Organisational ambidexterity in manufacturing SMEs

An empirical study of managers’ and workers’ perceptions of ambidextrous elements

PAPER WITHIN Production Systems

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Abstract

Organisational ambidexterity is considered a key to company survival and performance. Despite this, organisational ambidexterity is still a poorly understood phenomenon, especially in an SME context. The purpose of this study was therefore to investigate how the compliance with ambidextrous elements is perceived at different levels in manufacturing SMEs, to increase the understanding of organisational ambidexterity in this context. The empirical data was collected through a combination of questionnaire and interview. The case companies in this report perceive that they comply stronger with contextual elements than with structural elements. The strong compliance with contextual elements is motivated by the lack of hierarchies, flexibility in the company, different management structure and low number of employees. This allows employees to perform the contextual elements such as initiative-taking, cooperating, brokering and multitasking. The structural elements including e.g. vision, values, strategies, senior team responsibility and alignment are perceived differently at different hierarchal levels, indicating that there are subcultures within the hierarchal levels within a company. The biggest difference can be found between the middle managers and the top managers, workers perceive that they are not included explorationn within the company, and that the exploration occur more sporadically than those for exploitation. The definitions of exploration and exploitation vary between the companies which results in a lack of consensus. This makes it difficult for the companies to perform the changes necessary in order to develop and achieve long-term sustainable growth i.e. economical sustainability. The managerial implication of this report concerns four actions: (1) create a common definition for exploration, (2) develop goals for exploration, (3) communicate for buy-in and (4) involve all employees.

Key words: strategic management, exploration and exploitation, employee involvement,
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1 Introduction

SMEs are today facing an increased level of complexity on a global market where growth and constant change are predominant (Carter, 2015; Dodgson & Gann, 2018; Fernández, et al., 2017). This forces companies and managers to develop a combination of capabilities (Nosella, et al., 2012; Smith & Lewis, 2011). Among these challenges, sustainability is becoming a central concern and emerges as one of the most important topics for strategic decisions for manufacturing companies (Azzone & Noci, 1998). Although production has contributed substantially to the progress of society, companies are today expected to be accountable for their actions and to take responsibility of all three pillars of sustainability (Johansson & Winroth, 2010; Langwell & Heaton, 2016).

To achieve economical sustainability, companies need to assure their performance by managing the daily operations and their resources in an efficient and effective way, thus, increasing their productivity (de Ron, 1998; Tangen, 2005). By simultaneously being successful in innovation and making improvements in technology and the organisation, it will ensure future company performance and economic growth (Dodgson & Gann, 2018; Lubatkin, et al., 2006). By involving the employees and ensuring their participation along the way, companies can increase not only their productivity i.e. their economical sustainability but also engage in social responsibility simultaneously (Ajayi, et al., 2017; Colantonio & Dixon, 2009; Phipps, et al., 2013; Sachs, 1999; Veleva & Ellenbecker, 2001). Thus, companies face several challenges related to exploiting and managing their daily operations whilst simultaneously reinventing themselves and conducting the changes required in order to create tomorrow’s business opportunities (Birkinshaw & Gibson, 2004; Steiber, 2014; Tushman & O’Reilly, 1996).

1.1 Background

A company’s ability to manage these challenges is known as organisational ambidexterity (March, 1991). Organisational ambidexterity consists of two logics: (1) the logic of exploration and (2) the logic of exploitation (March, 1991). The term ambidexterity originally refers to the human trait or ability to use both hands with equal performance and skill (Lubatkin, et al., 2006; Simsek, 2009). Thus, the term organisational ambidexterity is used as a metaphor, emphasising on the capability of a company to manage the two conflicting logics of exploitation and exploration equally well (Lubatkin, et al., 2006; Simsek, 2009). Exploration is defined as the ability to explore new knowledge regarding markets, products, and creating new business opportunities, and involves activities related to innovation, experimentation, risk-taking and discovery (Kanter, 1984; March, 1991). Exploitation is defined as the ability to take advantage of existing knowledge, markets, resources and competences, and involves activities such as execution, efficiency, adjustment, refinement, production and implementation (March, 1991; Rosenkopf & Nerkar, 2001; Vassolo, et al., 2004; Vermulen & Barkema, 2001). The practice of simultaneously engaging in exploitation and exploration was previously stated by researchers as impossible to achieve, but after
March (1991) conversely argued that this is a necessity for firm survival it has received increasing attention (Raisch & Birkinshaw, 2008).

Organisational ambidexterity is considered a positive force for organisational performance and survival (Juni, et al., 2013; Lubatkin, et al., 2006; March, 1991; O'Reilly & Tushman, 2011). A one-sided focus on exploration can trap an organisation in an endless cycle of searching with an inability to reap (March, 1991; Raisch & Birkinshaw, 2008). The ability to manage the contradicting logics of exploration and exploitation is a crucial challenge for any company, and requires the attention of the management (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2004; Timmas, 2018). Peters (1990; 1991) states that exploration should be considered as a strategic activity, driven by a company’s chief executive officer (CEO). Tushman and O'Reilly (2002) argue that a company’s ability to be innovation reflects how the company is organised and managed, rather than its technological skills.

March (1991), O’Reilly and Tushman (2011) and Raisch and Birkinshaw (2008) have identified structural conditions, contextual behaviours and leadership as vital prerequisites that enable organisational ambidexterity within companies. These aspects together constitute the three theoretical bodies of organisational ambidexterity. The conditions and behaviours are related to a company’s ability to sense changes in the competitive environment regarding competition, customer behaviour, and technology but also to seize and act on opportunities and threats for the company to meet new challenges (Birkinshaw & Gibson, 2004; O'Reilly & Tushman, 2011). The leadership plays an important role in fostering ambidexterity within the company (Raisch & Birkinshaw, 2008). O’Reilly and Tushman (2011) summarised the vital prerequisites that are needed for a company to succeed with organisational ambidexterity as five structural conditions, referred to here as structural ambidexterity. Birkinshaw and Gibson (2004) summarised four vital contextual behaviours in individuals which are required to achieve a culture that supports organisational ambidexterity, referred to here as contextual ambidexterity. The structural conditions and contextual behaviours constituting the structural and contextual ambidexterity respectively are in this report referred to as elements.

1.2 Problem description
Large multi-divisional companies commonly manage ambidexterity by a split organisational design where exploration occur in developmental structures such as a department for research and development, while exploitation occur in established operations (Lubatkin, et al., 2006). The scarce resources in small and medium sized enterprises (SMEs) make the same arrangements difficult (Lubatkin, et al., 2006; Senaratne & Wang, 2018; Stentoft, et al., 2015).

SMEs differentiate themselves from large companies by characteristics such as (1) smaller size of market share, (2) different management structure, (3) smaller size of revenue, (4) local area of operations, (5) lower numbers of employees, (6) scarce
resources, (7) lack of competences, (8) lack of strategic thinking, (9) reliance on a small number of customers and (10) owners deeply involved in the operations (Stentoft, et al., 2015). Seraratne and Wang (2018) mean that characteristics like these are both drivers and barriers in becoming ambidextrous. Furthermore, several roles normally lay with a few top managers in SME, which requires them to manage both the strategic exploration and operational exploitation roles (Lubatkin, et al., 2006). March (1991) states that operational efficiency tends to be favoured before innovation in companies with scare resources. Therefore, the SME context is commonly characterised by the presence of a reactive fire-fighting mentality, and professionals in SMEs report that they are struggling to have time for innovation and that they are stuck with a reactive firefighting mentality (Cagliano & Spina, 2002; Dangayach & Deshmukh, 2001; Löfving, 2009). There are also differences in the management structure, with deeper owner involvement, low levels of hierarchies and authority structures that make the influence of the CEO and the senior team even greater compared to larger companies (Bierly & Daly, 2007; Man, et al., 2002; Senaratne & Wang, 2018).

When looking at the different hierarchal levels within SMEs it can be seen that individuals have different perceptions regarding the strategic activities of the company, resulting in a lack of strategic consensus (Boyer & McDermott, 1999; Floyd & Wooldridge, 1992). The lack of strategic consensus within the company, allows individuals to drift in different directions, making it harder for companies to achieve their long-term goals related to exploitation and exploration (Floyd & Wooldridge, 1992; Kellermanns, et al., 2005). Organisational ambidexterity is still an undertheorized and poorly understood phenomenon where a relatively small number of studies have examined the organisational characteristics that enhance the innovation capabilities of SMEs (Ajayi, et al., 2017; Simsek, 2009).

1.3 Purpose and research questions
To address the above-mentioned challenges, the purpose of this study is to investigate how the organisational compliance with ambidextrous elements is perceived at different hierarchical levels in manufacturing SMEs, in order to increase the understanding of organisational ambidexterity in this type of organisations.

The purpose has been broken down into two research questions. The relations among the theoretical bodies, different levels and the area of investigation for each research question are illustrated in Figure 1. The first question captures the companies’ compliance with structural elements and the second research question captures the companies’ compliance with the contextual elements. The reason for this differentiation is to ensure that a detailed understanding of the perceptions of ambidextrous elements is provided.

RQ1: How do different hierarchical levels in manufacturing SMEs perceive the company's compliance with the ambidextrous elements related to structural ambidexterity?
RQ2: How do different hierarchical levels in manufacturing SMEs perceive the company's compliance with the ambidextrous elements related to contextual ambidexterity?

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<th>STRUCTURAL AMBIDEXTERITY</th>
<th>CONTEXTUAL AMBIDEXTERITY</th>
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<tr>
<td>MANAGER</td>
<td>RQ1</td>
<td>RQ2</td>
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<td>WORKER</td>
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Figure 1 Illustration of the research questions

1.4 Delimitations
This report covers three main theoretical bodies for organisational ambidexterity: (1) the leadership aspect, (2) the structural ambidexterity and (3) the contextual ambidexterity. However, investigations regarding the leadership style and personalities of those executing the leadership and how they affect organisational ambidexterity is outside the scope given by the purpose. This delimitation is based on that the investigation of personalities of those executing leadership is not needed to capture individuals’ perceptions of organisational compliance. Further, it is important to emphasise that it is the individuals’ perceptions of the organisational compliance, and not how the individuals themselves comply with the ambidextrous elements that is focused here.

1.5 Outline
Chapter two describes the theories used in this report. The three main theoretical bodies for organisational ambidexterity are described and finally the analytical framework of the study is be presented.

Chapter three describes the research design and the research process used in this report to inform how the study was carried out. A subchapter with a discussion regarding the quality of the research and the decision chosen.

Chapter four describes the case companies and presents the context of the study.

Chapter five outlines the findings from the collected empirical data together with the analytical framework.
Introduction

Chapter six describes the analysis of the findings which are analysed in accordance to the research questions.

Chapter seven outlines the discussion of the major trends of the analysis as well as conclusions and managerial implications
2 Theoretical background

This chapter outlines the three main theoretical bodies that enable ambidexterity within organisations: (1) the structural elements that allow exploration and exploitation to be carried out in different organisational units, (2) the contextual elements that allow exploration and exploitation to be pursued within the same unit and (3) the leadership that make the senior teams responsible for reconciling and responding to the tensions between the two activities (Raisch & Birkinshaw, 2008), as seen Figure 2. After an initial theorisation of organisational ambidexterity, the three bodies are described and finally combined into the analytical framework of this report.

![Diagram showing three overlapping circles labeled Leadership, Structure, and Context, illustrating the three theoretical bodies describing organisational ambidexterity.]

2.1 Organisational ambidexterity

It was Duncan (1976) who first coined the term organisational ambidexterity, exploring the adaptation of dual structures, one for initiating innovation and another for executing it. But it was March’s (1991) article about the balance between exploration and exploitation, which awoke the current interest in the concept. March (1991) proposed that exploration and exploitation are two fundamentally different learning activities between which companies divide their attentions and resources. They would therefore require fundamentally different organisational structures, strategies and contexts (March, 1991), as shown by O’Reilly and Tushman (2004) in Table 1.
Theoretical background

Table 1 Characteristics of exploration and exploitations (O'Reilly & Tushman, 2004, p. 80)

<table>
<thead>
<tr>
<th>Alignment of:</th>
<th>Exploitative activities</th>
<th>Exploratory activities</th>
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<tbody>
<tr>
<td>Strategic intent:</td>
<td>cost, profit</td>
<td>innovation, growth</td>
</tr>
<tr>
<td>Critical tasks:</td>
<td>operations, efficiency, incremental innovation</td>
<td>adaptability, new products, breakthrough innovation</td>
</tr>
<tr>
<td>Competencies:</td>
<td>operational</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Structure:</td>
<td>formal, mechanistic</td>
<td>adaptive, loose</td>
</tr>
<tr>
<td>Control, rewards:</td>
<td>margins, productivity</td>
<td>milestones, growth</td>
</tr>
<tr>
<td>Culture:</td>
<td>efficiency, low risk, quality, customers</td>
<td>risk taking, speed, flexibility, experimentation</td>
</tr>
<tr>
<td>Leadership role:</td>
<td>authoritative, top down</td>
<td>visionary, involved</td>
</tr>
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In this report, exploitation is defined as the mere reuse of existing knowledge and involves activities such as execution, efficiency, adjustment, refinement, production and implementation (March, 1991; Rosenkopf & Nerkar, 2001; Vassolo, et al., 2004; Vermulen & Barkema, 2001). In comparison, exploration is defined as ideas that are perceived as new to the people involved, and involves activities such as innovation, experimentation, risk-taking and discovery (Kanter, 1984; March, 1991). Exploration and exploitation include a wide range of activities related to products, processes, marketing or organisational designs (Kanter, 1984).

The simultaneous pursuit of both exploration and exploitation presents a challenging but vital trade-off for companies (O'Reilly & Tushman, 2004; March, 1991). Levinthal and March (1993) conclude that long-term survival and success depend on an organisation’s ability to “engage in enough exploitation to ensure the organization’s current viability and to engage in enough exploration to ensure future viability” (p. 105). Companies that mainly focus their aim at excelling in exploration in favour of focusing on exploitation, tend to suffer from the costs of experimentation without gaining the benefits in the long-term, as they tend to display too many new underdeveloped concepts or ideas but lacks the distinctive competence needed to execute them (March, 1991). Likewise, companies that set their focus on mainly engagement in exploitation rather than exploration tend to end up in a suboptimal state, where growth stagnates over time (March, 1991; Tushman & O'Reilly, 1996). Therefore, it is necessary to achieve a balance between the two activities for the company to reap the benefits from organisational ambidexterity and not sub optimise the company (March, 1991).
Theoretical background

However, although March (1991) viewed exploitation and exploration as competing logics at two ends of a single continuum other researchers have viewed exploration and exploitation as independent activities where it is possible to pursue high levels of both simultaneously, without being forced to make trade-offs between them (Cao, et al., 2009; Gupta, et al., 2006). Cao et al. (2009) mean that for companies with access to sufficient resources it is possible and desirable to combine exploration and exploitation, and that they can be combined without trade-offs by effectively leverage resources across both. Meanwhile, for companies with resource constraints it is beneficial to maintain a close relative balance by managing tensions and trade-offs between exploration and exploitations demands (Cao, et al., 2009). Organisational ambidexterity could also be achieved by periodical switches between exploration and exploitation and thus remain ambidextrous over time (Chen & Katila, 2008). Sequential ambidexterity could however be associated with ambiguity within the company (Chen & Katila, 2008). To avoid any ambiguity, companies could also choose to externalise exploitative or explorative activities through outsourcing or by established alliances (Raisch & Birkinshaw, 2008). However, in this report, ambidexterity is defined as a firm’s internal ability to simultaneously pursue high levels of exploration and exploitation and in a balanced manner.

2.2  The leadership aspect of organisational ambidexterity

Leadership is an antecedent of organisational ambidexterity since a leader plays an important role in fostering ambidexterity (Raisch & Birkinshaw, 2008). The leaders themselves also need to be ambidextrous in simultaneously managing cost-cutting and freethinking (O'Reilly & Tushman, 2004). Engaging in both exploitation and exploration requires a diverse set of capabilities, which makes it a challenging task for companies to manage, in particular for SMEs with constrained resources (Rothaermel & Alexandre, 2009; Voss & Voss, 2013). Furthermore, the low levels of hierarchies and authority structures make the influence of the CEO and/or the senior team even greater when it comes to organisational ambidexterity in SMEs, compared to larger companies (Bierly & Daly, 2007; Man, et al., 2002). Burton (2001) mean that small firms mainly rely on their CEO’s knowledge to innovate. Klaas et al. (2010) states that employees are seldom involved in unique and valuable activities such as exploration. Andries and Czarnitzki (2014) conclude that non-managerial employees’ involvement and participation contributes to both process and product innovation. Without any cross-level integration, subcultures within the hierarchical levels will emerge and different perceptions will form among them (Schein, 1996; 2010). The different perception will allow individuals to drift in different directions and make it harder for companies to achieve their long-term goals (Floyd & Wooldridge, 1992; Kellermanns, et al., 2005).

Researchers have found that a transformational leadership is linked to successful organisational ambidexterity (Keller & Weibler, 2015; Jansen, et al., 2008). Transformational leaders encourage other people to perform and develop beyond what is normally expected of them (Bass & Avolio, 2004). They do so by inspiring respect
Theoretical background

and trust, delivering an appealing vision to motivate and create meaning, stimulating followers’ effort by questioning assumptions, reframing problems and finding new approaches and finally pay attention to each individual’s need (Bass, et al., 2004). Thus generating understanding and alignment across the organisation (Keller & Weibler, 2015) Hence, transformational leadership could enhance the shared vision, social integration and contingency reward system of a senior team and subsequently the ambidextrous performance of a company (Jansen, et al., 2008; O’Reilly & Tushman, 2011).

2.3 Structural ambidexterity

Structural ambidexterity concerns when exploration and exploitation are pursued in specialised structures or units (O’Reilly & Tushman, 2011). The expectation is that exploration is most effectively pursued in small decentralised units with loose processes while exploitation is expected to be pursued by larger centralised units with tight processes (Tushman & O’Reilly, 1996). Raisch and Birkinshaw (2008) mean that there are conflicting views whether and to what extent these organisational units should be integrated. Some argue for creating loosely coupled organisations in which the explorative units are strongly buffered against exploitative unit and at extreme completely separated. (Leonard-Barton, 1995; Levinthal, 1997). Meanwhile, others argue for the use of multiple tightly coupled subunits that they are loosely coupled with one another (O’Reilly & Tushman, 2004; Tushman, et al., 1997). The units are physically and culturally separated with different incentives and managerial teams but share the same overarching strategic and corporate culture (O’Reilly & Tushman, 2004).

An alternative path to structural ambidexterity is the use of parallel structures allowing people to switch back and forth depending on the requirement of the specific task (O’Reilly & Tushman, 2004; 2011). A parallel structure could for example be a project organisation or network which is used to support non-routine tasks and innovations, hence, balance the primary structure’s shortcomings (Raisch & Birkinshaw, 2008). O’Reilly and Tushman (2004) call such an arrangement for the ambidextrous organisation, an organisational structure in which companies have been successful at both exploiting the present and exploring radical innovations. In contrast to other organisational structures such as functional, cross-functional or networks where the exploratory unit is blended with the exploitative, the ambidextrous organisation consists of dual structures in which the new exploratory unit is separated from the traditional exploitative one (O’Reilly & Tushman, 2004). The use of dual structures allows for coexistence of exploitation and exploration within a single business unit but with different processes, structures and cultures while at the same time, maintains close to the top management (O’Reilly & Tushman, 2004). Some researchers argue that structural separation is necessary because individuals who have operational responsibilities cannot explore and exploit simultaneously as dealing with the two competing logics creates operational inconsistencies and implementation conflicts (Benner & Tushman, 2003; Gilbert, 2006).
Theoretical background

O’Reilly and Tushman (2011) proposed five specific structural elements that are necessary to be successful at in order to manage ambidexterity. The elements are directed towards the management of separate explore and exploit subunits, i.e. structural ambidexterity and how to balance resources to simultaneously explore new opportunities and exploit mature markets (O’Reilly & Tushman, 2011). The five elements are described in the following subchapters.

2.3.1 Strategic intent

The first element of structural ambidexterity defined by O’Reilly and Tushman (2011, p. 9) is “a compelling strategic intent that intellectually justifies the importance of both exploration and exploitation”. The concept of strategic intent was first discussed by Hamel and Prahalad (1989) and refers to the management process of bringing a desired future state into the current way of thinking. Thus, by visualising a desired future for the company the manager can start adopting the company thereafter by developing core competences, products and systems that goes in line with the desired future state (Mburu & Thuo, 2015). This goes in line with Boyer and McDermott (1999) who described strategy as “a compass that provides a general framework for employees at all levels of the organisation” (Boyer & McDermott, 1999, p. 292). Not having a clear strategic intent that justifies the importance of both exploitation and exploration and creates a unified understanding of what is important in the company, could result in tension when coordinating and allocating the resources (O’Reilly & Tushman, 2011). For example, would there be a lack of rationale why a profitable exploit unit should give up their resources in favour of an uncertain, small explore unit to fund the activities related to exploration (O’Reilly & Tushman, 2011; Steiber, 2014). Thus, having a clear strategic intent communicated throughout the company will result in a common understanding of the strategies and a pattern of decisions that contributes to the shaping of long-term capabilities, which in the end will contribute to the overall strategy (Slack & Lewis, 2017).

2.3.2 Vision and values

The second element of structural ambidexterity defined by O’Reilly and Tushman (2011, p. 9) is “an articulation of a common vision and values that provide for a common identity across the exploitative and explorative units”. The vision visualises the future state that the company seeks to accomplish in the long-term, thus lead the way for the whole company (Altiok, 2011). Hence, the vision should be cascaded and concretised to all levels in the organisation so that strategic goals can be translated into specific actions and goals for the daily operations (Kunonga, et al., 2010). Alongside the vision, organisational values that support the long-term vision need to be formulated, as they together serve as a glue which consolidates and sustain organisational culture (Harmon, 1996). Thus, the values together with the vision create a common identity in the company that unifies the explorative and the exploitative units and promotes cooperation, trust and a shared long-term perspective (O’Reilly & Tushman, 2011).
2.3.3 Responsibility
The third element of structural ambidexterity defined by O’Reilly and Tushman (2011, p. 9) is “a senior team that explicitly owns the unit’s strategy of exploration and exploitation; there is a common-fate reward system; and the strategy is communicated relentlessly”. This element aims to demonstrate the importance of ownership and responsibility among the senior team and to ensure that all members are onboard with the company’s strategy. The ownership is a psychological state in which the individual feels that the target belongs to him or her (Pierce, et al., 2001). It has a positive effect on people, which is reflected in e.g. a greater sense of responsibility for the result at work, a greater organisational commitment and/or increased productivity (Pierce, et al., 2003). O’Reilly and Tushman (2011) identified that there is a strong relation between the ownership of a strategy that promotes both exploration and exploitation, and in some cases, managers opposing the strategy was replaced to ensure a united front. Because only when the senior team is fully committed and believe in the strategy it can be transferred through the organisation to gather followers, this connection was in some cases further enforced by using incentives such as a common-fate reward system (O’Reilly & Tushman, 2011). Barton and Ambrosini (2013) emphasise the role of middle managers as key stakeholders in communicating the strategies to the rest of the organisation and note that their participation in the formulation of strategies increases their commitment. Without a common-fate reward system and the relentless communication of the ambidextrous strategy, showing the organisation their equal value, cooperation could be undermined and unproductive conflicts encouraged (Beckman, 2006; Jansen, et al., 2008).

2.3.4 Alignment
The vision and the strategic intent are eventually bottled down to the organisational architecture of different units. Hence, the fourth element of structural ambidexterity defined by O’Reilly and Tushman (2011, p. 9) is “separate but aligned organizational architectures (business models, structure, incentives, metrics, and cultures) for the exploratory and exploitative units and targeted integration at both senior and tactical levels to properly leverage organizational assets”. O’Reilly and Tushman’s (2011) framework are dedicated to structural ambidexterity where explore and exploit are pursued in separate units. To the extreme, O’Reilly and Tushman (2004) propose the use of an ambidextrous organisational form where breakthrough efforts are organised in structurally independent units having their own processes, structures and culture but integrated into the existing senior team hierarchy. The challenge with separate units is to keep them aligned and to leverage the organisational assets between them to avoid the inefficient use of resources, ambiguous coordination and sub-optimisation (O’Reilly & Tushman, 2011; Slack & Lewis, 2017). This is a though balancing act which requires that all levels and units work together to optimise the organisation as a whole and O’Reilly and Tushman (2011) identify that separate units for explore and exploit where resources are allocated and managed through an integrated senior team is favourable.
2.3.5 Tension

Finally, the fifth element of structural ambidexterity defined by O’Reilly and Tushman (2011, p. 9) is “the ability of the senior leadership to tolerate and resolve the tensions arising from separate alignments”. Inevitably the organisation will face conflicts and trade-offs regarding resource allocation, and in these instances, it is crucial to have clear identifiable leaders, forums and decision-making processes to resolve the conflicts (O’Reilly & Tushman, 2004; March, 1991).

The five elements capturing structural ambidexterity are visualised in Figure 3.

![Structural Ambidexterity](image)

Figure 3 The elements for structural ambidexterity according to O’Reilly and Tushman (2011)

2.4 Contextual ambidexterity

Contextual ambidexterity concerns individual employees’ choices between explorative and exploitative work based on their day-to-day context, hence, achieving ambidexterity simultaneously in the business unit (Birkinshaw & Gibson, 2004). Its focus lays in the human capital of the organisation and is associated with the culture which is an important factor of an organisation’s ambidextrous performance (Raisch & Birkinshaw, 2008). It also requires a certain degree of involvement by all individuals which in turn requires managers to be open towards diverse opinions and engagement in decision making and to be oriented towards change and building of collective understanding (Nemanich & Vera, 2009). Birkinshaw and Gibson (2004) mean that this requires a supportive context characterised by stretch, discipline, support and trust in the organisation, but also a shared vision to which employees and supportive leaders strive (Tushman & O’Reilly, 1996). Furthermore, Adler et al (1999) identify five contributors for this: (1) the use of meta routines for facilitating the efficient performance of nonroutine tasks, (2) that both workers and suppliers participates in nonroutine tasks while they work in routine production, (3) that both workers and suppliers participates in nonroutine tasks while they work in routine production and (4) that routine and nonroutine tasks are separated temporally and workers switch sequentially between them and finally (5) that differentiated subunits works in parallel with both routine and nonroutine tasks. Denison et al. (1995) argue the need for leaders with complex behavioural repertoires capable to effectively handle different boundaries such as different units, industries and cultures. The contextual ambidextrous capability
is critiqued for being unfit to adapt revolutionary change in technologies and markets and thus is not capable of facilitating organisations’ radical forms of exploration and exploitation when it is required (Kauppila, 2010).

Birkinshaw and Gibson (2004) propose four specific elements of ambidexterity that highlights ambidextrous behaviours in individuals. The framework supports the creation of contextual ambidexterity where the individual employee, whether it is manager or workers, make choices between exploration and exploitation (Birkinshaw & Gibson, 2004). The elements describe an ambidextrous individual who is solution-oriented and motivated into taking actions, which is in the broader interest of the organisation and involves new opportunities but still is aligned with the overall strategy of the organisation (Birkinshaw & Gibson, 2004). The four elements are described in the following subchapters.

2.4.1 Initiative taking
The first element of contextual ambidexterity defined by Birkinshaw and Gibson (2004, p. 49) is “ambidextrous individuals take the initiative and are alert to opportunities beyond the confines of their own jobs”. An ambidextrous individual is focused towards contributing to the development of the organisation in whatever way possible, rather than only focusing on performing the job described in one’s job description (Birkinshaw & Gibson, 2004). This contextual ambidextrous element could be demonstrated by for example an individual who identifies a new opportunity, it could be a client searching for a new product that no other company currently is offering (Birkinshaw & Gibson, 2004). Instead of passing the lead to someone else within the company, the individual who identified the opportunity takes the initiative and drives the new business cases forward once the case is approved internally at the company (Birkinshaw & Gibson, 2004).

2.4.2 Cooperating
The second element of contextual ambidexterity defined by Birkinshaw and Gibson (2004, p. 49) is “ambidextrous individuals are cooperative and seek out opportunities to combine their efforts with others”. An ambidextrous individual can take initiative to gather others to jointly seek opportunities for improvements (Birkinshaw & Gibson, 2004). This contextual ambidextrous element could be demonstrated by for example an individual who is placed abroad to work on its company’s marketing strategy in that particular country (Birkinshaw & Gibson, 2004). In case the individual experiences that there is a lack of contact with the peers in other countries, and instead of waiting for the headquarters to act, the individual initiates the contact with the peers and seeks opportunities in which the peers can combine their efforts (Birkinshaw & Gibson, 2004).

2.4.3 Brokering
The third element of contextual ambidexterity defined by Birkinshaw and Gibson (2004, p. 49) is “ambidextrous individuals are brokers, always looking to build internal
Theoretical background

An ambidextrous individual can connect different people to one and other when there is an opportunity for cooperation (Birkinshaw & Gibson, 2004). This contextual ambidextrous element could be demonstrated by for example that an individual who identifies an opportunity that the individual reckon could be of interest for someone else in their network (Birkinshaw & Gibson, 2004). Thus, the individual takes the initiative to act as a broker and connect the two stakeholders and builds internal linkages (Birkinshaw & Gibson, 2004).

2.4.4 Multitasking

The fourth element of contextual ambidexterity defined by Birkinshaw and Gibson (2004, p. 49) is “ambidextrous individuals are multitaskers who are comfortable wearing more than one hat”. An ambidextrous individual can perform different roles simultaneously when for example pursuing new opportunities (Birkinshaw & Gibson, 2004). This contextual ambidextrous element could be demonstrated by that an individual who has been assigned a specific role or assignment also can go outside of that role if an opportunity presents itself where the individual perceives that there is a possibility to develop and thrive outside of the ordinary role (Birkinshaw & Gibson, 2004).

The four elements capturing contextual ambidexterity are visualised in Figure 4.

![Figure 4 The elements for contextual ambidexterity according to Birkinshaw and Gibson (2004)](image)

2.5 Analytical framework

An organisation is neither completely structural nor completely contextual, and Birkinshaw and Gibson (2004) states that the two are complementary structures. Kauppila (2010) agrees and means that “in reality, firms are likely to create ambidexterity through a combination of structural and contextual antecedents and at both organizational and interorganizational levels, rather than through any single organizational or interorganizational antecedent alone” (p. 284). Therefore, the analytical framework for this report is based on a combination of the framework for structural ambidexterity presented by O’Reilly and Tushman (2011) and the framework for contextual ambidexterity by Birkinshaw and Gibson (2004). The two frameworks make up different ends of an ambidextrous spectrum (see Figure 2) and by combing
Theoretical background

them, a more comprehensive view of the phenomenon could be created. Davis et al. (2009) add insights to the ambidextrous spectrum by describing the relationship between structure, performance and the environment, and by stating that performance moderately dissolves with too much structure and radically drops with too little in an unpredictable context. The analytical framework for this report is illustrated in Figure 5. It has organisational ambidexterity in the centre, flanked by the elements supporting the achievement of structural and contextual ambidexterity. Moreover, the purpose of this report is to investigate the perceptions at different hierarchical levels and thus are managers and workers included. The analytical framework is here positioned in a SME context and is an open system, hence the dotted cloud. The context is thus subjected to a series of internal and external factors (Kotter, 1980).
3 Research methodology

This chapter outlines the decisions taken regarding the research design and the motivations behind those decisions. The research process for the data collection and data analysis are described along with aspects regarding validity and ethics.

3.1 Research design

The research design of a study explains the means which the study used to get from the research questions to the concluding remarks that answers them (Yin, 2014). In this study, the purpose was to examine how the organisational compliance with ambidextrous elements is perceived at different hierarchical levels in manufacturing SMEs, in order to increase the understanding of organisational ambidexterity in this type of organisations. Based on the nature of the research questions and in order to fulfil the purpose of the study, there was a need to study and investigate various individuals’ perceptions, hence, a qualitative research approach was applied. Agostini et al. (2015) points out that organisational ambidexterity obligates a qualitative research design due to the inherent complexity that could not be captured and understood by any other research design. The empirical data that was needed to answer the research questions was collected through two single case studies, in which both qualitative and quantitative techniques were used when collecting the data. The techniques used were a combination of questionnaire and interview, according to Williamson’s (2002) definition. The usage of both qualitative and quantitative techniques for the data collection was another argument for the usage of case study design as method in this study (Williamson, 2002).

The two single case study design allowed the phenomenon to be studied closely, hence creating an in-depth understanding needed to fulfil the purpose of the study (Bryman & Bell, 2015; Williamson, 2002). By using two single case study design the findings deriving from each of the cases could be compared both within and between the cases (Bryman & Bell, 2015). Using combined questionnaire-interviews resulted in both qualitative and quantitative data. The usage of both quantitative and qualitative data in qualitative research is supported by Bryman and Bell (2015) which states that qualitative research does not completely consist in the absence of numbers. By using two different techniques, it enabled the avoidance of too immense a reliance of one single approach and increased method triangulation (Knights & McCabe, 1997; Williamson, 2002). Method triangulation is defined as the usage of more than one technique or source of data when studying a social phenomenon, thus, the results can be compared and the data can complement each other, resulting in a greater confidence of findings (Bryman & Bell, 2015).

Triangulation is commonly associated with quantitative research, but Bryman and Bell (2015) advocates that triangulation also can take place in qualitative research. The selection of the two cases was based on that both companies were manufacturing SMEs that participated in a research project at Jönköping University, and that both companies had an interest for the research questions and the purpose of the study. The case companies are described further in chapter 4.
Research methodology

3.2 Research process
The research was conducted with deductive reasoning, starting from studying the theory and then studying the phenomena and collecting the empirical data (Bryman & Bell, 2015). The theory consists of two frameworks: (1) structural ambidexterity presented by O’Reilly and Tushman (2011) and (2) contextual ambidexterity by Birkinshaw and Gibson (2004). Based on these two frameworks a combined analytical framework was developed which guides the research process. The research process is illustrated in Figure 6 and is described in the following two subchapters.

3.2.1 Data collection
To capture the compliance with the ambidextrous elements at different levels, each element was broken down into one or several statements. By breaking down the elements into statements, ambiguous double-barrelled questions were avoided (Bryman & Bell, 2015). This process resulted in 14 statements (see appendix 0). In the theory, the contextual elements refer to the individuals’ capabilities within a company such as initiative taking and multitasking. The statements for the contextual elements were formulated in a way that assess whether the company allows the individuals to execute the capabilities that are defined in the contextual element, i.e. if the company allows the individuals to take initiatives. All the structural elements were already assessing the company and not the individuals’ capabilities, hence those statements were mainly formulated in a way that avoided double-barrelled questions. The interviewees were then asked to indicate their perception of the statement, thus assessing the company’s compliance with the ambidextrous elements on a Likert scale followed by a motivation of their answers. Thus, the data collection techniques for this study were a combination of questionnaire and interview, according to Williamson’s (2002) definition. The reason for using combined questionnaire-interviews was to get quantitative data regarding the compliance of the ambidextrous elements, and simultaneously get nuanced qualitative explanations regarding their indications. The Likert scale included a 7-points scale, as seen in Table 2. A Likert scale is commonly a 5- or 7-point scale, where the interviewees have the option to choose a neutral midpoint in case they feel insecure (Bryman & Bell, 2015; Krosnick & Presser, 2010). Although the validity and reliability do not differ notably between 5- and 7-point scales (Krosnick & Presser, 2010), a 7-points scale provides more alternatives for the interviewees which in cases where they are able to differentiate between several alternatives a bigger scale allows the interviewees to indicate the answer most corresponding to their perception (Krosnick & Presser, 2010).
After indicating their answers to each statement on the Likert scale, the interviewees were asked to give qualitative motivations and give examples about their perception of the compliance with the element. The combined questionnaire-interviews were carried out in a semi-structured manner, they followed the structured order of the questionnaire, but the follow-up questions were unstructured (Williamson, 2002). The questionnaire-interviews with the managers were carried out with one interviewee at the time while the questionnaire-interviews with the workers were carried out in groups of two to make the workers feel comfortable and be able to help each other to associate the statements to their work situation. However, the workers were asked to first indicate their perception regarding the statement individually and then discuss their answers together. The questionnaire-interviews were carried out in Swedish, the native language of the interviewers and most of the interviewees with the purpose to make it easier for the interviewees to understand the statements and express themselves without being hindered by their language skills. Even though this meant that all statements had to be translated from English to Swedish without losing its essence.

Moreover, the key terms exploration and exploitation were anticipated to be difficult to grasp for all interviewees. Hence, they were defined prior the questionnaire-interviews to ensure that all interviewees understand the core of the research and uses the same definitions, which facilitates for comparison between the answers. All definitions and all statement could be read by the interviewees on the questionnaire, in addition to the interviewers reading them aloud. The questionnaire-interviews started with a brief introduction to the study and the definition of the key terms, hence the interviewees answered personal factual questions to give information about their role and background, before finally starting to answer the statements (Bryman & Bell, 2015). To capture as much data as possible during the questionnaire-interviews and in order to have the possibility to go back and control the answers they were recorded. As Bryman and Bell (2015) and Williamson (2002) empathises the importance of during interviews. The questionnaire-interviews were conducted by two interviewers in order to be able to ask follow-up questions (Bryman & Bell, 2015; Williamson, 2002).

### Table 2 Classification of Likert scale

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strong disagreement</td>
</tr>
<tr>
<td>2</td>
<td>Disagreement</td>
</tr>
<tr>
<td>3</td>
<td>Partial disagreement</td>
</tr>
<tr>
<td>4</td>
<td>Neutral</td>
</tr>
<tr>
<td>5</td>
<td>Partial agreement</td>
</tr>
<tr>
<td>6</td>
<td>Agreement</td>
</tr>
<tr>
<td>7</td>
<td>Strong agreement</td>
</tr>
</tbody>
</table>
The interviewees were chosen based on theoretical sampling, where the suitable candidates were not chosen on a random basis, but selected according to their role and perceived suitability for the study (Bryman & Bell, 2015). Eisenhardt and Graebner (2007) mean that the selection of highly knowledgeable participants, such as actors from different hierarchical levels and units is a key approach to limit bias in interview data. All the interviewees and their hierarchical classification in this study are found in Table 3, the hierarchical classification is made based on the specific context of the case company. Table 3 Interviewees roles and hierarchical classification in this study

<table>
<thead>
<tr>
<th>Classification</th>
<th>Metallic Inc</th>
<th>Plastic Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top managers</td>
<td>Production Manager (PM)</td>
<td>Owner and CEO</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>Lead Production Engineer (PE)</td>
<td>Production Manager (PM)</td>
</tr>
<tr>
<td></td>
<td>CNC Team leader (TL)</td>
<td></td>
</tr>
<tr>
<td>Workers</td>
<td>CNC-operator</td>
<td>Set-up technician</td>
</tr>
<tr>
<td></td>
<td>Lathe-operator</td>
<td>Injection Moulding (IM)-operator</td>
</tr>
</tbody>
</table>

3.2.2 Data analysis
The data consisted of quantitative data in terms of the numbers indicated on the Likert scale. The data also consisted of qualitative data in terms of oral descriptions and motivations given by the interviewees for how and why they did the indication they did on the Likert scale regarding each statement. To facilitate the analysis of the quantitative data, the data was visualised in a boxplot, see Figure 7 for example of these. The box in the boxplot visualises the middle 50 per cent of the interviewees and the upper and the lower boundaries of the box visualises the interviewees that indicated the highest and the lowest within the middle 50 per cent (Bryman & Bell, 2015). The line that crosses the box visualises the median and the cross is the mean (Bryman & Bell, 2015). The ends of the vertical line that go downwards and upwards from the box visualise the interviewees who indicated the lowest and the highest of all interviewees (Bryman & Bell, 2015). By using boxplot, the dispersion and the mean of the interviewees for each statement can be visualised (Bryman & Bell, 2015). To make sense of the dispersion of the answers, the data had to be classified in a systematic way. If the answers among the interviewees in different groups only differed by 1 number in a numerical order it was regarded as no difference. E.g., when one interviewee indicated 6 and another one 7 on the Likert scale, as seen in Table 4. This resulted in that the perception of compliance with the ambidextrous elements at different levels in
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manufacturing SMEs could be analysed, which answered the first and second research questions of this report.

Table 4 Classification of dispersion

<table>
<thead>
<tr>
<th></th>
<th>No difference</th>
<th>Slight difference</th>
<th>Difference</th>
<th>Big difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The answers from the interviewees were transcribed and translated from Swedish to English. By transcribing all the data, it was possible to capture not just what the interviewees had said but also the way they said it, which is of interest when studying people’s perceptions (Bryman & Bell, 2015). When the data was transcribed and translated, the analytical framework (see Figure 5) could be used to guide the analysis of the data and the different interviewees divided into its hierarchical levels. Since the elements were broken down into statements, the answers regarding all statements could be clustered into their respective element before the analysis begun. During this analysis it became clear that the manager level that was expected to constitute one level had to be divided into two levels as the answers from these two levels showed different patterns at both case companies. Hence, this level was divided into middle managers and top managers. When the data had been analysed separately for the different hierarchical levels for both Plastic Inc. and Metallic Inc., the differences was first analysed at different levels within each case and then analysed between the cases and the different levels.

To compare the perceptions of structural element and contextual elements in the discussion, an average for each group’s indications to the elements (including all statements for the element) was calculated. Hence, the averages were colour coded to mark the group’s common perception. The Likert scale was divided in three sections and given colours according to Table 5. A coloured line was used to visualise the hierarchical levels’ perception of the compliance with the ambidextrous elements. By analysing and comparing the quantitative data from the questionnaires and the qualitative data from the interviews, method triangulation was conducted. This increased the confidence of the findings since the qualitative data provides a more detailed picture while the quantitative data provides a narrower and more focused picture of the statements (Williamson, 2002). The comparison and analysis of the data between the cases enabled the researchers to identify or cross-check the data and look for consistency of the data between the different cases and levels. During this comparison it became clear that both case companies presented similar patterns which was that the manager levels differentiated from each other, which increased the source
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triangulation as this result showed on consistency of the data derived at two different case companies (Williamson, 2002).

Table 5 Colour coding of perceptions

<table>
<thead>
<tr>
<th>Colour</th>
<th>0 ≥</th>
<th>&lt; 2.33</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>2.33 ≥</td>
<td>Orange</td>
</tr>
<tr>
<td>Orange</td>
<td>4.66 ≥</td>
<td>Green</td>
</tr>
</tbody>
</table>

Figure 6 The research process of the study

3.3 Research quality

The validity is regarded as one of the most important criteria of research (Bryman & Bell, 2015). However, there are ongoing discussions regarding the relevance of the different criteria used for assessing the quality of qualitative research (Bryman & Bell, 2015). This is due to that the criteria for assessing the quality of the research mainly are dominated by positivistic/quantitative inspired logics (Halldorsson & Aastrup, 2003). Halldorsson and Aastrup (2003) argue that qualitative research which is commonly dominated by naturalistic/qualitative aspects should be assessed according to a qualitative alternative in order to avoid a misfit. Trustworthiness is a parallel criterion for naturalistic/qualitative research which includes credibility, transferability, dependability and confirmability (Guba & Lincoln, 1989). The usage of both qualitative and quantitative data assures the credibility in this study as it increases triangulation by the avoidance of too immense a reliance of one single approach and the results can be compared which is one technique for ensuring credibility (Bryman & Bell, 2015). Due to the operational focus of this work, this study only investigates the compliance with the ambidextrous elements within the manufacturing unit, excluding other support functions, at manufacturing SMEs. However, by investigating other functions the credibility of this study could have been ensured further.
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The second criterion is the transferability and refers to the generalisability (Guba & Lincoln, 1989). However, true generalization is not possible, as both time and space changes both the context and the individuals in it, thus creating constraints in generalising the findings (Erlandson, et al., 1993). Although, the knowledge attained from this report and its findings can be applicable for other manufacturing SMEs that constitutes a similar context as the case companies (Erlandson, et al., 1993). The difficulties with the different definitions was anticipated, hence the definitions and examples of exploration and exploitation was attached on the questionnaire that the interviewees filled in during the questionnaire-interviews. Despite the attempts to mitigate the risk, the interviewees tended to use their own individual interpretations of exploration and what activates that could be related to exploration. Such a context dependent vocabulary may impact the direct transferability of the findings if one is not observant on other contexts’ potential differences in how the concepts are perceived. However, that the interviewees have their own individual interpretation is in itself a finding since it shows a gap between the industry and the theory of the field within organisational ambidexterity that shows that the definition of exploration and exploitation varies. One way of decreasing this could have been to acquaint the interviewees with the different terms and their definitions during a session before the questionnaire-interviews as this could have decreased the risk for individual interpretations. Due to the diverse group of interviewees it was difficult to assure that the terminology would be understandable to all interviewees, and some terms such as strategy and trade-off posed a challenge for some interviewees. This can also have an impact on the direct transferability of the findings. To minimize this, the questions regarding any of the terms was explained in a similar way to the interviewees to avoid bias by the researchers. Another factor that could have an effect on how the interviewees answered is the Hawthorne effect. The Hawthorne effect concerns the effect of being the studied subject in an experiment, which affect the subject into wanting to answer or express themselves in a way that is according to what the subject thinks that the study aims to achieve (Bryman & Bell, 2015).

Dependability is the third criterion for quality assessment of qualitative research and is a parallel to the conventionally term of reliability (Halldorsson & Aastrup, 2003). Dependability concerns the stability of data and that the researcher keeps all records during all phases of the research process (Bryman & Bell, 2015). Dependability was ensured by maintaining all records and documents from the questionnaire-interviews and the data collection during the whole research process. Confirmability is the fourth and final criteria for assessing qualitative research, and concerns the objectivity of the researcher and that the research was conducted in good faith (Bryman & Bell, 2015). In this study, confirmability was ensured by demonstrating how the findings can be confirmed and presenting the sources which all conclusions and interpretations are based on.
3.4 Ethics

It is the responsibility of the researchers to carefully assess the ethical aspects of their research (Bryman & Bell, 2015). Diener and Grandall (1978) have defined four main areas of consideration to assess when conducting business research. These areas are harm of participants, lack of informed consent, invasion of privacy and the involvement of deception. To ensure that this report fulfils and take these ethical considerations into regard different actions have been taken. The first area concerns the harm of participants. To ensure that no harm can happen to any of the participants in this study, the identity of all participants and both companies is confidential. The purpose with omitting the names of the interviewees and the companies is to protect the interviewees and the company’s anonymity. However, since the purpose of this study was to investigate how the compliance with the ambidextrous elements is perceived at different levels in manufacturing SMEs, the hierarchal level of the interviewees within the companies was of interest and could therefore not be left out in this study. Instead, the names of the interviewees were replaced with their official titles to differentiate the different levels of the interviewees. Those interviewees that expressed consent when being asked if he or she allowed the questionnaire-interview to be recorded, were informed that the recording will be accessible to the researchers only. The second area defined by Diener and Grandall (1978) concerns the lack of informed consent. All participants in this study have been informed of the purpose and the nature of the research before being asked if they want to be involved. The third area concerns invasion of privacy. Invasion of privacy is very much linked to the previous area, lack of informed consent (Bryman & Bell, 2015). If the participant is aware of the details of the research and gives his or her consent to participating in the study, the participant also acknowledges that this might intrude to the right to privacy for a limited time, as the participant agrees to be involved in the research. Some topics can be judged as sensitive to everyone on beforehand and therefore be handled sensitively, although it is not always possible to foresee beforehand (Bryman & Bell, 2015). Therefore, each case in this study was treated individually and sensitively which according to Bryman and Bell (2015) is a way to manage invasion of privacy during interviews. The fourth area defined by Diener and Grandall (1978) concerns the involvement of deception. Deception takes place when the researchers present their research as something other than what it is (Bryman & Bell, 2015). Before the interviewees in this study were asked if they gave their consent to be involved in the study, they were given the information about the nature of the research and its purpose.
4 Company descriptions

This chapter outlines the two small Swedish manufacturing companies that the case study was carried out in. Both companies have less than 50 employees and a turnover of less than 10 million euros per year which are the two factors that determines if a company is considered a small company by the European Commissions (European Commission, 2018).

4.1 Metallic Inc.
Metallic Inc. is a subsidiary to a Swedish family owned group with several independent sites. The site is managed by a site manager and a senior team consistent of the site manager, production manager, lead production engineer, lead sales and members of the group’s board of directors. Metallic Inc. is a subcontractor within machining and supply’s for example the defence industry, medtech and heavy-duty industry all where with strict tolerances. The workforce consists of in total 45 employees, 10 white collar workers working with e.g. sales, production engineering and management and 35 workers working with e.g. CNC or lathe machines, assembly or quality controls.

4.2 Plastic Inc.
Plastic Inc. is a family owned company, managed by the owning family which has the position of CEO and CFO in the company. The company is a subcontractor within plastic injection moulding. The majority of the revenue stem from the same customer in the furniture industry. In total, Plastic Inc. employs 40 persons, including management, administration, engineering (working with realising the customers’ drawings), operators, tool makers, set-up technicians and a process developer. It is a multi-cultural workplace with many employees from different cultures and at different language levels.
5 Findings

This chapter outlines the findings from the questionnaire-interviews, the findings are structured according to the structural and contextual elements. Each statement and company are described separately before finally summarising the findings from each element at the end of the subchapter.

5.1 Structural ambidexterity

In the following subchapter the findings regarding the elements of structural ambidexterity are described. The answers from Metallic Inc. are outlined in the first section, followed by the answers from Plastic Inc. and ending with a summary of each element where the answers from Metallic Inc. and Plastic Ins are compared.

5.1.1 Strategic intent

Compelling strategy

At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the compelling strategy indicated a big difference, ranging from partial disagreement to agreement as seen in Figure 7. The PM indicated a partial disagreement and says that “there is no clear strategy, but the leadership encourages employees to be agile and work with both”. The PE has a similar perception of the compelling strategy, saying that “it perhaps is not that clear... of course everybody understand that it is important, but I cannot put my finger on a clear strategy”. The TL agrees partially with the statement that captures the compelling strategy but says that it is difficult to find enough time to manage both exploration and exploitation. The CNC-operator agrees with the statement motivated by the continuous follow-up on goals every day and that the explorative activities are scheduled once a week where they check improvement suggestions filled in by the employees according to a PDCA-methodology. The CNC-operator also acknowledge that much of the explorative work eventually became adjustments rather than the application of new knowledge i.e. exploitation.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the compelling strategy indicated a slight difference, ranging from neutral to agreement as seen in Figure 7. The CEO agrees partially with the statement and says that the company lacks a compelling strategy that justifies both exploration and exploitation but values insights from employees, “I really try to emphasize this, however it is not a written strategy”. The PM agrees with the statement that captures the compelling strategy and says, “yes we do, and especially the white-collar workers are more involved”. According to the PM, both exploration and exploitation is discussed during daily meetings in the production and “by doing so we communicate the strategies to the workers”. Both of the interviewees at worker level indicated neutral

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1 PDCA-methodology is an iterative four-step method for control and continuous improvement of processes and products.
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to the statement and says that they lack any information regarding strategies and that they are not included in decisions regarding exploration and exploitation. “Instead of communicating with the workers and involve them, new things just show up all the time, which you need to adapt to”. The other worker adds and says that “we don’t feel as important as those who make tools or attract new customers”.

Separate strategies
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures separate strategies indicated a slight difference, ranging from neutral to agreement as seen in Figure 7. All interviewees except the PE are neutral to the statement. The other interviewees say that there are no separate strategies for exploration and exploitation, but that there are different goals for exploration and exploitation and that these goals guide their work rather than a strategy. The PM says that “there are no separate strategies, but we have our work methods with daily meetings where we focus on follow-up of goals and improvements”. However, the PE states that the strategies are indeed separate, based on that the company has different goals for measuring exploration and exploitation. According to the PE there are different forums for discussing exploration and exploitation, where exploitation is discussed during the daily meetings while exploration in considered once a year when the strategies are set.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the separate strategies indicated a slight difference, ranging from partial agreement to strong agreement as seen in Figure 7. The CEO agrees partially and the PM agrees strongly to the statement but they both motivate their answers similarly. Both the CEO and the PM say that the company has a separate strategy for exploitation, focusing on the deliverability and cassations. Goals related to exploitation is communicated through daily meetings. The CEO and the PM say that the strategy for exploration is not very clear, but that employees are encouraged to take initiatives. They also acknowledge that many employees seldom do this due to language and culture barriers. “I want to emphasize that we don’t have an explicitly pronounced strategy in that sense, but we work hard with encouraging people to present ideas, that is quite known. Perhaps not to all levels, it is not for certain that the workers knows that they have the opportunity to express their opinions... I think it has to do with their culture and depending on individual’s background.”. It may be observed that the PM deviates from the definition of exploration, as the PM considers the work with adjustments of the machines as explorative work rather than exploitive. Both the workers agree with the statement that captures separate strategies and says that there are separate strategies for exploitation and exploration. The IM-operator says that activities related to the strategy for exploitation is handled every day through daily meetings where goals for causation and problems that has occurred during the day are discussed. Activities related to the strategy for exploration is not handled as often, the IM-operator says “what will happened during the year is usually only communicated by the CEO before Christmas and summer leave”. The set-up technician however says that there is a
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difference between the working groups. According to the set-up technician there are no daily meetings in his group any longer and he says that there is a lack of information. Both workers are aware of the possibility to express opinions, but they recognise that the workers in general tend to hesitate to express their opinions through the formal process, and instead they prefer to approach their colleagues directly, trying to solve problems as they arise.

Summary of strategic intent

When comparing the result of the companies, Plastic Inc. has a slightly higher mean and less dispersion regarding the perceptions of the compelling strategy in comparison Metallic Inc. as seen in Figure 7. At Metallic Inc. the dispersion is due to a big difference in the perceptions given by the PM and the CNC-operator. The PM indicated partial disagreement and says that the company does not have a compelling strategy while the CNC-operator indicated an agreement to the statement and claims that the company has a compelling strategy. Regarding the statement that captures separate strategies, Plastic Inc. indicates a higher mean than Metallic Inc. (as seen in Figure 7). The difference in the mean is due to the answers from the workers that differs between the companies. The interviewees at worker level at both companies says that they are not very involved when it comes to exploration, but at Plastic Inc. the workers indicated a stronger agreement to the statement than at Metallic Inc.

![Figure 7 The grading of compliance with the statements capturing to strategic intent.](image)

5.1.2 Vision and values

Common vision

At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the common vision indicated a difference, ranging from neutral to strong agreement as seen in Figure 8. The PM indicated a neutral agreement to the statement, and says that few adheres to the vision. “I experience that few believe or can grasp the vision... instead many strive to develop and never settle.” Both the interviewees at worker level indicated an agreement to the statement saying, “sometimes the vision is demonstrated in our work, but mostly it shows in the financial investments undertaken
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by the company during the last couple of years”. The PE indicated a strong agreement and says, “of course we have a common vision, everybody has different ideas, but we have one goal that we all are striving for”.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the common vision indicated a big difference, ranging from partial disagreement to strong agreement as seen in Figure 8. The CEO indicated partial disagreement, saying that there is no outspoken vision in the common sense, instead the company is top-oriented “if you would ask the employees here they would say that we do not have a vision, it is CEO who is in charge”. The CEO says that he hopes that the employees senses the direction of the company. However, the PM indicated a strong agreement and says that they have a strong common vision to develop the company with the help of new technology and that the vision is well-known, at least to the senior team. Both interviewees at worker level indicated a partial agreement and the IM-operator says that they are not involved in the vision and the work of the senior team and therefore not aware of what is happening in the long-term even though they notice the transition towards automation.

Common values
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the common values indicated a difference, ranging from neutral to strong agreement as seen in Figure 8. The common values were created collectively by the employees to act as a foundation for their work according to the PE. The PE indicated a strong agreement and says that we do have common values. The rest of the interviewees acknowledge that not all employees adhere to the values. The lathe-operator says that they are “almost brainwashed with the values, they are presented at every meeting”. He also says that a few years ago the whole company visited one of their biggest customers. Seeing how their products were used at the customer site gave him an increased understanding for the importance of their common values and work methods.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the common values indicated no difference, ranging from agreement to strong agreement as seen in Figure 8. The CEO indicated a strong agreement to the statement and says that they have done a thorough work with the values and that they were to be followed by all “the values are very important for us”. According to the CEO, the values have been created by all employees and everyone’s voice was heard upon creation,”everyone has to sign these values before being employed”. The PM and both of the interviewees at worker level indicated an agreement to the statement that captures the common values. The IM-operator says that the company has values visualised in the communal areas. However, the IM-operator says that not all employees adhere to them.

Summary of vision and values
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Plastic Inc. had a greater dispersion regarding the perceptions of the vision and values, and a lower mean compared to Metallic Inc. The top managers at both companies, which is the CEO at Plastic Inc. and the PM at Metallic Inc., indicated the lowest agreement to the statement that captures the vision and values, while the middle managers at both companies, which is the TL and the PE at Metallic Inc the PM at Plastic Inc. all indicated the highest agreement. All the interviewees at worker level at both companies indicated an agreement ranging between the answers of their top and middle managers at both companies. I.e. the top managers at both companies tend to be critical when viewing the company’s compliance with the ambidextrous element, while the middle managers tend to exaggerate the company’s compliance with the elements. The CEO at Plastic Inc. has personally influenced the importance of values with his leadership style which is demonstrated by the indication of agreement by the rest of the interviewees at Plastic Inc. The values at Metallic Inc. have also been created collectively and are presented frequently, but the interviewees at both manager and worker level do not perceive that the company complies as strongly with the statement compared to Plastic Inc.

![Figure 8](image)

Figure 8 The grading of compliance with the statements capturing vision and values.

5.1.3 Responsibility

Ownership

At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the ownership of the senior team indicated no difference, ranging from partial agreement to agreement as seen in Figure 9. The PM indicated partial agreement to the statement and says that due to low levels of hierarchy in the company employees in general take responsibility for goals and the handling of deviations. The rest of the interviewees at both manager and worker level indicated an agreement to the statement. The PE says that “The managers has their ideas of how to run the company and their word is final”. The CNC-operator says that “when we have a problem it is taken seriously and the whole company comes running to solve it”.

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At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the ownership indicated no difference and all interviewees indicated a strong agreement as seen in Figure 9. This is motivated by a sense of mutual responsibility for the output of the company where they want to help each other and focuses on solutions rather than problems. The CEO says that “our leaders exhibit a fantastic example of responsibility, historically we have not presented goals but now we do it every week and the responsibility is delegated throughout the company”. The PM says that “you notice on those you work with, that they are passionate about what they do and wants the best for the company… If there is a problem, we solve it together, it is not only the productions responsibility it is everyone’s problem”. Both the interviewees at worker level say that the PM take responsibility by being presence and can take actions if necessary.

Reward system
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the reward system indicated a slight difference, ranging from strong disagreement to partial disagreement as seen in. All of the interviewees say that the company does not have a common-fate reward system within the company. However, they are occasionally rewarded with cake etc. to celebrate success as a managerial appreciation.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the reward system indicated no difference, ranging from strong disagreement to disagreement as seen in Figure 9. All of the interviewees at both manager and worker level says that the company does not have a common fate reward system. However, they are occasionally rewarded with breakfast or cake etc. to celebrate successes as a managerial appreciation.

Communicating strategies
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the communicating of strategies indicated a slight difference, ranging from partial agreement to strong agreement as seen in Figure 9. The PM indicated the lowest with a partial agreement and says that strategies are broken down to the company through goals to make everybody understand how they contribute. However, the PM says that “pursuing the goals requires present leaders, which we have failed with”. The PE indicated a strong agreement and says that “we communicate goal fulfilment daily and if we do not fulfil our goals, we take action”. The rest of the interviewees at both manager and worker level says that the management are successful in relentlessly communicating the strategy, especially through their goals which are discussed daily.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the communicating of strategies indicated a difference, ranging from neutral to strong agreement as seen in Figure 9. The PM indicated a strong agreement and says that the managers are successful in relentlessly communication the strategy based on
meetings held daily, weekly and monthly where goals and strategies are addressed. Meanwhile the CEO and both interviewees at worker level indicated neutral and partial agreement and says that this is an area of improvement and that the company needs to become better at communicating the goals and strategies continuously.

Summary of responsibility
Plastic Inc. indicated an unanimously strong agreement regarding the ownership. The interviewees at Metallic Inc. indicated no difference in how they perceive the element but with a lower mean compared with Plastic Inc. Both companies motivated their perception of the company’s compliance with the ambidextrous element in similar ways, emphasising on responsible managers and that everyone cooperates to solve problems. Neither of the companies perceive that they have a collective reward system. Metallic Inc. has a smaller dispersion and a higher mean compared to Plastic Inc. as seen in Figure 9. The middle managers at both companies indicated a strong agreement while the top managers indicated partial agreement which was among the lowest. At Metallic Inc. the interviewees at worker level indicated a stronger agreement which was closer to the middle managers at Metallic Inc., compared to the workers at Plastic Inc. who indicated a lower agreement which was closer to the indicated agreement of the CEO at Plastic Inc.

Figure 9 The grading of compliance with the statements capturing responsibility.

5.1.4 Alignment
Separate units
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the separate units indicated a big difference, ranging from strong disagreement to strong agreement as seen in Figure 10. The PE indicated a strong agreement to the statement and says “the units for exploration and exploitation are completely separate”. In contrast to the TL who indicated a strong disagreement and says “exploration and exploitation is not separated”. The CNC-operator indicates a partial disagreement, and adds “no one is working entirely with exploration, different people from different units are involved in the problem solving”. The PM also indicated a
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partial disagreement and says “we have no separate unit”, but adds that this is an area where they want to improve in and that he wants the production engineers to work more with exploration.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the separate units indicated a difference, ranging from strong disagreement to neutral as seen in Figure 10. The CEO indicated a strong disagreement saying that “everybody is involved in both; we have no special unit for exploration”. The PM indicated a disagreement and says that there is no single unit for exploration only.

Leverage organisational assets

At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the leverage of organisational assets indicated no difference, ranging from partial agreement to agreement as seen in Figure 10. The TL indicated a partial agreement and says that “we try to see the entire company as one team”. The PE indicated an agreement with the statement that captures the leverage of organisational assets and says “we are a small company which makes it easy to allocate the resources to where they are needed the most, but by moving someone you create a vacancy elsewhere”. The PE elaborates and says “I do not agree that there is an understanding for reallocating personnel” and with an increasing degree of specialisation in the workforce it becomes more challenging to relocate resources at a tactical level. The CNC-operator indicated an agreement and says that the team leaders are good at allocating the staff to the area with most need if for example someone would be sick. The lathe operator indicated a partial agreement and adds that the teams have received roughly as many new machines and that the staff is equally distributed.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the leverage of organisational assets indicated no difference, ranging from an agreement to strong agreement as seen in Figure 10. The CEO indicated an agreement to the statement and says, “if there is a lack of resources at some place, we all try to help out... there is no prestige”. The IM-operator indicated an agreement to the statement and says, “sometimes white-collar employees and even senior managers help out in the production and run the machines”.

Summary of alignment

Metallic Inc. has a greater dispersion and a higher mean compared to Plastic Inc. as seen in Figure 10. The dispersion is due to the different perceptions between the three interviewees at manager level, who indicated both strong disagreement and a strong agreement. At Plastic Inc. the dispersion was due to the different perceptions between the interviewees at manager level and the interviewees at worker level, but all interviewees at Plastic Inc. indicated a disagreement to the statement. There was no difference in the perceptions of the interviewees at neither Plastic Inc. nor Metallic Inc., although Plastic Inc. has a higher mean. One difference that can be seen in the motivations given by the interviewees at the companies, is that Plastic Inc. gives
practical examples of how they leverage organisational assets while the interviewees at Metallic Inc. gives real or practical examples of how they leverage organisational assets while the interviewees at Metallic Inc. says that they are flexible but they also find it difficult to move personnel.

![Alignment]

Figure 10 The grading of compliance with the statements capturing alignment.

5.1.5 Tension
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the management of tensions indicated no difference, ranging from partial agreement to agreement as seen in Figure 11. The interviewees at both manager and worker level had similar motivations saying that the size of the company and the lack of hierarchal structure within the company could be one reason for why they perceived that conflicts are easily resolved.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the management of tensions indicated a slight difference, ranging from partial agreement to strong agreement as seen in Figure 11. The CEO indicated a strong agreement and says that all discussions are handled with respect and openness. The interviewees at worker level and the PM indicated a partial agreement and an agreement. The PM says “due to the fact that most of us have worked here for many years and we know each other, it makes it easy to talk to each other and solve tensions” but that they still strive to improve in this area. The IM-operator says that conflicts regarding for example lack of resources is solved while more sensitive matters such as personal problems tends to be left unsolved and that it creates tension within the company.

Summary of tension
Plastic Inc. has a greater dispersion and a lower mean compared to Metallic Inc. as seen in Figure 11. The difference in dispersion between the companies is due to the different perceptions of the top managers. At Metallic Inc., the top manager indicated a lower agreement than the rest of the interviewees at Metallic Inc., while the top manager at
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Plastic Inc. indicated a stronger agreement than the rest of the interviewees at Plastic Inc.

![Tension Graph]

Figure 11 The grading of compliance with the statement capturing tension.

5.2 Contextual ambidexterity
In the following subchapter the findings regarding the elements of contextual ambidexterity are described. The answers from Metallic Inc. are outlined in the first section, followed by the answers from Plastic Inc. and ending with a summary of each element where the answers from Metallic Inc. and Plastic Inc. are compared.

5.2.1 Initiative taking
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures initiative-taking indicated no difference, ranging from partial agreement to agreement as seen in Figure 12. The TL and lathe operator indicated an agreement to the statement. The TL says, “if you have a suggestion it is not impossible to realise it, the entire team has an opportunity to influence”. The PE engineer and the CNC operator indicated a partial agreement. The PE says, “we are narrow minded regarding who is doing what work”. The CNC operator shares the same views and says “I don’t want to step on someone’s toes, so I tend to stay within the confines of my job”.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures initiative-taking indicated no difference, ranging from an agreement to a strong agreement as seen in Figure 12. Both of the interviewees at worker level indicated a strong agreement and the set-up technician says, “if you see something that is not good or can be improved, just let the manager know and if they approve you may realise your idea”. The CEO and PM indicated an agreement saying that it is possible to take initiatives. The PM says, “it depends on your personality, if you want and dare to take initiatives you can”.

Summary of initiative taking
Plastic Inc. has a higher mean than Metallic Inc. as seen in Figure 12. The interviewees at both manager and worker level at Metallic Inc. perceive the possibility to take
initiatives as lower compared to the interviewees at manager and worker level at Plastic Inc. At Plastic Inc. the interviewees at worker level perceive the possibility to take initiatives stronger than their managers.

Figure 12 The grading of compliance with the statement capturing initiative-taking.

5.2.2 Cooperating
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures cooperating and combining of efforts indicated a slight difference, ranging from partial agreement to strong agreement as seen in Figure 13. The PM indicated a partial agreement and says that the company has a prestige less culture. The PE shares the same view and indicated a strong agreement. The PE says, “we can cooperate even though we are not in the same group”. The TL indicated a partial agreement and says, “we dare to make mistakes, which I believe is essential to develop”. Both the interviewees at worker level indicated an agreement to the statement that captures cooperating and says that they mainly cooperate with the production engineers which works well, but also other teams can prove helpful to cooperate with.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures cooperating and combining of efforts indicated no difference, ranging from agreement to strong agreement as seen in Figure 13. Both the CEO and the interviewees at worker level indicated a strong agreement to the statement, based on the perceived feeling of team spirit within the company and the willingness to solve problems together. The CEO says, “we are a large team with the common mission to satisfy our customers in the best possible way”. The IM-operator indicated a strong agreement and says, “we often end up trying to solve problems with many people and everyone has a say among operators, set-up technicians and whatever they call themselves at the office”.

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Summary of cooperating
Plastic Inc. has a greater mean and a smaller dispersion compared to Metallic Inc. as seen in Figure 13. The interviewees at both companies motivate their answers in similar way. The main difference that can be seen between the companies is that the interviewees at Plastic Inc. tend to perceive that their company comply stronger to the statement than the interviewees at Metallic Inc. One explanation for this could be that Plastic Inc. might have a smaller perception gap between the different levels within the company, compared to Metallic Inc.

![Cooperating](image)

Figure 13 The grading of compliance with the statement capturing cooperating.

5.2.3 Brokering
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures brokering of individuals indicated a slight difference, ranging from neutral to agreement as seen in Figure 14. The TL indicated neutral and says that the company and its individuals can sometimes appear as set in its way and that they have a lot to gain on becoming more flexible. Both of the interviewees at worker level indicated an agreement to the statement that captures brokering of individuals and says that there is always someone who could support them in problem solving. The lathe operator says, “it is possible to approach anyone”. The PM has similar experiences and indicated a partial agreement. However, the PM sometimes experience that there can be a need for an extra nudge in order for the individuals to take responsibility.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures brokering of individuals indicated a difference, ranging from neutral to a strong agreement as seen in Figure 14. The interviewees at both manager and worker level had a similar perception which is that solutions for different problems can be discussed with individuals within all units. The PM indicated an agreement to the statement that captures brokering of individuals and says, “regardless who you choose to talk to, there are no problems, we help each other and it’s a culture that is attached
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to our walls”. The IM-operator indicated a strong agreement to the statement that captures brokering of individuals, and says that all teams help each other out, “we are really good at this”.

Summary of brokering
Plastic Inc. has a greater dispersion, but a higher mean compared to Metallic Inc. as seen in Figure 14. This shows that even though the interviewees at both manager and worker level at Plastic Inc. has a greater dispersion in their answers compared to Metallic Inc., the interviewees at Plastic Inc. still perceive that their company comply stronger with the contextual element of brokering compared to the interviewees at Metallic Inc.

![Figure 14 The grading of compliance with the statement capturing brokering.](image)

5.2.4 Multitasking
At Metallic Inc. the perceptions among the interviewees regarding the statement that captures the possibility to wear more than one hat indicated no difference, ranging from partial agreement to agreement as seen in Figure 15. The PM indicated a partial agreement and says that the small size of the company facilitates a shared understanding of the process and shared responsibility for the output of the company, focusing on the ‘right from me’-principle. Which makes it easier to try other hats. The TL indicated an agreement and says “you have all kinds of possibilities to develop and try different things if you want to”.

At Plastic Inc. the perceptions among the interviewees regarding the statement that captures the possibility to wear more than one hat indicated no difference, ranging from agreement to strong agreement as seen in Figure 15. Both the workers indicated a strong agreement and says it is possible to take on multiple roles. The CEO and the PM

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2 The right from me-principle is when all employees are encouraged to take ownership over every product that leaves their station and assure that it has the right quality.
indicated an agreement and says that it is possible but that it is up to the individuals if they are comfortable with wearing more than one hat.

**Summary of multitasking**
Plastic Inc. has a higher mean compared to Metallic Inc. as seen in Figure 15. This shows that the interviewees at both manager and worker level at Plastic Inc. perceive that their company comply stronger with the contextual element of multitasking compared to the interviewees at Metallic Inc.

Figure 15 The grading of compliance with the statement capturing multi-tasking.
6 Analysis

This chapter outlines the analysis of the findings in relation to the research questions, as seen in Figure 16. The different levels are analysed separately and subsequently summarised and combined for each element. The focus lays on what and how the interviewees motivated their answers rather than their indication on the Likert scale.

Figure 16 Illustration of the research questions combined with the analytical framework
6.1 RQ1: How do different hierarchical levels in manufacturing SMEs perceive the company's compliance with the ambidextrous elements related to structural ambidexterity?

As pointed out in the introduction this research question emphasises the companies’ compliance with structural elements, which are strategic intent, vision and values, responsibility, alignment and tensions. In the following subchapter the perceptions regarding these elements are analysed.

6.1.1 Strategic intent

When focusing on the element strategic intent at manager level, the top managers at both companies state that they have neither a compelling strategy nor a separate strategy for exploration and exploitation. They both emphasise on the importance of a leadership that encourage both a compelling strategy and separate strategies for exploration and exploitation. However, the middle managers at both companies perceive that there is a compelling strategy and that there are separate strategies for both exploration and exploitation. One explanation to this might be that the middle managers do not have full insight to the strategic work. Instead they interpret the leadership that prioritise both as a sign that there is a compelling strategy and separate strategies.

When focusing on the worker level’s perceptions of the element strategic intent, the data shows that while the workers at Plastic Inc. perceive no compelling strategy, the workers at Metallic Inc. perceive a compelling strategy that encourages the importance of both exploration and exploitation. This is motivated by their continuous involvement in accomplishment and follow-up of goals, which Ajayi et al (2017) points out as one way for workers to become more involved. However, the workers at Plastic Inc. feel that they are not included in the strategic work of their company and that decisions concerning their work are being taken without their knowledge. Regarding the use of separate strategies, the workers at both companies perceive a separate strategy for exploitation which governs their daily operations. However, they feel that the work with exploration occurs more sporadically and lack a separate strategy as a guidance.

As can be seen in the above descriptions, it seems as if the top managers at both companies tend to have a more holistic view when viewing their own company’s compliance with the ambidextrous element and can view the company more objectively. Since the middle-manager does not have the same holistic view they tend to exaggerate the company’s compliance with the ambidextrous element. One explanation for this could be that the top managers have a higher level of insight into the strategic parts of the company, and can view the full picture, while the middle managers might not. The workers perception of the company’s strategies is based on the goals that they are pursuing in the daily operation. Which is why Kunonga et al (2010) emphasises the importance of translating the company’s vision into strategic goals and actions for all units in the company and Barton and Ambrosini (2013) emphasises the importance of communicating the goals. Exploitative activities are measured every day, while explorative activities are more sporadically pursued. The
sporicidal pursuit and the lack of involvement results in that the workers perceive that they lack insight to the company's explorative activities.

6.1.2 Vision and values
Regarding the common vision at manager level, the top manager at Metallic Inc. says that they have an explicit vision while the top manager at Plastic Inc. says that their vision is only implicit. However, they both perceive the same issue regarding the common vision, which is that few of the employees believes in the vision. The middle managers at both companies perceive that they have an explicit common vision that is known to all. Regarding the common values, the top manager at Metallic Inc. feels that there are explicit values but acknowledge that not all employees adhere to them. Meanwhile one of the middle managers at Metallic Inc. says that there are no doubts whether they have common values or not and that all employees in fact adhere to them. At Plastic Inc. the managers perceive that the company have common values that are adhered to by all employees.

Regarding the worker level’s perception of the element vision and values, the data shows that the workers at Metallic Inc. perceive that there is a common vision and motivates it by the financial investment in machines that they have seen during the past years. The workers at Plastic Inc. also says that financial investments in automation shows the direction of the company but they perceive that they are not included in the vision and the long-term goals of the company. Thus, they acknowledge that there is a vision, but it is not commonly accepted. Regarding the common values, the workers at both companies say that the values are communicated thoroughly but they perceive that not all employees adhere to them.

As can be seen in the above descriptions, it seems as the top manager at Metallic Inc. tend to underestimate the company’s compliance with the element of common vision and values, perceiving that the rest of the company cannot grasp the vision or adhere to the values. The rest of the interviewees claim that the vision is commonly known as well as the values even though they feel that not all adheres to the values. The same situation can be seen at Plastic Inc. One of the workers at Metallic Inc. says that the reason he adheres to the values was a customer visit where he gained insight to the importance of their work. Activities such as customer visits can increase the employees understanding of their work and its effects. Regarding the vision, there are different perceptions about whether it is explicit or implicit. Even though the workers see the direction of the companies through its investments, they do not feel included in the strategic work even when it has direct effects on their work environment. Meanwhile Andries and Czarnitzki (2014) means that the involvement of production workers can contribute greatly to the innovation of processes.

6.1.3 Responsibility
Regarding the ownership at manager level, the managers at both companies perceive that its senior team explicitly owns the strategies for exploration and exploitation. This
was more evident at Plastic Inc. whose managers highlighted the passion which was exhibited by its managers. None of the managers at either company say that they have a reward system. However, regarding the communication of strategies, the managers at both companies perceive that managers communicate strategies and fulfilment of goals through daily meeting. However, the top manager at Metallic Inc. states that the managers have failed with being present enough to advocate this. Meanwhile the top manager at Plastic Inc. says that they need to increase the support to their team leaders for them to increase their responsibility and practise their leadership.

When focusing on the worker level’s perceptions of the element responsibility, the data in relation to the ownership shows that the workers at both companies perceive that the senior team’s ownership is high which is motivated by their presence in problem solving. Regarding the reward system also the workers at both companies says that they do not have a reward system. Regarding the communication of strategies, the workers at Metallic Inc. perceive that the managers communicate strategies and goal fulfilment relentlessly through the use of daily goals which are communicated continuously. At worker level at Plastic Inc. there is a difference of opinion regarding the relentless communication of strategies, as some say that strategies are communicated through daily goals while other say it is not communicating at all.

As can be seen in the above descriptions, it seems as the managers and workers at both companies share the same perception of the senior teams’ ownership of strategies and goal fulfilment. It is motivated by the passion of leaders and their responsible approach to problem solving that occurs when pursuing the strategies where the senior team are present. However, nor managers or workers at both companies perceive that the companies have a common-fate reward system. The managers and workers at both companies does perceive that its managers communicate strategies and fulfilment of goals through daily meeting. Although the top managers at both companies perceive that there is room for improvements regarding this. The top manager at Metallic Inc. feels that its managers should be more present in communicating their strategies. Which Barton and Ambrosini (2013) also emphasise, where especially middle managers have a large role in communicating the strategies from the strategic apex to the operating core. Ergo the interviewees reflect that the managers are present in problem solving but not as present in the communication of strategies. This could be a sign of the reactive firefighting mentality that SMEs are struggling with (Caglano & Spina, 2002; Dangayach & Deshmukh, 2001; Löfving, 2009).

6.1.4 Alignment
When focusing on the manager level’s perception of the element alignment, the data regarding separate units shows that the top manager and one of the middle managers at Metallic Inc. perceive that there are no separate units for exploration and exploitation. However, the other middle manager at Metallic Inc. perceives that the units for exploration and exploitation are in fact completely separated. None of the managers at Plastic Inc. perceive that the company have separate units for exploration and
exploitation and instead they claim that everyone is involved in both. Regarding the leverage of organisational assets, the top manager and one of the middle managers at Metallic Inc. perceive that the company can properly leverage organisational assets. However, the other middle manager at Metallic Inc. says that this is easy because of their small size but that they lack a common understanding for reallocating personnel within the company. The managers at Plastic Inc. perceive that the company can properly leverage organisational assets and that there is no prestige for anyone to help wherever they are needed.

When focusing on the worker level’s perception of the element alignment, the data in relation to the separate units shows that the workers at both companies perceive that the company does not have separate units for exploration and exploitation. Instead everyone is involved in both activities. Regarding the leverage of organisational assets, the workers at both companies perceive that their company can properly leverage organisational assets. The workers at Metallic Inc. feel that organisational assets are equally distributed between the teams. At Plastic Inc. the workers gave examples on where even white-collar workers helped out operating the machines.

As can be seen in the above descriptions, it seems as all managers and workers except one middle manager at Metallic Inc. perceive the units for exploration and exploitation as separate. Both companies properly leverage their organisational assets but there are some tensions regarding the common understanding for reallocating personnel at Metallic Inc. This could be related to the lack of strategic intent that justifies the importance of both exploration and exploitation and thus lacks a rationale why resources are reallocated (O'Reilly & Tushman, 2011; Slack & Lewis, 2017). It can be noted that Plastic Inc. has a prestige less culture where everybody can help out with operating the machines regardless of their position in the company. Which both workers and the managers at Plastic Inc. confirms with their motivations. This could be an effect of being a SME with low hierarchies and closeness to all employees (Senaratne & Wang, 2018; Stentoft, et al., 2015).

6.1.5 Tension
The managers at both companies perceive that its managers can resolve and manage tensions that arise in the company. The managers at both Metallic Inc. and Plastic Inc. motivate this by their small size and that they have close relationships to each other. The managers at Plastic Inc. gave more examples on how they resolve and manage tension and why they succeed with it compared to Metallic Inc even though the middle manager at Plastic Inc. says that this is an area they always can improve in. The CEO at Plastic Inc. is the most confident of all interviewees at manager level regarding this element.

The workers at Plastic Inc. perceive that the managers can resolve and manage tension. However, they also say that sensitive issues such as personal problems that might emerge at work are not managed as good. One of the workers at Plastic Inc. feels that
the avoidance of solving personal problems can result in tensions arising within the company. The workers at Metallic Inc. perceive that its managers can resolve and manage tensions and that problems are solved easily.

As can be seen in the above description it can be noted that the CEO at Plastic Inc. tend to exaggerate the company’s compliance with the element regarding managing and solving tension. One explanation for this could be that the CEO is also the owner of the company, thus possesses the most power in the company. This could result in that the CEO always has the final say in any discussions, which according to Burton (2001) could be due to the hierarchical level of the CEO, leading to the perception that tensions always are solved. Meanwhile the workers and the middle manager at Plastic Inc. reflected a more nuanced picture of the company saying even though they agreed with the statement they also indicated that this as an area that the company could improve in. Both the managers and the workers at Metallic Inc. gave short but similar motivations regarding their perception of the ambidextrous element.

6.1.6 Summary of perception differences among the structural elements
When studying the perceptions regarding the structural ambidexterity, a difference within the manager group can be identified. The top managers tend to underestimate the company’s compliance with the element regarding structural ambidexterity and the middle managers tend to exaggerate the company’s compliance with the element. Therefore, it is interesting to study these hierarchical levels separately as can be seen in Figure 17 and Figure 18. Meanwhile, the workers’ perceptions can be found between the top manager and the middle managers. The workers also perceive that the explorative activities occur sporadically and that they are not involved in these activities. The data shows that both companies experience problems related to a firefighting mentality, prioritising activities related to exploitation rather than exploration. The interviewees also tend to have different ideas regarding the definition of exploration, making it difficult for the companies to perform the changes that are required in order to develop and achieve long-term sustainable growth. By defining and communicating the strategies for exploration, the perception gaps that exist between the different levels within the company could be decreased.
6.2 RQ2: How do different hierarchical levels in manufacturing SMEs perceive the company’s compliance with the ambidextrous elements related to contextual ambidexterity?

As pointed out in the introduction this research question emphasises the companies’ compliance with contextual elements, which are initiative taking, cooperating,
brokering and multitasking. In the following subchapter the perceptions regarding these elements are analysed.

6.2.1 Initiative taking
Regarding initiative taking the data shows that the managers at Plastic Inc. perceive that individuals can take initiatives and act on opportunities in their company as long as he or she feel comfortable doing so. At Metallic Inc. the top manager and one of the middle managers perceive that individuals can take initiatives and act on opportunities in their company and that it’s supported by their way of working. However, the other middle manager feels that it’s difficult for individuals to take initiatives and act on opportunities due to a perceived sense of narrowness when it comes to job confines.

A similar issue is being touch upon by one of the workers at Metallic Inc, both workers feel that it’s possible to take initiatives and implement new ideas, but one of the workers prefers not to take initiatives due to the tensions that might appear when stepping outside the role and interfering with someone else’s role. The workers at Plastic Inc. perceive that it is possible to take initiatives and act on opportunities. They strongly emphasise that it’s possible to approach their managers with any idea or improvement suggestion they might have.

As can be seen in the above description, both managers and workers at Plastic Inc. perceive that it is possible for individuals to take initiatives and act on opportunities in their company. The workers even perceive this opportunity more optimistically than their managers. This shows that the workers are in fact encouraged and empowered by the managers to take initiatives. At Metallic Inc. there is also an agreement between the managers and workers regarding the possibility to take initiatives. At Metallic Inc. it is the possibility to take initiatives supported by the work methods at the company. Which Birkinshaw and Gibson (2004) points out is a way to facilitate a culture where individuals can take initiatives to some extent without always having to wait for the initiative to be sign off or approved by a manager. However, representatives from both manager and worker level claims that it can be sensitive when interfering with someone else’s job.

6.2.2 Cooperating
Regarding cooperating, the managers at both companies perceive that individuals are cooperative and seek out others within the company to combine their efforts. The top managers at both companies claim that they have a prestige less culture at their company with low levels of hierarchy, and that this facilitate cooperation with others.

The workers at both companies perceive that individuals are cooperative and seek out others within the company to combine their efforts with. Both say that they can cooperate with not only their closes colleagues but also engineers and managers.

As can be seen in the above description, it seems that the managers and workers at both companies’ share the same perception, and that the culture and size support their
cooperation. Which also Senaratne and Wang (2018) and Stentoft et al (2015) points out is a key characteristic of SMEs. The low levels of hierarchy in both companies facilitate the possibility for the individuals to take initiatives and cooperate with others without having to wait for the top managers to act in case there is a lack of cooperation (Birkinshaw & Gibson, 2004). The workers at Plastic Inc. even perceive the element of cooperating more optimistically than their managers. This shows that it is not only the view of the managers, but this perception is also shared by the workers.

6.2.3 Brokering
Regarding the brokering of individuals and the building of internal linkages, all managers at Plastic Inc. perceive that the company complies with the ambidextrous element. The managers at Plastic Inc. both emphasised that this was due to the culture of the company where everyone helps each other. However, the managers at Metallic Inc. did not share the same perceptions regarding this element. The top manager and one of the middle managers perceive that individuals could indeed build internal linkages through brokering even if the top manager sometimes experiences that there could be a need for an extra nudge in order for the individual to take responsibility. The other middle manager claims that the company tends to be set in its way and could gain a lot on becoming more flexible.

The workers at both Plastic Inc. and Metallic Inc. state that their company complies with the ambidextrous element. The workers at both companies indicated stronger than some of the managers at their own company. This shows that the interviewees at worker level in both companies perceived the ability for brokering of individuals and the building of internal linkages in a more optimistic way than some of its managers.

As can be seen in the previous description, it can be noted that the workers tend to be optimistic about the possibility to build internal linkages and the brokering of individuals within the company. The same goes for the managers at Plastic Inc. However, the managers at Metallic Inc. do not completely agree with each other, as one of the middle managers claims that the company is set in its way. By saying that the company is set in its way he implies that the company is resistant to change. This could mean that the organisation is hesitant to the revolutionary changes that exploration entails (Tushman & O'Reilly, 1996; March, 1991). That the top manager at Metallic Inc. indicated that there sometimes is a need for an extra nudge in order for the individual to take responsibility could confirm the perception of the middle manager that the company tends to be set in its way and it therefore takes an extra nudge for individuals to take responsibility.

6.2.4 Multitasking
Regarding multitasking, the managers at both companies perceive that individuals at the company are multitaskers who are comfortable with wearing more than one hat. The manager at Metallic Inc. explain that the small size of the company contributes to a shared understanding for different processes which makes it easier to take multiple
roles. The managers at Plastic Inc. says that if individuals are comfortable with being a multitasker, then they can wear more than one hat.

The workers at both companies perceive that individuals at the company are multitaskers who are comfortable with wearing more than one hat. Both motivated this with the possibilities to develop and try new things.

As can be seen in above descriptions, it seems that the managers and workers at both companies’ share the same perception. It is up to the individuals to take initiative and if they do, it is possible to take multiple roles. The workers at Plastic Inc. even perceive the element of multitasking more optimistically than their managers. Which shows that it is not only the view of the managers, but this is also perceived at worker level. They also exhibit a level of flexibility that Senaratne and Wang (2018) mean exist in an SME, where you have large insight to other roles and are able to move beyond your own role (Birkinshaw & Gibson, 2004).

6.2.5 Summary of perceptions of contextual elements
When studying the perceptions regarding the contextual ambidexterity, all interviewees have a similar perception as can be seen in Figure 19 and Figure 20. The only difference that can be seen between the levels is that the workers tend to perceive the contextual elements slightly more positive than its managers. Both the companies’ compliance with contextual elements is motivated by the context, which supports it employees to be flexible and contribute wherever they are needed. However, they also experience that it could be sensitive to be too flexible and they are careful not to interfere with someone else’s job, since the interviewees state that not all employees are appreciative to change. The managers and workers perceive the compliance with the contextual element of brokering as lower than the compliance with the element of cooperating, which could be an effect of the resistance within companies where employees are willing to cooperate for their own benefits but they are not willing to selflessly take the role as brokers for others.
Analysis

Figure 19 Perceptions of Metallic Inc.’s compliance with the contextual elements.

Figure 20 Perceptions of Plastic Inc.’s compliance with the contextual elements.
7 Discussion

This chapter outlines the discussion of the analysed findings, highlights the contributions to theory and moreover pinpoint managerial implications of the findings.

7.1 Discussion of findings

The purpose of this study was to investigate how the organisational compliance with ambidextrous elements is perceived at different hierarchical levels in manufacturing SMEs, in order to increase the understanding of organisational ambidexterity in this type of organisations. This has been fulfilled by the identification of a compliance structure where it can be seen that the compliance with the contextual elements is stronger and more unanimous than the compliance with the structural elements, as seen in Figure 21 and Figure 21. The interviewees point out that the reason for the strong compliance with the contextual elements is the characteristics of an SME. In particular, they emphasise the lack of hierarchies, flexibility in the company, different management structures, lack of competences and low number of employees. This is in line with how Bierly and Daly (2007), Man et al (2002), Senaratne and Wang (2018) and Stentoft et al (2015) characterise SMEs. Further, this reasoning is what allows the employees to take initiatives, cooperate, break and multitask. That is, to comply with the contextual elements for organisational ambidexterity.

Moreover, the SME characteristics related to lack of strategic thinking, scarce resources and lack of competences, as pointed out by Stentoft et al (2015) and further detailed in this study, seem to affect the compliance also with the structural elements. Hence, impacting the company’s possibilities to establish a vision, strategies and goals. A perception gap exists between the hierarchical levels regarding the structural elements, as the top managers and the middle managers showed to have different perceptions regarding the structural elements. This was an unexpected finding which resulted in that the initial manager level had to be split into two levels: middle managers and top managers. The top managers tend to be critical and underestimate the compliance with the structural elements compared to the middle managers, who perceive the structural elements more optimistically. The workers indicated answers between the top and middle managers. These perception gaps are a contributing to theory and are elaborating on Schein’s (1996; 2010) research of subcultures within an organisation.

In line with the reasoning by Schein (1996; 2010), the top managers is the level with the most insights to the strategic work of the company, giving them awareness of the complexity of managing different aspects of a company. As a result, they were critical and acknowledged that the strategies for exploration and the balance between exploration and exploitation was an area of improvement, but also expressed their own strong responsibility regarding this. They confirm the view of Tushman and O’Reilly (2002) that the innovative ability reflects how the company is organised rather than its technical skills and that the low levels of hierarchy increase their influence (Bierly & Daly, 2007; Man, et al., 2002).
Discussion

On the other hand, the workers support Stentoft et al.’s (2015) idea, perceiving that the size of the company allows the managers to be present in the daily operations. The workers feel excluded from the strategic activities, especially related to exploration which occurs sporadically in opposite to exploitation which in monitored closely and measured daily by several goals. As Boyer and McDermott (1999) and Floyd and Wooldridge (1992) state that different perceptions can occur due to the lack of strategic consensus that can be identified when looking at different levels in SMEs. The lack of consensus results in that individuals have different perceptions regarding the strategic activities of the company (Boyer & McDermott, 1999; Floyd & Wooldridge, 1992). This allows individuals to drift in different directions, which makes it difficult for the individuals at different levels to be unanimous regarding their perception of the company (Floyd & Wooldridge, 1992; Kellermanns, et al., 2005). According to Burton (2001) it is common that small firms mainly rely on their CEO’s knowledge to innovate and be explorative. It is also common that the influence of the CEO and the senior management is greater in SMEs compared to larger companies, thus the rest of the company is not as involved and does not have the same influence regarding the explorative activities as the CEO or the senior team (Cagliano & Spina, 2002; Dangayach & Deshmukh, 2001; Löfving, 2009).

The lack of strategic consensus regarding exploration combined with a reactive firefighting mentality that favours operational efficiency before innovation effects the ability to achieve organisational ambidexterity and balance exploration and exploitation equally well (Boyer & McDermott, 1999; Cagliano & Spina, 2002; Dangayach & Deshmukh, 2001; Löfving, 2009). Klaas et al. (2010) state that SMEs tends to seldom involve their employees in unique and valuable activities such as exploration. However, the involvement and participation of non-managerial employees contributes to both process and product innovation. Ajayi et al. (2017), Colantonio and Dixon (2009), Phipps et al. (2013), Sachs (1999) and Veleva and Ellenbecker (2001) states that employee involvement and participation are a way to not only assure economical sustainability by increased productivity but also a way to engage in social sustainability simultaneously.

The definition of exploration varies between the levels both within and between the cases. This finding is a contribution to the theory within the field of organisational ambidexterity in manufacturing SMEs. The lack of consensus makes it difficult for the individuals to have a common definition of exploration which makes it difficult for the companies to perform the changes that are needed in order to develop and achieve long-term sustainable growth i.e. economical sustainability (Birkinshaw & Gibson, 2004; Floyd & Wooldridge, 1992; Steiber, 2014; Tushman & O’Reilly, 1996). Due to the scares resources in SMEs and that several roles usually lay with a few top managers, the rest of the company do not have the same knowledge about the explorative work
and thus define exploration differently (Lubatkin, et al., 2006; Senaratne & Wang, 2018; Stentoft, et al., 2015).

Figure 21 Plastic Inc.’s compliance with both the contextual and structural elements.

Figure 22 Metallic Inc.’s compliance with both the contextual and structural elements.
7.2 Conclusions

This report contributes to the theory of organisational ambidexterity in manufacturing SMEs by investigating how the organisational compliance with ambidextrous elements is perceived at different hierarchical levels in manufacturing SMEs, in order to increase the understanding of organisational ambidexterity in this type of organisations. Four conclusions can be drawn: (1) manufacturing SMEs have a strong compliance with contextual elements, but that (2) there are perception gaps between the hierarchical levels’ perceptions of structural elements, where the gap between top and middle managers is the largest, (3) workers feel excluded from the strategic work and explorative activities and, finally, (4) individuals have different definitions of what exploration entails. These conclusions result in the below recommendations for managers to improve their strategic approach to exploration:

1. Create a common definition for exploration
2. Develop goals for exploration
3. Communicate for buy-in
4. Involve all employees

By defining what exploration means within the company and advocate that definition, it is possible to decrease the risk that managers and workers have different perceptions regarding exploration and pull in different directions (Floyd & Wooldridge, 1992; Kellermanns, et al., 2005). After defining exploration, it should be approached more systematically, similar with how the companies approach exploitation e.g. with goals and strategies, this will allow the employees to see their contribution to exploration and also to facilitate that everyone can impact the strategic work (Kunonga, et al., 2010; O’Reilly & Tushman, 2011). By communicating and involving all levels in the strategic work of exploration the company can utilise the full performance of all its employees (Andreis & Czarnitzki, 2014). Thus achieving both increased economical sustainability by increased performance and long-term growth and social sustainability by engage all employees (Ajayi, et al., 2017; Colantonio & Dixon, 2009; Phipps, et al., 2013; Sachs, 1999; Veleva & Ellenbecker, 2001).

The recommendation for future research based on the findings in this report is to further investigate how to handle different definitions of exploration and its implication. Moreover, the findings of the study highlight that SMEs are struggling to comply with the structural elements of organisational ambidexterity. This shows that there is a need for further research to either adapt the structural elements to an SME context or facilitate SMEs transition to structural ambidexterity.
References


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## Appendix

### A. Statements for questionnaire-interviews

<table>
<thead>
<tr>
<th>Element</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic intent</strong></td>
<td>In this organisation there is a compelling strategy that justifies the importance of both exploration and exploitation. (1-7) If so, how?</td>
</tr>
<tr>
<td></td>
<td>In this organisation there are separate strategies for both exploration and exploitation. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Shared vision</strong></td>
<td>In this organisation there is a shared vision that we strive to achieve. (1-7) If so, what is it?</td>
</tr>
<tr>
<td></td>
<td>In this organisation there are core values that are followed. (1-7) If so, what are they?</td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
<td>In this organisation the managers and leaders explicitly own the strategies and its fulfilment. (1-7) If so, how?</td>
</tr>
<tr>
<td></td>
<td>In this organisation the senior team have established a collective common-fate reward system that is accepted by all. (1-7) If so, how?</td>
</tr>
<tr>
<td></td>
<td>In this organisation managers and leaders communicate strategies and there fulfilment relentlessly. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Alignment</strong></td>
<td>In this organisation there are separate units for E/E. (1-7)</td>
</tr>
<tr>
<td></td>
<td>In this organisation, all levels and units work together to properly leverage organisational assets for the whole organisation. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Managing tensions</strong></td>
<td>In this organisation, managers and leaders tolerate and resolve conflicts and trade-offs that inevitable occurs between units and interests. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Initiative-taking</strong></td>
<td>In this organisation, an individual can take initiative and be alert to opportunities even if it is beyond the confines of their job. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Cooperating</strong></td>
<td>In this organisation, an individual can seek opportunities by cooperating and combining their efforts with others. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Networking</strong></td>
<td>In this organisation, an individual can build internal linkages by connecting different people. (1-7) If so, how?</td>
</tr>
<tr>
<td><strong>Multitasking</strong></td>
<td>In this organisation, an individual can take on multiple roles. (1-7) If so, how?</td>
</tr>
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