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The Impact of Diversity on Organizational

Ambidexterity

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The Impact of Diversity on Organizational Ambidexterity

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By

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Shashank, you will be in our hearts

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Roberto Ortiz Deveaux

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Executive Summary

Background: The management of Small & Medium Enterprises (SMEs) might represent a challenge in itself. There are several concepts that affect the performance of SMEs. One is ambidexterity, which refers to the balance of activities for explorative and exploitative innovation. Another concept is diversity which encompasses differences in gender, age, cultural and functional backgrounds. Ambidexterity and diversity might be related as diversity influences the activities for explorative and exploitative innovation. It has been argued that successful organizations need to be ambidextrous.

Practical problem: The relationship between a diverse middle management team (MMT) and top management team (TMT) might affect the organizational ambidexterity; this research focuses on exploring this relationship. In order to provide a context, the research was based on *Feedbackly* which is a Finnish SME with its MMT located in Mexico City and TMT located in Helsinki. MMT and TMT diversity might bring complexity to the organization in terms of balancing the exploratory and exploitative innovation activities. Diversity has been seen as a desirable characteristic as it adds different techniques, knowledge, approaches, resources and expertise that in combination improve innovation within organizations. Nevertheless, it has been recognized that barriers in the relationship of diverse managerial teams might arise, bringing complexity to the managers.

Purpose: The interaction between a diverse MMT and TMT might have an impact in organizational ambidexterity. This impact has not been fully explored within SMEs. Normally, it is not recognized the importance of organizational ambidexterity as the main focus of managers relies in maintaining an efficient operation. Thus, the purpose of this research is to identify how diverse management teams can impact organizational ambidexterity, whether increasing complexity or adding resources to improve the organization's performance. This need led to elaborate the following research question to guide the research "***How does diversity in MMT and TMT impact organizational ambidexterity?***".

Methodology: An exploratory approach was used to get a deep understanding and to answer the research question. First, a literature review was conducted to explore key concepts related to organizational ambidexterity and to identify diversity characteristics that might impact the relationship between MMT and TMT, affecting the organizational ambidexterity. Thereafter, semi-structured interviews were conducted with members of the management team of *Feedbackly* in order to answer the research questions. The interviews also had the purpose to

add more information into the discussion to gain more insights about the relationship between MMT and TMT.

Findings: This research found that diverse management teams have a direct impact in organizational ambidexterity by providing a pool of resources, increasing the expertise, knowledge and capabilities of the organization. Nevertheless, complexity in managing diverse teams increases, as potential barriers might appear, hindering the relationship between the two levels of the management team. Additionally, organizations might struggle to recognize diversity as way to acquire additional resources, and it is often difficult to take advantage of the benefits of diversity in turning the organization ambidextrous.

Future research: This research contributed to identify how the relationship, between a diverse MMT and TMT, impact organizational ambidexterity. However, it is necessary to incorporate additional activities for future research. First, increasing the sample size of interviews might help to increase the validity of the research. Second, including more industries might help to identify how the relationship between diversity and organizational ambidexterity might differ by industry and firm size. Third, adding more experts and case studies might help to improve the validity of this research. Finally, the incorporation of human resource management (HRM) could provide insights about how to manage a diverse team.

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1. Introduction

1.1 Background

Small and medium-sized enterprises (SMEs) play an important role in the modern economy. SMEs underpin the growth of the gross domestic product (GDP), tax revenues and employment across different countries and continents (Ndiaye et al., 2018). According to the World Bank (2021), SMEs constitute 90% of business and are responsible for more than 50% of employment worldwide. Governments all over the world have developed policies to provide support and foster the development of these enterprises (Czarnitzki & Delanote, 2015). Nevertheless, SMEs own management might represent a challenge in itself. There are several concepts that affect the performance of SMEs. One is ambidexterity, which refers to the balance of activities for explorative and exploitative innovation (Chang & Hughes, 2012). Another concept is diversity which encompasses differences regarding gender, age, cultural and functional background (Pitts, 2006). Ambidexterity and diversity are related as diversity influences the activities for explorative and exploitative innovation (García-Granero et al., 2018).

Organizational ambidexterity has been studied previously in relationship with the performance of Top Management Teams (TMT) within different enterprises. Li (2013) has identified that TMT has received special attention because executives play an important role in designing and implementing strategies to remain competitive and improve the overall performance of organizations. The members of TMT have been encouraged to explore and exploit behaviors among their Middle Management Teams (MMT) to provide higher innovation performance (Alghamdi, 2018). A top-down approach for ambidexterity has been used by several authors (Carmeli & Halevi, 2009; Chen et al., 2021; Torres et al., 2015; Venugopal et al., 2020). However, the interaction from MMT towards TMT, which is called bottom-up approach has not been explored sufficiently.

MMT has had the objective to execute and follow the strategies from TMT. Exploratory and exploitative innovation traditionally have not been attributed to MMT (Heyden et al., 2018). Nevertheless, MMT might develop capabilities that influence organizational ambidexterity. A key factor affecting the relationship between these teams might be diversity. Additionally, SMEs size enables to have better managerial activities as the enterprises have less layers of management (Gifford, 1992). Grimpe et al. (2019) have pointed out that the role of MMT is important while developing innovation. Organizational ambidexterity might improve when TMT and MMT collaborate and share knowledge.

The interaction between MMT and TMT is addressed in order to provide empirical evidence about how the relationship between these two teams affects the overall organizational ambidexterity. The diversity of the MMT is considered as an element that might affect how the TMT performs and develops ambidexterity. The interactions of managers at both levels might help to improve exploratory and exploitative innovation. Benefits might arise while managing ambidexterity as new competencies might be added to the organization. However, challenges might arise when MMT interacts with TMT. In **Section 1.2**, a practical problem is introduced to identify the relationship between TMT and MMT regarding diversity and organizational ambidexterity.

1.2 Practical problem

The relationship between a diverse MMT and TMT affecting organizational ambidexterity is the practical problem that this research focuses on. In order to provide a context, the research will be based on *Feedbackly*, a Finnish SME which has its MMT located in Mexico City and the TMT located in Helsinki. According to the European Commission (2016), *Feedbackly* forms part of SMEs as the company has more than 10 employees but less than 50 employees. The diversity of the teams adds different techniques, knowledge, approaches, resources and expertise that combined improve innovation within the organization (Post et al., 2009). However, MMT and TMT diversity might bring complexity to the organization in terms of balancing the exploratory and exploitative activities. Thus, diversity within both management teams might affect the organizational ambidexterity.

Currently, MMT is executing strategies developed by TMT. The MMT has been influenced by the local market where the business dynamics are different from the location of the headquarters of *Feedbackly*. The relationship between MMT and TMT might be partly constrained by linking variables. Organizational ambidexterity might be altered by the interaction between MMT and TMT. In this direction, it is possible to structure a practical problem and identify elements affecting organizational ambidexterity. When a diverse TMT interacts with a diverse MMT, it is expected that the activities of exploration and exploitation will be affected. From here the research questions are elaborated alongside with the objective.

1.3 Objective

The interaction between a diverse MMT and TMT might have an impact in the organizational ambidexterity. This impact might be identified in organizations with the same characteristics of *Feedbackly*. Exploratory research is required to understand how the interaction between the two managerial levels is affecting the activities of exploration and exploitation. *Feedbackly* should acknowledge how organizational ambidexterity is altered to remain competitive and improve the overall performance. Normally, SMEs do not recognize the importance of ambidexterity as their main focus relies in maintaining an efficient operation. *Feedbackly* should recognize organizational ambidexterity as way to remain competitive and grow in the market. The dimensions of diversity considered by this research are gender, age, cultural and functional background.

Therefore, the objective of the research is:

Identify and understand how the relationship between a diverse MMT and TMT affects the organizational ambidexterity. The research should be able to recognize how the dimensions of diversity, which are gender, age, cultural and functional background, modify the organizational activities of exploration and exploitation. The linking variables: trust, connectedness, and shared vision will be considered to understand the foundation relationship between the management teams.

1.4 Research Scope

The scope of this research will focus on *Feedbackly* which is a Finnish SME. Constraints in time and resources do not allow to study more organizations and conduct more interviews. *Feedbackly* is an organization offering software as a service (SaaS) and provides to its customers consultancy services in customer experience. Thus, more industries will not be considered for this research. Interviews will be conducted to gather information to answer the research question. ***Chapter 3*** contains more information about the research methodology of this master thesis.

1.5 Relevance of the research

This master thesis has managerial implications by the nature of the topic. Social relevance is also present due to the interaction between the members of the management teams. Diversity has brought discussions about how organizations can integrate members with different backgrounds to improve efficiency, innovation and creativity. Nevertheless, barriers with social characteristics have been present in managerial relationships, and hence answering the research questions also provide meaningful insights from a social perspective. Thus, the relevance of the research is viewed in these both lines: managerial and social.

1.5.1 Managerial relevance

As Li (2013) has argued, successful organizations need to be ambidextrous. These organizations have the capability to explore new alternatives to achieve consistency in a changing business environment and simultaneously exploit old capabilities to guarantee efficiency (Benner & Tushman, 2003). Managers have been encouraged to pursue ambidexterity within organizations. Nevertheless, achieving organizational ambidexterity is complex and requires a set of skills and structures by organizations aiming to achieve it successfully. The composition of the management team has been identified as one of the elements that drives ambidexterity (Smith & Tushman, 2005). Many scholars have identified that a diverse composition of the TMT members is a way to facilitate organizational ambidexterity (Carmeli & Halevi, 2009; Chen et al., 2021; Li, 2013; Smith & Tushman, 2005). This research will provide more insights not only from the TMT perspective but also from the MMT.

TMT might benefit from a diverse MMT. It is important to understand how TMT turns advantage from the interaction with a diverse MMT. New opportunities to improve efficiency and explore new products and services might arise by sharing knowledge with the MMT. In this way, the activities of exploration and exploitation might come from different perspectives, and the TMT might gather more information to make better decisions and design better strategies to remain competitive in the market. Different perspectives might help to have a better approach in problem-solving activities, increasing the overall performance of the organization.

The MMT might identify new processes and services to share with the TMT, improving the exploration activities of the organization. However, the TMT might also affect the activities of the MMT. New processes and information can be provided to the MMT members to improve their efficiency and provide better services. The research will identify insights about the relationship between the diverse MMT and TMT. Organizations might benefit from the diversity of their

management teams; however, challenges might arise as well. The research will provide an overview of the possible barriers in a real-context scenario.

1.5.2 Societal relevance

Kunze & Boehm (2013) pointed out that mega-trends in globalization are changing the interaction of the workforce. As organizations expand internationally, it is becoming the norm to integrate diverse team members. In this direction, the research can provide information about the benefits of the interaction and inclusion between members with different backgrounds. The research will identify aspects of diversity that might affect the organizational ambidexterity which can improve the competitiveness of organizations (Chang & Hughes, 2012). The integration of diverse members is a relevant activity that has become an important element in organizations seeking better performance in innovation which translates in better products and services for customers.

Nevertheless, Ozgen et al. (2017) have discussed that diversity might bring barriers and misconceptions in the interaction between members of a team; thus, in some cases team members might experience difficulties in carrying out their activities and sharing knowledge. Overcoming misunderstandings is an essential element in every human relationship. Acknowledging diversity is required to overcome misconceptions as every individual might have different behaviors and attitudes towards managerial activities. Hence, a set of values is also relevant to provide a structure to minimize possible barriers in the social interaction of members of the management team. In this way, every member can be listened and included in the process of developing organizational ambidexterity.

1.6 Research structure

This section aims to present a breakdown of the research layout into main phases. In this way, it is possible to structure the research and identify the key sections.

Chapter 5
Discussion

Discuss the main findings, limitations and directions of further research

Literature review   Members interviews

Discussions

Chapter 6
Conclusions

Derive conclusions and recommendations
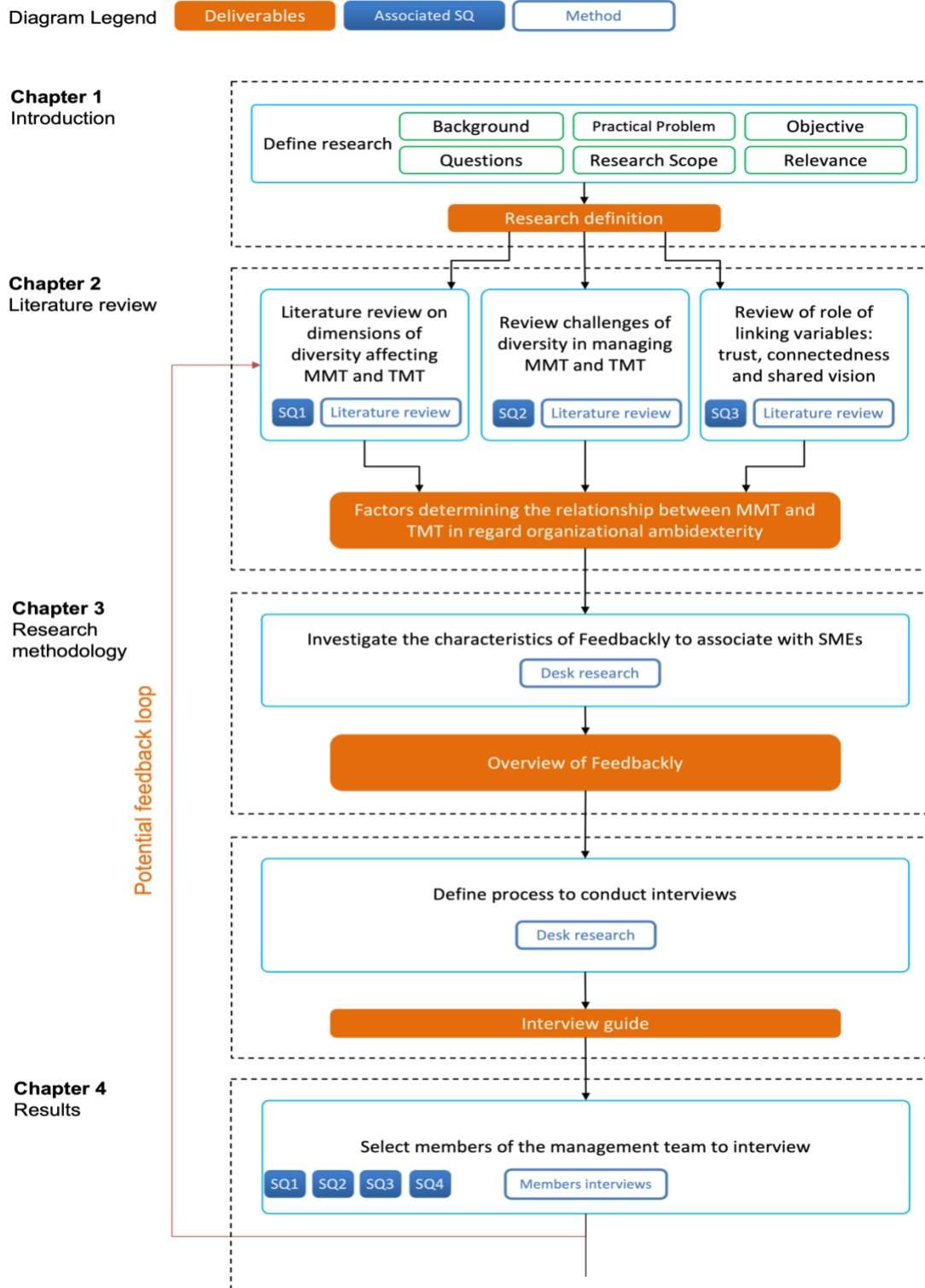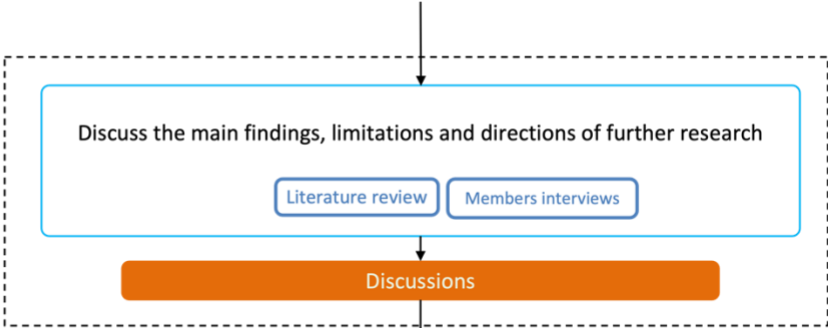
Conclusions and recommendations

2. Literature Review

A systematic literature review was conducted to explore key concepts related to organizational ambidexterity and to identify diversity characteristics that might impact the relationship between MMT and TMT. This chapter provides the foundations to achieve the research objective and answer the proposed research questions. The aim of the literature review is to provide an overview of existing knowledge regarding the main topic of this master thesis. In this direction, it is possible to present information about the relationship between organizational ambidexterity and diversity that has been already identified by previous authors and scholars. The systematic literature review is done in a methodical way as described by Jesson et al., (2011). The following five stages are considered for the systematic literature review in this master thesis:

1. Search for literature
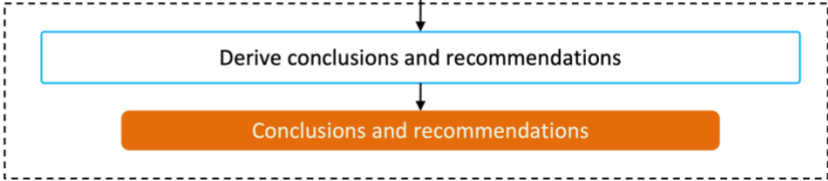2. Exclusion and inclusion criteria
3. Quality assessment
4. Synthesis
5. Research question definition

2.1 Search for literature

The search process started by defining keywords which were selected according to the objective of the research. The topic includes standardized words that help to define concepts easier; nevertheless, there are many articles and papers regarding the research topic. The literature search was done in Scopus. The initial query resulted in 1. 235 papers. The query for the first iteration is described in *Table 1*:

Table 1: Search Criteria

Keyword	Search term
Ambidexterity	TITLE-ABS-KEY (("ambidexterity" OR "Organizational ambidexterity" OR "Contextual ambidexterity") AND ("Diversity" OR "Age" OR "Gender" OR "Cultural background" OR "Functional background" OR "Innovation"))
Organizational ambidexterity	
Contextual ambidexterity	
Diversity	
Age	
Gender	
Cultural background	
Functional background	
Innovation	

2.2 Exclusion and inclusion criteria

The search included many articles and papers that did not correspond to the area of this research. For example, areas like arts and humanities, computer science, and energy were shown by the first query. Thus, these areas were excluded from the searching query. Additionally, the search was limited to show only English articles to avoid other languages that might increase the volume of the search result.

Table 2: Exclusion Criteria

Excluded research areas
(EXCLUDE (SUBJAREA , "ART") OR EXCLUDE (SUBJAREA , "ENER") OR EXCLUDE (SUBJAREA , "HUM") OR EXCLUDE (SUBJAREA , "MEDI") OR EXCLUDE (SUBJAREA , "ENER") OR EXCLUDE (SUBJAREA , "COMPU") AND (LIMITTO (LANGUAGE , "English"))

This further exclusion of articles resulted in 818 articles in Scopus on 17.07.2021. As the number of articles was still long, a filter in the journal type was applied. The final list resulted in 123 articles. As the list was not short enough, the "scan-skimunderstand" reading technique from Jesson et al. (2011) was applied. After applying the filter, I narrowed down the number of articles by scanning the title and abstract.

2.3 Quality assessment

The journal's quality has been evaluated to include high-quality articles from peer-reviewed and highly rated top journals. The journals were evaluated using H-index and SCImago Journal Rank 2019 provided by SCImago Journal & Country Rank. The journals were categorized in the first and second quartile (Q1 & Q2). Books, news articles, and working papers are not assessed by the SCImago Journal Rank. Nevertheless, as mentioned by Jesson et al. (2011) there might be an equally good article or paper in a lower rated journal which could not get past the strict publication criteria. Hence, articles from journals with lower ranks were also included.

2.4 Synthesis

2.4.1 Ambidexterity

Ambidexterity has been seen as a desirable organizational characteristic for firms all over the world. Managers have identified ambidexterity as a way to move quickly towards new opportunities, adjust to competitive markets and avoid comfort zones. These elements underpin the development of an important capability called *adaptability* (Gibson & Birkinshaw, 2004). Successful organizations have proven that it is not enough to be proactive. It is also necessary to explore and exploit the value of assets, adapt existing business models and reduce costs of current operations (Gibson & Birkinshaw, 2004). Particularly, organizations should find a clear idea about how value is created and how activities should be organized to provide value. This in turn can support organizations to develop a second key capability in ambidexterity which is *alignment*.

O Reilly & Tushman (2004) have discussed that managers require to explore new opportunities even when there is exploitation of existing capabilities. Many organizations are successful in their current offerings; however, sometimes the adaptation to new markets dynamics is not achieved properly. In other words, it is common for organizations to fail in achieving breakthrough innovations while implementing constant improvements in existing business activities (O Reilly & Tushman, 2004). There are several cases of organizations which have failed due to a lack of vision for new innovations. For example, the american-based movie and videogame rental company Blockbuster failed to adapt to the new characteristics and dynamics of the market and to explore opportunities to offer new services to a new customer base.

Organizational ambidexterity

Organizational ambidexterity refers to the ability of an organization to develop itself in terms of its explorative and exploitative capabilities (Blarr, 2012). The main objective of this kind of ambidexterity is to improve the overall organizational performance. The accelerating pace of change in markets and increasing globalization have pushed organizations to implement strategies with the purpose of combining efficiency and flexibility. Nevertheless, organizational ambidexterity might bring challenges to organizations as it lead to complex processes to allocate resources in exploitative and explorative activities (Blarr, 2012). Thus, finding a balance might be challenging as the activities of exploration and exploitation need different structures, processes, capabilities, and cultures (O Reilly & Tushman, 2004).

Leadership has been identified by Mihalache et al. (2014) as an essential characteristic to manage the trade-offs that organizational ambidexterity requires. As decisions regarding strategic directions and resource allocation are designed and executed in the top layers of the organization, the TMT has been attributed as the main actor in solving tensions between activities of exploration and exploitation. This might open conflict between members of the TMT as generally senior managers belong to functional units which have different priorities and objectives. Thus, members of the TMT must overcome functional biases and perceived conflicts of interest in order to support both explorative and exploitative activities. Moreover, the MMT might be distributed into functional areas, and hence similar conflicts might arise as the ones of TMT.

Mihalache et al. (2014) have proposed that the concept of shared leadership has a great potential for stimulating organizational ambidexterity. When team members of the TMT distribute the responsibility to participate in leadership tasks for the organization, shared leadership is stimulated. The main goals of shared leadership consist in establishing objectives, motivating behaviors to achieve goals, and maintaining team spirit. Shared leadership fosters a cooperative conflict management style which includes a high level of concern for individuals as well as other members in the management team. In this way, it is possible to cooperate when conflicts arise, searching for common solutions and looking for the overall organization's success. Thus, shared leadership provides integrative behaviors and cooperation between members which stimulate organizational ambidexterity.

Contextual ambidexterity

Gibson & Birkinshaw (2004) have described contextual ambidexterity as "building a set of processes or systems that enable and encourage managers to make their own judgments about how to divide their time between conflicting demands for alignment and adaptability" (p. 211). The simultaneous process of alignment and adaptability is contextual in this direction. Organizations have the objective to control these activities because it helps to overcome structural inertia and avoid moving towards a direction of change without considering the impacts and benefits for the organization (Levinthal & March, 1993). As a such contextual ambidexterity is a multidimensional construct with exploration and exploitation activities forming a separated but interrelated non-substitutable component. According to this view, ambidexterity is best achieved by building a context that encourages managers to make their own judgments as to how best to invest their time between conflicting situations of exploration and exploitation.

TMT has an important role in framing organizational context. This is performed through different actions and decisions affecting the value chain of activities. Nevertheless, one of the most common challenges is how to design and support specific contexts that enable better organizational outcomes. Therefore, leadership is important as it shape followers' perceptions and behaviors towards working activities (Levinthal & March, 1993). In order to achieve specific behaviors, managers normally set an example about how to behave, and by conveying beliefs regarding the ways in which managers can use their influence to motivate team members. Employees note their managers' behaviors and adjust their perceptions and behaviors accordingly. The direct influence of the managers towards employee behavior through role modeling or exchange processes have a separate role apart from the influence leaders exert by creating context. **Table 3** presents the main differences between organizational and contextual ambidexterity.

Table 3: Organizational vs Contextual Ambidexterity

	Organizational ambidexterity	Contextual ambidexterity
How is ambidexterity achieved?	Alignment-focused and adaptability-focused activities are done in separate teams.	Individual members split their time between alignment-focused and adaptability focused activities.
Where are decisions made?	At the top of the organization.	On front line–by salespeople, supervisors, and office workers.
Role of TMT	Define structure, make trade-offs between alignment and adaptability.	Develop organizational context in which individuals act.
Nature of roles	Relatively clearly defined.	Relatively flexible.
Skills	Specialists.	Generalists.

2.4.2 Innovation

For SMEs, the resources required to innovate can overstrain their developing possibilities (Chang & Hughes, 2012). Innovation activities involve a certain degree of uncertainty and risk. Larger organizations have resources to cope with possible failures involved in the development of innovative products or services. Smaller organizations do not have the capabilities and resources to hold the risks associated with innovation, and it has been proved that innovative activities have a higher failure risk in this kind of organizations (Rosenbusch et al., 2011). Nevertheless, SMEs are often considered successful innovators. SMEs pursuing an innovation strategy might benefit in different ways, for example, organizations can gain rents through temporary monopolies or benefit from brand loyalty of buyers (Ndiaye et al., 2018). Additionally, SMEs can

serve attractive niches with innovative products, which it is more advantageous for SMEs compared to large firms due to their limited size and greater agility. All of these benefits help SMEs to successfully compete with well-established organizations that have a larger resource base.

Scholars have made a distinction between explorative and exploitative innovation (Blarr, 2012; Gibson & Birkinshaw, 2004; Jansen et al., 2016; O Reilly & Tushman, 2004). Organizations tend to focus on either explorative or exploitative innovation (Blarr, 2012). Every approach on these type of innovations has been seemed as a viable option as both need different capabilities within the organization and are easier to implement individually (O Reilly & Tushman, 2004). Exploitation-oriented organizations have the objective to improve efficiency by focusing on routinization and production, whereas exploration-oriented organizations have aimed to develop more flexibility by an open approach to learn such as experimenting and carrying out riskier innovation projects (McGrath, 2001). Successful ambidextrous organizations normally find a balance between their activities of exploration and exploitation.

Explorative innovation

This kind of innovation implies that organization's behavior is characterized by discovery, search, experimentation and risk taking (Wang & Ke, 2016). Explorative innovation might not be necessarily new. Any innovation might be implemented in one specific context; nevertheless, it may be perceived as experimental or risky in other contexts (Barrutia & Echebarria, 2019). Traditionally, this kind of innovation has focused on creating new and distinguishable products, services and markets (Sheng & Hartmann, 2019). Exploration has been identified as way to foster radical innovations which are designed to meet the needs of emerging customers and markets. Exploration-oriented organizations might develop flexibility through an open approach to experiment and embark into riskier innovation projects.

Exploitative innovation

Exploitative innovation is directed to build improvements on current capabilities and processes. It leads to incremental product and services changes, which have the goal to penetrate existing markets (Mueller et al., 2013). From an organizational learning perspective, exploitation involves activities such as process optimization, efficiency, selection and execution of strategic activities (Blarr, 2012). Consequently, organizations pursuing exploitative activities concentrate their capabilities, apply knowledge, and focus on current activities in existing domains. Exploitative innovations arise from existing knowledge and reinforce existing skills, structures and processes. Interpreted in a management-orientated way exploitation refers to incremental innovations of

existing products or operations to meet the needs of the markets. This implies the use and extension of knowledge and skills to lead improvement in designs, expansion of existing products and services, or increase efficiency of existing distribution channels.

2.4.3 Diversity

Diversity is a key element of ambidexterity. Managers all over the world have identified diversity as an element that fosters innovation and the overall performance of organizations. Hewlett et al. (2013) have pointed out that diversity has the potential to increase market growth. Diversity adds different techniques, knowledge, approaches, resources and expertise that combined improve innovation within organizations (Post et al., 2009). SMEs have gained interest in adopting diversity by adding members with different backgrounds. Whether the presence of diversity has a positive or negative impact in the development of ambidexterity, it has attracted several scholars to research about it. Gender, age, cultural and functional background are dimensions of diversity that have a direct influence in the development of ambidexterity.

Diversity can bring different contexts that might help to solve challenges with different perspectives (Williams & O'Reilly III, 1998). As people from different ages, genders, cultural, and functional backgrounds have different approaches, it is possible to increase the range of possible solutions to various challenges. Specially, in a SME context this effect is more visible comparing with larger organizations. Although SMEs might find difficult to find resources, diversity can add value in multiple levels. For example, the TMT might work in designing a strategy to take advantage of the resources from different members of the team. An increase in international relationships has been identified as a factor that has brought diversity to more organizations. Consequently, the workforce has become more international, and as a result diversity has grown in the composition of management teams (Podsiadlowski et al., 2013).

<u>Gender</u>

According to the International Labour Office (2007), workforce gender has been increasing in countries all over the world. Countries such as USA, Canada, Mexico and UK have adopted changes in legislation to promote gender equality in employment opportunities (Cotter, 2017). Accordingly, organizations have been pushed to attract employees from different genders. Almor et al. (2019) has argued that a broad gender diversity provides organizations with several advantages for innovation, such as greater creativity, effective problem solving and enhanced capability. Previous studies on gender diversity in management teams have focused on differences between men and women. Some reported that women are believed to be more capable in monitoring and advising within management teams (Lakhal et al., 2015) while others

identified that women tend to behave differently from men in risky scenarios (Campbell & Mínguez-Vera, 2008).

Judgements still exist among senior management as well as researchers regarding issues surrounding gender diversity, especially in terms of sexism and stereotyping. As pointed out by Campbell & Mínguez-Vera (2008) the world is shaped by embedded assumptions about gender roles. Certain attributes and behaviors have been associated with specific genders, and hence stereotypes and sexist attitudes are maintained and repeated. For example, Lakhal et al. (2015) have discussed that behavior of women in organizations is measured differently compared with men. Women have to prove themselves in the workplace, while men do not experience the same pressure. In consequence, women have more difficulties in reaching top management positions in organizations as stereotypes continue to be present in the organizational culture of many firms all over the world.

Kirsch (2018) has pointed out that gender differences on management teams exist regarding knowledge, skills, abilities, and behavioral styles. Some scholars have focused on gender diversity and its relation to financial results in organizations (Almor et al., 2019; Campbell & Mínguez-Vera, 2008; Cotter, 2017). In countries with higher gender parity, the effect of gender diversity on financial results differs from countries with less gender parity (Kirsch, 2018). Nevertheless, organizations' strategies regarding innovation seem also to be affected by gender diversity. Several studies have found a positive effect of gender diversity in organizational innovation (Heyden et al., 2018; Vecchio & Brazil, 2007). A gender diverse management team tend to provide better alternatives and solutions for unexpected changes, which translates in better adaptation for organizations.

Organizations that need more monitoring and control are expected to increase gender diversity on their management teams (Kirsch, 2018). Monitoring is part of the organization's exploitive behavior which, as was previously discussed, is directed to build improvements on current capabilities and processes. Campbell & Mínguez-Vera (2008) have shown that gender diversity in management teams improves monitoring. For example, the quality of financial statements is positively affected by the degree of gender diversity within the management teams as women tend to comply better with standards comparing with men. An additional benefit of gender diversity on management teams is a reduction of the probability of organizational accounting fraud. Cumming et al. (2015) found in a study from 1 500 S&P companies, a positive relationship between gender diversity of the management members in monitoring organizational activities. Additionally, it was found that women attend to more meetings and perform more monitoring activities than men.

Almor et al. (2019) have mentioned that women tend to be more risk aversive than men. Nevertheless, these associations have been difficult to stablish as women are still a minority in upper layers of management teams, and women's behaviors are frequently viewed and measured differently from that of men. As judgements towards women are still in place, women have to prove themselves often using metrics and specific measures to prove their managerial worth (Kirsch, 2018). Thus, women do not necessarily tend to have a risk-averse behavior, but rather a focus on risk management and compliance which characterizes the behavior of gender parity in management teams (Campbell & Mínguez-Vera, 2008). As women still constitute a minority in TMT, sometimes they act more carefully to avoid mistakes or rash decisions. Having TMT members who feel under scrutiny might push such teams towards more monitoring. This in turn is what leads to long-term innovation and more organizational ambidexterity as the activities have more control.

Age

The range of age is a specific form of diversity which reflects in a collective level the age structure of a particular social entity such as team, work unit or a whole organization (Kunze & Boehm, 2013). In this way, the age-diverse team members have a different set of knowledge, values and preferences (Backes-Gellner & Veen, 2013). Hence, an age-diverse team has a larger pool of resources comparing with teams in which age is homogenous. Younger members might have high academic skills but might lack of experience, while older members might have more working experience but lower academic skills. Backes-Gellner & Veen (2013) also point out that combining workers with different ages help to reduce the risk of making decisions with one-side bias and innovation averse attitudes, as compared with teams with homogeneous ages.

TMT age diversity refers to the extent to which the team consists of members from various group ages (Kunze & Boehm, 2013). Age has been related to specific behaviors, career horizons and network patterns, and hence it might lead the team members to feel different from each other (Richard & Shelor, 2002). Researchers have shown that when team members become older, they tend to be less flexible in changing their behaviors and mindsets which in turn creates resistance to acquire new knowledge (Backes-Gellner & Veen, 2013; Wiersema & Bantel, 1992). Thus, older managers tend to become more risk-averse, whereas younger managers are generally less constrained by conventional ways of thinking and behaving and are more eager to support and engage in riskier strategies (Wiersema & Bantel, 1992).

Social identity theory argues that belonging to a particular generation creates a psychological mindset in which team members build a common identity leading to solidarity and conformity (Richard & Shelor, 2002). The visible age differences are more likely to create a particular

aggrupation within team members in comparison with elements that are less visible, because age gives a clear indication about how to behave with each other (Kunze & Boehm, 2013). This is explained by social constructs that cause people to perceive, approach and act differently towards members of another age group (Backes-Gellner & Veen, 2013). Regardless of the function or managerial activities to be performed, age diversity leads to the formation of subgroups within the members of the management team. Thus, diverse perspectives might create conflicts among subgroups or individual members within management teams reducing their ability to reach consensus about how to carry out exploratory and exploitative activities.

<u>Cultural background</u>

The growth of international activities and shift of organizations into new markets have increased the diverse cultural backgrounds of the members working in tasks and activities within an organization (Raithel et al., 2021). Previous research on the topic (Guillaume et al., 2017; Nederveen Pieterse et al., 2013; Williams & O'Reilly III, 1998) has shown that cultural background might be a "double edged-sword". On one hand, it has the potential to enhance the overall performance of the team by improving problem solving, creativity, decision making and innovation. On the other hand, cultural background might bring disruptions on the performance of the organization because biases and misunderstandings might appear among members of the team (Earley & Mosakowski, 2000).

In a diverse cultural team, exploitative innovation makes reference to the existing knowledge acquired through activities in close cultures, and explorative innovation refers to new knowledge developed through learning from operations in distant cultures (Williams & O'Reilly III, 1998). For example, Stahl & Tung (2015) have studied how organizations balance exploratory activities into culturally distant markets, coordinating short-term gains originated by operating in local markets, and then acquiring long-term benefits by continuous learning from new foreign markets. Barkema & Drogendijk (2007) researched how organization's international exploitation and exploration activities benefit from diverse cultural environments, discovering that successful firms have a long-term balance between expanding into well-known cultural markets by exploiting their knowledge base and maximizing short-term performance in distant cultural markets. This implies a low short-term performance in distant markets, but a learning curve is placed to improve future success in those markets.

Studies on exploration and exploitation regarding cultural dimension discuss the need to balance these activities because of inherent tensions arising from simultaneous pursuit. March, (1991) identifies that exploration and exploitation set inherently conflict and organizational demands on the organization. In this view, trade-offs between exploration and exploitation are considered

as unavoidable, and hence organizational ambidexterity involves managing these trade-offs. While a trade-off view considers choices between alternatives, a paradoxical view accepts contradictions without necessarily resolving or synthesizing them (Smith & Lewis, 2011). For instance, organizations might organize their activities in separate units that will independently pursue either exploration or exploitation which is a typical scenario for product and service divisions from large multinational organizations.

Bruyaka & Prange (2020) define international cultural ambidexterity as "a dynamic capability by which firms can effectively balance their internationalization strategies into both proximate and distant foreign markets over time, which could differentiate them from their rivals and lead to competitive advantage" (p.495). This new concept has been introduced to identify the international expansion of organizations across different locations. Using a portfolio approach to manage cultural backgrounds of an organizations' foreign locations implies that besides managing pairwise relationships between headquarters and each of the foreign offices, an organization can leverage the interconnectedness and interdependence between foreign locations (Bruyaka & Prange, 2020). Therefore, this view sees organization's internationalization as a series of interconnected decisions taken within the context of their existing portfolios. Throughout time, organizations might organically adjust the number of entries to culturally close and culturally distant locations (Bruyaka & Prange, 2020).

Functional background

The functional activities performed by members of the management team have diverse backgrounds. The main purpose of this differentiation is to reduce uncertainty within organizations (Mia & Chenhall, 1994). The activities are assigned according to the nature of their function. Managers can work according to their expertise background and focus on specific activities. Establishing boundaries enhances the performance of the members of the management team and avoids confusion among activities and tasks (Thompson, 2003). Managing these diverse functional backgrounds is important for organizations as division of functions helps to organize their activities according to requirements from current and potential customers.

The management functional diversity makes reference to the extent to which the teams consist of members from different functional areas (Nielsen & Nielsen, 2013). Even when managers are carrying out activities outside their own functional area, for instance, in a general management position, their previous functional expertise biases their current decisions (March, 1991). Moreover, certain functional areas focus more on exploration and others on exploitation due to the nature of their activities. For example, managers from design or marketing are more likely to spend more time in exploration strategies, whereas those from operations or production will

focus more on exploitative strategies (Mia & Chenhall, 1994). Thus, a functionally diverse management team helps to foster differentiation between members and might help the team to balance both activities of exploration and exploitation.

When top managers share responsibility and have decision making autonomy in their own functional area of expertise, it is expected that individual views will be defended. Shared responsibility in decision making processes enables team members to get involved in negotiations to reach a consensus. This is not easy to achieve, given the differences between functional diverse management members, especially when managers hold responsibility for certain departments. Hence, when members of functionally diverse TMTs are empowered to make decisions, their links to different functional areas hinder collaboration among them. These difficulties in reaching consensus in a time frame might undermine the positive effect of TMT functional diversity for ambidexterity.

2.5 Literature review analysis

In this sub-section, the main findings from the literature review will be analyzed and prepared to identify how a relationship between a diverse MMT and TMT has impacted organizational ambidexterity. The elements of diversity have been explored in relation with the members of the management team and ambidexterity. The different characteristics provide benefits and challenges for the development of organizational ambidexterity within the organization. Moreover, every management team might have a certain degree of diversity which set particular interactions among team members. For the development of successful ambidextrous organizations, it is important to consider how diversity might impact the activities of exploration and exploitation which are carried out by members of the management team.

2.5.1 Diversity benefits on organizational ambidexterity

According to the literature review, diversity enhances organizations' performance by increasing creativity, effective problem solving and adding capabilities. Each dimension of diversity provides a specific benefit. *Table 4* presents the benefits for every dimension of diversity. In this way, it is possible to have a quick overview of the main findings of the literature review in terms of the advantages that diversity provides on the development of organizational ambidexterity.

Table 4: Diversity Benefits

Diversity dimension	Benefit	Source
Gender	• A gender diverse management team tend to provide better alternatives and solutions for unexpected changes which translates in better adaptation for organizations. • Gender diversity in management teams improves monitoring. For example, the quality of financial statements is positively affected by the degree of gender diversity within the management teams as women tend to comply better with standards comparing with men. • Actions are carefully observed to avoid mistakes or make rash decisions.	(Campbell & Mínguez-Vera, 2008)
Age	• Combining workers with different ages helps to reduce the risk of making decisions with one-side bias and innovation averse attitudes. • An age-diverse team has a larger pool of resources comparing with teams in which age is homogenous.	(Backes-Gellner & Veen, 2013; Wiersema & Bantel, 1992)
Cultural background	• It has the potential to enhance the overall performance of the team by improving problem solving, creativity, decision making and innovation. • Better organizational performance by expanding into well-known cultural markets by exploiting their knowledge base and maximizing short-term performance in distant cultural markets.	(Earley & Mosakowski, 2000)
Functional background	• It helps to organize their activities according to requirements from current and potential customers. • A functionally diverse management team helps to foster differentiation between members and might help the team to balance both activities of exploration and exploitation.	(Thompson, 2003)

2.5.2 Diversity challenges on ambidexterity

Diversity not only provides benefits for the development of organizational ambidexterity, but also brings challenges that management teams should recognize. As more elements of diversity are added into the team composition, the interaction between the team members will be more complex to manage. Hence, diversity might also hinder the development of organizational ambidexterity. From literature review, some challenges have been identified. Managers should be aware of these possible challenges while developing strategies to take advantage of a diverse management team. *Table 5* provides a summary of the main challenges.

Table 5: Challenges of Diversity

Diversity dimension	Challenge	Source
Gender	• Women have more difficulties in reaching top management positions in organizations, as stereotypes continue to be present in the organizational culture of many firms. • Certain attributes and behaviors have been associated with specific genders, and hence stereotypes and sexist attitudes are sustained and repeated.	(Lakhal et al. 2015)
Age	• Differences in risk perception might arise conflicts among subgroups or individual members reducing their ability to reach consensus about how to carry out exploratory and exploitative activities.	(Backes-Gellner & Veen, 2013)
Cultural background	• Cultural background might bring disruptions on the performance of the organization because biases and misunderstandings might appear among members of the team.	(Guillaume et al., 2017; Nederveen Pieterse et al., 2013; Williams & O'Reilly III, 1998)
Functional background	• Previous functional expertise biases current decisions as the members consider their functional background first. • The difficulties in reaching consensus in a time frame might undermine the positive effect of MMT and TMT functional diversity for ambidexterity.	(March, 1991)

Building on the conceptual model of Li (2013), it is possible to identify the link between MMT and TMT. Both management teams are separated due to geographical limits; nevertheless, there are some variables identified by the conceptual model connecting both levels of management to maintain a relationship. The first variable is trust, which supports the strategic activities carried out by the MMT located in Mexico. Connectedness is an important element as it provides the means of communication to share and transfer knowledge and insights between the two managerial teams. Finally, a shared vision is placed to align activities towards a common goal which in this case creates a link between MMT and TMT. The exploratory research might add more variables to understand the relationship between MMT and TMT in regard of organizational ambidexterity.

Figure 1: Adapted Conceptual Model
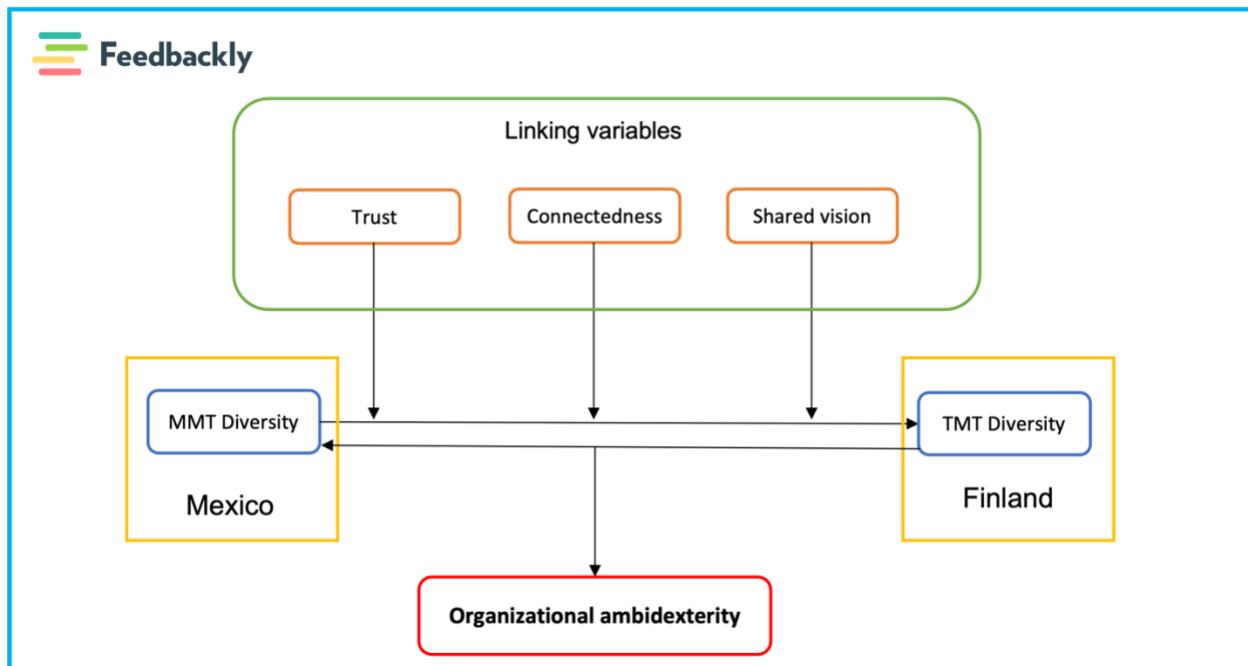
Figure 1 also illustrates a two-way relationship between the two managerial levels. When TMT interacts with MMT it is expected that the organizational ambidexterity will be affected. The input from the MMT might change the direction of the overall strategies in order to accomplish new objectives and remain competitive in the market (By, 2005). The MMT might explore new activities that come from the dynamics of the market in Mexico. As diversity is present in both management teams, this might bring knowledge and capabilities to firm. However, MMT might experience pressure by following TMT's strategies, which might be difficult to adapt and implement in MMT's local market. Thus, it is relevant to understand how the relationship between both diverse teams affects the overall organizational ambidexterity.

2.6 Research Questions

The main research question has been written according to the objective of this research. Four sub-questions (SQs) will support the main research question and provide structure to fill the research gap. The main research question and sub-questions are the following:

How does diversity in MMT and TMT impact organizational ambidexterity?

The main research question can be subdivided in the in the following SQs:

SQ1.   *How do the dimensions of diversity affect the relationship between MMT and TMT?*

This SQ provides insights about the characteristics of the dimensions of diversity. The objective is to understand how managers perceive diversity as way to enhance or diminish the efficiency of their activities. This might have a direct or indirect impact in the development of organizational ambidexterity as the activities of exploration and exploitation require interaction from the members of the management team.

SQ2.   *What barriers are present in the relationship between a diverse MMT and TMT?*

Barriers might hinder the relationship between the two managerial levels. Hence, this SQ aims to identify how these barriers might affect the organizational ambidexterity.

SQ3.   *What is the role of trust, connectedness and shared vision in maintaining the relationship between a diverse MMT and TMT?*

The aim of this SQ is to explain how the linking variables maintain the relationship between the MMT and TMT. This might represent the foundations of a solid relationship which in turn can affect the organizational ambidexterity. This could explain how to overcome certain barriers that could be present within *Feedbackly.*

SQ4.   *How the dimensions of diversity impact the organizational ambidexterity?*

The final SQ has the objective to recognize how diversity can impact the development of organizational ambidexterity. It will be considered the diversity of the MMT and TMT to answer this SQ.

3. Research Methodology

For the research methodology, an interpretative qualitative single case study is applied. This method helps to investigate contemporary phenomena embedded in real-life contexts (Yin, 1994). The criteria used for this single case study consist in two parts. First, it was necessary to choose a company within a SME context with a diverse top and middle management. Second, diversity dimensions (gender, age, cultural and functional background) were required to be present within the management teams to address the main research question and SQs. Thus, *Feedbackly* was selected as it fulfills the criteria for the research. The data collection procedure consists in semi-structured interviews with the management members of *Feedbackly*.

The main research question and SQs are related to an adapted conceptual model, which is related to the context of *Feedbackly*. Interviews will be conducted to identify the main elements of diversity within the management teams and how it impacts the organizational ambidexterity. The interviews will be held with members of MMT and TMT. The questions will be based according to the main research and SQs to gather information that will help to answer them.

3.1 Interviews

Interviews have been generally used in conducting qualitative research, in which the objective is to gain insights about a desired topic (Rowley, 2012). Researchers normally use two types of interviews: structured and semi-structured. Structured interviews consist of few questions in which answers are short, and the questions are placed in the same order with every interviewee. Structured interviews are similar to questionnaires with the exception that instead of letting the respondents to complete and return the questionnaire at their own pace, the interviewee poses the questions. Thus, structured interviews can be used for large random samples.

3.2 Semi-structured interviews

According to Adams, (2015), semi-structured interviews engage with fewer people (an optimum of ten to twelve interviewees) for a much longer period of time and with an elastic open-ended questions which have the purpose of extending the discussion about the topic. Semi-structured interviews are used to answer the research questions. Pre-defined questions will be used to receive the input from managers in *Feedbackly*. The questions will be open-type to guarantee the possibility of further discussion. Members of the MMT and TMT will answer the questions to

provide insights about how the organizational ambidexterity has been affected by the interaction between a diverse management team.

3.2.1 Advantages

Semi-structured interviews are suited for certain tasks. For example, when more than a few open-ended questions are required to follow up inquiries. In addition, this kind of interviews are used to generate ideas in order to develop or change further topics. During a semi-structured interview, the interviewee is free to talk as much as possible, and opinions can go straight to the matter (Adams, 2015).Thus, it is possible to add more elements to the research that has not been identified prior the interview. This flexibility adds value and opens the possibility to identify new elements in the discussion of the topic.
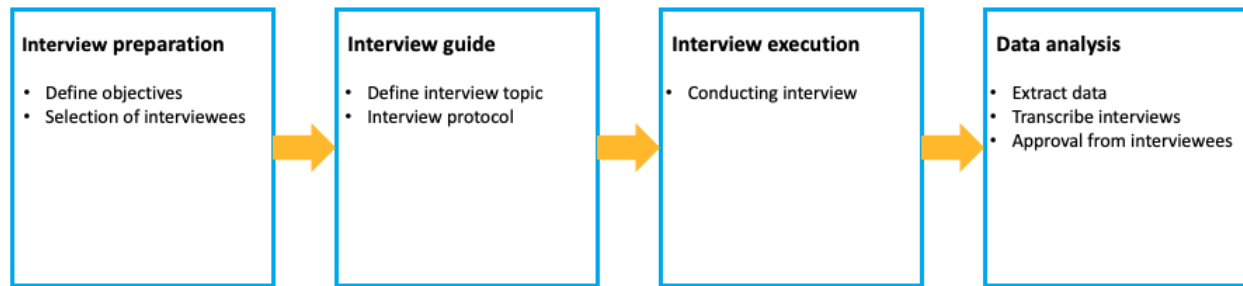
3.2.2 Disadvantages

Semi-structured interviews are time consuming and labor intensive. The process requires scheduling, conducting and analyzing the interviews which needs a considerable amount of time in comparison with structured interviews (Rowley, 2012). Moreover, the interviewer must be enough knowledgeable about the topic discussed; thus, sophistication is required to conduct a semi-structured interview (Adams, 2015). Another disadvantage is that this type of interview only applies for small group of participants, which puts pression on the precision in the estimate of the population from which the sample was drawn or confidence intervals. Therefore, a standardized survey for a sample of two hundred participants would be superior to two hundred hours of semi-structured interviews (Adams, 2015).

3.3 Interview protocol

The interview protocol, *Appendix A,* was designed following the process proposed by Adams (2015). The following phases are part of the process: interview preparation, interview guide, interview execution, and data analysis. In the preparation phase the objective of the interviews are defined as well as the selection of interviewees. Afterwards an interview guide was prepared to set the outline of the interviews for the groups that will be interviewed. The interview execution consists in conducting the interview. The final phase involves extracting data for analysis and sending the interview transcripts for the approval of the interviewees.

Figure 2: Interview Protocol

Interview preparation	Interview guide	Interview execution	Data analysis
• Define objectives • Selection of interviewees	• Define interview topic • Interview protocol	• Conducting interview	• Extract data • Transcribe interviews • Approval from interviewees

3.3.1 Interview preparation

The questions were designed according to the level of management, following the criteria:

TMT

The members of the TMT will be interviewed to investigate how their explorative and exploitative behaviors might be affected from a relationship with a diverse MMT. TMT develops the core strategies, and hence dedicated questions will be directed to understand how the linking variables are used to stablish the foundations of the relationship between the two managerial levels. Moreover, the interviewees might include additional information to provide further discussion regarding organizational ambidexterity.

MMT

The questions in this management level have the purpose to explore diversity regarding gender, age, cultural and functional background. The interviewees will be asked about the relationship with the TMT in order to explore the function of the identified linking variables in maintaining a relationship. Questions regarding barriers will be part of the interview as it is part of the SQs of this research. The sample for MMT consists in three members. Although it is a short sample, the members can be considered diverse as they have fundamental differences regarding the TMT. For instance, age, cultural and functional background differ from the upper layer of management.

3.3.2 Participants

Managerial Level	Expertise and background	Relevance
1 MMT	Senior customer success manager. The role of this member is to have a relationship with LATAM customers.	This MMT member has a direct relationship with the TMT member located in Helsinki.
2 MMT	LATAM sales manager who manages deals that have been closed with different customers.	The manager has the role to communicate and align strategies with the TMT.
3 MMT	Dashboard developer manager, who has the skills to provide customers value and identify key metrics.	Provide insights about new analysis and tools.
4 TMT	CEO. Develops strategies to keep growth and achieve strategic objectives.	The one in charge designing strategies and setting the direction of *Feedbackly*.
5 TMT	Director of LATAM markets. The expertise of this member has proven to achieve sales objectives and grow internationally, especially in LATAM.	Identifies the relevance of markets and offers the value proposition of *Feedbackly*.
6 TMT	Chief customer officer has the experience to manage customer relationships, and it ensures the objectives toward customers are complied.	Receives input from the manager located in Mexico and provides support to maintain relationships.
7 TMT	Director of customer acquisition has the experience to attract customers by communicating the value proposition of the organization.	This TMT member has to share a message which is consistent with the activities of development.
8 TMT	Director of marketing has the responsibility to elaborate strategies for communications and enhance the image of the organization.	Develops communication according to the new developments and features of the software.
9 TMT	Chief technology officer has the technical background to support and develop the software needed to provide value to the customers.	Develops new features in the software and keep the maintenance of the software.
10 TMT	Director of logistics has the expertise to deliver all the products and services on time. In addition is responsible for the contact of suppliers.	Coordinates activities in both countries. Responsible to communicate status of orders.

3.4 Background SMEs

3.4.1 SMEs Characteristics

SMEs have different operating conditions than larger organizations (Chang & Hughes, 2012). The general strategies for organizational ambidexterity might not be appropriate for SMEs as these are normally designed for bigger firms with multiple business units. Previous scholars (Czarnitzki & Delanote, 2015; Ndiaye et al., 2018; Rosenbusch et al., 2011) have recognized that SMEs tend to follow alternative strategies to pursue organizational ambidexterity. These alternatives have the objective to manage limited resources which SMEs find difficult to acquire. For example, human and financial capital are an important constrain in balancing out activities of exploration and exploitation; thus, SMEs might compensate the lack of resources through incorporating right organizational structures and adopting appropriate leadership styles (Ebben & Johnson, 2005).

Another characteristic of SMEs consists in less bureaucratic structures and diversified procedures (Chang & Hughes, 2012). This might benefit the articulation of innovation as it is not necessary to transit into different gates or stages to share new ideas and knowledge. This flexibility can translate into the exploration of new technologies and products that might improve the overall innovation. Nevertheless, these flexible structures might represent a challenge for managers as the lack of formal systems might turn into difficult situations to codify knowledge. For example, there is a possibility of unorganized activities of exploration for new products or services which might cause confusion among the management members, and it could be difficult to replicate in other scenarios as the conditions are not standardized.

Studies have shown that organizational ambidexterity leads to creation of value for new and established SMEs. Although development of innovation requires continuous investment and involves risks and uncertainty, benefits might come in the form of differentiation from competitors, customer loyalty, price premiums for innovate products and entry barriers for potential competitors. However, the management of the risk involved in pursing organizational ambidexterity might represent a challenge for SMEs. Managers might design strategies considering potential risks involved to optimize the allocation of resources. As it was identified before, it is not possible for SMEs to invest a high number of resources in innovative activities comparing with larger organizations which have the opportunity to have slack in resources for risky activities. Thus, SMEs have the challenge to allocate wisely their resources to avoid risks that might cause serious underperformance and even bankruptcy.

3.4.2 Organizational Structure

The organizational structures have been associated with activities related to organizational ambidexterity. Explorative tasks have been linked with organic structures and loosely-coupled systems that support breaking behaviors, and exploitative activities with mechanistic structures and tightly-coupled mechanisms that support path-refining behaviors (Chang & Hughes, 2012). On one hand, exploitative innovation seems to develop from structures in which standardized procedures and routines exist to efficiently coordinate activities of the members of the management team. On the other hand, explorative activities thrive from simple organic structures with limited routines that offer priorities, vision and boundary conditions to inform about strategies to team members. Thus, organizational structure has an influence in the ability to purse explorative and exploitative innovations.

Jansen et al. (2016) have found that the linking variable connectedness is positively associated with explorative and exploitative innovations in large multi-unit organizations. However, SMEs have less members than larger firms, and hence connectedness might not be a crucial variable as the team members find ways to communicate with less boundaries and barriers. Instead, distributing effectively activities and resources to the members is considered to be more efficient while developing ambidexterity (Mueller et al., 2013). For example, a member of the TMT might have more activities and responsibilities creating an overwhelming situation in which it is not possible to focus on strategies to develop ambidexterity. Thus, SMEs might distribute and allocate responsibilities efficiently to enable members of the management to focus on specific activities that might add to ambidexterity activities.

Feedbackly has a functional structure which is commonly adopted by SMEs. This has the purpose to simplify managerial activities and communicate the intended strategies and knowledge throughout the organization. Although the interaction between members of the management team is flexible, a formal structure is followed to define job responsibilities, rules, and how communications are formalized. In this way, it is possible to balance a tight and loose structure to foster activities of exploration and exploitation. **Figure 3** depicts the structure of *Feedbackly*. The CEO is leading all the TMT members and the MMT is reporting directly to each member of the TMT.

Figure 3: Feedbackly Structure
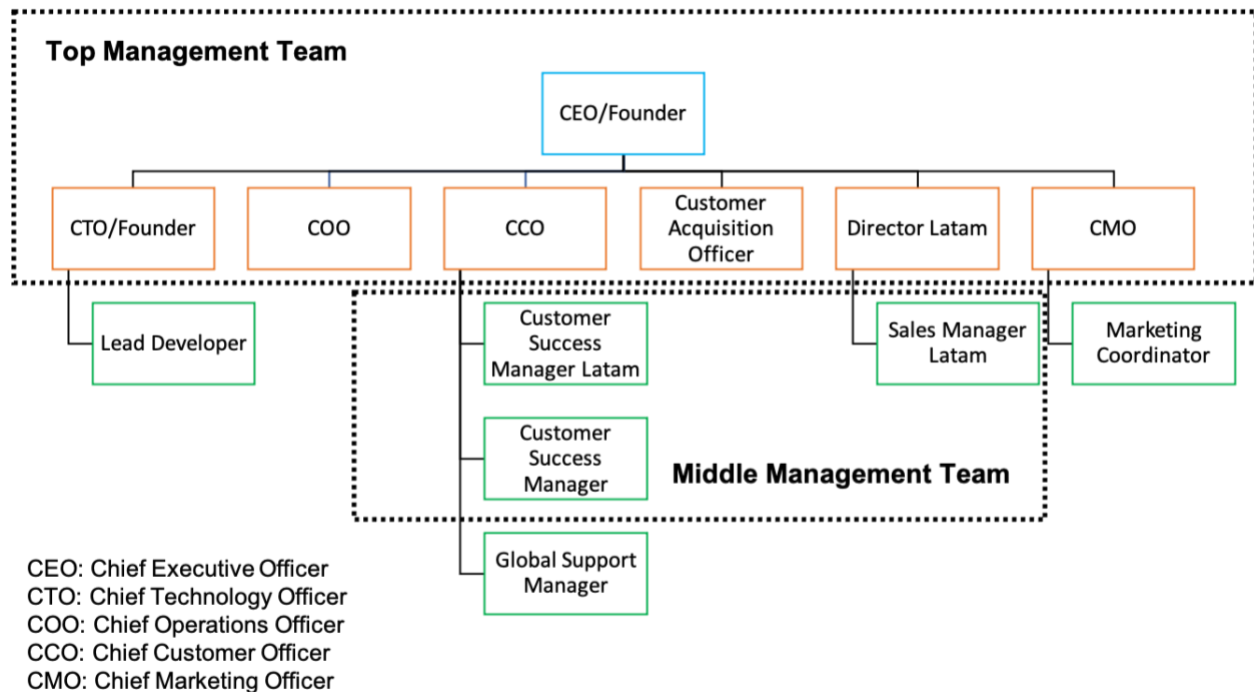
A functional structure is followed by *Feedbackly*. This kind of structure has different benefits, for example members with similar skills and knowledge are grouped together which enables them to become specialists, increasing the operational efficiency. The natural objective of a functional structure is to bring the human and informational resources together to accomplish the organization's goals. Davoren (2019) argues that functional structures are suitable for small organizations in which the focus relies in few products or services, because the performance is maximized by encouraging cooperation among different teams at various levels of management through communication and coordination. Currently, *Feedbackly* does not offer a wide variety of services and the organization size is small; thus, a functional structure is appropriate.

Nevertheless, there are disadvantages in functional structures. Management issues might arise due to every function can be rigid due to a certain level of formalization. There is the case in which functional units are not accountable for each other and weak horizontal coordination might occur. This might lead the decision process to be slow and inflexible. Additionally, the lack of coordination and communication might lead to a decrease in innovation activities as every functional team is focused on its activities and strategies. For instance, the CTO might be working in a function that might not be aligned with the requirements of the CCO creating a misunderstanding and misplacing strategies. Managers of SMEs should recognize these disadvantages in order to avoid issues in the overall performance of the organization.

3.4.3 ICT in Organizational Structure

Since the introduction of internet, the development of communication tools has increased exponentially in the last two decades. Contemporary ICTs tools have provided new ways to collaborate and share knowledge. The reliability and availability of business communication platforms have opened a faster interaction between members located in different places and even continents. Sharing documents, media and information through internet is a normal activity that occurs in every organization. This has improved the access and sharing of information which is essential for organizations. The cost of acquiring ICT tools has decreased over the time making easier for SMEs to acquire different set of technologies that maintain communication and assist to organize activities.

ICTs enable looser structures which improves flexibility within the organization. This is possible because the structure can be divided in modules facilitating decentralization of the organization. The flexibility allows organizations to react faster to external changes and increase the overall efficiency of the operations. As mentioned by Newell et al. (2009) these flexible structures lead organizations to achieve ambidexterity as it is possible to be efficient and innovative at the same time. Newell et al. (2009) also provide a set of characteristics for organizations with these flexible forms of organizing:

1. **Decentralization via the creation of semi-autonomous business units (BU):** it has the purpose to focus on a particular market niche and respond with more flexibility to the needs of the market niche.

2. **Less-hierarchical structures:** this gives more autonomy and empowerment to individuals as there is less control and supervision. Additionally, the removal of layers of management helps to have less-hierarchical structures.

3. **Cross-functional project teams:** members of different functional teams are brought together to work in cross-functional teams. This has the objective to reduce lead times and give a faster response to needs of new services or products.

4. **Interorganizational networking:** organizations are working to build alliances and partnerships with other organizations or outsourcing particular services. This helps organizations to innovate more quickly since it is possible to acquire knowledge and skills that are not developed internally.

5. **Globalization of business:** this characteristic has enabled the grow and expansion of organizations as it is possible to go to different markets. Organizations normally reach globalization through partnerships, acquisitions or internal international growth. Benefits of globalization include more profitability and the potential to develop new capabilities as it is required sometimes to adapt to different markets.

Feedbackly has relied in ICTs tools to carry out activities and operation. The teams are in constant communication via Slack, which is a business communication platform. The use of email is an official way of communication within the organization, and it is also used to maintain official communication with customers. Video-communication services are also in place to maintain regular meetings to share information about the activities and share knowledge across the members. Every team member uses digital calendars to provide information about time availability and to schedule meetings. These technologies are essential for *Feedbackly*; and since the start of the COVID-19 pandemic, now it has become the norm for almost every organization as it is not possible to do traditional ways of working, for example: meeting in offices, visiting customers or attend to off-line workshops. *Figure 4* illustrates the characteristics of the ICT tools used by *Feedbackly*.

Figure 4: ICT Tools

	Email	Cloud drive	Business communication platform	Video-communication service
Purpose	Request and share information.	Save copies of data and files backup.	Communication in real time with members of the team.	Hold team meetings, webinars, interviews and product demos.
Frequency	Everyday.	Everyday.	Everyday.	Weekly meetings and monthly meetings with customers.
Benefits	Easy and fast. It is possible to attach files and media.	Accessible for every member. Contains all documents.	Convenient as it possible to use it at any time and location.	Overcome location bariers, fast and easy.
Disadvantages	Possible information overload, misunderstandings and can take time to reply.	Privacy issues and support needed.	Blurring lines between personal and professional time. Information overwhelming.	Less personal contact, technical issues and virtual fatigue.

4. Results

This chapter provides the findings of the semi-structured interviews. Firstly, the main characteristics of diversity for both managerial levels are presented to understand how their relationship is affected. Secondly, the barriers in the relationship between MMT and TMT are discussed aiming to get a deeper knowledge about how this can impact organizational ambidexterity. Thirdly, it is discussed the role of the linking variables: trust, connectedness and shared vision as a way to establish the foundation for the relationship between MMT and TMT. Finally, it is presented how the dimensions of diversity impact the organizational ambidexterity.

4.1 Characteristics of MMT and TMT diversity

The first question asked to the interviewees consists in identifying the management teams as diverse. Every interviewee considered that the teams are diverse at least in one dimension. It was recognized that working with diverse teams affects the managerial relationships in comparison with homogenous teams. The following table summarizes the main characteristics of diversity in *Feedbackly*.

Table 6: Characteristic of Diversity on Feedbackly

Diversity dimension	Characteristics
Age	Most members of both managerial teams are in their late 20's and early 30's. Nevertheless, there are members over 40 years old and in their early 20's. Thus, there is wide range regarding age which translates in differences in working experience and knowledge.
Gender	The interviewees mentioned that *Feedbackly* is male driven. Approximately, 70% and 100% of TMT and MMT respectively are constituted by men. It was acknowledged that it is necessary the incorporation of more women in the team to reach gender parity.
Cultural Background	**TMT 6** mentioned *"At this point the organization has 6 different nationalities: Mexican, American, Finnish, Estonian, Spanish, and Turkish".* Hence, multiple cultures are interacting in the daily activities of *Feedbackly* in both management teams.
Functional Background	The members of the team come from different areas of expertise. For example, the TMT has members with expertise in computer science, business, logistics, management, marketing and sales. This provides the required knowledge to perform on every functional area within *Feedbackly*.

4.1.1 Diversity affecting the relationship between MMT and TMT

Age

As it was identified previously by the literature review, age is a characteristic easily recognizable. **MMT 2** acknowledged that working with **TMT 7** has been a rewarding experience as the top management member has over 30 years of working experience in sales. A relationship of respect and admiration has been established. This builds an environment in which younger team members can acquire knowledge by asking relevant questions to members with more experience. Thus, it is possible to receive advices when doubts or questions arise while executing strategies. In the same way, older team members can gain knowledge by interacting with younger members. For example, **MMT 1** has had accomplished a master's degree in England which provides academic knowledge to structure activities and share knowledge across management members.

Gender

As the organization is male driven, gender seems to not have an influence in the relationship between the management members. The team members mentioned that is necessary gender parity. This is aligned with the findings of the literature review in which it was described that gender parity helps to balance activities of exploration and exploitation. As it was mentioned by **TMT 8**, *Feedbackly* will take into consideration gender parity for future recruitment activities.

Cultural background

It was stated by members of both managerial levels that it is required to understand the cultural background. For example, it was discussed that Latin Americans tend to be more ambiguous in communicating while Nordics are straight forward. This is discussed in depth in **Section 4.2.1** in which barriers regarding communication are analyzed. Thus, if team members do not recognize this dimension, they will potentially experience difficulties in establishing a proper relationship.

Functional background

The diversity of functional backgrounds can make better connections within the team members which can result in better performance. For example, **MMT 2** mentioned that during meetings with customers it was identified an improvement in the user interface of the software, and hence using the knowledge of **TMT 9** it was possible to develop a new feature for the product. In this way, it is possible to achieve synergies between the members of both managerial teams.

4.2 Barriers in the relationship between MMT and TMT

During the interviews some barriers were identified. Managing diversity adds complexity in the interaction between members of the management team. Every interviewee mentioned that it is natural to encounter certain obstacles while working with members who have different backgrounds. Every individual has its own way of working and set of values which sometimes are difficult to adapt while working towards common goals. It is relevant to analyze barriers as the activities of exploration and exploitation for innovation require coordination between the two management levels.

4.2.1 Communication

Every interviewee mentioned that communication is the most common barrier in maintaining a relationship between MMT and TMT. It was mentioned that sometimes communication is poor as it is not shared the whole information about current activities in different locations. **MMT 1** mentioned that it is difficult to share information to the TMT about meetings with potential customers who are located in Latin America. As codifying the perceptions of certain customers is not possible, some details regarding meetings are not possible to share. Specially for the sales team, interactions face-to-face contribute to access to more information as it is possible to perceive the behavior of potential customers and improve the communication of the value proposition.

Timing was mentioned by the interviewees as a barrier in communication. The different locations involve time gap between working hours of the management team. For example, a Latin American customer might request a code to perform an activity; however, the IT team located in Europe might be late at night. **MMT 3** mentioned that managing time gaps is a challenge that requires structured process and clear communication to avoid situations in which the IT team in Europe has to work outside scheduled times.

Every culture has its own way of communicating information. Latin Americans tend to avoid situations in which it is necessary to communicate the feasibility of a task or project; in the contrary, Nordics are concrete and straight forward while sharing information. For example, an **MMT 1** mentioned that in Latin America is a common practice to accept every request from customers; in contrast, the Nordic culture tends to be clear in setting boundaries and acknowledging when it is not possible to offer a service to a customer. This is a clear difference in culture.

Feedbackly also relies in a cloud platform to provide access to documents and files to all the members of the organization. This practice has the objective to codify knowledge. Nevertheless, the members of MMT find difficult to interpret certain files which creates confusion about how to perform certain processes. As mentioned by Newell et al. (2009) sharing codified knowledge is only effective in situations where there is some common understanding and a sufficiently well-defined task. Cloud platform links geographically the diverse members of the management team; however, it might inhibit knowledge sharing if it becomes a substitute for face-to-face interaction.
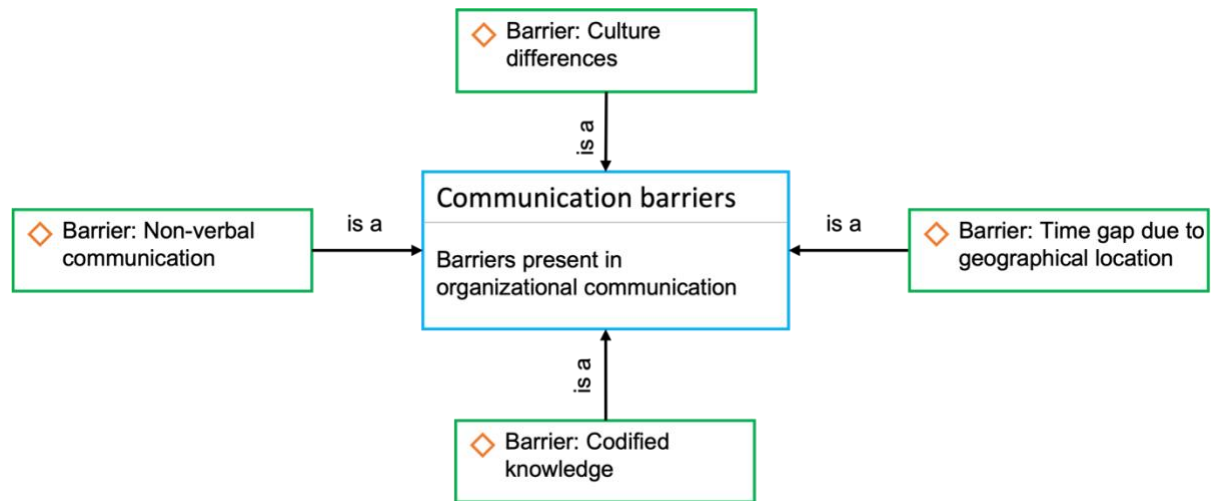

Figure 5: Overview of Barriers in Communication

4.2.2 Resistance to change

The interviewees mentioned that one of the barriers in the relationship between MMT and TMT is resistance to change. This barrier introduces costs and delays in the implementation of strategies and activities from the TMT. However, this resistance has also been considered as a source of information, being useful in learning how to develop a more successful change within the organization. Undoubtedly, resistance to change is a key topic while managing organizational ambidexterity and it has to be considered seriously by the members of the management team to help the organization to achieve activities of exploration and exploitation.

One of the sources of resistance of change comes from the inability organization's members to look into the future with clarity. As it was mentioned by the interviewees, *Feedbackly* does not have a particular department to research about future trends. At the moment most of the innovation activities come from feedback from the customers and by following strategies from main competitors. This creates certain resistance to change as it is not clear the vision regarding innovative activities. Members of the team might resist to move towards certain activities as it is not clear what the objectives and benefits are expected from the proposed strategies.

Another source of resistance to change comes from differences in beliefs, or strong and definitive disagreement among groups about the nature of the problem and its alternative solutions. As the management teams have a diverse background, different perspectives are in place when it is required to approach challenges. Thus, it is expected that members will maintain their beliefs. The consequence is that other possible solutions might be ignored and reaching consensus from the members of the team will be difficult to achieve.

The MMT has mentioned that the perpetuation of ideas is also a source for resistance of change. In other words, there is a tendency to go on with the present thoughts although the situation has changed. This characteristic has been attributed to members of the team whose age is older. Literature and interviews from young members of the management team have proposed that there is a positive relation in sticking to own ideas and beliefs as the team member is older. It is important to acknowledge that the markets are constantly evolving, and hence it is necessary to adapt thoughts and ideas.

Feedbackly has limited resources to develop new capabilities. It has been identified that this lack of necessary capabilities to implement change brings resistance to perform activities that require a different mindset. **MMT 1** has mentioned "without the required resources, it is difficult to change existing process to improve organizational ambidexterity". When there is this capability gap, it is expected that the members of the management team will experience uncertainty and insecurities in introducing and exploring new strategies and processes that might improve the overall organizational ambidexterity. **Figure 6** summarizes the main characteristics in resistance to change.
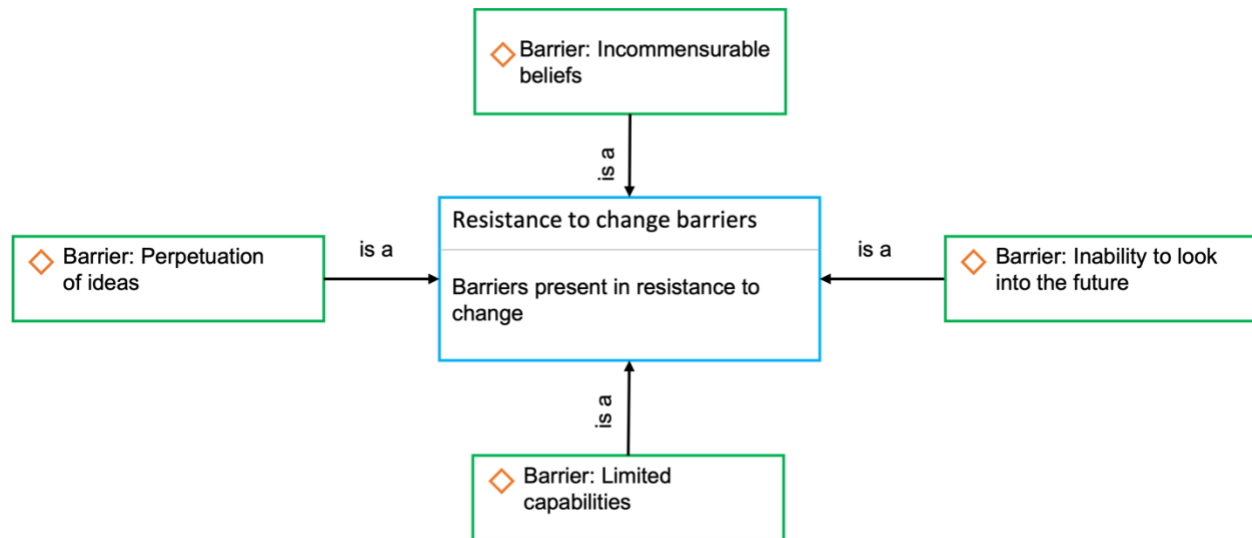
Figure 6: Overview of Barriers in Resistance to Change

4.2.3 Team integration

The communication among team members is mainly via ICT tools. The perception among members of the TMT is that the video conferencing tools are enough to maintain and share insights about the daily activities and report the progress of the objectives. Nevertheless, it was mentioned that it is also important to have not only professional conversations that are carried out in a daily basis but also informal conversations to meet the members in a more casual context. As mentioned by **MMT 1**, confidence and trust are improved when there is more information about the team members outside the professional environment.

Although in the past was common to organize integration activities for members of the management team, the COVID-19 restrictions have limited these kinds of activities. The objective of the integration activities is to build trust, team spirit and build a working environment. Moreover, leaders have the opportunity to interact and listen to members of the management team with the opportunity to show interest and commitment. ICTs tools have enabled some integration activities using online channels; however, the interviewees mentioned that although those initiatives help to build teamwork, it is missed the face-to-face interaction to feel closer to the management team.

Team integration is important to deal with conflicts that might arise inside the management team. When conflict is poorly managed, it might impede collaboration. Moreover, as it was

discussed during the interviews, conflict might be a sign of ambiguity over objectives, competition over authority and differences in members' expertise and goals. Conflicts around resource allocation are also common in *Feedbackly*. This is a normal characteristic of SMEs as the restriction of resources leads to carefully invest their resources in strategic activities. As mentioned by **TMT 4** "At the moment, it is not possible to provide all the resources to develop more functionalities to our platform".
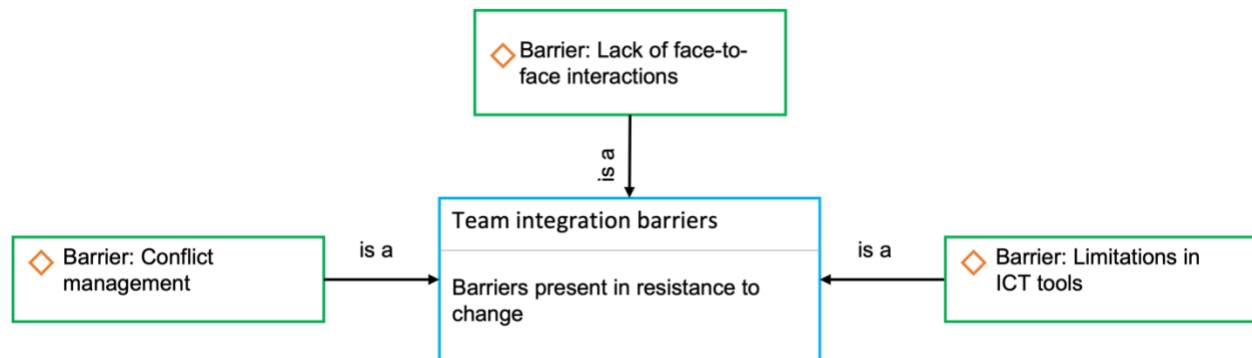

Figure 7: Overview of Team Integration Barriers

4.2.4 Emotional barriers

In the process of communication, it is essential to understand each other's mindset and mental capacity; this applies in every case whether a TMT sharing the objectives of the firm or a conversation between the top manager and middle manager. If someone is communicating with the other individual or a group of individuals with an attitude of disinterest or unwillingness, then the process of communication will be ineffective. In this case, it is believed that attitude of the communicators is inappropriate for the purpose of making the process of sharing information. It is therefore considered crucial to overcome emotional barriers.

MMT 3 mentioned that emotions play an important role in managing a relationship between MMT and TMT. It has been acknowledged that mental well-being is required to perform efficiently in the daily activities. When TMT members are experiencing a bad situation, it is normal that emotions like anger, frustration and antagonism will take place in the relationship among members of the team. These emotions impact negatively the relationship between MMT and TMT as it is not possible to listen to ideas and opinions of other members of the team. As it was described by **MMT 3** "I failed to shared ideas when a member of the team is experiencing anger or frustration". The perception of a negative emotional environment hampers the

communication and makes the team members insecure. As it was mentioned by **MMT 3** "The MMT members might be afraid of sharing results, and hence they might only show what they consider to be appropriate to the TMT".

When MMT members perceive an environment with negative emotions, it is likely that organizational ambidexterity will be affected as the activities for explorative and exploitative innovation will not perform adequately. It is important to consider emotional work to improve professional relations between the MMT and TMT and to avoid misunderstanding. On the contrary when MMT members feel that their comments and ideas are welcome, they will share ideas, solutions and knowledge that might be relevant to enhance the ambidexterity of the TMT. Interviewee mentioned that being open provides more resources to solve challenges and improve the overall innovation within the organization.
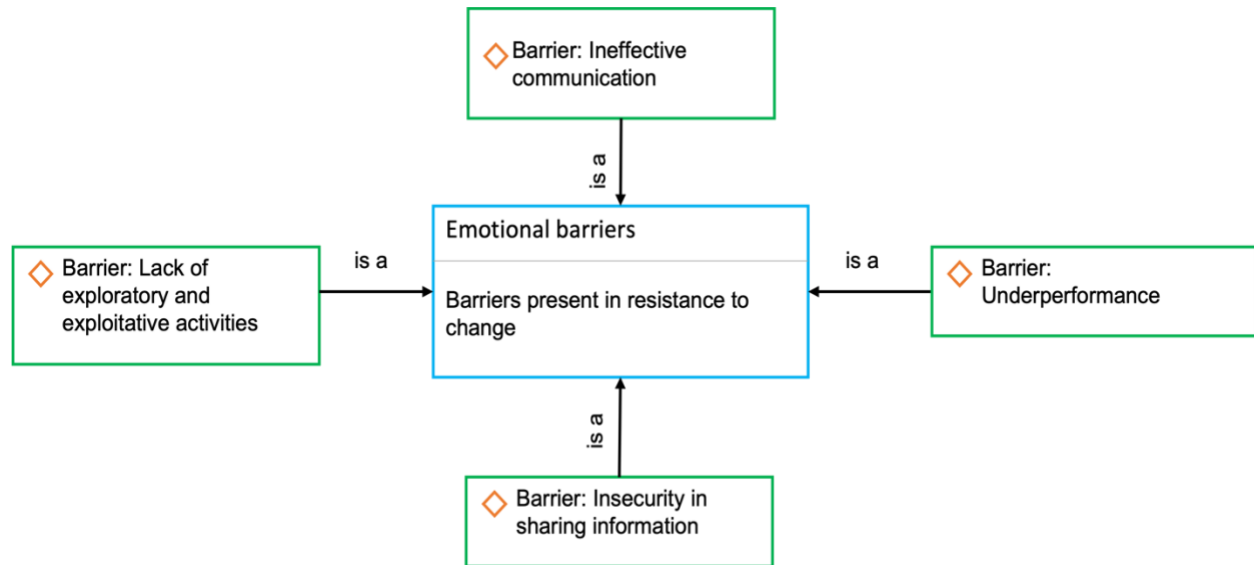

Figure 8: Overview of Emotional Barriers

4.3 Role of trust, connectedness and shared vision

4.3.1 Trust

As mentioned by the interviewees trust is an essential element in maintaining the relationship between MMT and TMT. As the teams are located in different locations, a degree of freedom in performing tasks is required. Thus, trust is necessary as the members should acknowledge that the team members are capable in performing adequately to meet with the goals and objectives. Schnackenberg & Tomlinson (2016) have argued that the level of trust depends on the extent to which the trustee is perceived as trustworthy which is influenced by the following characteristics of the trustee:

- Benevolence: The perceived willingness of an organisation perform well aside from profit motives.
- Integrity: The extent to which an organization follows rules and principles that are acceptable perceived from another' perspective.
- Ability: The necessary skills, and competencies, that enable an organization to influence within a task and situation specific nature.

An example of trustworthy is recognizing errors that might occur during the execution of strategies. **TMT 5** mentioned "You need to recognize that you can make mistakes and you can be wrong that's the best thing to build trust". In occasions, the activities and tasks do not meet the intended objectives. It is clear that adjustment of certain strategies is necessary. The members of the team should have enough trust to share any mistakes or adjustments to improve the operation. Some mistakes might lead to important improvements and help the organization to get learnings. Additionally, **TMT 5** commented "Every organization makes mistakes"; mistakes are unavoidable, and managers should be aware that it is essential to recognize and communicate them. Thus, the characteristics of trustworthy should be in place to guarantee a professional relationship.

Another important element of trust is transparency. The expectations and intentions of the members of the management team can be shaped by the quality of the information shared. This leads to transparency which is an element to develop trust among the team members. According to Schnackenberg & Tomlinson, (2016) three factors are required to achieve successfully transparency:

- Disclosure: This factor refers to the extend by relevant information is shared open and timely by another party. The information must be documented and communicated properly.
- Clarity: The information must be clear comprehensible, coherent and understandable to analyze and interpret it.
- Accuracy: The extent to which the individual receiving the information perceive it as correct and reliable. Accurate information is associated with truthfulness and honesty.

4.3.2 Connectedness

As previously discussed by Li (2013), connectedness refers to formal or informal personal links between TMT members, which enables access to other members disparate experience, knowledge, and backgrounds. Connectedness among the upper layers of the management team creates channels for information and knowledge to flow and exchange among members. Such channels enhance TMT mutual adjustment and efforts to participate in problem solving. TMT of *Feedbackly* has acknowledged the necessity of sharing information to recognize different interpretations, understand the need to align these differences, and identify mutually beneficial solutions to overcome psychological and structural inertia.

Connectedness facilitates the close communication between members increasing the team integration. As members get to know each other in a deeper level, it is encouraged the consideration of diverse ideas and develop a common identity. As mentioned by **TMT 10** "An open dialogue is the most important element in maintaining the relationship with the management team". This in turn can help in the exchange of ideas that might improve the exploitative activities and communicate the discovery of new ideas which is essential for organizational ambidexterity. Thus, it is important to overcome the barriers that were previously identified in order to provide a safe environment in which connectedness can be developed.

4.3.3 Shared vision

The shared vision of the TMT includes the collective goals and aspirations of the organization. This can act as a bonding mechanism by integrating resources among different members of the management team. When the goals and values are shared by the team, it is possible to provide a common language platform, which eliminates misunderstandings in communication and increases opportunities for sharing and exchanging ideas and resources freely. Using an information-processing perspective, the organization builds a common communication platform among the upper layers of the management team enabling them to share information, exchange

their different perspectives, and incorporate opposing views more effectively. Because top managers acknowledge a shared vision, a combination of perspectives on the effects of exploration and exploitation is in place. This enables to consider and address the challenges of allocating resources to balance strategic contradictions.

Moreover, a shared vision contributes to a collective understanding that can reduce the potential negative effects of TMT and MMT heterogeneity, such as interpersonal conflicts and social categorisation. The main purpose is to align the members of the organization towards a common vision in which it is possible to allocate resources and reach consensus in the activities that the organization should perform in a collective way. The members of the management team will acquire guidelines to share relevant insights that can contribute to the shared vision. Therefore, when there is a shared vision in place the diversity of the members of the management team impact positively the organizational ambidexterity taking advantage of the diverse ideas and thoughts as it is possible to organize them within a shared vision.

In addition to trust, connectedness and shared vision the interviews indicated that there is other two linking variables that are important in maintaining the relationship between MMT and TMT. These are commitment and ownership. The interviewees mentioned that these variables are required to sustain the relationship and also to foster the activities of exploration and exploitation of innovation. Thus, the variables are incorporated in the adapted conceptual model that is illustrated by *Figure 9*.

4.3.4 Commitment

TMT 5 mentioned that sometimes there is a lack of commitment by members of the MMT and TMT. When objectives and goals are set to start operations in a different market, sometimes the upper layer of the management team does not carry out follow up activities to coordinate and evaluate results. Hence, the MMT located in a different market experiences uncertainty in the direction of the strategies and begins performing activities that might be out of scope from the original objective. This affects exploitative activities as the efficiency is not improved and explorative activities will not be performed. As mentioned, there are limited resource, and hence it is required efficiency in operations to perform certain activities of exploration.

4.3.5 Ownership

Ownership has been an important characteristic of successful organizations. As it was referred by the interviewees, ownership is about taking initiative in projects that involve activities for exploration and exploitation. Every member of the management team is accountable for the quality and timeless of an outcome, even when collective work is in place. When managers develop ownership, it is likely that decisions will be taken thoughtfully and with more care. Moreover, it is possible to increase initiatives that have the objective to improve the daily activities. This is enabled as the motivation of the team members increase. It is important to highlight that economic incentives are not the only way to motivate management members to embrace ownership, but also personal interests should be aligned to encourage ownership.

Figure 9: Adapted conceptual model
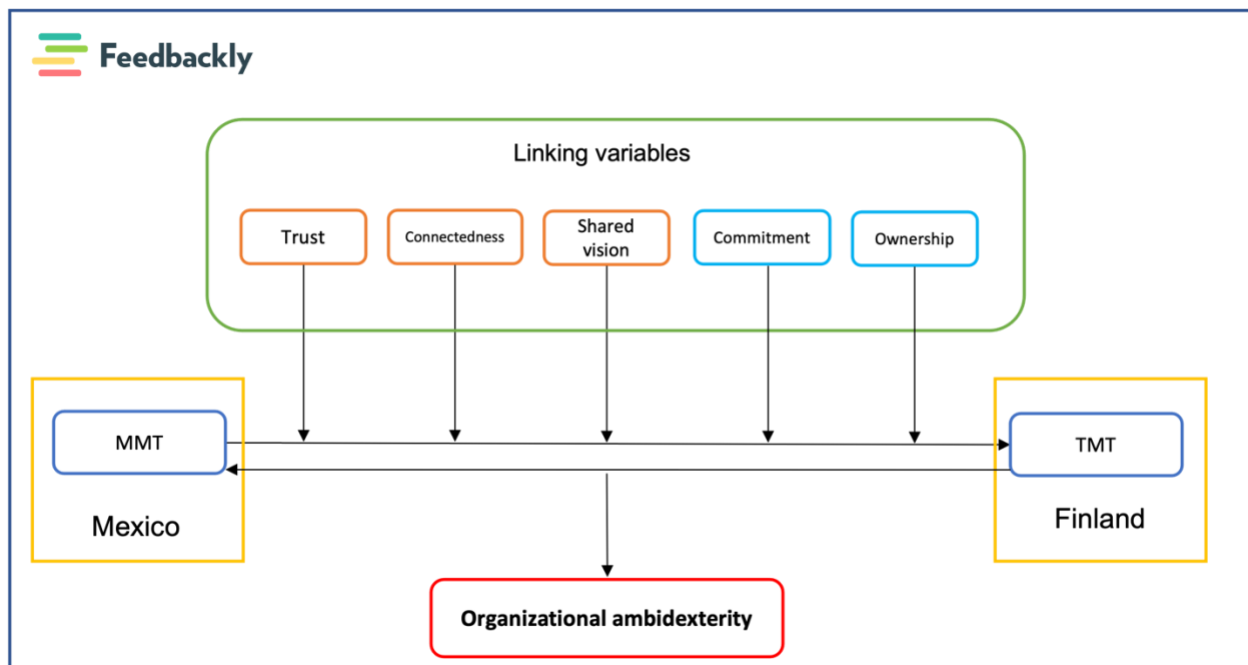
4.4 Diversity affecting organizational ambidexterity

Every element of diversity within members in both management teams has an impact in organizational ambidexterity. It has been identified that diversity provides a bigger pool of resources that might help in the activities of exploration and exploitation. The MMT interviewees mentioned that it is possible to acquire perspectives from a wide variety of angles that help to approach challenges when the organization is facing them. Knowledge and experience are broader when the members are diverse. This brings benefits when the organizations are small such as *Feedbackly*. For example, it is possible to develop capabilities like increasing the quality of sales leads.

Nevertheless, as it was discussed in *Section 4.2,* there are barriers that both management teams need to overcome to move *Feedbackly* into a successful ambidextrous organization. For instance, explorative activities rely in sharing insights and exploitative innovation in taking advantage of the existing knowledge within the organization. TMT has the expertise and knowledge to develop ambidexterity; however, the MMT has a different set of experiences that might enable the TMT to adapt or modify the strategies to improve the overall organizational ambidexterity. *Figure 10* shows a summary of the impact of diversity on organizational ambidexterity.

Figure 10: Diversity Affecting Organizational Ambidexterity
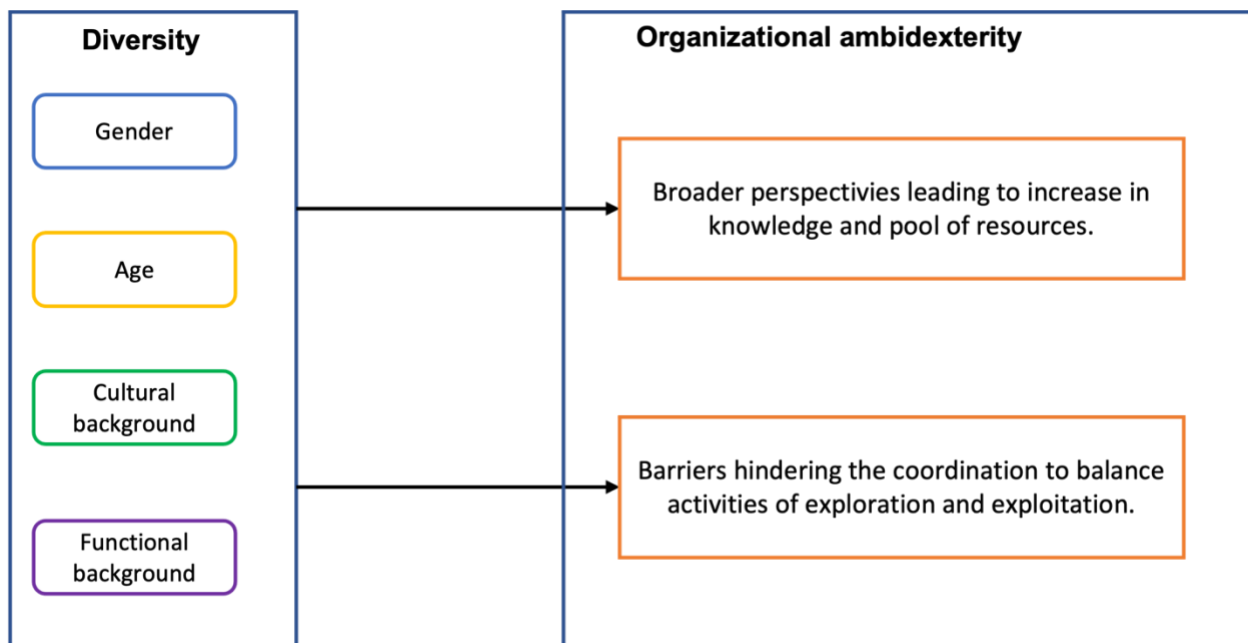
From the results, it is possible to present the complete interaction between the two managerial levels. The linking variables are important to maintain a good relationship between the two teams, which is essential to develop organizational ambidexterity as communication and coordination is required to perform activities of exploration and exploitation. Then, it is possible to identify how diversity of each managerial team affects organizational ambidexterity in every dimension of diversity. *Figure 11* illustrates the main results of this master thesis translated into an adapted model from Li (2013).

Figure 11: Final Adapted Model
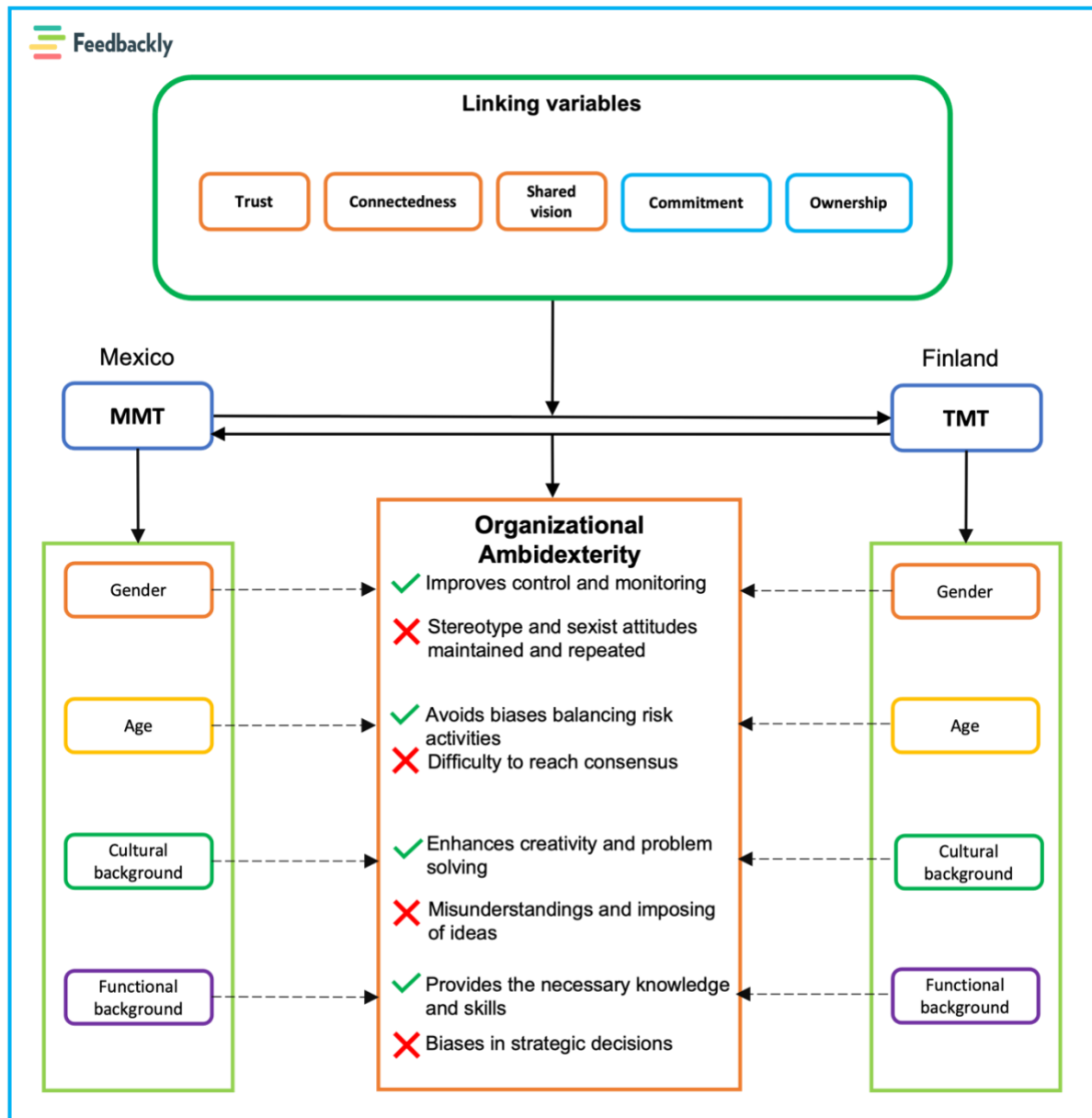
5. Discussion

5.1 Discussion on research findings

It has been argued that diversity has an impact on the development of organizational ambidexterity. Thompson (2003) has argued that diversity provides resources in form of knowledge, skills, capabilities, and experience. This was confirmed during the interviews as it was mentioned, for instance, that different backgrounds enable the organization to develop and improve their activities of exploration and exploitation. This in turn provide capabilities that allows the firm to remain competitive and increase the value proposition of the products and services. The expertise of the members of the organization contribute to innovate and perform activities and tasks with efficiency.

The literature review offered an overview of the existing knowledge regarding ambidexterity and diversity. It is clear that every dimension of ambidexterity has an impacting in carrying out activities of exploration and exploitation. For instance, a balance in age might provide a neutral risk attitude to explore new ideas and test new services. The functional background enables the access to skills and capabilities that help to increase the efficiency in the processes of the organization which improves the exploitation of existing knowledge. For example, *MMT 3* mentioned that it was found a way to improve alerts to customers by programming forecast methods within a business intelligence tool used by the customer.

From the semi-structured interviews, it was possible to identify the relevance of diversity within the organization. The members of both management team acknowledged the importance of having diversity in regard of gender, age, cultural and functional background. The performance of the organization has a natural tendency to improve when there is a myriad of perspectives about how to solve natural challenges that the organization faces as it was mentioned by (Post et al., 2009). For instance, how to adapt to certain markets in which it is not possible to communicate with the same set of cultural beliefs and ideas. An important insight of the research is that the members acknowledge that it is still necessary to enhance certain aspects of diversity like gender as it was recognized that the management team is still driven by males, and hence it is necessary to incorporate female members to achieve gender parity.

Nevertheless, diversity also opens challenges and barriers for the members of the management team. It has been discussed that managing diverse members it is not an easy task. Misunderstandings are common in practice and the expectations might differ among members of the team as it has been also discussed by March (1991). Although there are many ICTs tools

that supports the daily communication among members of the management team, the interviews showed that barriers are still present such as lack of interaction face-to-face which helps to build team integration as the members are seen beyond a professional background. It is important to point out that trust, ownership and commitment are essential to move the organization into ambidexterity.

An important finding of the research is to be open and embrace diversity. As mentioned by *TMT 5* "Societies sometimes are trying to conquer and impose the way of thinking. And this is one of the most common mistakes in companies when they are trying to go abroad. They try to impose things and when you are trying to impose things you might fail". This quote resembles the importance of adapting to different cultures. Some strategies applied, for instance in Nordic countries, might not be useful in regions like Latin America. It is relevant to consider differences in cultures to adapt and achieve the desired goals. This is aligned with the arguments of Earley & Mosakowski (2000) in which it was identified that overcoming differences regarding cultural backgrounds is necessary to increase the team performance.

Finally, the findings indicate that besides knowledge, skills, experience and capabilities it is also important to consider that humans are interacting to perform and innovate. Almost every interviewee mentioned the importance of the social interaction as way to build an environment in which it is possible to collaborate and share ideas. This can help the organization in becoming ambidextrous and acquire benefits to outstand competitors and offer better services to customers. Therefore, managers might pay attention in these details to achieve objectives and goals that sometimes go beyond profit motives.

5.2 Limitations

Limitations have been found in this research. Firstly, the relationship between MMT and TMT has been defined in a SME context, and hence the findings might not be comparable for different types of organizations such as large multinational companies. A bigger sample including multiple organizations might improve the analysis. Nevertheless, restrictions in time and resources did not allow a deeper sample for this master thesis.

Secondly, a limiting factor is the data collected through the semi-structured interviews. The interviewees were introduced to the topic as they did not have enough knowledge. Although managers are familiar with several managerial concepts, organizational ambidexterity is not a common concept that every manager knows. This clarification of concepts could have biased the managers and influenced their answers. Further, the sample size does not represent

proportionally the entire universe of managers within SMEs. To mitigate this effect, it was described the characteristics of *Feedbackly*, and it was identified that it has similar characteristics in comparison with other SMEs such as size, resources, and structure.

Thirdly, the research was conducted only by one researcher. Consequently, the data analysis depends on the judgement and interpretation of the researcher. The quotations, categories, and elements attached to the transcripts are susceptible to the subjectivity of the researcher and has an influence in the results of analysis. This involves a risk to the validity of the analysis. The data analysis between researchers will increase the validity of this research. Moreover, the including elements of data triangulation would have reduced the risk of subjectivity; thus, the introduction of more case studies will improve the validity of the report.

Finally, including knowledge of more experts in the evaluation of the impact of ambidexterity from the interaction of diverse MMT and TMT will improve the validity of the research. For instance, interviewing experts from academia will add expertise from a different point of view. This influences the quality of the research by adding more perspectives to the practical problem and adds more discussion.

5.3 Future research

Further research for diversity and organizational ambidexterity can be done. Increasing the sample size of interviews might help to increase the validity of the research. Additionally, it could be possible to interview members of more organizations to evaluate possible differences; this might improve the validity of the research. Including more industries might help to identify how the relationship between diversity and organizational ambidexterity might change regarding the industry. Moreover, adding more types of organizations with diverse organizational structures and with bigger structures will improve the analysis between the relationship between diversity and ambidexterity.

Analyzing more case studies might improve the methodical triangulation of this research. In this way, the intrinsic biases from a single researcher will be reduced. The case studies might complement the literature review and the semi-structured interviews. Moreover, the case studies might provide more information and insights about the relationship between diversity and the ambidexterity of the members of the management team. Thus, the credibility of this qualitative research can be improved.

Finally, the incorporation of human resource management (HRM) could provide insights about how to manage a diverse team. The objective of including HRM is to make more robust the

research in terms of analyzing how it is possible to collectively improve the sense of purpose, develop skills and capabilities, leadership, and the overall performance of the employees within the organization. This is related in achieving a successful ambidextrous organization, and hence it can be linked for future research.

5.4 Managerial implications

It has been argued by scholars (Birkinshaw & Gibson, 2004; Blarr, 2012; March, 1991; O Reilly & Tushman, 2004) that ambidexterity supports organizations to remain competitive in the long run by developing capabilities to foster innovation. This master thesis aimed to identify how the relationship, between a diverse MMT and TMT, impact the organizational ambidexterity. Besides, it has been acknowledged that there are key variables to maintain a proper relationship between the two managerial levels. A good relationship between members of both management teams is important because it can enhance communication and coordination which are required to carry out activities of exploration and exploitation.

Managers should acknowledge diverse teams as a first step to overcome barriers, which were analyzed in *Section 4.2*. In this way, awareness about the necessity of managing diversity becomes evident. Every team member is different, owning a set of beliefs and knowledge. It is natural to find differences in daily activities and even in designing strategies. Managers should mediate and conciliate these differences in order to take advantage of diversity and improve organizational ambidexterity. As it was found during the interviews, communication, commitment and ownership are important elements to keep a good relationship between members of both management teams. Thus, policies can be developed to share them throughout the organization communicating the importance of embracing diversity.

Normally, managers within organizations are focused on maintaining efficiency on operations and providing resources to execute strategies. Nevertheless, this master thesis brings back characteristics of diversity which are important to consider as there might be a direct impact in achieving objectives. Benefits might be lost if managers fail to recognize how to take advantage of a diverse team. In the same way, disadvantages might arise when a diverse team is not working properly as there is a possibility that organizational ambidexterity might not be achieved. *Figure 11* can provide a quick overview of the impact of diversity on organizational ambidexterity.

6.   Conclusions

6.1 Conclusion

This thesis researched about the dimensions of diversity in the top and middle management teams that affect organizational ambidexterity. As it was stated in **Chapter 1**, the objective of this master thesis is to "***Identify and understand how the relationship between a diverse MMT and TMT affects the organizational ambidexterity. The research should be able to recognize how the dimensions of diversity, which are gender, age, cultural and functional background, modify the organizational activities of exploration and exploitation***". To achieve the objective, a literature review and semi-structured interviews were conducted. This was used to understand the impact of diversity in organizational ambidexterity. *Feedbackly* was selected to gain insights of this relationship in a real-context scenario and by asking relevant questions to the members of both management teams.

From the objective the main research question was formulated: "***How does diversity in MMT and TMT impact organizational ambidexterity?***". To support the main research question, four SQs were elaborated. Each of these SQs will be answered separately.

SQ1: *"How do the dimensions of diversity affect the relationship between MMT and TMT?"*

To answer this question, it was synthesized in **Section 4.1.1** how diversity from the members of both management levels affects their relationship within *Feedbackly*. Additionally, during the interviews it was validated that these dimensions were present in the management teams. It was found that both levels of management might benefit from their relationship but also, they might find barriers in their interactions due to differences in cultural backgrounds.

SQ2: "What barriers are present in the relationship between a diverse MMT and TMT?"

Several barriers were found in the relationship between MMT and TMT. It is clear that although diversity brings benefits, it also might lead to place barriers in the relationship between managerial levels. From literature review, it was identified challenges that are involved in diversity. The interviews provided more insights; it was identified that communication, resistance to change, team integration, and emotional barriers are present. Overcoming these barriers will improve the organizational ambidexterity as it is possible to share and exchange knowledge and information that might help to develop the necessary capabilities to balance activities of

exploration and exploitation. Organization with similar backgrounds might take into consideration these barriers as organizational ambidexterity might be hindered by them.

SQ3: *"What is the role of trust, connectedness and shared vision in maintaining the relationship between a diverse MMT and TMT?"*

It was found that these three variables are the foundation for a proper relationship between the MMT and TMT. Almost every interviewee mentioned that trust is key in working with diversity. Connectedness and shared vision were also considered important in keeping a good relationship as it provides the grounds to work towards common objectives and align the team to achieve the desired strategies. An important finding from the interviews was the identification of commitment and ownership as elements that maintain the relationship between the members of both layers of management. These variables support the development of organizational ambidexterity.

SQ4: *"How the dimensions of diversity impact the organizational ambidexterity?"*

The interviews helped to answer this SQ. It was found that diversity provides a pool of resources that enable the organization to develop activities of exploration and exploitation to foster innovation. It is possible to access to knowledge and expertise that is useful not only to improve the efficiency of the operations and processes but also to search for innovations that might place the organization in a specific niche.

Answering these questions are relevant for organizations in a SME context who are looking to develop organizational ambidexterity. Diversity is becoming a common characteristic of organizations as the world is becoming more interconnected. Members from different ages, genders, cultures and functional backgrounds are interacting more than before as it was identified by the literature review. *Feedbackly* is a good example of these interaction in a small scale. Hence, **the answer to the main research question is:** the relationship between a diverse MMT and TMT provides more resources which in turn can improve organizational ambidexterity by assisting the balancing activities of exploration and exploitation within the organization. Nevertheless, complexity in managing both managerial levels might increase because barriers are added, and hence the activities to develop organizational ambidexterity might be hampered.

6.2 Reflection

During the research it was necessary to get familiar with the concept of ambidexterity and the dimensions of diversity. The literature review provided many perspectives about these topics which increased the complexity in narrowing down the main concepts. It was through an extensive review of papers which enabled to focus on the key elements for this research. The interviews complemented the literature review by adding perspectives in a real-life context moving the theory into application in a real context. Although the process of interviewing members of management team required time, it enriched the research by providing more elements to take into consideration.

Several elements of this thesis can be used as a foundation for further research and to stablish relationship with more managerial topics. Reflecting on this thesis, it can be viewed diversity as a key part in the management activities of organizations who are seeking to achieve successfully their objectives and thrive in a market which is highly competitive. Of course, it is necessary to keep researching to find best practices that might help organizations to continue offering high quality products and services to meet customers' expectations. Finally, this research can offer an insight to organizations who are looking to increase their participation in foreign markets in which diversity plays an important role.

6.3 Link to Management of Technology

Normally, MOT theses are characterized by researching about how organizations can procure technology by own research capabilities, collaboration with outside parties, and how the technology can affect mission, objectives and strategies. This thesis is positioned between a management perspective and innovation. This thesis was written using the knowledge from the MOT curriculum. The courses Leadership and Technology Management (MOT1524), Research Methods (2312) and Master Thesis Preparation (MOT2004) underpinned the writing of this master thesis. The perspectives that MOT curriculum have allowed me to develop the skills and knowledge to analyze situations in a real-world context and identify key elements for the development of organizations.

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Appendix

A. Interview Guide

Pre-interview checklist

- Clear and illuminated room.
- Wired internet connection.
- Test camera and headphones via zoom.
- Tablet to write notes.
- Notes about interviewee background.

Introduction

Thank you for taking our time for this interview [Name]

[Ice breaker]

Permission to record

Before starting the interview, I would like to ask you if this interview can be recorded. Can I record?

The recording will be used to make a transcription, which will be send via email to verify that the transcript does not contain any information that you would prefer not to be published. The transcript will be included on the appendix of this thesis, which will be publicly available.

Introduction to topic

As I have introduced before in our previous emails and slack messages, I am a student at Delft University of Technology currently doing a Master of Science on Management of Technology.

The topic is about how Middle Management Team diversity has impacted Top Management Team ambidexterity, which is a concept that refers about simultaneous activities of explorative and exploitative innovation. From literature review, I have identified some elements about how diversity impacts Top Management ambidexterity. Now an interview is part for the research process.

The objective of this interview is to gain more knowledge about how Middle Management diversity impacts Top Management ambidexterity. Additionally, the interview will provide insights about how the relationship between Middle and Top Management is maintained.

Key terms clarification

Diversity: refers to the differences regarding gender, age, cultural background and functional background (Pitts, 2006).

Exploitative innovation: activities to improve efficiency by focusing on routinization and production (McGrath, 2001).

Explorative innovation: activities about discovery, search, experimentation and risk taking (Wang & Ke, 2016).

Interview questions

General questions

1. Could you please describe your role in the organization and your professional experience?

2. Is your organization diverse? Do you identify specific elements of diversity (e.g., age, cultural, functional, etc.)?

3. What resources has diversity provided for activities of exploration and exploitation?
   - Broader knowledge
   - Broad markets
   - Skills and abilities
   - Creativity

4. How strategy is modified by the resource pool of diversity?
   - Identification of new products/services
   - Modification of intended strategies
   - Adjustment of value propositions
   - Current strategy vs future technology

5. What are the elements (variables) maintaining the relationship of MMT and TMT?
   - What do you consider is the most important element?

- o What criteria do you use to classify it as the most important?
- o What is the most difficult to achieve? And why?
- o Which elements need to be improved to take advantage of diversity in ambidexterity?

6. Can you explain some barriers in the relationship between MMT and TMT?
   - o Communication
   - o Resistance to change
   - o Integration
   - o Confusion/uncertainty
   - o How these barriers might be overcome?

7. How are explorative activities carried out?
   - o What is the process of searching?
   - o Is experimentation part of the activities? why or why not?
   - o How risk is managed?

8. How exploitative innovation is performed?
   - o How opportunities to improve efficiency are seized?
   - o How has exploitative innovation improved services?

Questions for Top Management Team

1. How the knowledge and information from the MMT has modified the overall strategy?
   - o New opportunities
   - o Development of new capabilities
   - o Different approach

2. What level of freedom is given to the MMT?
   - o Rigid- Follow intended strategies and specific activities
   - o Moderate- Some freedom to implement local activities and strategies
   - o Open- Totally freedom to introduce new strategies or activities

3. What challenges have you found in managing a diverse MMT?
   - o Shared mission and vision
   - o Objective setting
4. How ambidexterity has changed by the interaction with MMT and explain why?
   - o An improvement in ambidexterity (more efficiency and innovation)
   - o Diversity has not changed TMT ambidexterity

- o   Ambidexterity has deteriorated

5. Anything else you would like to add?

Questions for Middle Management Team

1. When new knowledge is shared to TMT?
    - o   What are the criteria to share new ideas?
    - o   How is it shared?

2. What differences have you noted in the market of TMT?
    - o   How the differences have benefitted the operation in your market? (efficiency, innovation, productivity)
    - o   What are the limitations with the interaction of TMT?

3. How have you perceived the TMT's ambidexterity in terms of efficiency in your market?!!!

4. Why do you consider diversity as a way to improve ambidexterity activities within TMT?

5. Anything else you would like to add?