose changes, as they threaten their way of working. In addition, the strong desire for achievements and victories is a significant issue in building leadership unity (Y. Doz, 2020). Executives want to experience personal victories where the success can be personified in themselves in competition against other executives. In these situations, the change to collaborative teamwork, where all work together toward common goals, can prove to be too much for executives.

Managers accustomed to a high degree of autonomy often have difficulty adapting to more agile and collaborative environments (Doz & Kosonen, 2008a; Y. Doz, 2020). Traditionally, managers are used to operating through one-to-one relationships with the CEO or other executives (Doz & Kosonen, 2010), reinforced by structures that reward individual control and success. Changing the familiar and safe habit to collaborative teamwork can be difficult to accept, as it may feel like a threat to their autonomy and hard-earned status. Doz (2020, p. 4) supports this by stating that *"successful intelligent individuals paradoxically don't learn easily."* He explains that successful managers are used to problem-solving and leveraging their existing competencies, but not challenging them through changes.

Overcoming issues in leadership unity is not an easy fix. Doz and Kosonen (2008a) state that leadership disunity is hard to overcome without changes in the top team. In their book (Doz & Kosonen, 2008c), they argue that significant change in how the executive team works may require changes in the top management team composition, as existing members may be too stuck in the old ways of working. Long tenures can make people lose edge, leading to declining dialogue and loss of personal motivation. Such changes also mitigate the risk of letting loyalty between managers affect the results of their work.

In response, new hires can be used to bring the energy needed to break existing groupthink and challenge assumptions. However, replacing individuals one by one is rarely enough, as new managers can adopt existing routines. Like enhancing strategic sensitivity, effective change requires multiple new hires simultaneously to create real momentum and break established patterns.

2.1.4 Resource fluidity

Strategic commitments remain mere plans without the proper resources, which is why resource fluidity is a critical part of strategic agility. It is described as *"the internal capability to reconfigure business systems and redeploy resources rapidly…"* (Doz & Kosonen, 2008a, p. 96). The goal is to enable a highly responsive and quick reallocation of resources to where they are needed the most. Teece (2007) also highlights that resource reconfiguration, similar to resource fluidity, is critical to maintain competitiveness in dynamic environments.

To enable such high responsiveness, Doz and Kosonen (2010) identify several mechanisms that form resource fluidity. They argue that resource fluidity is built from decoupling, modularizing, dissociating, switching, and grafting. Decoupling is a way of regaining flexibility by dividing the business model into separate, autonomous, but well-coordinated parts. It is famously metaphorized by Sir Richard Sykes: *"we need to transform ourselves from a big aircraft carrier to floatillas of small fast ships."* (Doz & Kosonen, 2010, p. 379). Modularizing is a method of disassembling and reassembling business systems. It increases flexibility by breaking business systems down into reusable components that can be rebuilt to support new business models. Dissociating creates flexibility by separating resource use from resource ownership, enabling more adaptive organizational structures. Switching refers to the use of multiple business models simultaneously. This enhances flexibility as products and activities can be moved between the models to respond to market changes. Grafting refers to acquiring a company with a different business model and then integrating it to fuel internal renewal.

This allows a gradual transformation from the existing business model without severe disruption.

Beyond financial and structural aspects, resource fluidity also depends on people (Doz & Kosonen, 2008b). The ability to mobilize, redeploy, and develop talent is crucial for achieving true resource fluidity, as it is ultimately people who determine how effectively and quickly resources are moved. This becomes increasingly important when organizations must reallocate people to new roles or reinforce current activities that best support strategic priorities. Doz and Kosonen (2008c) emphasize that fast and flexible resource reallocation is essential for building strategic agility. They illustrate this with an analogy of a military breakthrough, which requires a quick concentration of forces where they are most needed. Similarly, strategic agility requires fast redeployment of both human and material resources to emerging opportunities, where they can be most beneficial to the organization.

2.1.4.1 Enablers

Doz and Kosonen (2008c) state that changes in the organizational structure and how organizations are run can have a positive impact on resource fluidity. They further argue that the multidimensional organizational structure is the best fit for improving strategic agility, as it also enhances strategic sensitivity and leadership unity, along with resource fluidity. They illustrate it as a living organism, where resources can be allocated in multiple directions quickly, and business management and results are separated from resource ownership. A flatter structure helps mitigate hierarchical issues, freeing up resources that might otherwise be trapped in silos. In addition, Doz and Kosonen highlight the benefits of modular activity systems that enable changes, reconfiguration, and collaboration quickly. Furthermore, they recommend an adjustable planning process over traditional planning, which is mostly based on the calendar year instead of a real need. The adjustable planning process enables strategic decisions and resource allocation to take place whenever necessary. This further supports strategic agility and

ensures that planning and strategic actions respond to emerging opportunities rather than schedules.

In addition to structure, Doz and Kosonen (2008a) also argue that different mechanisms and incentives for collaboration enhance resource fluidity. Such mechanisms and incentives help reduce resource safeguarding, freeing up resources for more critical activities without the fear of losing to internal competition. Along with resource safeguarding and entrapment, overinvesting in legacy activities is a recognized problem. In response, Doz and Kosonen (2008c) recommend transparent corporate-wide channels. For example, a portfolio of development opportunities could be made visible for everyone, which would allow employees to see where the resources could be allocated to better support strategic priorities. Another helpful option is to make clear rules regarding resource allocation, such as that resources are always moved where they create the greatest margin. This can include reallocating highly performing employees to where they are needed more. Moving valuable employees can cause issues as managers find it hard to let high performers go. These situations highlight the complex and vital interplay between the meta-capabilities of strategic agility. Strong leadership unity allows managers to understand common goals and recognize that sometimes allowing the best employees to go is more beneficial for the organization as a whole.

Beyond internal structure and processes, contextual factors such as firm size also affect resource fluidity. Smaller firms are generally less bureaucratic, enabling managers to make quicker decisions and reallocate resources with greater flexibility (Reed, 2020). Reed also notes that smaller companies are less path dependent, as they are not as limited by routines or legacy systems, which further supports their resource fluidity. Furthermore, understanding complex systems and entities helps to comprehend the need and actions that support resource fluidity (Y. Doz, 2020). When managers are able to perceive the overall situation and goals of the organization, they tend to safeguard their resources less and support resource fluidity more. Common goals and incentives

are vital here, as otherwise, managers only want to focus resources on activities that are beneficial for themselves and their teams.

Although structure and mechanisms are vital, the most critical enabler of resource fluidity is people (Doz & Kosonen, 2008b). They highlight that mobilizing and utilizing the right people is a crucial aspect of resource fluidity. Not only is it important for resource fluidity, but for the organization to develop human capital to have top talent in the future. In support, Doz (2020) suggests flexible job design as a useful method to increase the resource fluidity of people. By allowing roles, responsibilities, and team compositions to change in response to new priorities, flexible job design enables organizations to reallocate talent and expertise to support faster strategic adjustment. In some instances, even whole teams can be reallocated (Doz & Kosonen, 2008c). This is usually done only when something critical needs to be resolved quickly, and managers want their best team working together on that problem. Doz (2020) also argues that organizations best develop their prominent talents by sending them out to the "periphery" of the organization. It allows them to see the organization critically from a distance and not be blinded by the proximity or the current views that might drown out new ideas and views. When promoted or transferred elsewhere in the organization, managers have a fresh and differing opinion about the organization's current situation, and as they have progressed within the organization, they also understand the actions of different departments and the reasons behind them. These "peripheral insiders" are also more easily accepted than outsiders, as they are already one of their own. Doz even states that *"peripheral insiders make best CEO appointees"* (2020, p. 6). This supports the idea that HR should hire promising managers to the periphery of the organization, where they can grow and develop more freely. Another way to boost the people aspect of resource fluidity is proactive hiring (Doz & Kosonen, 2008c). In proactive hiring, organizations first plan what competencies, jobs, and roles they need to execute their strategy. When this is visible and transparent, employees understand where their skills fit and what is needed, which boosts internal mobility and job rotation. Organizations should also

highlight individual career development opportunities early on to ensure commitment and that skills align with strategic priorities.

However, as company roles evolve and change frequently in strategically agile companies, it is important to be patient and let employees grow step-by-step and avoid “set-to-fail” situations, which can destroy self-confidence and motivation (Y. Doz, 2020). To avoid these issues, Doz recommends maintaining delivery discipline to balance learning and accountability. This nurtures motivation and the development trajectory and grows trust. Doz also notes that agile leaders who are resilient learn from failures. They absorb the shock and carry on with the gained experience and valuable lessons. All these activities, focusing on the people side of resource fluidity, importantly mitigate the risk of losing high-potential employees to competitors or harming their progress and motivation.

2.1.4.2 Barriers

The key challenge in achieving effective resource fluidity is finding ways to utilize resources quickly while avoiding hierarchical processes that slow reactions (Doz & Kosonen, 2008b). Several structural and behavioral factors can limit this responsiveness and cause issues. For example, existing structures, processes, and beliefs can cause inertia, leading to rigidity and making change more difficult (Doz & Kosonen, 2010). Doz and Kosonen (2008c) note that organizational structure can impact resource fluidity. Hierarchical organizations, in particular, often perform poorly in terms of resource fluidity as they allocate and organize resources into subunits and have strict budgets. They further emphasize that budgeting can be harmful for resource allocation, as subunits often spend their entire budgets out of fear of future cuts. As a result, resources are tied to these rigid plans, leaving many potential opportunities without adequate financial support.

Even without resource imprisonment, resources are often tied to ongoing activities, making it harder to reallocate them (Doz & Kosonen, 2008c). As previously noted, people ultimately determine how effectively resource fluidity works. However, reallocating high-

performing employees is not straightforward, as achieving tough performance targets requires the best workers, which leads managers to safeguard their top employees. Employees may also oppose changes in their roles or placement within the organization, preferring the safety and familiarity of their current role. Although understandable, both tendencies harm and undermine fluidity. In addition, resource fluidity also suffers from organizational rigidity and the resource guarding it brings (Y. Doz, 2020). Doz and Kosonen (2008c) also identify that resource constraints and doubts of fairness in resource allocation can lead to resource hoarding within different units, and resources become trapped in subunits, where they are not as useful. They illustrate that often in these scenarios, legacy businesses are overfunded, and potential strategic opportunities are left without sufficient resources. Remarkably, they also note that top management often does not even know where and how resources are used. Furthermore, firm age is recognized as a barrier to resource fluidity as well, as older firms tend to have more issues. They often are characterized by organizational rigidity, leading to resources and capabilities becoming obsolete, costs increasing, R&D investments decreasing, and growth slowing down (de Diego Ruiz et al., 2023). Recognizing these barriers is essential to effectively address and overcome the challenges limiting resource fluidity.

2.2 Microfoundations

2.2.1 What are microfoundations

Microfoundations are defined by Felin et al. (2012, p. 1353) as *"a theoretical explanation, supported by empirical examination, of a phenomenon located at analytical level N at time t (N_t). In the simplest sense, a baseline micro-foundation for level N_t lies at level N - 1 at time t - 1, where the time dimension reflects a temporal ordering of relationships with phenomena at level N – 1 predating phenomena at level N."* In simpler terms, each analytical level is affected by lower-level mechanisms. For example, differences in micro-level skills and abilities affect firm performance.

The key focus of microfoundations research is to examine how individual-level factors affect organizations, their performance, and how relations between macro variables are mediated by micro-level actions (Felin et al., 2015). For example, they argue that value creation and value appropriation happen at the individual and stakeholder levels, opposing terms such as "firm-level competitive advantage". In their 2015 article, Felin et al. depict microfoundations through the levels argument. Constructing microfoundations aims to locate "*the proximate causes of a phenomenon at a level of analysis lower than the phenomenon itself."* (p. 586). It calls for acknowledgement or control of lower-level factors, and highlights that the factors cannot be considered homogeneous. They continue by arguing that macro-level phenomena cannot be explained solely by other macro-level factors, because of the fundamental problem of unobserved lower-level factors. In other words, micro-level mechanisms act as building blocks forming macro phenomena. This is emphasized by Felin et al. (2012), who argue that understanding micro-level actions enhances knowledge of a higher-level phenomenon. They also note that the current literature on the knowledge-based theory of the firm highlights the role of individuals, processes, and interactions in developing organizational-level constructs.

Eisenhardt et al. (2010, p. 1263) complement this perspective by defining microfoundations as *"the underlying individual-level and group-level actions that shape strategy, organization, and, more broadly, dynamic capabilities, and lead to the emergence of superior organization-level performance."* This highlights how important it is to understand how individual and group-level actions aggregate into higher-level strategic and organizational outcomes.

The microfoundations perspective is not only concerned with individuals, but also with their interaction and the organizational context (Barney & Felin, 2013). They argue that the goal of the microfoundations perspective is to examine how individual choices and social interactions lead to different outcomes, countering the prior macro-macro focus. Understanding the underlying microfoundations shifts the focus of explanation from

macro-macro to micro-macro relationships, reducing black box explanations. Barney and Felin *(2013, p. 145)* describe the microfoundations perspective as "*a pragmatic observation that explanation often is best accomplished by looking at the origins and evolution of collective givens as a function of lower-level factors and social interaction".* They also highlight that relying on emergence often hides the actual mechanisms, processes, and actors that lead to emergent outcomes. Explaining emergence itself is considered a key issue that requires more attention.

Coleman's bathtub is an analytical framework used to explain how micro-level mechanisms aggregate into macro-level constructs (Hedström & Ylikoski, 2010). The framework highlights that macro-level constructs cannot be fully explained by other macro-level variables, but require a deeper understanding of the underlying mechanisms. Examining the micro-level processes that create macro-level outcomes helps reduce "black box" explanations. Coleman's bathtub describes several mechanisms linking micro and macro-level phenomena. First, situational mechanisms describe how social structures constrain individual-level action. Second, action-formation mechanisms link individuals' desires and beliefs to their actions. Third, transformational mechanisms describe how individual actions aggregate to create both intended and unintended macro-level social outcomes. By examining these interconnected mechanisms, the framework enables a more comprehensive understanding of how organizational-level capabilities emerge from micro-level practices. For this reason, the framework is widely applied in microfoundations research.

2.2.2 Routines and capabilities

Routines and capabilities are central to organizational heterogeneity and competitiveness (Felin et al., 2012). Heterogeneity is becoming increasingly important in competitive markets, where organizations must create competitive advantages to stand out from the competition. Different routines and capabilities, therefore, can explain differences in performance between organizations competing in the same environment. In other words, some organizations consistently perform certain activities better,

resulting in a competitive advantage. Unpacking these routines and capabilities into micro-level actions can further improve understanding of what specifically creates behavioral and performance differences in organizations. In addition, further understanding how the micro-level components interact improves knowledge of how different routines and capabilities are formed.

Routines are defined as *"repetitive, recognizable patterns of interdependent actions, carried out by multiple actors"* (Felin et al., 2012, p. 1355; Feldman & Pentland, 2003, p. 95). They allow individuals to work more efficiently as they can focus more attention on tasks requiring judgment, problem-solving, or adaptation, while familiar activities can be carried out with less cognitive effort. Therefore, routines not only support individual efficiency but also enable coordination of multiple actors by standardizing expectations about how work is performed. However, it is important to note that routines are not only rigid automatic patterns of behavior, but can be adjusted over time if necessary. As routines stabilize individual behavior, they can also reduce uncertainty through familiar activities. Moreover, routines can also affect what individuals shift their focus to, as they learn through routines to identify what may be relevant.

In addition, organizational capabilities are higher-level constructs that go beyond routines. An organizational capability is defined as "*a high level routine (or collection of routines) that, together with its implementing input flows, confers upon an organization's management a set of decision options for producing significant outputs of a particular type"* (Felin et al., 2012, p. 1355; Winter, 2003, p. 991). Routines are formed from patterns of action, and capabilities are formed through deliberately organized routines. Capabilities are more purpose-oriented, and they coordinate multiple routines toward specific outcomes. While routines enable repeating actions, capabilities allow repeating reliable performance. For example, the aggregation of routines can lead to organizational capabilities that may lead to a competitive advantage. In other words, routines are the microfoundations of capabilities.

Felin et al. (2012) continue by highlighting that understanding how routines and capabilities are built, maintained, adapted, and changed over time at the micro-level has clear managerial relevance. There are several factors impacting the emergence of routines and capabilities. For example, Winter (2013) states that the shared experience of individuals affects how quickly and effectively routines emerge. When individuals engage efficiently with each other, routines are formed more quickly than without the social interaction. Routines stabilize and become standardized through repetition. Social interaction enhances knowledge-sharing, through which effective routines are shared among actors, improving the efficiency of others as well. Social interaction also strengthens the alignment of individuals, which is important for coordinated organizational action.

Although repetitive routines sound mechanical, individuals reflect and adapt their ways of working to better suit requirements. Winter (2013) considers the role of deliberation as an integral part of routines, stating that routines can involve conscious reflection and choice, rather than being purely automatic patterns of action. Stable routines improve efficiency, but need adaptation when circumstances change. As aggregated routines create capabilities, changes in routines can lead to differences in capabilities as well.

2.2.3 Individuals as microfoundations

Felin et al. (2012) identify individuals, social processes, and structure as the three primary categories of micro-level components that underlie routines and capabilities. Individuals and their interactions are important in explaining the firm-level heterogeneity and outcomes, as well as routines and capabilities. The literature shows that individuals have a profound impact on the behavior, evolution, and performance of organizations, implying the importance of human capital. Interactions between individuals and processes within organizations can explain how routines and capabilities are formed. To summarize, individuals are considered to be core micro-level building blocks.

Relational ability is defined as *"an individual's ability to engage or interact with other individuals",* and the integration ability is *"to integrate different elements such as knowledge or artefacts"* (Felin et al., 2012, p. 1361). These abilities show that routines and capabilities depend on how individuals interact with each other and the existing practices, and how individuals are able to combine knowledge, creating new results. Felin et al. also note that scholars have debated about the importance of individual-level elements, some suggesting it has less, and others argue that it has greater influence in the study of routines and capabilities. This can be tested by examining how routines and capabilities are affected when individuals in the organization change. The results suggest that individuals often are the locus of knowledge in organizations. Countering this should be a priority to avoid losing knowledge when personnel changes. Barney & Felin (2013) support this idea, noting that the departure of key individuals from the organization can have negative effects on organizational performance. They highlight that the information and knowledge within the organization is possessed by its individuals, not the organization in itself. As individuals hold the knowledge in the organization, improving organizational design can be a key to releasing the potential that may be held down by poor structure.

The emphasis on individuals contrasts with much of organizational research that tends to focus on higher-level constructs. Countering this, Felin and Foss (2005) strongly emphasize that organizations are made up of individuals. Although this may seem self-evident, increased focus on structure, routines, capabilities, and culture, for example, has taken away focus from individuals and their roles. A common issue in these situations is that individuals are considered to be homogeneous, which shows that the origin of organizational routines and capabilities is often not clearly understood. Coff (1999) even argues that organizations do not appropriate or possibly even create value, only individuals do.

Felin and Foss (2005) emphasize the importance of microfoundations for explaining organizational outcomes, arguing that understanding phenomena such as identity,

learning, knowledge, or capabilities requires starting from the individuals who constitute the organization, including their characteristics, choices, abilities, heterogeneity, and motivations. Considering individuals as homogeneous is a mistake, and understanding that individuals are fundamentally heterogeneous allows a better understanding of why individual differences lead to differences in routines and capabilities, which eventually result in differences in performance.

2.2.4 Processes and interaction

While individuals are a key micro-level building block, their actions are always embedded in ongoing processes and interaction patterns of the organization. A process is defined by Felin et al. (2012, p. 1362) as "*a sequence of interdependent events".* Processes are essential for organizations as they organize action. They ensure that separate activities do not result in uncoordinated action but contribute to collective outcomes instead. Felin et al. also argue that interactions between individuals and organizational processes play a critical role in shaping routines and capabilities. Interaction enables improved coordination and alignment, which supports more coherent and collective action as well. There are several factors, along with coordination, such as repetition and feedback, that shape routines and capabilities.

Barney and Felin (2013, p. 141) emphasize that individual interactions are more than their sum, noting: *"individual interactions are not simply additive, but can take on complex forms and lead to surprising aggregate and emergent outcomes that are hard to predict based on knowledge of the constituent parts"*. In other words, outcomes from social interaction are emergent, and they cannot be predicted despite knowing the individuals involved in the interaction. Barney and Felin further argue that social interaction can be either negative or positive, i.e., the whole is either less or greater than the sum of its parts. For example, social interaction can lead to groupthink, which makes the organization less heterogeneous in its ideas and perspectives. Long-term social interaction can even lead to collective myopia, resulting in weakened strategic

awareness. The positive effects include, for example, group cohesion and mutual learning that benefit the organization by strengthening its members and teams.

Although individuals form the micro-level foundation, it is through ongoing and repeated processes and interactions that organizational routines and capabilities are enacted, stabilized, and transformed over time.

2.2.5 Structure as an enabling and constraining context

The final cornerstone of microfoundations, complementing individuals, processes, and interaction, is structure. Felin et al. (2012, p. 1364) argue that structures may either be constraints or enablers: *"structures, whether at the organizational level or within an organization, specify the conditions that enable and constrain individual and collective action and establish the context for interactions within an organization.*" Positive effects of organizational structure include enabling collective action through improved information processing, knowledge development and sharing, and coordination. In other words, structures can shape what individuals can do and how they interact. Felin et al. (2015) argue that the flatter the organizational structure, the more individuals interact with each other. Less hierarchy allows individuals to interact more freely, which can lead to the benefits discussed above. Although flat structures improve autonomy and knowledge sharing, they can cause issues with effective coordination (Felin et al., 2012).

Eisenhardt et al. (2010) observe that organizations often prefer efficiency over flexibility. Organizations are commonly structured to be as efficient as possible, which can cause rigidity as an unintended consequence. Greater structure improves reliability, speed, and efficiency, while less structure enhances flexibility and responsiveness. However, less structure demands more focus on deciding appropriate actions and is more prone to mistakes. Moderate structure is likely to be high-performing as it balances efficiency and flexibility, and literature supports this assumption. Studies also show that organizations with too much structure are optimized for efficiency, but often underperform as they

miss or have difficulties adapting to new opportunities, while organizations with little structure may struggle to achieve coordinated and efficient action. Felin and Foss (2005) also note that when companies become more specialized and structured, they become increasingly more myopic, causing rigidities and competency traps.

The interplay of individuals, processes, interaction, and structure constitutes the core elements of the microfoundational perspective. Structure provides the context within which individual actions and interactions take place, shaping how organizational routines and capabilities are developed, stabilized, and transformed over time.

2.2.6 Critique

The microfoundations perspective is not universally accepted and has received criticism from scholars. Barney and Felin (2013) note that the perspective has been criticized for focusing too much on individuals. Additional criticisms include the assumption that microfoundations lead to an infinite regress of explanation and that it neglects the causal role of organizational structures.

Barney and Felin (2013) address the critique and suggest that the assumption of infinite regress is a misconception. They argue that the microfoundations research does not require going deeper than the individual level and their interactions, and focusing on how individual actions aggregate into collective outcomes through interaction and organizational context is sufficient and fruitful. They also highlight that the microfoundations perspective does not deny the role of structure, but rather focuses on explaining how structures both shape and are shaped by individual and collective action.

Despite the critique, the microfoundations perspective has proven to be useful in examining how routines and capabilities emerge and aggregate from individual actions and interactions. Linking micro-level behavior to macro-level outcomes enables a deeper understanding of how differences between organizations are formed. The microfoundations perspective also helps to reduce black box explanations of

organizational outcomes by uncovering the underlying mechanisms through which they emerge.

2.3 Digitalization

2.3.1 Digitalization and digital transformation

Digitalization has become one of the most significant transformations shaping business environments. Information systems and technologies have developed to be so advanced that they have changed the way people and firms operate. Understanding how digitalization affects the organization, business environment, and competition is critical for the survival of organizations.

Vial (2019, p. 118) defines digital transformation as *"a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies",* while Verhoef et al. (2021, p. 889) define digital transformation as *"a change in how a firm employs digital technologies, to develop a new digital business model that helps to create and appropriate more value for the firm"*. Essentially, digital transformation is an organizational change enabled by digital technologies.

Verhoef et al. (2021) identify three stages of digital transformation: digitization, digitalization, and digital transformation. Digitization is described as the process of converting analog information into digital information. Digitization is also referred to as the change from analog to digital tasks in research. Verhoef et al. highlight that digitization primarily digitalizes internal and external documentation processes, but does not directly affect value creation activities. The second stage, digitalization, *"describes how IT or digital technologies can be used to alter existing business processes."* (Verhoef et al., 2021, p. 891; Li et al., 2016). For example, digitalization can transform value creation processes, changing the way an organization does business. Organizations can leverage digital technologies to optimize and improve existing business processes. The

third stage, digital transformation, describes an organization-wide transformation that leads to the development of new business models, which can be completely new for the organization or even the whole industry. It goes beyond digitalization by rearranging the processes or the organization to change its business logic or value creation process. In other words, digital transformation describes the broader organizational change.

2.3.2 Why digitalization matters for organizations

Technology alone is insufficient for creating and maintaining competitiveness in a digital environment – organizations must also develop the capabilities and processes required to effectively utilize digital technologies (Vial, 2019). This increases pressure on organizations to develop and continuously refine their capabilities in order to utilize digital technologies to their full potential. In addition, they shape the creation and reinforcement of disruptions, which highlights the importance of adapting and leveraging these technologies for organizational benefit.

Vial (2019) argues that one of the most significant ways in which organizations leverage digital technologies is by changing their value creation processes. They enable organizations to use resources more effectively and flexibly and to reshape how value is created and delivered. For example, digital technologies allow organizations to collect, process, and utilize large amounts of data, which can be used to optimize processes, improve decision-making, and develop entirely new services and business models. Bharadwaj et al. (2013) argue that digital technologies also transform business strategies, firm capabilities, and relationships between customers and companies. They note that technology can enable the development of dynamic capabilities that help organizations navigate turbulent environments.

Verhoef et al. (2021) identify three external factors as major drivers of digital transformation. The first is the rapid advancement of digital technologies. The second is increased and changed digital competition. For example, the industry boundaries have become increasingly blurred, and competitors can cause disruptions over industry

borders. Lastly, the digital revolution has led to significant changes in consumer behavior. Vial (2019) also notes that digital transformation and technologies have not only reshaped organizational and industry practices but have also significantly altered consumer behavior and expectations. Verhoef et al. (2021) emphasize that digital transformation is multidisciplinary, as it affects strategy, organization, information technology, supply chains, and marketing.

2.3.3 Data, technology, and decision-making

Digital transformation leads to a substantial increase in the amount of data generated and collected (Vial, 2019). For instance, daily mobile device use produces continuous digital traces, resulting in rapidly growing volumes of customer data. Vial emphasizes that digital transformation pushes organizations to exploit data effectively to gain a competitive advantage. Verhoef et al. (2021) suggest that big data can be leveraged by utilizing data analytical capabilities to personalize service, which can lead to a competitive advantage through increased customer satisfaction.

Verhoef et al. (2021) underline that the capability to acquire and collect data is not enough, but organizations also require capabilities to analyze the data. Large volumes of data can become a burden if organizations lack the capabilities required to analyze and utilize them effectively. Despite this being widely acknowledged, firms commonly struggle with analyzing and effectively leveraging big data.

As an example of technology, As Bharadwaj et al. (2013) highlight the benefits of cloud computing, which enables organizations to scale their digital infrastructure according to organizational needs. Scaling digital business strategies, therefore, requires organizations to develop capabilities that allow them to manage and utilize the large and continuously growing volumes of data, information, and knowledge they generate. Digital technologies support organizational strategy in several other ways as well, for example, by accelerating decision-making through real-time data and enabling rapid responses to changes in the market. McAfee and Brynjolfsson

(2012) argue that the growing availability of real-time data enables managers to base decisions increasingly on evidence rather than intuition, which can significantly improve organizational performance. Through these characteristics, digital technologies can also support organizational agility. However, as noted above, technology alone is not sufficient. Data must be made available quickly and in an understandable form to relevant decision-makers – otherwise, its potential benefits remain underutilized.

2.3.4 Digital strategy and organizational change

Digital transformation presents significant challenges for organizations and often requires notable adaptation. Vial (2019) argues that organizations must make structural changes and remove barriers hindering digital transformation. This supports the notion that digital transformation is essentially an organizational change. Although the transformation can be a heavy process, in many cases, it is necessary to survive. Matt et al. (2015) also highlight that the potential benefits are manifold.

However, digital transformation requires more than just structural changes. Verhoef et al. (2021) highlight that companies need digital assets, such as data storage, information and communication infrastructure, and other technologies to survive the digital era. Hence, digital transformation often leads to heavy investments in developing and acquiring new digital technologies. Digital assets enable leveraging existing resources to create more value for customers, while improving the overall efficiency of the organization. For example, big data can be leveraged by utilizing data analytical capabilities to personalize service. Matt et al. (2015) emphasize that the exploitation and integration of digital technologies affect multiple parts of organizations, such as products, processes, and sales channels.

Digitalization not only reshapes how organizations are run on an operational level, but it also affects the strategic level as well. For instance, digital technologies can improve the ability to sense and seize opportunities, which Verhoef et al. (2021) describe as digital

agility. Similar to strategic agility, digital agility helps in surviving unpredictable and unstable markets. They also argue that digital agility enables effective digital transformation by connecting digital assets with other resources to transform the way of doing business. Matt et al. (2015) argue that digital strategies should be aligned or integrated into business strategies, instead of being a separate strategy. Bharadwaj et al. (2013) also emphasize that the role of digital strategy needs to be taken more seriously and merged with the business strategy itself, creating a digital business strategy. They define it as an "*organizational strategy formulated and executed by leveraging digital resources to create differential value"* (p. 472). These strategies usually focus on the possibilities and the impact digital technologies have on companies.

As business environments are becoming increasingly competitive and data-driven, strategic planning must also evolve accordingly. Matt et al. (2015) define strategic planning as the process of defining a strategy and deciding what resources are used to achieve strategic goals. In digital environments, the digitalization of strategic planning has become increasingly important for maintaining competitiveness. The growing availability of data has significantly reshaped strategic planning practices. McAfee and Brynjolfsson (2012) argue that the improved use of data has revolutionized strategic planning, as decisions are increasingly based on data instead of managerial intuition. For instance, the effective use of real-time data can enhance planning processes by allowing rapid responses to changes in markets and customer demands. McAfee and Brynjolfsson also note that data alone does not automatically improve strategic planning and decision-making. They emphasize that data must be understood and interpreted to create value. When high-quality data is analyzed and presented in an understandable form, managers are able to make well-informed decisions and predictions, improving the competitiveness of the organization.

2.4 Theoretical framework

Prior strategic agility research has identified meta-capabilities (e.g., Doz & Kosonen, 2008), but it has not systematically explained how these emerge from daily managerial

practices. Coleman's bathtub provides a mechanism-based lens that enables uncovering how these processes aggregate to strategic agility (Coleman, 1990; Hedström & Ylikoski, 2010). In this thesis, the framework is designed to recognize how the interplay of macro-level structures and micro-level practices of digitalized business planning enables strategic agility. The microfoundational perspective solves the "black box" issue by conceptualizing how individual actions aggregate into strategic agility capabilities in practice, as macro-level outcomes cannot be explained solely with macro-level variables: *"The ultimate goal is to comprehend how microlevel actions and interactions mediate relationships between macrolevel variables"* (Rabetino et al., 2025).

Macro: The macro-level variables in Coleman's bathtub are referred to as social facts, which act as the baseline of this framework. In this thesis, the macro-level variables represent structures influencing digitalized business planning that shape managerial attention and behavior. These social facts consist of organizational structure, incentive structure, information systems (e.g., CRM, dashboards), and strategy.

Micro: The micro-level of the framework depicts the conditions of individual action. Digitalized business planning shapes managerial cognition and attention, interpretation, and interaction routines. These include individual sensemaking, data interpretation, decision-making practices, collaboration routines, and daily planning activities.

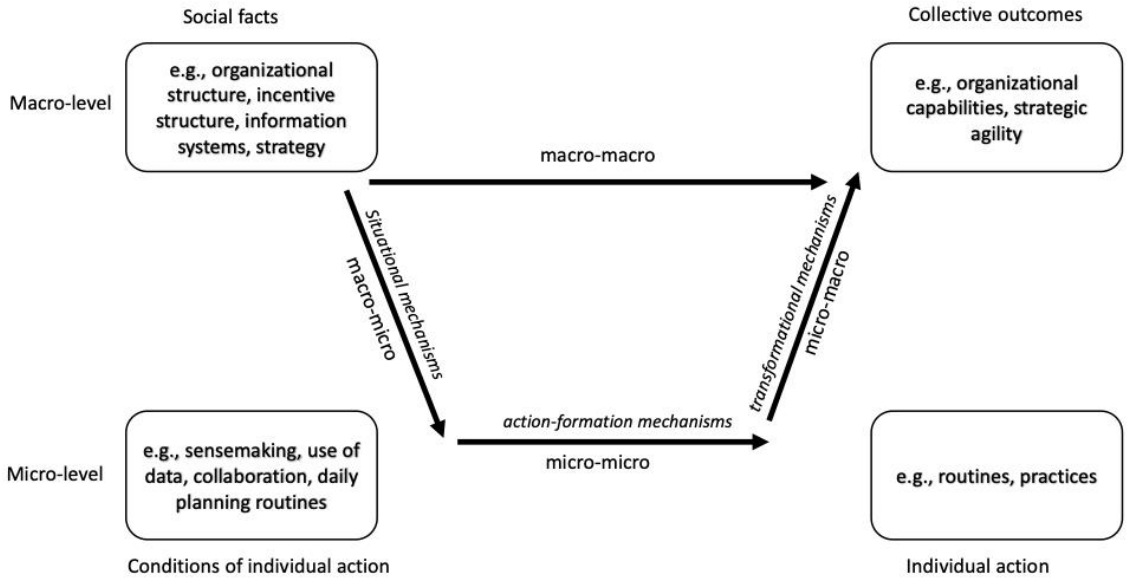

Figure 2. Theoretical framework (adapted from Coleman, 1990; Rabetino et al., 2025).

Macro-micro: The first side of the tub, the macro-micro link, describes the influence of macro-level variables on micro-level actions of individuals. The link in this thesis examines how digitalized business planning affects the actions and behavior of individuals. The main macro-level digitalized business planning variables guiding individual actions and behavior are the organizational structure, incentive structure, information systems (e.g., CRM, dashboards), and strategy. These structures shape individual behavior by directing managerial attention and defining performance expectations through metrics, dashboards, and incentives. For example, the incentive structure steers the work of individuals to achieve strategic goals set by top management. Individuals use dashboards to track their progress and KPIs, and managers interpret the data and take corrective actions achieve the goals. This implies that the social facts guide microlevel actions.

Micro-micro: The micro-micro level examines how individual actions and interactions, such as individual sensing, interpretation, discussions, and cooperation with others, form organizational practices and routines that guide individual action and create organizational capabilities. Repeated interaction between individuals in meetings and

discussions allows individuals to find the best possible practices for each activity. Individuals share their interpretations, and when this becomes a routine practice, organizational practices emerge, improving efficiency. Other microlevel actions, such as routine performance reviews and data interpretation, allow individuals to track their progress and make necessary changes quickly. Through repeated interaction, shared interpretation routines emerge, which gradually create routinized organizational practices. These standardized interaction patterns form the micro-level building blocks of macro-level capabilities.

Micro-macro: The micro-macro level shows how repetitive and shared micro-level practices across organizational members can aggregate into collective, organization-level patterns of action, which can create organizational capabilities, such as strategic agility. Formed routines and practices around decision-making and resource allocation enhance the three dimensions of strategic agility: strategic sensitivity, leadership unity, and resource fluidity. Shared data interpretation routines enhance collective situational awareness, enhancing strategic sensitivity. Shared incentive structures shape individual behavior, which aggregates into leadership unity through aligned actions and reduced internal competition.

Macro-macro: The macro-macro level shows collective outcomes, which in this thesis is strategic agility as an organizational outcome. Strategic agility may reshape planning processes, governance mechanisms, and how systems are used, thereby creating a feedback loop within Coleman's bathtub framework.

3 Methodology

3.1 Qualitative case study research design

Qualitative research is often used to understand *"reality as socially constructed: produced and interpreted through cultural meanings"* (Eriksson & Kovalainen, 2008, p. 5-6). It is particularly relevant when the phenomenon under study is not yet well understood, as qualitative research is often exploratory in nature. Qualitative research focuses on understanding meanings, experiences, and processes that are difficult to measure numerically and therefore requires an interpretive approach. The aim is to develop a deeper understanding of the research topic rather than to test predefined hypotheses. As qualitative research is especially suitable for examining complex organizational phenomena in their context, it provides a fitting approach for this thesis, which explores how micro-level activities in digitalized business planning influence strategic agility.

A case study strategy is an approach where research involving empirical investigation of a particular contemporary phenomenon is conducted within its actual context (Saunders et al., 2023). It enables an in-depth practical examination of a specific phenomenon while taking into account its context. Saunders et al. also note that the case study research is particularly suitable for addressing "why, what, and how" research questions. The case study strategy is appropriate for this thesis as it aims to develop an in-depth understanding of a phenomenon within the specific context of a Finnish insurance company. Strategic agility and digitalized business planning are highly contextual in nature and require detailed, context-sensitive analysis. A single case study approach allows an exploratory deep dive to examine how the relatively under-researched interplay between the microfoundations of digitalized business planning influences strategic agility within a Finnish insurance company.

Kvale and Brinkmann (2009) highlight that a semi-structured interview aims to understand themes of the everyday world from the perspective of the interviewees. This provides a fitting method for this thesis as it explores themes involving perception, interpretation, and decision-making that cannot be observed or measured directly. Semi-structured interviews, therefore, provide an appropriate method to understand the experiences and interpretations of participants.

A semi-structured interview *"seeks to obtain descriptions of the interviewees' lived world with respect to interpretation of the meaning of the described phenomena"* (Kvale & Brinkmann, 2009, p. 27). The interviews are guided by predefined themes, but otherwise resemble an everyday conversation, allowing probing and unexpected insights that a structured questionnaire might overlook. This method is particularly useful in exploratory studies, as it allows a deeper understanding of complex organizational phenomena. In this thesis, the interviewees consist of key personnel of the organization, primarily senior management members involved in decision-making, strategy, and planning. Their positions and experience mean that they possess knowledge highly relevant to the research topic and can provide an informed insider perspective on the organization and its practices.

Saunders et al. (2023) distinguish three approaches to theory development: deduction, induction, and abduction. In a deductive approach, hypotheses are developed based on existing theory and tested empirically, while the inductive approach focuses on generating new theory from empirical observations. This study follows an abductive research approach, which combines elements from deductive and inductive approaches. The interview themes are guided by existing theory, while the analysis allows new insights to emerge from the empirical data. The research process moves iteratively between theoretical concepts and empirical findings to deepen understanding of the studied phenomenon.

3.2 Case company

The case company is a Finnish insurance company operating in a stable but highly regulated and competitive insurance market within Finland. The company is a large incumbent organization with over 1000 employees. Due to confidentiality reasons, the organization and interviewees remain anonymous.

The company provides a relevant context for strategic agility research, as the existing literature primarily focuses on organizations operating in more turbulent environments. In addition, the case organization is undergoing digital transformation and is digitalizing its business planning processes, providing a relevant context for examining the interplay between strategic agility and digitalization. While the organization is not explicitly pursuing strategic agility, it has progressed toward more agile ways of operating.

A single case study is an appropriate method as it enables deep contextual understanding of the research topic. This is achieved through multiple management interviews with key members of the organization who possess rich internal insight into the research themes. The single case study design, therefore, supports the exploratory nature of this study and allows an in-depth examination of how the microfoundations of digitalized business planning influence strategic agility within the case company.

The case company was selected as an information-rich setting to examine how digitalized business planning shapes strategic agility in a relatively stable industry where strategic change remains necessary. The organization's extensive use of data-driven planning tools further supports its suitability for this study. As a large incumbent undergoing digital transformation, the organization provides a theoretically relevant context for examining the micro-level mechanisms linking digitalized business planning practices and strategic agility.

3.3 Data collection

The primary data for this thesis were collected through semi-structured interviews. Interviews are often used as a primary data source when examining strategic and organizational phenomena, as they provide access to the experiences and perspectives of members of the organization that are otherwise difficult to measure (Eisenhardt & Graebner, 2007). However, Eisenhardt and Graebner note that interview-based research may be subject to bias. This can be mitigated by interviewing multiple participants with different perspectives on the studied phenomenon.

In this thesis, a total of ten interviews were conducted. The interviewees consisted primarily of members of senior management, except for one specialist, each representing different domains and perspectives within the organization. The participants were selected based on their involvement in strategic planning, digitalization, and organizational management, using heterogeneous purposive sampling (Saunders et al., 2023). This ensured that the data reflected multiple viewpoints relevant to the research and mitigated the risk of biased data.

All interviews were conducted via Microsoft Teams between 15.12.2025 and 05.01.2026 (see Appendix 2). Nine of the interviews lasted approximately 60 minutes, while one interview lasted 30 minutes due to time constraints. The interviews were held in Finnish and followed a semi-structured format, and the participants were provided with the main themes in advance. All interviews were recorded and transcribed using Microsoft Teams, after which the transcripts were anonymized and used for analysis. To ensure confidentiality, the interviewees are referred to using codes P1 – P10, based on the order in which the interviews were conducted. Due to the relatively small size of the case organization, interviewees are presented using generalized role descriptions to further ensure anonymity.

3.4 Data analysis

The study follows an abductive research approach, combining pre-existing theory with empirical data (Saunders et al., 2023). The analysis followed a qualitative thematic analysis process and consisted of multiple steps. Recordings and transcriptions were compared to reduce the risk of transcription errors, as the Finnish language increases the likelihood of automated transcription inaccuracies.

Following transcription verification, each interview was reviewed multiple times. The first round focused on familiarization with the data and identifying the main points of each interview. The second round focused on coding and highlighting recurring and relevant themes. Initial coding was data-driven and focused on identifying meaningful information related to planning practices, decision-making, and coordination. Notes from these rounds were then combined into structured summaries of each interview. After reviewing all interviews, similar codes were grouped into broader themes, which were compiled into a master findings table. The identified themes were examined in relation to the meta-capabilities of strategic agility and the mechanism-based theoretical framework guiding the study. The master findings table enabled cross-interview comparison and visualization of recurring themes. The identified themes were interpreted through the theoretical concepts of strategic agility and microfoundations literature. This iterative process allowed movement between empirical observations and existing theory. The credibility of the analysis was enhanced through iterative comparison of interviews and continuous refinement of themes. Attention was paid to diverging perspectives among interviewees, and direct quotations were used to support interpretations and improve transparency between data and findings. Each interview was revisited to identify illustrative quotations supporting the identified themes.

The findings were refined and structured into coherent subsections and iteratively compared with existing literature. While existing theory guided analytical attention, the final themes emerged from the interview data. These themes form the structure of the

findings chapter and enable a systematic examination of strategic agility and its microfoundations within the specific context of the case organization.

3.5 Assessment of data quality

The validity and reliability of the study should be evaluated to ensure research quality. Gibbert et al. (2008) introduce internal validity, construct validity, external validity, and reliability as the key criteria for assessing research rigor. Internal validity refers to the credibility of the findings and the extent to which interpretations are supported by the data. Construct validity "refers to the extent to which a study investigates what it claims to investigate, that is, to the extent to which a procedure leads to an accurate observation of reality" (Gibbert et al., 2008, p. 1466). External validity, or generalizability, refers to the extent to which findings may be transferable beyond the specific research context. This is particularly challenging in single case studies, but such studies can provide a foundation for further research. Lastly, reliability refers to the consistency and transparency of the research process and aims to ensure that findings are not the result of random error.

Several measures were taken during the data collection and analysis process to ensure research rigor. Internal validity was strengthened through pattern matching (Gibbert et al., 2008), supported by iterative cross-interview comparison, systematic coding, and continuous alignment between empirical findings and existing theory. The analysis followed a systematic and transparent process, and findings are traceable to the interview data. Construct validity was supported by carefully designed semi-structured interview questions that ensured the collection of relevant data on the studied phenomenon.

Several steps were taken to enhance the reliability of the study. The interviewees were informed about the themes of the study in advance and were able to familiarize themselves with the semi-structured questions (Appendix 1). Interview questions were reviewed with participants to ensure shared understanding. All interviews were

conducted in a consistent manner using the same semi-structured format via Microsoft Teams. All data were anonymized to encourage open and honest responses.

4 Findings

This chapter presents the empirical findings of the study and examines how digitalized business planning influences strategic agility through its microfoundations. The findings are structured around key themes identified through abductive analysis of the interview data. These themes illustrate how digitalized business planning practices shape sensing, decision-making, coordination, and resource allocation, as well as the factors enabling or constraining strategic agility.

4.1 Data-driven business planning

The interviews indicate that the business planning in the case company is strongly data-driven. Multiple managers describe that strategic planning and decision-making are grounded in data, forecasts, and measurable targets rather than managerial intuition.

> *"Everything is based on data." (P1)*

> *"Data is the product – insurance companies don't have any other concrete products." (P3)*

Across the interviews, several examples illustrate how data guides business planning practices. The managers participate in regular planning discussions, such as quarterly reviews, where KPIs are examined, and potential issues are discussed. In these review discussions, data is presented in visual form through dashboards or slide decks, enabling managers to develop a shared understanding of metrics and trends. Data is also used in scenario planning to predict potential future scenarios and prepare for alternative outcomes.

> *"Data is fuel for the long-term predictions." (P1)*

> *"Agreed-upon data is regularly reported and discussed in business reviews." (P2)*

The findings further indicate that new strategic initiatives must be supported by data and a positive business case demonstrating their expected value for the organization. Standardized templates are used to ensure that initiatives are presented in a structured and similar manner, supporting collective understanding and decision-making.

> *"Slide presentations are used to present ideas… ready-made templates answer questions about what value the proposition adds." (P8)*

The organization uses several digital tools and systems to collect and analyze quantitative and qualitative data. Digital dashboards play a central role in business planning by enabling real-time monitoring and shared visibility of performance. These tools allow managers to continuously track developments and identify potential issues early, which supports rapid responses and adjustments.

The interviewees all agree that data drives the case company's business planning. However, there are some inconsistencies between domains. Certain units demonstrate more advanced routines and capabilities for utilizing data and digital systems more effectively than others. A recurring and identified challenge relates to the inconsistent use of digital tools and systems, which can lead to fragmented data that can weaken the overall situational awareness. For instance, data may be dispersed across multiple sources, making it more difficult to form a comprehensive understanding of the organization's performance. Standardizing the use of digital tools and systems and ensuring consistent data practices were identified as important development areas.

> *"Systems are a reliable 'single source of truth'. It is essential to standardize their use to centralize data and get the most benefit out of the tools and systems used." (P3)*

Overall, the findings suggest that data-driven business planning supports strategic agility by shaping managerial understanding, decision-making routines, and shared situational awareness across the organization. Regular review practices and shared data visibility enable managers to monitor developments continuously and coordinate actions based

on the situational picture. However, the value of digital tools and systems depends on how effectively they are used in everyday practices. Consequently, the findings indicate that the case company operates fundamentally on data, making data-driven planning a necessity rather than a choice.

> *"The systems themselves are not the most important thing, but how they are used and how people get the most out of the systems." (P3)*

> *"Everything revolves around data, and data is a requirement to survive in the future, not just to be agile, but to survive the competition." (P6)*

4.2 Digitalized business planning and operational agility

The findings indicate that the organization demonstrates a notable degree of operational agility, which is primarily enabled by digitalized business planning. It enables faster operational reactions through continuous data observation. For example, a decline in hit rate is quickly noticed, triggering an operational response to the performance change. Through digital tools and systems, the case company's operational agility has significantly strengthened in recent years.

> *"Data, such as hit rate, is used to react to changes in the market and customer demand." (P4)*

Managers track KPIs, such as hit rate and churn, in almost real-time. A decline in these metrics becomes immediately visible, and the response is rapid, for example, through pricing adjustments.

> *"If we notice that churn is increasing, we don't wait for the top team meeting but immediately start to think about actions to turn the situation around." (P5)*

> *"The pricing capability has improved significantly. Now it takes only a week to make pricing changes – a year ago it took three months." (P5)*

The organization is also capable of proactive resourcing and forecasting of resource needs. Data is used to understand how the resources should be allocated on a daily basis. Along with historical data, weather, for example, affects resource needs. Tough conditions lead to an increase in the number of accidents, which consequently increases the number of contacts to the claims service. Digital tools supporting workforce allocation further enhance operational responsiveness.

> *"We have an AI-based tool that analyzes data and predicts how much workforce is needed on different days." (P2)*

The organization not only tracks issues and negative KPIs, but also monitors if something is going especially well. Both good and bad signals provide valuable information and have their benefits. For example, monitoring "green signals" allows managers to potentially leverage something that works well in other areas as well, and to take a closer look if something happens "too much", which potentially indicates that there are unknown issues.

> *"We track so-called red and green signals, which are KPIs monitored on a monthly basis. The red signals indicate issues and help us to understand 'What are the barriers?', while the green signals help us to understand 'Why does something happen so much?', 'Is there something we should know?', and 'Is there something we can utilize elsewhere also?'" (P7)*

Although operational agility is widely observed across the organization, some domains are more advanced than others. As mentioned, pricing and resource needs can be rapidly answered. However, not all performance metrics become immediately visible in the data. For instance, the risk ratio, fundamental for insurance companies, takes time to become realistic – customers pay steadily, but accidents take time to happen.

> *"Dashboards make issues with the hit rate quickly visible, but the risk ratio takes longer to be visible." (P7)*

Despite strong operational agility, there is still room for improvement. Managers also emphasize that data should be utilized even better to maximize its benefits and strengthen organizational performance. Currently, the data is not yet automatically interpreted or synthesized, but requires managerial attention. Improving this could further enhance operational agility.

> *"Data should be used to enhance productivity and efficiency, and to understand what is done well and what needs improvement." (P4)*

Overall, digitalized business planning enhances operational sensing and supports rapid decision-making routines across the organization. Standardized use of tools and systems also enables coordinated reactions, mitigating the risk of reacting based on emotions or intuition. These practices create a shared situational awareness among managers and support coordinated responses across organizational domains. While operational agility does not automatically translate into strategic agility, it forms an important foundation that enables broader strategic responsiveness over time.

4.3 Transformation of planning practices

The findings indicate that the organization is shifting from traditional, rigid annual planning toward more continuous and flexible planning practices. Planning previously required substantial time and resources in making heavy action plans, but is now focusing on a more goal-based steering. Instead of deciding what actions to take, the organization now defines strategic goals and adjusts actions flexibly to achieve them.

> *"Planning is becoming more interactive and less year-cycle centered." (P2)*

> *"The new model also prioritizes goals instead of procedures. Actions or procedures should not be the goal, but the end results are." (P5)*

Organizational actions are increasingly steered through regular performance reviews that enable adjustments to be made, if necessary, further enabling timely adjustments.

The top team takes part in planning discussions based on current data, which ensures that steering is based on facts. The organization chooses priorities for different quarters and steers actions based on this. Continuous review and planning allow the managers to identify the most effective ways to achieve strategic goals instead of being tied to predetermined actions. In addition to enhancing focus on achieving strategic goals, the new way of planning saves time and resources, and managers can use their time more effectively.

> *"The new way (of action planning) focuses on making goals clearer and achieving them. Previously, the action plans 'locked' the organization, and it was difficult to make changes if the actions didn't result in achieving the right targets." (P5)*

> *"Focus areas are now prioritized every quarter." (P9)*

As the change to this new way of planning is new, the transition is still ongoing and not yet complete. Similar to operational agility, some domains are more advanced in these more flexible planning practices. Some managers highlight that there are functions in the organization that require long-term planning and cannot purely rely on flexible planning. These domains must balance between stability and flexibility to find the most effective and suitable method. As the organization is relatively large and established, it is noteworthy that everything cannot change quickly.

> *"I believe quarterly prioritization is a good change – however, it is not the best in every domain. For example, marketing requires longer-term plans, which can also be adjusted, of course, if necessary." (P10)*

Overall, the shift toward more flexible planning practices strengthens the organization's ability to adapt to changing conditions, enabling the organization to adjust its direction more rapidly when needed. Through regular discussions and data reviews, the organization can reprioritize effectively, improving the overall responsiveness of the organization. Decision-making also becomes clearer as the focus is on achieving shared strategic goals. By changing the planning into a continuous practice, the organization

reduces the risk of strategic rigidity and improves organizational sensing of emerging changes.

> *"The strategy and strategic goals are now clearer and easier to understand." (P9)*

4.4 Coordination and alignment mechanisms

The findings indicate strong coordination and strategic alignment across the top management team and organizational domains. The top team demonstrates a high degree of unity, which is visible through decision-making and cooperation. Shared strategic goals and incentives align the organization to collectively achieve its goals and reduce the risk of internal competition. Digitalized business planning practices improve transparency within the organization. Shared data, goals, and incentives create a common strategic direction for the whole organization.

> *"The new incentive system will support cooperation and mitigate the risk of organizational silos." (P1)*

> *"With the new (incentive) structure, the top team will have approximately 80 – 90 % shared goals. This acts as a 'glue' and supports achieving common strategic goals." (P6)*

Alignment is reinforced through shared strategic goals, KPIs, and incentive structures that are directly derived from the organizational strategy. These structures are built to encourage organizational cooperation and to achieve the shared strategic goals. The top team takes part in regular planning meetings, where each domain is represented. These discussions further ensure that the organization pushes in the right direction and domains support each other. Top team members engage with each other and report their progress using standardized templates. These are discussed collectively to maintain a shared situational picture across domains. The findings further suggest that the top team functions efficiently and demonstrates cohesive decision-making.

> *"The strategy has been divided into a path of numeric goals." (P9)*

"The new incentive system not only supports cooperation but forces it." (P7)

"The top team is working well and is unified in its decisions." (P6)

The findings show that the strategic alignment is strongest at the top management level. However, there are still some silo tendencies. For example, insurance sales and the claims unit have partially competing objectives. The sales unit is incentivized to increase sales volumes, with the pricing being a key constraint. However, the pricing cannot be lowered too much, as there would not be resources to pay for claims. The siloing has significantly reduced in recent years, and data transparency further helps to mitigate the issues. Despite the progress, it is critical to understand that coordination and cooperation require continuous effort and nurturing. Another potential issue is that resource constraints may occasionally create tensions between units.

"Shared scorecards and incentives increase understanding and reason behind action and reduce the risk of siloing." (P8)

Leadership unity and shared understanding enable faster and more coordinated organizational responses. Unity is reflected in cross-domain collaboration and coordinated implementation. For example, the top team can act quickly and coherently across domains. As organizational-level goals are understood, the risk of internal competition and conflicts is reduced. The new incentive system also communicates what the organization wants to achieve. Overall, the findings indicate that high levels of leadership unity and interaction, together with structural mechanisms, act as key microfoundations enabling coordinated and agile organizational responses.

"The strategic goals seem clear, easy to understand, and realistic." (P5)

"Incentives are a strong method of communication." (P1)

4.5 Data interpretation and analytical challenges

The findings indicate that while data availability across the organization is high, its interpretation remains challenging and requires further development. Large volumes of data do not automatically translate to insights and improved organizational sensitivity, highlighting that interpretation and synthesis emerge as key managerial responsibilities. Specifically, predictive and future-oriented analysis requires major improvement.

> *"We are at a point where data can be presented, but difficulties arise when the meaning of the data is questioned" (P4)*

> *"The systems do not make synthesis of the data. We must take actions into our own hands and interpret it." (P4)*

The findings show that data is available practically everywhere in the organization. For example, dashboards provide large volumes of data in visual form. However, managers must take time to analyze and synthesize findings to create a coherent picture of what the data indicates. As data is widely available, it needs to be synthesized from various sources to create an unbiased view. Currently, this process of data analysis is primarily focused on retrospective, historical data. As a result, forming a comprehensive and forward-looking situational picture often requires significant managerial effort.

> *"Utilizing and interpreting data is improving." (P6)*

The findings indicate differences between domains in analytical skills and capabilities. One of the most significant organizational-level challenges is data fragmentation. Some data is fragmented because the measurable phenomenon is defined differently, or the same data is collected differently across units, leading to difficulties in forming a coherent and reliable situational picture. Another issue is that effective interpretation requires specialized expertise.

> *“Analyzing data is responsible work where you need to know what you are doing. Currently, too many people have access to the same data, which makes analysis difficult.” (P2)*

> *“Customer retention is still difficult to precisely monitor because of several reasons. For example, if a customer moves to a new apartment, the old insurance technically ends (although the customer keeps new home insurance within the company)” (P5)*

> *“Understanding context when analyzing data is important. There is a lot of data, so you need to understand the business logic, and you need to know how to ask the right questions.” (P7)*

The organization risks information overload if analytical capabilities are not further developed. It is also noteworthy that the processes and tools must be well-developed and reliable to ensure collected data is of high quality. A key area of improvement is in increasing analysis power and predictive analytics, which could further strengthen organizational responsiveness and agility.

> *“Processes and systems need to be good to provide high-quality data.” (P8)*

Effective data interpretation shapes managerial cognition and the organization’s shared situational awareness. Current limitations in data synthesis constrain strategic sensitivity and proactive strategic decisions. Through improved data interpretation and synthesis capabilities, the organization could improve managerial cognition and direct managerial attention toward relevant developments. Overall, the findings indicate that data alone is insufficient to generate strategic agility without the analytical capabilities required to interpret and act upon it.

> *“There is a severe need for more resources in data analytics to better utilize the data.” (P10)*

4.6 Resource and structural constraints

The findings indicate that strategic agility is strongly limited by resource and structural constraints. In particular, shortages of specialized expertise and limited time slow down organizational changes and development initiatives. Due to limited resources, the organization cannot respond to all identified needs despite detecting them through data. The structural complexity of a large and established firm also affects the speed at which the organization is capable of changing.

> *"Resources are limited, and the same resources are simultaneously used in different projects." (P8)*

> *"People taking part in development projects are tied to projects already: there is always more to do than there are resources." (P3)*

The organization faces constraints in limited specialist resources. In addition, the same resources are often required in multiple projects simultaneously. Consequently, the organization is dependent on key experts, which increases vulnerability to potential key personnel changes. The organization has identified its issues related to resources. For example, it is starting to utilize digital tools and systems to better manage resources and track their use. Resource shortages are occasionally addressed by using external expertise.

> *"Data shows where our resources are needed, where bottlenecks are, and where resources are used. Tools enable tracking development and where resources are used. A key objective in the future is a consistent use of the right tools: If it's not in 'the system', it does not exist." (P3)*

> *"Tools will be used in real-time to plan and track projects, what their status is, and what resources are required." (P8)*

These issues vary between domains as well. Some units require less specialized resources than others. As mentioned in the previous section, there is a shortage of analytical and technical skills that are required in most of the organization's projects.

Because of these special skill requirements, the organization faces challenges in reallocating resources across domains. The lack of resources results in the need to prioritize projects and initiatives to ensure that limited resources are used as effectively as possible. Therefore, the future focus is on ensuring that the organization can allocate the right resources for strategically critical initiatives.

> *"Resource fluidity is not easy between compartments as they require specific skills." (P2)*

> *"How the organization can allocate resources for strategically important projects is a key challenge to resolve." (P8)*

> *"The resources will be led more strongly in the future to focus the resources on top priorities." (P9)*

Despite extensive data availability, resource constraints ultimately shape what the organization can execute in practice. Resources limit the speed of response and strategic renewal. The organization is increasingly developing its resource allocation routines. It is also undergoing an organizational structure change to become more customer-centric in its actions. Overall, the findings support the notion that strategic agility not only depends on sensing or leadership unity but also on the ability to mobilize and reallocate resources effectively.

4.7 Strategic sensitivity limitations

The findings indicate high levels of operational sensing, but the organization's strategic, forward-looking sensing is weaker. The data collected is primarily retrospective and does not sufficiently support the development of strategic sensitivity. This makes it difficult to anticipate long-term changes, and the organization tends to react to changes rather than anticipate them proactively. However, strategic sensitivity is developing, and further development of predictive capabilities could significantly strengthen its sensing capabilities.

> *"The 'rolling planning' is not good, the organization is looking in the rearview mirrors and not predicting for the future." (P4)*

Currently, dashboards show the past or current performance metrics of the organization. While this is sufficient on the operational level, it limits strategic sensitivity as long-term trends are hard to detect early. The predictive capabilities of the organization require further development to support effective forward-looking analysis. Another challenge is the lack of systematic external analysis and analyzing the organization in relation to its external environment. With a strong focus on internal data, the organization is vulnerable to sudden changes in the market or customer behavior, despite operating in a relatively stable industry. As the strategic signals are weaker than operational signals, the organization has to rely more on managerial judgment.

> *"Systematic (market) observation and monitoring is almost nonexistent." (P4)*

> *"How could such a small firm think that it knows what is happening in the market just by looking at its own numbers?" (P4)*

> *"You always have to have a situational picture; if you don't know where you are, your conclusions will be wrong." (P4)*

The sensing capabilities also vary between domains. Long-term metrics, such as risk ratio, take more time to aggregate, which slows strategic sensing, while sales data updates quickly. Another challenge with sensitivity is that future uncertainty is difficult to quantify. Data integration across domains could further improve understanding of the current situation. However, the most significant barriers to strategic sensitivity are the lack of external analysis and a strong focus on internal, current, and historical data. Although the organization has started to conduct external analyses, the findings indicate that further development of predictive capabilities should be prioritized.

> *"Strategic planning requires knowledge about the market and the business environment." (P7)*

> *“For example, customer experience data should be better linked with other business data to create a bigger picture.” (P10)*

> *“Our own data is important, but market research and analysis are also important.” (P10)*

Overall, limited strategic sensing constrains proactive action and broader strategic agility. Weak levels of strategic sensitivity hinder the long-term strategic direction and increase the risk of sudden and insufficiently anticipated changes. The organization’s focus should be on detecting weak signals early in order to improve its competitiveness in highly competitive markets. Strengthening managerial attention, cognition, and data interpretation could enhance the sensing capabilities in practice, but it would require a fundamental shift to predictive analysis as well. As noted earlier, operational sensitivity does not translate to strategic sensitivity, but it may provide important lessons that can support the development of broader strategic agility.

4.8 Tension between operational and strategic agility

As discussed in previous sections, the findings indicate strong levels of operational agility, while strategic agility is more limited. The organization reacts quickly operationally, which is essential in its industry. Overall, a clear gap emerges between operational responsiveness and long-term strategic responsiveness.

Operational agility is evident in several areas, such as rapid pricing adjustments and resource reallocation, while strategic changes and renewals take more time due to several structural and contextual factors. For example, the size, age, and industry in which the organization operates contribute to slower strategic responses. Data, digital tools, and systems support daily operations more than long-term strategy. However, over time, these operational-level actions can aggregate into strategically useful information. Overall, operational improvements are significantly easier to implement than broader strategic change.

> *"In the short-term, tools and customer surveys provide operational benefits, but in the long-term, they are strategically useful." (P7)*

> *"In the future, AI will be utilized to stay up to date on what is being discussed each day. This is mainly operational level benefit, but longer-term tracking can also help in the bigger picture." (P5)*

Strong operational agility is evident across the interviews. However, it is noteworthy that strategic agility is usually linked to companies operating in volatile markets and is less frequently required in relatively stable industries. Hence, the organization rarely faces the need for rapid, radical strategic change. The main barriers to strategic agility are limited resources and the size of the organization. Despite these challenges, some improvements, enhancing the underlying capabilities of strategic agility, are underway. Although achieving strategic agility may not be an explicit organizational objective, its meta-capabilities have significant benefits in improving the overall performance of the organization.

> *"The 'case company' is a large tanker, incapable of making rapid changes of direction." (P7)*

> *"Operational excellence is really important in the 'tanker business'." (P7)*

Achieving higher levels of strategic agility requires the combined and simultaneous development of strategic sensitivity, leadership unity, and resource fluidity. The microfoundations of these meta-capabilities are partly strong, such as data-driven coordination and leadership alignment, while some areas, such as predictive capabilities and resources, remain less developed. However, the operational agility of the organization provides an important foundation for the further development of strategic agility over time.

4.9 Summary of findings

The purpose of the analysis was to examine the findings from ten interviews focusing on the interplay between digitalized business planning, strategic agility, and microfoundations. The key recurring findings are summarized in this section.

The main finding from the interviews is that digitalized business planning has clearly changed how the organization works. These changes have significantly strengthened the operational agility of the case organization. Despite strong data-driven coordination and planning practices, the strategic agility remains comparatively underdeveloped.

Strong data-driven planning, coordination, leadership unity, improved operational agility, and flexible planning practices are the key strengths of the organization. The findings indicate that challenges in data interpretation, predictive capabilities, resource constraints, and the slow pace of strategic renewal are the most significant constraints to strategic agility. The findings also show tension between operational and strategic agility, reflected in the gap between reactive operational capabilities and forward-looking strategic capabilities. However, it is noteworthy that these limitations are typical for large organizations operating in a relatively stable environment.

The findings indicate that digitalized business planning shapes key microfoundations of strategic agility, such as managerial cognition, coordination, and decision-making routines. Some microfoundations are stronger, while others, such as predictive sensing, are weaker. Overall, the findings enhance understanding of the underlying mechanisms that shape organizational-level capabilities and provide greater transparency into how strategic agility is formed in practice.

Table 1 provides a cross-interview summary of key themes identified in the analysis and illustrates how digitalized business planning shapes the microfoundations of strategic agility in the case organization.

Table 1. Summary of key findings.

Theme	Key finding	Supporting interviews	Implication for strategic agility
Data-driven planning and decision-making	- Planning and decision-making are strongly grounded in data and analytics. - Digital tools enhance situational awareness and justification of decisions.	P1 – P10	- Strengthens analytical decision-making and shared situational awareness, supporting strategic sensitivity and alignment.
Digitalized planning enhances operational agility	- Real-time performance monitoring enables rapid operational responses. - For example, pricing adjustments and resource allocation.	P1, P2, P3, P4, P5, P7, P10	- Enhances operational responsiveness. - Does not automatically translate into strategic agility.
Transformation of planning practices	- Planning practices are becoming more continuous, goal-oriented, and adaptive processes. - Supported by data and regular reviews.	P2, P5, P9, P10	- Enhances adaptability and faster prioritization. - Strengthens strategic responsiveness through flexible planning routines.
Coordination and alignment mechanisms	- Shared goals, incentives, and digitalized planning practices strengthen alignment and coordination. - Supports strong leadership unity.	P1, P5, P6, P7, P8, P9	- Improves coordinated decision-making and reduces siloing. - Supports leadership unity as a key microfoundation of strategic agility.
Data interpretation and analytical challenges	- Challenges in data interpretation, synthesis, and predictive analytics. - These limit the ability to leverage data for proactive strategic decision-making.	P2, P4, P5, P6, P7, P8, P10	- Constrains strategic sensitivity by limiting predictive awareness and proactive responses.
Resource and structural constraints	- Limited specialist resources, competing priorities, and structural complexity restrict the ability to effectively reallocate resources.	P2, P3, P8, P9	- Weakens resource fluidity and slows strategic responses.
Strategic sensitivity limitations	- Operational-level sensing is strong and data-driven. - Strategic and forward-looking sensing weak due to reliance on internal and retrospective data.	P4, P7, P10	- Limits proactive strategic responsiveness. - Increases reliance on reactive decision-making.
Tension between operational and strategic agility	- Digitalized business planning enhances operational agility. - Operational agility does not automatically translate to full strategic agility. - A gap between reacting and anticipating capabilities.	P5, P7, P10	- Highlights the need to strengthen predictive sensing and resource fluidity to transform into broader strategic agility.

4.10 Linking the findings to the theoretical framework

The study examines how the micro-level digitalized business planning practices impact macro-level capabilities by using a mechanism-based theoretical framework, Coleman's bathtub (Figure 2). The purpose of the framework is to illustrate how micro-level practices aggregate into macro-level strategic agility and its meta-capabilities. These microfoundations include managerial practices, routines, cognition, and interaction.

Situational mechanisms explain how macro context affects micro-level conditions. In this case, digital infrastructure, organizational structure, and incentive structure are key structural conditions shaping individual action. Digitalization changes how data is used and interpreted, while organizational and incentive structures shape collaboration routines and practices. Together, these macro-level conditions shape how individuals interpret information and act within the organization.

The findings reveal several factors affecting action-formation mechanisms. Data interpretation challenges, shared situational awareness, open dialogue, managerial cognition, and coordination practices shape how individuals act and interact with other individuals. Despite shaping decisions and responses, digitalized business planning practices alone do not create strategic agility, but interpretation and coordination determine whether agility emerges.

The findings illustrate how micro-level practices aggregate into transformational mechanisms shaping the meta-capabilities of strategic agility. For example, data improves situational awareness, but issues with data interpretation and forward-looking analysis limit strategic sensitivity. Digitalized planning practices strengthen leadership unity, for instance, by justifying decisions based on data, providing data to discussions, and aligning the top team through shared incentives. Resource fluidity remains constrained, but early signs of operational-level flexibility are emerging through systems that increase awareness of resource needs and forecasting accuracy. Overall, the findings

show that operational agility in the case organization is improved, but full strategic agility remains conditional and has barriers.

The findings support the mechanism-based explanation of Coleman's bathtub. Strategic agility emerges conditionally from the aggregation of micro-level routines and practices. The findings illustrate that digitalized business planning enables strategic agility but does not guarantee it, as micro-level practices and issues with them determine the outcome. Overall, the framework provides a useful lens for explaining how digitalized business planning shapes the microfoundations and conditional emergence of strategic agility.

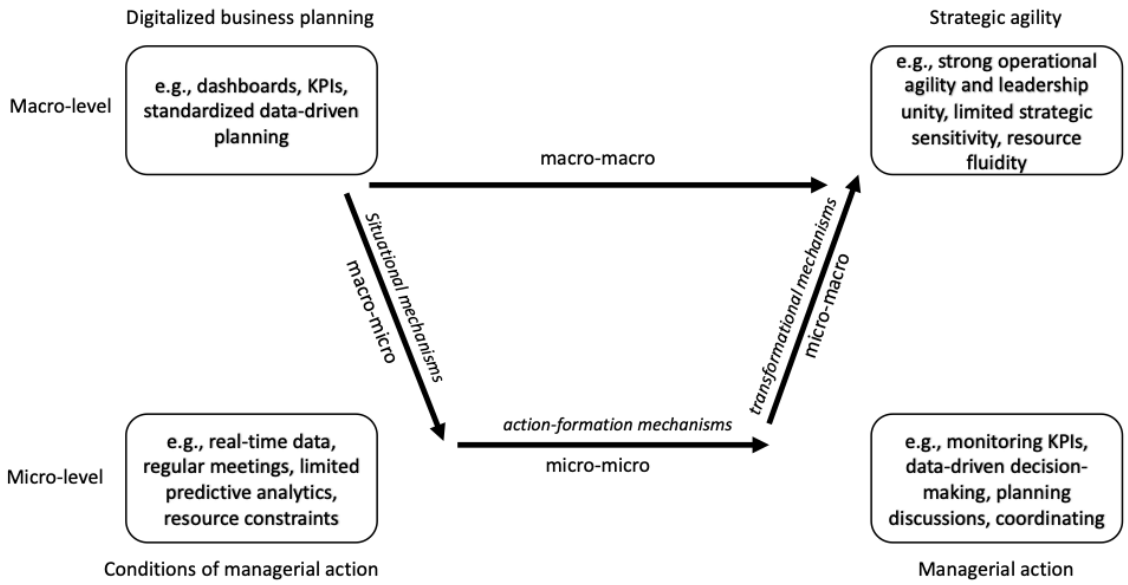

Figure 3. Linking digitalized business planning to strategic agility.

5 Discussion

5.1 Digitalized business planning & microfoundations of strategic agility

This study responds to calls for a deeper empirical understanding of the underlying mechanisms of strategic agility. Prior research has often examined strategic agility in dynamic contexts, while its development in more stable industries has received less attention (e.g., Doz & Kosonen, 2010). Microfoundations research has also repeatedly called for further empirical studies to open the organizational "black box" by examining how macro-level capabilities emerge from micro-level practices (e.g., Felin et al., 2015; Vial, 2019). Teece (2007) calls for further examination of the microfoundations of sensing and reconfiguration in practice. As sensing and reconfiguration capabilities are close to strategic sensitivity and resource fluidity capabilities, this study also responds to this call. Although the interest in digitalization and agility has grown, the micro-level mechanisms through which digital tools support agility remain underexplored. Hence, this study also responds to recent calls to examine how digital tools enhance agility (e.g., Zhang et al., 2025). By examining digitalized business planning in a stable incumbent context, this study not only responds to these calls but also extends existing understanding of how strategic agility develops under conditions of increasing digitalization and data intensity.

The study addresses the main research question: *How does digitalized business planning influence strategic agility through its microfoundations in an incumbent organization operating in a stable industry?* This question is explored through sub-questions focusing on sensing, decision-making, coordination, and the enablers and constraints of strategic agility, examined through a microfoundations perspective.

The findings indicate that digitalized business planning significantly shapes strategic agility through micro-level practices. These microfoundations aggregate into capabilities that support the meta-capabilities of strategic agility: strategic sensitivity, leadership unity, and resource fluidity. However, the microfoundations do not automatically translate into full strategic agility, suggesting that digitalized business planning enables

but does not guarantee the development of strategic agility. This highlights the conditional nature of strategic agility formation in digitally advanced incumbent organizations.

This chapter interprets the findings in relation to existing literature. In doing so, the chapter demonstrates how digitalized business planning extends current understanding of strategic agility and dynamic capabilities. Each meta-capability is discussed separately through its underlying microfoundations, followed by theoretical contributions, managerial implications, limitations, and recommendations for future research.

5.1.1 Microfoundations of strategic sensitivity

Strategic sensitivity is defined as *"the sharpness of perception and the intensity of awareness and attention"* (Doz & Kosonen, 2008a, p. 96). It enables proactive measures through an enhanced situational picture. Similarly, Teece (2007) describes sensing as the action of scanning, creating, learning, and interpreting opportunities. A key enabler of strategic sensitivity is forward-looking, predictive awareness (Reed, 2020). Essential microfoundations of strategic sensitivity are managerial cognition, attention, interpretation, and open dialogue (Doz & Kosonen, 2010). Strategic sensitivity is a macro-level capability, as shown in Figure 2. Coleman's bathtub model illustrates the link between the micro- and macro-level, illustrating how macro-level capabilities emerge from the aggregation of micro-level practices (Hedström & Ylikoski, 2010). This study examines how digitalized business planning shapes these microfoundations.

The findings indicate that sensing is strongly data-driven in the case organization. Digital tools and systems, such as dashboards and KPIs, significantly improve managerial sensing practices. Managers interpret data individually and collectively in top team planning and performance reviews. This extends sensemaking literature, which emphasizes the role of collective sensemaking practices in improving strategic awareness (e.g., Maitlis & Christianson, 2014). Regular review sessions focus on

discussing the data, further enhancing shared situational awareness, which is crucial for strategic sensitivity and informed decision-making.

The findings reveal that sensing is strong and fast on an operational level, but limitations remain in strategic-level sensitivity. Key constraints are due to the data being mostly a retrospective report of performance, while the future-looking, predictive capabilities are limited. This is consistent with Teece's (2007) argument that sensing requires forward-looking capabilities to identify future opportunities soon. The organization also has insufficient external sensing of market and customer developments. It lacks the practice of viewing the organization from the outside, or distancing, as referred to by Doz and Kosonen (2010). Overall, digitalized business planning strengthens sensing capabilities but is currently mainly beneficial to operational sensitivity due to constraints.

The findings extend the existing literature about sensing and strategic sensitivity by deepening the understanding of the underlying mechanisms through which they emerge. The study illustrates how digitalized business planning can enhance strategic sensitivity, but also reveals its limitations. The findings indicate that digitalized business planning alone does not automatically translate into strategic sensitivity, but requires micro-level practices that support it. This aligns with microfoundations literature, which highlights the underlying mechanisms creating macro-level constructs (e.g., Felin et al., 2015). A key risk for strategic sensitivity in the case organization is the retrospective bias, which could be reduced by strengthening its predictive capabilities and analytics (Furtak et al., 2015). It is also noteworthy that the case organization operates in a relatively stable industry and may therefore be less dependent on rapid strategic sensing. Overall, the study provides empirical microfoundational evidence on the distinction between operational and strategic sensitivity and their formation.

Several microfoundational mechanisms influencing sensitivity are identified in this study. Routines regarding the use of digital tools and systems shape managerial attention and cognition, for example, through regular use of dashboards. The top team participates in

regular interactive meetings, where they discuss and analyze data. However, current processes and structure alone do not support the formation of predictive sensing routines. The case organization also lacks systematic external scanning practices, despite having a foundation for developing them.

The findings illustrate that micro-level sensing practices can aggregate into a macro-level construct of strategic sensitivity. However, limitations in the underlying microfoundations lead to limited formation of strategic sensitivity. As Doz and Kosonen (2008) note, strategic agility is only fully realized when all three meta-capabilities function together, indicating that limitations in strategic sensitivity influence the overall development of strategic agility. The findings also extend dynamic capabilities research by illustrating how sensing enabled by digitalization may remain operational rather than strategic in stable incumbent organizations.

5.1.2 Microfoundations of leadership unity

Doz and Kosonen (2008b) emphasize that the benefits of strategic sensitivity are limited if top management cannot agree on strategic redirections and reach unified commitments rapidly. Leadership unity is defined as the ability of the top team to make quick decisions without the disruption of internal politics slowing decision-making (Doz & Kosonen, 2008a). The literature highlights various mechanisms that enhance leadership unity, such as open dialogue and mutual dependency (e.g., Doz & Kosonen, 2008b). These mechanisms improve shared understanding and commitment among the top team, ensuring alignment among top team members. Several microfoundational mechanisms support leadership unity. For example, managerial cognition and social interaction (Felin et al., 2015), as well as communication and incentives, act as key microfoundations of leadership unity. Similar to strategic sensitivity, leadership unity can be understood as a macro-level capability that emerges from micro-level routines and interactions, consistent with the microfoundational perspective of this study.

The findings reveal strong leadership unity within the case organization's top team. Leadership unity is supported through both managerial actions and structural mechanisms. The top team strengthens leadership unity through shared strategic goals and incentives. This both supports and reinforces unified action to achieve strategic goals, while reducing the risk of internal conflicts of interest. The finding supports prior research suggesting that shared KPIs and incentives enhance strategic alignment and coordinated decision-making (e.g., Kaplan & Norton, 2001). The organization nurtures leadership unity through regular planning and review meetings, where open discussion is encouraged. Digitalized business planning improves leadership unity, for example, through shared data, which enables shared situational awareness. Shared awareness reduces the likelihood of disagreements between managers by grounding decisions in evidence (Doz & Kosonen, 2008). The organization has also developed standardized templates and reporting practices to ensure that data is easily understood and interpreted. Overall, digitalized business planning strengthens alignment and shared understanding within the top team.

The findings align with existing literature on leadership unity. Digitalization enhances transparency and openness, which strengthens leadership unity within the top team (e.g., Doz & Kosonen 2008). Digital tools and systems enable continuous monitoring of performance metrics, aligning managerial behavior with shared strategic goals. The findings indicate that digitalized business planning practices significantly reduce siloing, which has been identified as a threat to leadership unity, as organizational siloes often have conflicting objectives. However, leadership unity requires continuous effort and is not permanent. Currently, the organization demonstrates strong leadership unity, although potential threats, such as resource conflicts, may create tension. The findings complement prior research by demonstrating how digitalized business planning practices concretely build leadership unity through shared data, incentives, and interaction routines.

Overall, digitalized business planning strengthens leadership unity through several microfoundational mechanisms. Shared dashboards and data support shared managerial cognition. Digitalized business planning practices also standardize interaction routines in meetings. The incentive system helps align managerial interests. Standardized templates and reports support consistent interpretation of data. The findings support the view that micro-level practices aggregate into macro-level leadership unity, enabling coordinated action, which is essential for the development of strategic agility. Furthermore, the findings extend dynamic capabilities literature by demonstrating how digitalized business planning enhances coordination and shared interpretation, thereby supporting the seizing dimension of dynamic capabilities (Teece, 2007) in practice.

5.1.3 Microfoundations of resource fluidity

Doz and Kosonen (2008a) define resource fluidity as the capability of an organization to reconfigure business systems and reallocate resources rapidly. Together with strategic sensitivity and leadership unity, it enables full strategic agility. Without resource fluidity, the benefits of strategic sensitivity and leadership unity are constrained, as the organization cannot allocate resources where they are needed. Reconfiguration is also discussed by Teece (2007), who highlights its role in improving organizational responsiveness. Resource fluidity is supported by several microfoundational mechanisms, such as routines, structures, skills, and managerial prioritization. Resource fluidity is also a macro-level capability, and the study examines its emergence through micro-level practices of digitalized business planning, consistent with the microfoundational perspective of this study.

The findings illustrate resource constraints within the organization, as well as limited resource fluidity at the operational level. This is in line with existing literature, which emphasizes that resource rigidity is often a challenge in incumbent organizations (Gilbert, 2005). Digital tools and systems enable operational resource fluidity, for example, by allocating more people to the claims customer service when data predicts

an increase in contacts. A key constraint to broader resource fluidity is the limited availability of specialist skills. Development projects require specific skills, and the resources are often already tied elsewhere. Due to specialized skill requirements, the organization cannot rapidly reallocate its workforce. The organization has competing priorities, leaving some development initiatives without sufficient resources. As the organization is dependent on key experts, it is vulnerable to the departure of key personnel. The size and incumbent nature of the organization also slow reallocation, as its operations aim for efficiency, and therefore, the workforce cannot be easily redeployed elsewhere. However, digital tools and systems help to track resources, and the capability is developing further, for example, through the adoption of a cloud-based ERP system in the near future. Although these tools help, they cannot solve challenges with resource scarcity. Overall, digitalized business planning improves resource visibility, but cannot provide full resource fluidity.

The findings suggest that resource fluidity is the most difficult meta-capability to achieve in a large incumbent organization, where resources are tightly allocated to maintain operational efficiency. This structural inertia hinders resource fluidity, although it is noteworthy that rapid reallocation of resources is not as critical within relatively stable industries. The findings also show that digital tools and systems do not automatically translate into resource flexibility, consistent with the microfoundations literature. They can enable visibility and prioritization, but require managerial action as well. Overall, the findings reveal microfoundational barriers to resource fluidity that explain limits to full strategic agility.

Digital tools and systems can enhance resource allocation routines. For example, they can help with budgeting and prioritization, which are critical when operating with limited resources. Individual special skills are critical resources for the organization, illustrating how individual-level capabilities aggregate into organizational performance. Specialized skills also create structural boundaries, as employees cannot be easily redeployed across units. The organization is dependent on key experts, whose work must be carefully

prioritized to meet organizational needs. The organization addresses these challenges with external specialists when necessary. However, the issue with resource scarcity is identified, and the organization is planning on hiring more experts and further educating existing personnel. The study shows that micro-level resource allocation practices aggregate and shape macro resource fluidity, which in this case emerges as the primary constraint on achieving full strategic agility. Furthermore, the study supports dynamic capabilities research by demonstrating the key role of resource reconfiguration (Teece, 2007), while also highlighting its constraints in stable and incumbent organizations.

5.2 Theoretical contributions

This study makes three main theoretical contributions to research on strategic agility and dynamic capabilities. It extends current understanding of how strategic agility develops under conditions of increasing digitalization by empirically examining digitalized business planning in a stable incumbent organization through a microfoundational perspective. Specifically, it contributes to strategic agility research, dynamic capabilities theory, and understanding digitalized business planning as a microfoundational mechanism.

First, the study contributes to strategic agility research by extending the understanding of how strategic agility develops in stable incumbent organizations. Prior research has primarily examined strategic agility in highly dynamic and volatile environments (e.g., Doz & Kosonen, 2008a). This study illustrates that strategic agility is also relevant in a stable incumbent context where strategic change occurs more gradually. The study demonstrates how the meta-capabilities of strategic agility emerge from micro-level practices, thereby providing empirical support for microfoundational perspectives on strategy (Felin et al., 2015). In particular, the findings provide empirical insight into the meta-capabilities of strategic agility identified by Doz and Kosonen (e.g., 2008, 2010), by demonstrating how these capabilities are constructed through daily managerial and digitalized planning routines and practices. This finding aligns with the theoretical framework of this study, illustrating how micro-level practices aggregate into macro-level

meta-capabilities of strategic agility, thereby addressing the black box explanations highlighted by Felin et al. (2015). The findings further suggest that strategic agility emerges conditionally rather than automatically, even in digitally advanced organizations. This extends existing strategic agility literature by highlighting the contextual and microfoundational conditions shaping its emergence in digitally advanced incumbent organizations.

Second, the study contributes to dynamic capabilities theory by providing empirical insight into the microfoundations of strategic sensitivity and resource fluidity, corresponding to the sensing and reconfiguration capabilities described by Teece (2007). By examining strategic sensitivity and resource fluidity processes in practice, the findings also respond to the call from Teece (2007) to better understand the microfoundations of dynamic capabilities. The findings indicate that digitalized business planning and data strengthen sensing and coordination, but do not automatically result in full dynamic capabilities. Digitalization enables the development of managerial capabilities that support dynamic capabilities (Teece, 2018), but it does not constitute dynamic capabilities in itself. The findings further suggest that digitalized business planning practices may enhance operational responsiveness without necessarily producing full strategic-level dynamic capabilities. The study extends dynamic capabilities research by demonstrating that the development of capabilities in digitally advanced incumbent organizations is conditional on managerial interpretation, coordination, and resource reconfiguration rather than digital technologies alone.

Third, the study contributes to the literature by positioning digitalized business planning as a key microfoundational mechanism underlying strategic agility. The findings show that digitalized business planning shapes managerial cognition, coordination, leadership unity, and resource allocation routines that underpin the meta-capabilities of strategic agility. However, the findings illustrate that digitalized business planning alone does not automatically translate into full strategic agility. Key constraints include limitations in predictive sensing and interpretation, as well as structural resource constraints. While

digitalized business planning enhances operational agility, it alone remains an insufficient microfoundational mechanism for full strategic agility.

Together, these contributions improve the understanding of how digitalized business planning shapes the conditional emergence of strategic agility in digitally advanced incumbent organizations.

5.3 Managerial implications

In addition to theoretical contributions, this study offers managerial implications for organizations seeking to enhance strategic agility through digitalized business planning in large incumbent organizations, particularly those operating in relatively stable industries. As this study approaches strategic agility from a digitalization point of view, the findings are especially relevant for data-driven organizations, as the study demonstrates how digitalized business planning can support the development of strategic agility.

The study illustrates that data-driven business planning improves sensing but often remains too retrospective. This highlights that organizations should invest in developing predictive analytical capabilities further to enable anticipation instead of reaction (Teece, 2007). Moreover, organizations should strengthen external scanning to be aware of market and customer needs and to develop a broader understanding of their strategic environment. Relying on only internal data can cause strategic myopia, and strategic sensitivity may weaken (Doz & Kosonen, 2008). Overall, the study shows the benefits of data for sensitivity, but highlights the need to acquire forward-looking, predictive sensing capabilities.

The findings indicate that leadership unity is not just something that emerges from managerial cooperation but can be intentionally strengthened through organizational structures and practices. The case organization demonstrates this by using shared goals and incentive systems to reinforce cooperation while reducing the risk of siloing. The

organizational strategy is divided into strategic goals, and managers across domains are incentivized to work together to achieve these shared goals. The case organization has regular top team meetings, where data is an essential tool used to improve and ensure alignment and transparency. However, it is also noteworthy that structures and digital tools alone don't result in leadership unity. Leadership unity also needs to be actively maintained (Doz & Kosonen, 2008). Overall, the findings highlight that leadership unity does not emerge automatically, but must be deliberately designed and continuously maintained.

A key constraint to strategic agility in the context of the case organization is constraints related to resource fluidity. Organizations need flexible resource allocation, but often struggle to balance agility with operational efficiency, which is also called the strategic agility conundrum (Doz & Kosonen, 2008a). The study highlights the need to reduce dependency on key experts, as key personnel may leave the organization. Hence, organizations should invest in developing employee skills to improve how they can be redeployed if necessary. In addition, organizations with limited resources should further strengthen prioritization routines to ensure key development initiatives have sufficient resources. The study demonstrates that digital tools help increase resource visibility, but visibility alone is insufficient to ensure resource fluidity.

Overall, the findings highlight that digitalized business planning can act as a significant enabler of strategic agility in incumbent organizations when supported by appropriate managerial, structural, and resource-related conditions. These implications help organizations to leverage digitalized business planning to support strategic agility more effectively while avoiding structural and resource constraints that may hinder its development. Furthermore, the results suggest that strategic agility in digitally advanced organizations is primarily a managerial and organizational challenge rather than a technological one.

5.4 Limitations

Despite efforts to ensure research rigor, this study has some limitations. The study is conducted as a qualitative single-case study. Hence, the findings of the study are context-specific and therefore limited in their generalizability. However, these limitations do not diminish the value of the study, but rather define its scope.

The empirical and contextual scope of the study also introduces certain limitations. As the case organization is a large incumbent organization operating in a relatively stable Finnish insurance industry, the context limits the generalizability of the findings, while providing in-depth insights within its specific context.

The chosen research method also introduces certain limitations. The study is based on data collected through semi-structured interviews. Although efforts were made to mitigate bias, nine out of ten interviewees were managers. However, the managers were selected based on involvement in strategic planning and digitalization, and heterogeneous purposive sampling was applied to capture diverse perspectives. Despite ensuring anonymity, responses may reflect managerial perspectives and perceptions that differ from organizational reality. As with all qualitative research, the interpretation of data involves the researcher's judgment. The researcher is employed by the case organization, which may cause potential bias but also provides contextual understanding. To mitigate potential bias, the study process followed systematic procedures and continuous supervision throughout the study.

5.5 Suggestions for future research

The limitations suggest that more empirical research is needed as the microfoundations of strategic agility remain underexplored. The digital context of strategic agility particularly requires further investigation. As noted, strategic agility research has primarily focused on unstable industries, while research examining its development in

stable and incumbent organizations remains limited. Therefore, this study highlights several possibilities for future research to further deepen knowledge of the themes.

Longitudinal studies could examine how microfoundations evolve over time and how digitalization gradually shapes agility. As strategic agility is a macro-level capability that forms slowly, longitudinal studies could provide valuable insights into this process. Comparative and multi-case studies could help address the limitations of single-case research. Current literature has often focused on fast-paced industries, but future research could compare industries and varying levels of digital maturity. These comparative and multi-case studies would strengthen the generalizability of the findings. Future studies could also adopt quantitative or mixed-method approaches. These studies could test relationships between identified constructs and further validate the framework proposed in this study. Future studies could also further examine the relationship between operational and strategic agility. Additionally, the role of digital tools in shaping managerial cognition and attention could be further researched. The rapid development of AI-based tools may significantly revolutionize managerial sensing practices, making this a particularly interesting area for future research.

Overall, future research could further explore how digitalization shapes the microfoundations of strategic agility and broader organizational responsiveness.

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Appendices

Appendix 1. Semi-structured interview questions

1. How would you describe your current business planning process and the role digital tools or systems play in it?

2. Which digital systems (e.g., CRM, analytics, planning tools) are most central to your planning or decision-making, and how do they support or limit the work?
→ *Can you describe typical routines or daily practices in how these digital tools are used in planning or performance discussions?*

3. How does the company identify and interpret changes in the market or customer needs, and how does digital data affect this sensing?

4. Have there been situations where insights from digital data or tools directly helped anticipate or respond to change?

5. How would you describe collaboration and decision-making in the leadership team, especially when interpreting digital data or insights?

6. To what extent do shared strategic goals, metrics, and incentives support alignment across departments? Do they encourage collaboration or reinforce silos?

7. How easily can resources (people, budget, technology) be reallocated when new opportunities arise, and how do digital systems support or hinder this?

8. What changes or improvements in digital planning or data use would most strengthen your organization's strategic agility in the future?

Haastattelukysymykset suomeksi

1. Miten kuvailisit yrityksen nykyistä liiketoimintasuunnitteluprosessia ja digitaalisten työkalujen tai järjestelmien roolia siinä?

2. Mitkä digitaaliset järjestelmät (esim. CRM, analytiikka, suunnittelutyökalut) ovat keskeisimpiä strategisen suunnittelun tai päätöksenteon kannalta, ja miten ne tukevat tai rajoittavat työtä?
→ *Kuvaile tyypillisiä rutiineja tai arjen käytäntöjä siitä, miten näitä digitaalisia työkaluja käytetään suunnittelu- tai tuloskeskusteluissa?*

3. Miten yritys tunnistaa ja tulkitsee muutoksia markkinassa tai asiakkaiden tarpeissa, ja miten digitaalinen data tukee tätä?

4. Voitko antaa esimerkkejä tilanteista, joissa havainnot digitaalisen datan tai työkalujen kautta ovat suoraan auttaneet ennakoimaan tai reagoimaan muutokseen?

5. Miten kuvailisit yhteistyötä ja päätöksentekoa johtoryhmässä, erityisesti digitaalisen datan tai havaintojen tulkinnan osalta?

6. Kuinka hyvin yhteiset strategiset tavoitteet, mittarit ja palkitsemismallit tukevat osastojen välistä yhtenäisyyttä? Rohkaisevatko ne yhteistyöhön vai vahvistavatko siilorakenteita?

7. Kuinka helposti resursseja (henkilöstöä, budjettia, teknologiaa) voidaan siirtää uusien mahdollisuuksien myötä, ja mitkä tekijät tai järjestelmät helpottavat tai vaikeuttavat tätä?

8. Millaiset muutokset tai parannukset digitaaliseen suunnitteluun tai datan hyödyntämiseen vahvistaisivat parhaiten yrityksen strategista ketteryyttä jatkossa?

Appendix 2. Interview overview

Code	Generalized role	Experience (years)	Date	Duration
P1	Senior management	15 – 20	15.12.2025	60 min
P2	Senior management	+ 30	15.12.2025	60 min
P3	Senior management	25 – 30	16.12.2025	60 min
P4	Senior management	25 – 30	18.12.2025	60 min
P5	Senior management	25 – 30	19.12.2025	60 min
P6	Senior management	25 – 30	22.12.2025	30 min
P7	Senior management	20 – 25	23.12.2025	60 min
P8	Senior management	+ 30	29.12.2025	60 min
P9	Specialist	10 – 15	02.01.2026	60 min
P10	Senior management	20 – 25	05.01.2026	60 min

Appendix 3. Statement on the use of artificial intelligence

AI tools were used as a support during the preparation of this thesis. AI use was limited to language refinement, assistance in choosing and ensuring sources are of good quality, structural improvement, and feedback.

AI was used in the following ways:

1. Paraphrasing and language refinement

AI tools (ChatGPT, Grammarly) were used to assist in paraphrasing to improve clarity and ensure academic language.

2. Language correction

An AI language-correction add-in tool integrated into Microsoft Word (Grammarly) was used to identify and correct grammatical errors, improve sentence structure, and ensure academic language, as English is not the author's native language.

3. Sources

AI tools were used to assist in finding potentially relevant academic sources and to evaluate the quality of sources. All sources used in the thesis were accessed through academic databases and assessed by the author as well.

4. Structuring

An AI tool (ChatGPT) was used to assist in structuring and restructuring chapters to improve the flow and readability of the thesis.

5. Evaluation and feedback

An AI tool (ChatGPT) was used to evaluate parts of the work to identify potential weaknesses and areas for improvement.

All AI recommendations and corrections were critically evaluated by the author.