# Leader Traits & Relation Based Leadership in Achieving and Sustaining Contextual Ambidexterity

An inductive research about the role of leader traits and the relation between the leader and follower (Leader-Member Exchange), in effectively achieving and sustaining contextual ambidexterity within organizations in dynamic environments & markets



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# PREFACE

In front of you is the result of the thesis that has been written to complete the intensive two years part-time Executive Master of Business Administration at the Rotterdam School of Management, Erasmus University. Innovation and disruption, but also exploitation activities of an organization always attracted my attention last years. I find it interesting topics to read, how some organizations can grow very fast in short time and on the other hand, organizations which are not able to manage this and get disrupted, or even worse, eventually get bankrupted. Secondly, leadership and psychology within an organization inspires me; how some great leaders, like Steve Jobs or Jeff Beszos are able to manage and build a very strong, large and profitable organization in short time where others are not able to achieve this.

In my daily work in a high-tech organization that is producing tire building machines, I am constantly being exposed how the organization needs to survive in the dynamic and turbulent markets where technical organizations are operating in. Organizations need to become "dual handed" or ambidextrous, doing both exploitation and exploration simultaneously to achieve and sustain a competitive advantage on rival organizations. This, in my noble opinion can only be achieved with strong and willing leaders who are able to transform the organization.

Before I started with my master I did not know, or heard anything about the term "ambidexterity". When I heard it for the first-time during college Strategical Management, I was hooked on and wanted to know more about how to achieve, but also sustain it as an organization. Therefore, this thesis can be described in two ways: Firstly, it fulfils my own interest and knowledge on the subject's ambidexterity and leadership / psychology. Secondly, I hope this master thesis can help and give guidance to (technical) organizations how to achieve and sustain ambidexterity.

Last but not least, I would like to thank Raymond van Wijk and Justin Jansen for their guidance and great advices during the last seven months. I enjoyed the conversations and I am inspired about the way how with a few words from Raymond/Justin, I was able to see it all clear again and could proceed with my thesis. Furthermore, I want to thank my family and friends for supporting me during the last two years and my organization, VMI Group for the freedom and chance they granted me to fulfill my master studies.

Bas Uppelschoten August, 2019

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# **EXECUTIVE SUMMARY**

In this decade where markets are dynamic and turbulent, organizations need to constantly think about exploring the day of tomorrow, but also exploiting the present day. When organizations are able to do this, they act ambidextrous which leads to a sustained competitive advantage on rival organizations. To achieve and sustain ambidexterity is a hard task for organizations. Top management teams, managers and followers all play a prominent role.

Several studies have been conducted the last years to understand how to achieve and sustain ambidexterity, most of the studies were conducted on macro level. Less studies have researched the individual or micro level of ambidexterity which also plays an important role to achieve and sustain ambidexterity. Leader traits and the relation between the follower and leader could play a role to achieve and sustain contextual ambidexterity, but got less attention in studies last years. When relations between the leader and follower can be marked as high-quality relation, high performance is being achieved according the literature. On the other hand, leader traits could tell us something about how traits play a role to achieve and sustain contextual ambidexterity and which traits are important to have for a leader.

This thesis has researched how traits in combination with leader-member exchange theory play a role in achieving and sustaining contextual ambidexterity. Results show that leader traits: intelligence, working experience, flexibility, delegation of task and having a strong strategy & vision play important roles to effectively achieve and sustain contextual ambidexterity. Intelligence grants the leader the ability to solve complex problems and flexible switch between the transactional and transformational leadership behavior, which is needed for ambidexterity. The working experience of the leader can help to achieve and sustain contextual ambidexterity when business units are large, in smaller business units the working experience is less relevant.

Results show that leaders should focus on building a strong relation with the follower, this generally improves the performance of a business unit and thus the ability to become ambidextrous with the business unit. When leaders are able to achieve the "partnership" phase, trust, discipline and mutual respect are at a high level which helps to achieve and sustain contextual ambidexterity.

Leaders need to build a strong team within the business units to achieve and sustain contextual ambidexterity. When having a strong team with both exploitation and exploration expertise among the followers, ambidexterity can be achieved quicker.

Organizations can use the thesis to understand the different roles the traits and relationships play in contextual ambidexterity and could hire or train managers, that fulfill the specific traits that are needed to achieve and sustain ambidexterity.

#### **Keywords:**

Ambidexterity, Contextual Ambidexterity, Organizational Learning, Exploration, Exploitation, Leader-Member Exchange, Leader-Traits, Leader Effectiveness, Leader Behavior, Paradox Middle Manager.



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## 1. INTRODUCTION

In the last few years ambidexterity has become a prominent topic within business research. Ambidexterity is the ability to simultaneously pursue exploitation and exploration within an organization. Exploitation within an organization is the ability to manage present demands and exploit current products and services. Exploitation is a short-term strategy for an organization, therefore organizations also need to pursue exploration. Exploration is managing future demands and being able to adapt and change as an organization to stay competitive in the future (Raisch, Birkinshaw, Probst, & Tushman, 2009; Gupta, Smith, & Shalley, 2006; Benner & Tushman, 2003; Taylor & Greve, 2006). When organizations are able to be ambidextrous, they can create a sustainable competitive advantage (O'Reilly & Tushman, 2008).

Studies show that most organizations fail to achieve ambidexterity (O'Reilly & Tushman, 2008, O'Reilly & Tushman, 2016, Jansen et al 2009). One of the reasons is exploitation and exploration have contradictory and trade-off requirements for individuals and leaders to resolve (Smith & Tushman, 2005). Individuals and leaders who are not able to think paradoxical, will most of the time chose for short-term exploitation. The study of Levinthal and March (1993) found out that managers and leaders are myopic on short-term over long-term and certainty of success above risk and failure. On top of that, according to Bazerman & Watkins (2004), historical success creates cognitive biases for individuals that will drive organizations on predictable data. Therefore, the biased leaders and managers do not achieve ambidexterity (Siggelkow & Rivkin, 2006).

Ambidexterity can be divided in structural & contextual form according to Birkinshaw & Gupta (2004). Structural ambidexterity is when exploitation and exploration activities are strictly separated in, for example teams or business units. Within the structural form, leaders and top management always have trade-offs between exploitation and exploration. Contextual ambidexterity is the ability being able to adapt and align the business unit or teams simultaneously, or swiftly switching between exploration. Systems and processes are aligned in such a way that individuals or leaders are able and are forced to split time and effort by themselves between exploitation and exploration. This means that individuals and leaders need to think paradoxical instead making tradeoffs between exploration and exploitation (Gibson & Birkinshaw, 2004).

The study of Tushman et al. (2010) concludes that organizations who are contextual ambidextrous designed, perform better than organizations that strictly divided the exploration and exploitation activities (structural ambidexterity). Contextual ambidexterity can also reduce the myopic learning effect of leaders and individuals, because they are forced to do both exploration and exploitation activities instead of only one of the activities at the time. To create an organizational framework that supports contextual ambidexterity leaders and individuals play a prominent role (Bartlett & Ghoshal, 1994).

Leaders and individuals in organizations which are contextual organized, are crucial when environments become more dynamic (Davis et al. 2009, Gibson & Birkinshaw, 2004). Leaders and individuals need to act ambidextrous. Individual ambidexterity is a construct, which focuses on three variables (divergent thinking, focused attention between exploitation and exploration and cognitive flexibility) to manage the dilemma between exploitation and exploration on individual level (Good & Michel, 2013). Leaders play an important role to create the context to encourage followers in stimulating ambidextrous behavior (Zacher & Rosing, 2015) and therefore, the leaders' behavior can



be marked as a major driver for achieving and sustaining ambidexterity (Jansen et al. 2008, Nemanich & Vera, 2009). The study of Rosing et al. (2011) shows that followers' behavior can be best predicted by the specific leader's behavior. Although the importance of understanding ambidexterity on multi-level, most studies on ambidexterity were conducted on macro- and organizational levels (Lavie et al. 2010). Therefore, it is important to study leader traits that are linked to the behaviors of the leader within the different situations of exploration and exploitation. This can contribute to the literature to understand how to achieve and sustain ambidexterity in contextual design.

The effectiveness of the leader on his or her subordinates is influenced by a combination of behavior within a situation (task, or change related leadership style) and traits of the specific behavior (Derue et al. 2011). Traits can be organized in three categories according to Derue et al (2011), demographics (for example age, gender), task competence and interpersonal attributes. Linking the categories to contextual ambidexterity, task-competence and interpersonal attribute traits could play important roles. As mentioned, leaders and followers are important pillars for achieving ambidexterity, especially when environments become (more) dynamic in contextual organizational design (Davis et al. 2009), therefore this study is researching leader traits, which lead to a specific behavior that can play a role to effectively achieve and sustain contextual ambidexterity.

Task competence is the general category which is related to how the leader is executing and performing the tasks. It can be specified by four traits: intelligence, conscientiousness, openness to experience and emotional stability. Intelligence could be needed to achieve or sustain ambidextrous as a leader, leaders with a high intelligence are able to have a strong verbal, perceptual ability and reasoning, which can help leaders in complex problem solving and social judgement within organizations (Northouse, 2016, Zaccaro, 2007). The trait conscientiousness is the ability of the leader to achieve the goal and maintain structure and planning, which could be important if the leader is conducting exploitation activities. Openness to experience is a trait that can be described as creativity, open minded of the leader or open for new experiences, this can be important for ambidextrous leaders, especially with the exploration activities (O'Reilly & Tushman, 2008, Derue et al. 2011). Emotional stability refers to the leader that is not easily upset with challenging tasks and remains calm. To achieve and sustain ambidexterity, leaders must be strong and remain calm with the challenging tasks and paradoxes between exploration and exploitation, therefore this trait could potential play a role.

Interpersonal attribute is a general category of traits that are related to social interactions with followers and own personality. The most studied, and most likely related to contextual ambidexterity, are extraversion and agreeableness. Leaders who are highly extraverted or agreeable can build strong emotional ties with their followers which is needed to achieve and sustain ambidexterity (Northouse, 2016; Nahrgang, Morgeson, & Ilies, 2009).

The strong emotional ties are part of how the relation between the leader and the follower is build up. Leadership can be defined in three domains, the leader-follower, follower-leader and relational based domain (Graen & Uhl-Bien, 1995; Northouse, 2016). The relational-based approach is most suitable for two extreme situations, which ambidexterity has in forms of exploration and exploitations. One of the constructs is the Leader-Member exchange theory, which conceptualize leadership as a process of the interaction between the leader and follower instead from the point of view of the leader, follower or situation. The Leader-Member exchange implies that the leadership behavior of the leader depends



on the relation between the leader and the follower and therefore can be different among followers. The higher the quality of the relation between the leader and the follower, the higher trust, discipline and mutual respect. When trust is high between the leader and followers, followers are willing to take more risks and therefore Leader-Member exchange contributes positively to innovation and ambidexterity (Rosing, Frese, & Bausch, 2011). In combination with traits of the leader, relations between leader and followers are important to understand on ambidexterity; how high- or low-quality relations between leader and followers play a role to achieve and sustain contextual ambidexterity. Together with the traits and relation between the leader and the follower, a leader shows a certain behavior (Yukl G. , 2013). Behavior leads to a leadership style, which have been studied prominently the last years on ambidexterity.

Several leadership styles and behaviors have been studied to understand ambidexterity. Two most popular leadership styles studied for ambidexterity are transformational- and transactional leadership (Vera & Crossan, 2004, Jansen et al. 2008, Jansen, Vera, & Crossan, 2009.) Transformational leadership, as the name implies tries to transform followers to accomplish more than what usually is expected. Transformational leadership consists of four factors, idealized influence (charisma), inspirational motivation, intellectual stimulation and individualized consideration. Transformational leadership studies show that it positively contributes to exploration (Jansen et al. 2008, Jansen et al. 2009). The transformational leader inspires and motivates the followers to challenge the status quo and sets high expectations beyond the daily routine jobs.

Transactional leadership on the other hand, consists of two factors: contingent reward and management by exception. Transactional leadership is mainly related to exploitation, because it focuses more on improvements on existing routines and product/services. It does not stimulate followers to be creative or innovative (Vera & Crossan, 2004). Up to today, there is not a single leadership style which is best suitable for ambidexterity, it is a mix of several leadership styles (Rosing et al. 2011. To understand ambidexterity, it must be seen as a multi-level phenomenon for organizations, which makes ambidexterity foremost a leadership challenge on macro, but also on micro levels of organizations (Birkinshaw & Gupta, 2013).

There has been minimal research on the role of leader traits in combination with the relation between leader and follower in achieving and sustaining contextual ambidexterity. The aim of this research is to find out how and if leader traits and the relation between the leader and follower, play a role in effectively achieving and sustaining contextual ambidexterity. This leads to the following research question:

# How do leader traits and the relation between the leader and follower play a role to effectively achieve and sustain contextual ambidexterity?

The thesis is structured in the following way: firstly, the literature will be examined to understand how ambidexterity, leader traits, leader styles and/or behaviors are studied the last decade and brought together in a conceptual model. After the theoretical background, the method will explain what kind of research this research is and how the data has been collected and analyzed. The empirical results that have been found with the 20 semi-structured interviews and 30 surveys will be explained. The results can be summarized in a new model. Propositions will be made and discussed in the discussion chapter and how and where in the literature this research contributes. Finally, limitations and future research recommendations for this thesis are being described and management implications are given.



# 2. THEORETICAL BACKGROUND

## 2.1 Ambidexterity & Exploration/Exploitation

The construct ambidexterity was first used in organizational studies by Duncan (1976). It was defined as being able to align today's business as efficient as possible, but simultaneously being able to adapt and change as an organization for tomorrows demands to maintain a competitive advantage. March (1991) initially defined the two constructs exploration and exploitation in an organizational learning context.

March (1991) found out that adapting and aligning are two organizational learning constructs which are both needed for organizations long term success. Exploitation (aligning) according to March (1991) is: "efficiency, control, certainty and variance reduction". The focus of exploitation is on aligning present demands, products, services and assets in the most efficient possible way. Exploitation is a short-term strategy of an organization and therefore, organizations also need to pursue exploration for long term sustainable success and competitive advantage. Exploration (adapting) according to March (1991), in contrast of exploitation is: "Discovery, autonomy and innovation" which focus on future demands and explores new possibilities for organizations.

If organizations only focus on exploitation or exploration, organizations can fall in success, or failure traps (Levinthal & March, 1993). The success- or competence trap occurs when organizations only focus on exploitation and drive out exploration. Short-term exploitations have a more certainty on revenues and returns than exploration on the long-term. Also, organization can see the short-term past successfully exploitations in several domains and do it more efficiently when doing it again in the same domains. This could lead organizations to only pursue exploitation all the time; the result is organizations who may not be able to adapt adequate and quickly enough on environmental changes and disruptions in the market and sustaining competitive advantage on long-term success.

On the other hand, the failure trap will occur when organizations only focus on exploration and drive out exploitation. Organizations will do explorative experiments and research on products, services or markets, which can lead to failure. A logic result after a failure occurs, is for organizations to start the exploration process again and search for new opportunities or knowledge; this leads to a constant cycle of exploration. When organizations only pursue exploration, the organization does not earn any revenues or profits with short-term exploitation, which will bring the organization into a selfdestructing cycle (Levinthal & March, 1993).

Tushman & O'Reilly (1996) followed organizations for decades which were able to survive and adapt. Results of the study show that the organizations were able to act ambidextrous. Tushman & O'Reilly found out that organizations should simultaneously pursue exploitation and exploration, or become ambidextrous for long term survival and success. After the study of Tushman & O'Reilly (1996) a prominent amount of studies has been conducted on the positive association of ambidexterity and firm performance, sales growth and innovation (He & Wong, 2004, Gibson & Birkinshaw, 2004, Jansen et al, 2008, O'Reilly & Tushman, 2013). Exploitation and exploration are complementary, and cannot be seen separately. To illustrate this, the study of Adler, Goldoftas, & Levine (1999) shows that the Toyota production system employees on one hand fulfills exploitation by improving the routine jobs and exploration by continuous improvement. Also, Levinthal & March (1993) show that existing knowledge is needed to do exploration and vice versa for example.



#### 2.1.1 DIFFICULTIES AMBIDEXTERITY

To become and sustain ambidexterity is difficult and most organizations fail to achieve it (Smith & Tushman, 2005, Jansen et al, 2009). Organizations find it hard to manage the paradox between exploitation and exploration or making trade-offs between the two activities. Managers or leaders need to make trade-offs between stability (exploitation) and adaptability (exploration). As organizations focus on exploitation, organizations trade in flexibility for stability which can lead to organizational inertia. The organization will not be able to changes in the environment or adapt quickly enough to sustain competitive advantage (March, 1991).

Both exploitation and exploration need for example resources. Organizations, must make trade-offs between exploitation and exploration activities and face the consequences of the activity that has been chosen (Siggelkow & Rivkin, 2006). When organizations choose resources for exploitation, the organization will improve the short-term productivity and competencies, but for the future takes risks for long-term survival of the organization. When organizations choose resources for explorations, the organization will invest in the future, by doing research, new knowledge and new products & services. Exploitation activities, like maximizing productivity or current knowledge are not being leveraged with only focus on exploration. This can harm the current position of the organization (March, 1991, Lavie et al. 2010). Both activities are complementary, exploitation is needed to invest in the future and exploration is needed for organizations to be exploited in the future.

#### 2.2 TYPES OF AMBIDEXTERITY

All studies during the last decade show the importance of balancing exploitation and exploration, or becoming and sustaining ambidextrous for improved organizational performance and sustainability. Although the consensus on balancing the activities, studies do not show one single form how to achieve ambidexterity (Adler, et al. 2009). During the last decade four forms of ambidexterity have been studied and questioned: Contextual Ambidexterity, Structural or Organizational Ambidexterity, Temporal Separations (Punctuated Equilibrium) and Domain Separation.

#### 2.2.1 CONTEXTUAL AMBIDEXTERITY

According to the study of Gibson & Birkinshaw, (2004) contextual ambidexterity can be defined as *"the capacity to simultaneously achieve alignment and adaptability at a business unit level"*. This can be at every organizational level of the organization which is characterized by a supportive context and combination of stretch, discipline, support and trust. Contextual ambidexterity builds on the organizational effectiveness model of Ghoshal & Bartlett (1994).

This model implies that superior performance of a business unit is not being achieved basically by charismatic leadership, formal organization or a strong culture, but by aligning the systems and processes in such a way it can be used for multiple activities. Within this context, adaptability and alignment is possible when senior leaders create the supportive context within an organization which contains the combination of stretch, discipline, support and trust (Ghoshal & Bartlett, 1994). Only then will individuals be able to judge by themselves how to split time between exploitation and exploration.

Several studies during the last year's show that it is important to shift from the trade-offs (and/or) between exploitation and exploration to paradoxical thinking (both/and) (Bouchikhi, 1998, Gresov & Drazin, 1997, Lewis, 2000). Together with the recognition that processes and systems in organizational



context are important for balancing contradictory demands, contextual ambidexterity can play an important role.

#### 2.2.2 STRUCTURAL/ORGANIZATIONAL AMBIDEXTERITY

Organizational ambidexterity can be designed as two separate business units or organizations to resolve the dilemma of ambidexterity, were exploitation and exploration activities are strictly divided (He & Wong, 2004, Tushman & O'Reilly, 1996, Jansen et al. 2009). The separation of the units requires a strong pro-active management. The split organizations are being coordinated at the corporate level of the organizations. According to (Jansen et al. 2009) structural ambidexterity can be seen as an organizational-level dynamic capability. Organizations structural divide exploration from exploitation, but also the integrations back again between exploration and exploitation is important. This has to be done by senior management teams, which play a crucial role to sustain and achieve ambidexterity.

Crucial to make structural ambidexterity a success is the coordination of the learning context between the exploitation and exploration units, both activities can be done simultaneously via structured processes. Because the fundamentally different activities, it is possible to do exploitation and exploration simultaneously (Lavie et al. 2010). Although it seems a good method to balance exploitation and exploration, in the essence the problem of the dilemma and paradox has become now an organizational trade-off. The senior management teams now have the trade-off between the two activities, and less studies have been done how operational managers face the trade-offs that are being made at the top (Tushman & O'Reilly, 1996, O'Reilly & Tushman, 2008)

#### 2.2.3 PUNCTUATED EQUILIBRIUM

Instead of doing exploration and exploitation separately or contextual, punctuated equilibrium or temporal separations lays the focus on cycles of time. When needed organizations shift to more exploitative, or explorative activities. Punctuated equilibrium at the organizational level is a big challenge for senior management teams, they are responsible for doing the transitions between exploration and exploitation effectively and timely (Siggelkow & Levinthal, 2003).

Punctuated equilibrium has the same challenge as the structural form of ambidexterity. In the transition time between exploitation and exploration, both exploitation and exploration have to be managed which can lead to trade-offs that need to be resolved quickly to stay competitive and survival of the organization.

#### 2.2.4 DOMAIN SEPARATION

Domain separation is a particularly new construct and introduced as an approach to successfully balance exploitation and exploration, or become ambidextrous between interfirm relationships. The difference between structural, contextual and temporal, is within the domain separation, it is possible to carry out multiple domains as long as there is a balance between exploitation and exploration. Alliances can for example help in domains to do exploitation or exploration (Lavie & Rosenkopf, 2006). Lavie & Rosenkopf define three separate domains which together describes an alliance; function, structure and attribute.

#### 2.2.5 INDIVIDUAL AMBIDEXTERITY

To create an ambidextrous organization, Batrlett & Ghoshal, (1994) found out that individual and leaders are responsible for creating the organizational framework which is needed for ambidexterity, but research on the individual (managers) level of ambidexterity is scare (Gupta et al. 2006, Raisch &



Birkinshaw, 2008). This is remarkable, because a prominent amount of studies, for example, organizational learning (Vera & Crossan, 2004) and technology innovation (Tushman & O'Reilly, 1996) show that managers and leaders play a prominent role in becoming ambidextrous as an organization. The scarceness of studies on individual ambidexterity has a main reason: a bias on structural ambidexterity (Good & Michel, 2013) and the fact ambidexterity was first seen as an organizational capability (March, 1991) instead of a multi-level phenomenon. New studies show that it is important to research ambidexterity not only as an organization capability, but on all levels to understand it as a multi-level phenomenon (Lavie et al. 2010).

The bias on structural ambidexterity was created by organizations which designed ambidexterity in a split form. Tasks and responsibilities are differentiated in jobs at the individual level in exploration and exploitation. For example, finding new markets and product innovation is explorative, and working on efficiency is exploitative. Individuals do not have to act ambidextrous, because the separation of business units, or organizations in exploration and exploitation units. Therefore, studies are less conducted on the individual side of ambidexterity because it was not researchable with the separations of exploration and exploitation activities. After the study of Tushman et al. (2010) which found out with longitudinal data of 13 business units and 22 innovations, ambidextrous organization designs (contextual form of ambidexterity) are more effective than functional, cross-functional, and spinout designs (structural form of ambidexterity), individual ambidexterity got prominent attention.

Contextual ambidexterity let the individuals simultaneously, or split time by themselves doing exploration and exploitation (Gibson & Birkinshaw, 2004). Processes and systems in organizations are aligned in such a way that it is possible to simultaneously exploit and explore for the individual. According to Davis et al. (2009) when environments become more dynamic and unpredictable, individual ambidexterity is necessary and needed to stay competitive as an organization. Individuals then should be flexible and being able to switch quickly between exploration and exploitation.

On individual (managers) level several studies have been conducted during the last years. For example, Mom and colleagues (2007) researched the inflow of knowledge top-down, bottom-up and horizontal inflows in relation to exploration and exploitation. It was found that horizontal knowledge and bottom up knowledge positively relates to exploration activities while top-down knowledge inflow positively relates to exploitation activities. A second study of Mom et al. (2009) contributed on individual level by studying managers ability to become ambidextrous. Part of the study proposed three related characteristics: 1. ambidextrous managers host contradictions, which have to deal with conflicts and think paradoxical, 2. ambidextrous managers are multitaskers, they fulfill several roles and need to act on different tasks and 3. ambidextrous managers need to refine and renew knowledge, skills and expertise.

According to Good & Michel, (2013) Individual ambidexterity, is the cognitive ability to flexible switch between exploration and exploitation in a dynamic context. It contains three variables for managing the dilemma between exploration & exploitation: divergent thinking, focused attention and cognitive flexibility. Next to the three variables intelligence plays an important role in dynamic contexts. intelligence is the most well studied and consistently predictive variable and needed by individuals for example to assess the needs for explorative and exploitative contexts and the ability to act on them. Intelligence of the individual is also linked to better performance if activities become more complex and the ability to choose the right strategies within situations when adopting is needed (Good & Michel



2013). Individual exploration is linked on the cognitive aspect of creativity or divergent thinking and is especially important in dynamic contexts within organizations. It grants the individual the ability to think of new creative ideas or solutions which are needed and important to stay ahead of competitors (Weick & Sutcliffe, 2006). On the other hand, individuals need to conduct exploitation, which helps organizations to build op experience and generate profit and revenues from today's business to do exploration for future business (Levinthal & March, 1993). Individuals conducting exploitation need to have focused attention on processes and products which are already known, and not being distracted by new information or processes (Holmqvist, 2004).

To process both exploration and exploitation as an individual is a big challenge (Gupta, Smith, & Shalley, 2006). Individuals who are acting ambidextrous are simultaneously, or rapidly shifting between exploration and exploitation (Gibson & Birkinshaw, 2004, Tushman & O'Reilly, 1996). Individuals need to be flexible by managing both exploration and exploitation (Mom et al. 2009), therefore individuals need to have cognitive flexibility. Cognitive flexibility contains two mechanisms: cognitive control, which forces the individual to overcome the automatic response sets and set shifting, which enables the individuals to swiftly switch between exploration and exploitation. (Canas et al. 2003).

#### 2.3 LEADERSHIP

Leadership has been one of the most researched topics in the last decades, and plays a crucial role for organizations. Leaders are needed for organizational learning and performance of the organization (Levinthal & March, 1993). Leadership and leaders need to change from the classic form, were creativity and innovation were less needed to a form where it is needed to have creativity (generation of new ideas) and innovation (new ideas set to action) in-house to sustain a good organization performance and competitive advantage (Mumford et al. 2002). Furthermore, as environments become more dynamic and organizations need to focus on both exploitation and exploration, leaders play a prominent role.

The scheme below shows the types and causal relationship to understand the effectiveness of leadership.

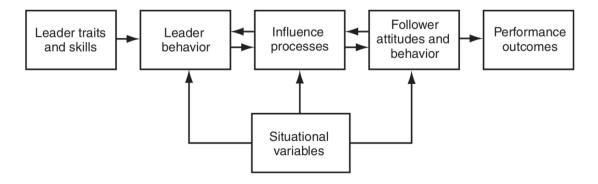


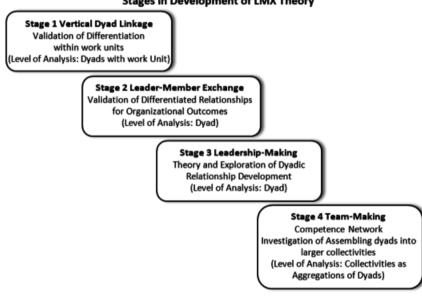
Fig. 2.1 Causal relations among the primary types of leadership variables. (Yukl G. , 2013)

Leadership in general knows three domain approaches, where the leader, follower and the relation between the leader and follower lead to the desired outcome (Graen & Uhl-Bien, 1995) (Yukl G., 2013). The leader-based domain primarily focusses on the leader him or herself, how the mix of characteristics and leader behavior leads to or achieve the desired outcomes. This domain is most

applicable where strong position leader power, structured tasks and follower acceptance of the leader is present. Secondly, a follower-based domain is the other way around, which means that the mix of the characteristics and behavior of the follower leads to or achieve the desired outcome. This domain is most applicable in situations where there is a prominent number of unstructured tasks or activities, leaders have weak position powers and members do not accept a leader in general. Last, is the relationbased domain, which focusses on relational characteristics and dyadic relation between the leader and follower to promote the desired outcomes. The domain is most applicable when two extreme situations are present (Graen & Uhl-Bien, 1995). Ambidexterity knows two extreme situations, exploration and exploitation. Relation-based leadership therefore can play an important role, one of the leadership constructs based on relations between the leader and follower is the Leader-Member Exchange.

#### 2.3.1 LEADER-MEMBER EXCHANGE

The Leader-Member exchange (LMX) construct has been found around 1980 and the primary focus of the theory is a relationship-based, social exchange approach to leadership (Graen & Uhl-Bien, 1991; Graen & Schiemann, 1978). The main concept of the theory is that effective leadership occurs when leaders and followers create a mature leadership-relationship (partnerships) and thus, this with this relationship brings higher (organizational) performance. The model describes how effective leadership develops between dyadic "partners" within or outside the organizations. The higher the relation, the more the partners are in the "in-group". The lower the relation, the more the partners are in the "outgroup" (Graen & Uhl-Bien, 1995). The development of the LMX theory consists of four stages during the last decade:



Stages in Development of LMX Theory

Fig. 2.1 Four stages of LMX Theory, (Graen & Uhl-Bien, 1995)

The first stage that was studied on LMX theories was the Vertical Dyad Linkage (VDL) in combination with work socialization (Johnson & Graen, 1973; Graen, Orris, & Johnson, 1973; Cashman, Dansereau, Graen, & Haga, 1976). The research in this stage discovered many managerial processes were found to occur on dyadic basis, with differentiated relationships between followers and professionals. The results of the stage one research were obtained by longitudinal studies by asking managers and



followers about the working relations in terms of input, process and outputs. These findings showed that when interviewees were asked to describe the behavior of the manager, differentiated data appeared. On one hand, "high quality exchanges" or "in-group" data were characterized by a high degree of mutual trust, respect and obligation. On the other hand, "low quality exchanges" or "out-group" data were characterized by low trust, respect and obligation. Within the high-quality exchanges, managers and followers acted like trusted assistants of each other and followers were able and willing to do more than just the job description. Low quality exchanges were characterized by "hired hands" and followers were willing and able to do only the job description, or the tasks they had been hired for (Graen & Uhl-Bien, 1991). In the first stage, thoughts were that trusted assistants would be limited, because it required more time and effort by the manager to improve the relation. In this stage, the focus was initially on the leader's behavior, but eventually turned to the dyads within the business units after the responses of followers that showed a prominent amount of variation.

Within the second stage of the LMX theory, focus was on further investigating and testing the dyads relationships that were found in stage one. Because of the large body of research, it was split in two investigations: one, studies evaluating characteristics of LMX relationships and two, studies analyzing the relationship between the LMX and organizational variables. Within study one, constructs and antecedents of relationships were investigated, for example dyadic role making processes (Graen, Orris, & Johnson, 1973), communication frequency (Baker & Ganster, 1985) and leader-member value agreement (Kozlowski & Doherty, 1989). Within the second study, addressed the issues how the differentiated relationships were related to organizational variables. For example, LMX and performance (Scandura & Graen, 1984), turn over (Graen & Ginsburg, 1977) and innovation. Key findings of both studies were the further validation of the differentiated relationships between a leader and follower and how the relations between leader and follower is being developed. Based on these second stage findings, the concept of LMX can be described in two ways. One, LMX development is influenced by traits/characteristics and behavior of the leaders and followers and occurs with a rolemaking process. Two, The higher the quality of LMX, the higher the outcomes for followers, leaders, work-units and organization.

Based on the findings of the second stage, the third stage focus on a more generalization of effective leadership relations. This means, going beyond the "in & out groups" and focus in general how the leader builds a relation with every single follower in the business unit. This leaves the traditional thinking of superiors and subordinates and comes to more partnerships between the two. The main difference with VDL is the leader is not building a high-quality relation with some of the subordinates, but must grant the opportunity of LMX to all of the followers. When leaders are able to give the opportunity of LMX to all the followers, the effectiveness of leadership and organization will be potentially higher. This model in the third stage Is called Leadership Making (Graen & Uhl-Bien, 1995). The Leadership Making model was originally found with a longitudinal study (Graen, Scandura, & Graen, 1986) and showed that when leaders were able to give the opportunity to all followers, instead of a select group, to create a high-quality relationship, performance improved dramatically. Not only performance of the followers and leaders, but implications showed that also productivity of the organizations working unit improved when more high-quality relations were present.



With the longitudinal study, followers and leaders with dyadic relations were interviewed over a duration of one year long to understand the relation that was being build up between the leader and the follower. The data collected over the year gave birth to the Leadership Making model how to build strong and high-quality relationships between leader and followers. The Leadership Making model consists of a "life cycle" of leadership relational maturity. The process begins with a "stranger" phase, where leader and follower interactions are in a more formal base, or economic exchange in essence. In this stage, the follower does the job that has been described, but nothing more and the leader only provides the tools to do the job correctly. The second stage, acquaintance stage, can be started if an "offer" occurs, this can be done by the follower or the leader. Once occurred, social exchanges will become more informal and greater information and resources are shared. This is only for a limited amount of time and the incremental influence is still limited which can go to the next stage, or fall back to the first stage. When the leader and follower are able to bring the relation to the next stage, maturity stage, the leader and follower have achieved "partnership" and exchanges are highly developed. The individuals can count on each other's support, trust and respect. When leaders and followers stay in the first stage, it can be seen as transactional leadership (Bass, 1990). Exchanges are on contingency terms between the leader and follower, as the leader and follower get in the last stage of the model a more transformational leadership style occurs and leaders can count on followers to do one step extra for example and followers can count on the extra step of the leader. The exchange of work-related social contributions is nearly unlimited in the last maturity stage (Burns, 1978). Within the last stage, followers and leaders are willing to engage in extra activities that are not specifically described in the jobs; This can be useful for innovation.

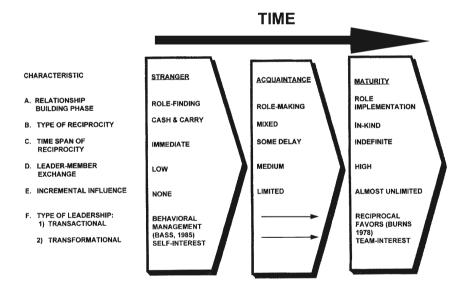


Fig. 2.3 Leadership Making Model (Graen & Uhl-Bien, 1995)

Up until the third stage of LMX, the focus was on relationships as dyads independently within a business unit or work-unit. This is not in line and representative for the reality most of the complex organizations are acting in. Most organizations have a leader, with multiple followers working together on complex issues and tasks, therefore Graen & Scandura, (1987) found out that dyads must be seen as a system or network assemblies. Stage four applies "mapping" the leadership structure to the task and structure of the organization. At this stage, tasks interdependencies and the quality of the relationships between the leader and follower that occur as a result of the interdependencies are being investigated. The higher and more effective relationships among the organizations, would facilitate in



completing tasks requirements better; however, some of the relationships with followers will be more important than others to successfully complete the tasks. Stage four involves in investigating the patterns that can be found in the leadership structure, considering the interdependencies and differentiated relations within the entire structure. Therefore, this stage addresses multi-levels of organizations and tries to find how effectively combining high quality and low-quality members in one group, or how many high-quality members can be in one group. Finally, in this stage it is possible to also see LMX outside the boundaries of the organization, for example the relation between the leader and the follower; how does it impact on the customers.

LMX consists of three dimensions, trust, respect and obligation and the development of the dimensions is based on the characteristics of the working relationship. The measurement of the LMX quality between the leader and follower can be done with the LMX 7 survey (see appendix). Although the LMX construct knows three dimensions, because of its highly correlation of the dimensions it is possible to clarify them in one single survey. LMX can be seen as both transactional and transformational leadership. Its first stages can be classified as transactional, but along the quality of the relation gets better, it transforms in a more transformational relationship. According to Rosing, Frese, & Bausch, (2011) LMX is positively related to innovation and creativity. When followers have a higher quality relationship with leaders, trust with the leader and follower is higher. Followers are more willing to take risks or try more innovative solutions, because they know their leader will promote it. Both transactional and transformational behaviors and/or styles are studied broadly during the last years on ambidexterity.

#### 2.3.2 TRANSFORMATIONAL LEADERSHIP

The behavior of the "new" leaders needs to activate the follower's creativity, but also keep on track the daily routine tasks. Leaders therefore are needed to achieve and sustain ambidexterity (Vera & Crossan, 2004). Up on till today there is not a single leadership style that can fulfill the requirements of ambidexterity, it will always be a mix of several leadership styles (Rosing et al. 2011).

Transformational leadership is a leadership style that is part of the "New Leadership" paradigm which focus more on charismatic and effective elements of leaders. Transformational leaders, as the name implies, tries to increase the motivation and morality of the subordinates and the leader self to reach full potential. Transformational leaders often are called charismatic leaders, they can act as a strong role model for the values and beliefs the leader wants the follower to adopt. Transformational leaders can act dominant as they have the desire to influence the subordinates (Conger, 1999, Northouse, 2016).

Transformational leadership consist of four factors, idealized influence (charisma), inspirational motivation, intellectual stimulation and individualized consideration. Idealized influence, or charisma is the emotional component of the transformational leader. It makes the leader a role model for the subordinates who are wanting to follow their strong leader. Also, subordinates want to emulate the leader. Inspirational motivation from the transformational leader leads the subordinates to do more than they asked for. High expectations are communicated and expected from the subordinates, and the leader tries to motivate the subordinates to do more than only what is in the self-interest of the subordinates. Intellectual stimulation is the ability of the leader to let the subordinates be creative and innovative and to challenge the organization or leader to find new approaches or new methods to solve problems. The last factor, individualized consideration, leaders are open for communication and



support for the subordinates on an individual basis. The leader acts more like a coach or advisor to the subordinates (Northouse, 2016)

Transformational leadership behavior is positively contributing to innovation (Vera & Crossan, 2004, Jansen et al. 2008, Nemanich & Vera, 2009). The leader stimulates the subordinates to challenge institutional learning and activates the exploration thinking process, which is needed for creativity and innovation. Therefore, the leader can have an impact on enhancing exploration by stimulating and behave as a role model for the subordinates (Jansen et al. 2008, Jansen et al. 2009). By establishing a learning culture by the leaders in the organization, it is possible for subordinates to act on exploration (Nemanich & Vera, 2009).

#### 2.3.3 TRANSACTIONAL LEADERSHIP

Transactional leadership differs from transformational leadership in a way it is not considering the individualize needs of the subordinates. It contains two factors, contingent reward and managementby-exception. Contingent reward is an exchange process between the leader and subordinate, when the subordinate finishes the tasks he or she gets a reward. An example is an account manager who tells the subordinate if he or she reaches the target he or she will get a bonus. (Northouse, 2016)

Secondly, is management-by-exception. Management-by-exception can have two types, active or passive form. The active form is when the leader keeps tracking the subordinates if they keep the rules in mind and they do not make any mistakes. If this occurs, the leader acts actively by correcting its subordinates. The passive form, is if the leader not actively checks the subordinate but only intervenes when problems occur (Northouse, 2016)

Transactional leadership behavior is mainly related to exploitation, by improving routine of existing products, services or competences (Vera & Crossan, 2004). Exploitation activities do not activate creativity and innovation amongst subordinates (Rosing et al. 2011). However, transactional leadership behavior may not lead to explorative new products or services, it activates exploitative innovations and renewals of the existing products and services (Jansen et al. 2008). Improving existing routines also is a sort of exploration to do the activities better and in a more convenient way with less effort. This is particularly important for organizations that are small, below 100 employees where less employees are active in exploration (Jansen et al. 2008).

#### 2.4 LEADERSHIP TRAITS

The characteristics or traits have been one of the first studies on leadership. In the early 20<sup>th</sup> century the focus was to identify qualities or traits possessed by great political and military leaders, it was believed that great leaders were born and not made (Bass, 1990, Jago, 1982, Northouse, 2016). During the mid 20<sup>th</sup> century, the universality of the leadership traits where questioned. A study of Stogdill, (1948) shared what was a leader with specific traits in one context, might not be a leader in a different context with the same specific traits. A second study of Stogdill (1974) resulted in that traits were indeed a characteristic of leadership and are still relevant, but in combination with the context where the leader acts in.

After the study of Stogdill, (1974) many researchers discarded the trait approach to leadership, because of its insufficient ability to explain leadership and the effectiveness of leadership. This phenomenon lasted for 30-40 in most psychology books and researches (Zaccaro, 2007). During the



1980's several new leadership models, like the transformational and charismatic rose and emphasize the importance of traits and qualities of individuals for effective leadership in different situations (House, 1988). During the last ten years, a prominent amount of studies has found out that personality variables and stable personal attributes do matter and are linked with a leader's effectiveness. (Zaccaro et al. 2004, Judge et al. 2002). Studies show that traits alone cannot predict the effectiveness of leadership, but a combination with behavior, situation and traits together makes it possible to explain the effectiveness of leadership in different situations.

Leader traits can be defined according to Zaccaro, (2007) as "Relatively coherent and integrated patters of personal characteristics, reflecting a range of individual differences, that foster consistent leadership effectiveness across a variety of group and organizational situations". This definition can be split in a few categories; the leader traits cannot be seen in isolation and always must be seen as integrated together. For example, behavior, like the leadership style cannot be seen in a few personal attributes or traits but must be seen as a whole, including situations only then the effectiveness of the leader can be found (Yukl, 2013). Second, with the new modern styles leaderships only personal attributes are not sufficient to claim effectiveness of the leader. During the 1980 studies tried to find specific personal attributes which could split leaders from non-leaders. Nowadays qualities and effectiveness of the leaders must next to traits also include motives, values, cognitive abilities, social and problem-solving skills, relations and expertise (Yukl, 2013, Zaccaro et al. 2004).

The situation where the leader needs to act in is important to explain the traits. Ambidexterity has different situations and requires several behaviors of the leader. Transformational behavior is positively contributing to exploration, on the other hand transactional behavior fits better to exploitation (Jansen et al. 2008). Transformational behavior, according to Bass (1990), can be marked with the traits dominant, desire to influence, self-confident and strong moral values were transactional behavior can be marked with honesty, fairness, responsibility. It is important to understand ambidexterity at multi levels, which leader traits in the different situations of exploration and exploitation how to achieve and sustain contextual ambidexterity.

According to Derue et al. (2011) there is a problem with leadership studies on integration. Leadership studies are most of the time being conducted on a single trait or behavior, which leads to results that cannot be compared. This is problematic, because all of the traits have almost the same effect sizes on leadership effectiveness. This is also the case with leadership behavior, most of the time single behaviors are being studied, which results in a non-integrated, consideration if the effects were independent. Although studies are not integrated, reasons why some of the similarities in effectiveness can be found, for example: both transactional and transformational behavior have similarities and thus have the same effects.

Within the theory, Bass (1990) proposed two questions when studying traits in general. The first question was how leaders can be distinguished from non-leaders and second question, what the magnitude of effects was between and across leadership traits. The first question has been prominently researched, but the second question, until today had little to no research has been conducted. To understand the relative validity of traits is important, because some traits might not be independent. For example, the trait intelligence may be different between sexes, when used in sociocultural- and biological models. Furthermore, the trait intelligence is related after meta-analytic research (Judge, Jackson, Shaw, Scott, & Rich, 2007) with personality traits openness to experience



and extraversion (Derue, Nahrgang, Wellman, & Humphrey, 2011). The personality traits openness to experience and extraversions have strong relationship with the effectiveness of leadership (Judge, Bono, Ilies, & Gerhardt, 2002), therefore it is likely that the effects of personality- and intelligence trait are not independent. This is not the case for all the traits and has not been researched or studied for all traits either. Based on prior researches, ( (Yukl, Gordon, & Taber, 2002; Yukl G. , 2013; Derue, Nahrgang, Wellman, & Humphrey, 2011) traits can be organized in three categories: demographics, traits related to task competence and interpersonal attributes

Demographic traits of leaders that have been researched or studied prominent on effectiveness of leadership in the last decade are gender, education and (working) experience (Howard & Bray, 1988; Fiedler, 1970; Eagly, Johannesen-Schmidt, & van Engelen, 2003). Findings show that gender did not matter on effectiveness of leadership. Further traits have not been examined on leadership effectiveness thus far.

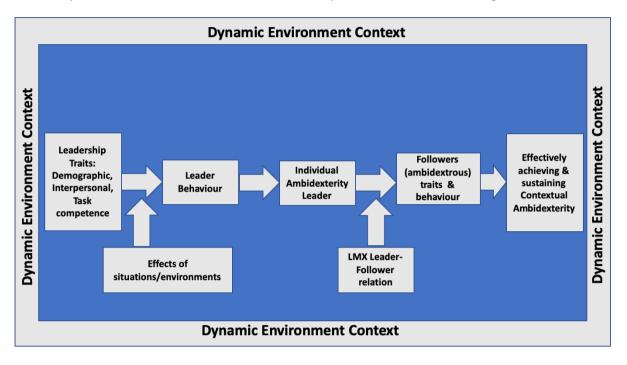
Task competence traits of leaders consist of traits how leaders' approach and execute tasks (Bass, 1990). There has been a variety of studies on task competence traits, but in the last decade prominent amount of research has been done on intelligence, conscientiousness, openness to experience and emotional stability (Derue, Nahrgang, Wellman, & Humphrey, 2011). Intelligence refers to the cognitive ability of the leader on for example: reasoning, verbal ability and problem-solving capacity. Studies show that intelligence of the leader has a positive effect on leadership effectiveness (Judge, Colbert, & Ilies, 2004). Conscientiousness, is most of the time reflected with the ability of a leader to be dependable, dutiful and achievement orientated. Conscientiousness is being linked most of the time to planning and structure. Openness to experience is the ability of the leader to be imaginative, curious and open minded to new ideas or way of working. This trait is particularly good for leaders who want to achieve and sustain ambidexterity. Emotional stability is the ability of the leader to remain calm during complex situations or problems and can help followers with their needs and (social) issues. All three remaining traits, conscientiousness, openness to experience and emotional stability are positively related to leadership effectiveness (Judge, Bono, Ilies, & Gerhardt, 2002).

The final trait category is interpersonal attributes, which contains traits that are related to how individuals or leaders approach social interactions with followers or individuals (Bass, 1990). Traits included in this category are for example, extraversion, agreeableness, political skills and communication skills of the leader/individual. Two most commonly researched traits are extraversion and agreeableness. Extraversion is a personality trait that can contribute to ambidexterity. The leader or individual that explains the personality. Agreeable leaders or individuals are warm, cooperative and emphatic persons. Agreeableness can be of use when achieving and sustaining ambidexterity, cooperation and emphatic leaders are willing to help followers with their problems and needs, which results in a higher quality relationship (Graen & Schiemann, 1978). Both extraversion and agreeableness are positive related to effective leadership (Judge, Bono, Ilies, & Gerhardt, 2002).



### 2.5 CONCEPTUAL MODEL

The theory and literature can be combined and conceptualized with the following model:



# 3. METHOD

#### 3.1 TYPE OF RESEARCH

The aim of the research was to find out if and how leader traits, in combination with the relation between leader and follower (LMX) playing a role to effectively achieve and sustain contextual ambidexterity. Leadership plays a prominent role to achieve and sustain contextual ambidexterity on organizational- but also on individual level. Leaders have to think paradoxical within contextual ambidexterity to achieve ambidexterity and thus, need to adopt several behavior styles with specific traits. Less studies have been conducted on traits of leaders and individuals in combination with relation-based leadership for achieving and sustaining contextual ambidexterity as a business unit. Given the fact that the theory on leadership traits and relation-based leadership (LMX) in combination with contextual ambidexterity is limited, the research conducted was an inductive, multiple case-study. Inductive research is being used to create new theoretical insights that goes beyond, or is limited available in the existing theories.

The multiple case-study was in this case effective, because it enabeld the researcher to generate comparative data between the leader's traits, relation between leader and follower and the combination with contextual ambidexterity (Eisenhardt & Graebner, 2007). Multiple case-studies enhances the reliability of the data in contrast to single-case studies, because the research was being conducted within several settings instead of only one. Furthermore, by answering the research question, the academic literature was extended on leadership traits/achieving and sustaining ambidexterity, individual ambidexterity, Leader-Member Exchange in combination with ambidexterity.



### 3.2 CASE SELECTION

A total of five business units divided over two large technology organizations (TireCo and RoboCo) were selected for the case studies. TireCo and RoboCo have been chosen after critical examination of the criterions. TireCo and RoboCo are in the technology sector which can be defined as a dynamic environment, therefore TireCo and RoboCo need to conduct exploration and exploitation simultaneously. The quick disruptions in the technology sector and competitors who are copying products, let TireCo and RoboCO no choice to explore and be innovative to stay ahead of the rivals. Meanwhile, exploitation is needed to generate revenues to conduct exploration for the future. Products and services have a life time of average 2-5 years. The organizations are project based per customer, which can be standard products, but also customer (R&D) specific products. After intake interviews with two business unit managers and CEO's of the organizations, contextual ambidexterity is being conducted at TireCo and RoboCo.

Both organizations have around 1500 employees and several business units, which contributes to the (internal) validity of the research. By doing multiple case studies within the same organizations, in five business units, the results can be compared better, because the circumstances within the organizations are the same (for the organizational structure, context). The aim of the research was to find out if and how leader traits and relation between leader and follower playing a role in achieving and sustaining contextual ambidexterity. TireCo and RoboCo business unit managers and their followers in the two large organizations fit perfect for interviews for the aim of this research, because of the dynamic environments the business units are acting in.

Due to the fact the process was studied between leader traits and relation between leader and follower in achieving and sustaining contextual ambidexterity, internal validity can be guaranteed. On the other hand, while the research was on individual level and not on organization level the external validity and the conclusions of the research were marked as valid in general when studying the traits and relations between leader and followers in other dynamic context, within the technology sector, influencing ambidexterity.

#### 3.3 DATA COLLECTION

The data was mainly collected through semi-structured interviews with business unit managers and followers of the business unit managers. Furthermore, annual reports have been conducted to check if TireCo and RoboCo can be compared with each other. To understand the relation between the follower and leader, the Leader-Member Exchange 7 survey (see appendix) was used at the beginning of every interview. In total 20 interviews were held divided over the two organizations. Twelve interviews were at TireCo, and eight at RoboCo. Both organizations are as mentioned in the dynamic technology sector.



Organization	Interviews	<b>Business Unit</b>	Interview 1	Interview 2	Interview 3	Interview 4
TireCo	3	Tire Passenger	Business Unit	Follower BUM	Follower BUM	Follower BUM
TireCo	3	Truck Passenger	Manager Business Unit	Follower BUM	Follower BUM	Follower BUM
meeo	5	Thuck Passenger	Manager	Tonower Bolw	Tonower Bolwi	
TireCo	3	TCP Tire	Business Unit Manager	Follower BUM	Follower BUM	Follower BUM
RoboCo	3	Storage	Business Unit Manager	Follower BUM	Follower BUM	Follower BUM
RoboCo	3	Construction	Business Unit Manager	Follower BUM	Follower BUM	Follower BUM

Table 3.1, Data collection interviews.

Five of the interviews have been conducted with the business unit managers. Three of the interviews at TireCo and two at RoboCo. The interviews with the business unit managers have been used to found out if and how the business unit manager relation with his follower and leader traits play a role on effectively achieving and sustaining effectively contextual ambidexterity

On the other hand, 15 interviews and LMX 7 survey were held with the subordinates. This empirical data was used to identify if the leader traits and the relation with the business managers they follow, are playing a role or were important for achieving and sustaining contextual ambidexterity of the subordinates and the business unit as a whole. As leaders play a prominent role for followers to achieve and sustain contextual ambidexterity, it was possible to compare the qualitative data from both follower and business unit manager perspective.

With the help of the semi-structured interviews, it is possible to reveal other variables which have not been considered previously. Also, by doing semi-structured interviews, it is possible to get a more indepth and other view on the research. The semi-structured interviews were a guidance to maintain the subject's contextual ambidexterity, traits and relation between leader and follower during the conversations. By interviewing five different business units, over two organizations within different markets, biases of the researcher can be reduced to a minimum. The semi-structured interviews lasted on average 50 minutes.

#### 3.4 DATA ANALYSIS

The data which was generated with the semi-structured interviews was transcribed in full text. This gave the opportunity to increase the validity of the interviews and analyze the full answers of the interviewees. After transcription, Excel was used to do the qualitative data analysis. First, every business unit is analyzed. When all interviews were transcribed, cross-case analysis was conducted on the data to find out if similar constructs and themes are present between the business units, followers and business unit managers. (Eisenhardt & Graebner, 2007).

The data, which resulted firstly in over 500 first order concepts, was analyzed according the Gioia method (Gioia et al. 2013). In the first stage, the data was analyzed on words that are commonly used by the interviewees and checked with the theory if there are similarities that are already known. With open coding new concepts and variables could be put in sub-categories or subjects, called second order themes. The second order themes were connected to the leader traits, behavior, relation with the follower and structure of the business unit. Usable data was identified by colors per trait, relation, behavior and structure of the business unit.



Eventually the data resulted in 100 first order concepts, which could be split into four aggregated categories: characteristics/traits of the leader, behavior-leadership style, relation leader-follower and structure/organization of the business unit. Furthermore, 30 surveys generated data about the relation between subordinate and leader which was analyzed to see similarities between the traits, behavior and relation between subordinate/leader and vice-versa.

## 4. EMPIRICAL RESULTS

The empirical data shows that leader traits play an important role for achieving and sustain contextual ambidexterity. Traits cannot be seen interdependently from the behavior, relation between the leader-follower and the structure/organization of the business unit according the empirical data. Therefore, the results of the four aggregate dimensions will be explained below. An overall model will be presented at the end of this chapter.

#### 4.1 CHARACTERISTICS/TRAITS OF THE LEADER

The characteristics/traits of the leader play an important role to understand the behavior of the leader and how to lead the team and followers to achieve and sustain contextual ambidexterity as a business unit. Empirical data shows several traits which will be described and explained below.

#### 4.1.1 WORKING EXPERIENCE OF THE LEADER

According the data, working experience of the leader plays a role to achieve and sustain a contextual ambidextrous business unit. This is only effective on larger business units, with less experienced followers on ambidexterity. Working experience of business unit managers who have worked previously on smaller technical departments, were doing both exploitation and exploration was mandatory, helps to use this gained experience in larger (un-experienced) business units. The previous experience of the leader can be translated in the business unit to achieve a structural and flexible way of working on both activities.

"When I came into the business unit there was no experience with structural working on innovation and routine tasks simultaneously, I have used my previous work experience within smaller business units, to start up the process of doing both activities together in a structural and flexible way".

The work experience is less important when the business unit is already contextual ambidextrous. Also, the work experience of the leader is seen as inspirational by several subordinates.

"His experience inspires me, I would like to have the same experience as he possesses to fulfill my tasks better".

When business units become smaller (below 25 people) the working experience becomes a "nice to have", but does not seem to have influence on ambidexterity. Smaller business units seem to do exploration and exploitation activities simultaneously automatically, because there is no possibility to split the activities in separate departments or employees:

"We need to do both innovation and routine tasks by ourselves, because we are a small business unit. It is in our system to do both activities automatically simply because we cannot give it to a separate department or

persons"



Working Experience		
Business unit:	Quotes	Characteristic
	"Previous work in smaller business unit is great a needed"	
1 (Large)	"Former experience manager in smaller units helps us to do both activities"	Working Experience plays a strong role in achieving and sustaining contextual ambidexterity
	"Experience of manager inspires me to do more than expected"	
	"It is crucial for a manager to have experience with both activities"	
2	"It can be useful to have experience on doing both activities"	Madia Francisca da a
2 (Large)	"It is nice when experience is available"	Working Experience plays a role in achieving and sustaining contextual ambidexterity
	"Experience with formal jobs can be used"	
3	"Experience of my manager is a nice to have for me"	Working Experience plays a
(Large)	"Experience can sometimes be used, it makes it easier to do the job"	Working Experience plays a role in achieving and sustaining contextual ambidexterity
	"It could help, but it is more an automatic process as a whole"	
4 (Small)	"It is in our system to do both activities"	Working experience plays a minimal role in achieving and sustaining contextual
	<i>"I think it could help us, but it is not needed at the moment in my opinion"</i>	ambidexterity
	"It is a nice to have"	
	"We as a business unit do it automatically"	
5 (Madium)	"It could help, but not necessary for us"	Working experience plays a
(Medium)	"It is "a nice to have" when you have experience with doing both activities"	minimal role in achieving and sustaining contextual ambidexterity
	"It could help, but not necessary for us"	



#### 4.1.2 FLEXIBILITY OF THE LEADER

According the data, flexibility of the leader is needed to switch between the exploration and exploitation activities. Although flexibility is needed, some of the business unit followers explain that the leader is not flexible, and pursue own ideas in a more directive way, for example a large business unit follower says:

"My manager is very stiff, he lets us free to think about his ideas but we cannot come up with our own, new sometimes better ideas"

The effect of this stiffness of the leader is that followers within the business unit become more exploitative minded, because the followers are limited by the ideas of the leader only. This specific example was within a larger business unit. According to the business unit manager the stiffness is needed to pursue the routine tasks, but flexibility is always needed within a technical business unit.

"Flexibility is always needed at a technical business unit, we have dynamic plans that require to be flexible and switching between several tasks".

When business units become smaller, flexibility of the leader is mandatory and easier according to the empirical data. Followers of leaders which lead smaller business units have therefore a totally other view on the flexibility of their leaders

# "My leader is very flexible, he switches from innovation of the machine to the routine orders in the blink of an eye"

This is in line with working experience, business units are smaller and there is a need for switching between both activities, leaders are forced to do so. No other option is available. In larger business units, the pressure of routine jobs and tasks is high at the moment at TyreCo and RoboCo which could explain the stiffness and the more structural, directive approach of the business unit managers:

"At the moment we are pursuing more routine jobs, because of time pressure and big order intake, we need to
go through this and then we can focus more on innovation again".

Flexibility		
Business unit:	Quotes	Characteristic
1 (Large)	<i>"I think that a manager always needs to be flexible"</i> <i>"Flexibility is needed to do both innovation and routine tasks"</i>	Flexibility plays a minimal role in achieving and sustaining contextual ambidexterity
2 (Large)	"When you are not flexible, you are not able to do different tasks" "My manager needs to be flexible. If he is flexible, we can be flexible" "Flexibility is a must for doing both tasks and activities"	Flexibility plays a role in achieving and sustaining contextual ambidexterity



3 (Large)	"Flexibility could help the business unit to do both activities and tasks" "Flexibility is a nice to have in general and needed"	Flexibility plays a role in achieving and sustaining contextual ambidexterity
4 (Small)	"Flexibility is a more general trait" "Flexibility could help to do both tasks, it's a more general trait" "It is a nice to have"	Flexibility plays a minimal role in achieving and sustaining contextual ambidexterity
5 (Medium)	"I think it is needed to be flexible for doing both tasks" "Flexibility is needed for swiftly switching between innovation and routine"	Flexibility plays a role in achieving and sustaining contextual ambidexterity

Table 4.2, Flexibility quotes, characteristics.

#### 4.1.3 DELEGATION OF TASKS & ACTIVITIES BY THE LEADER

Results show that delegation of tasks & activities is an important trait a leader should possess to effectively lead both exploration and exploitation activities. When leaders are able to delegate tasks to subordinates, leaders can use the spare time to think about vision, strategy and plans to achieve and sustain contextual ambidexterity. When leaders are not able to delegate the tasks to subordinates, it becomes harder to prioritize which tasks have to be done firstly for example. One of the subordinates of a large business unit:

# "My manager is being overwhelmed by the organizations with tasks that he is doing by himself. That is the reason he cannot prioritize. If he should delegate it to followers, he would be able to prioritize"

Another important reasons for delegating tasks to subordinates, is when the business unit manager has a certain characteristic, for example chaotic, the subordinate needs to have a more structural characteristic to succeed in the tasks or activities according a large business unit manager.

"I am a chaotic person, for structural activities and tasks I delegate it to my follower who is more structural, it is like Ying / Yang, I need followers who show the opposite characteristics and I need followers who are the same for more "chaotic and innovative tasks""

Also, when there is time pressure it is better to delegate the tasks to a team, and not doing it by the business unit manager self.

Delegation		
Business unit:	Quotes	Characteristic
	"Delegation is important, it creates space for creating a	
1 (Large)	plan"	Delegation plays a role in achieving and sustaining
	"Delegation is needed to divide tasks to followers	contextual ambidexterity



	which you are not able to manage″	
2 (Large)	"Delegation is needed in general and important as a leader" "When a manager is able to delegate, he or she can focus on strategy/vision"	Delegation plays a role in achieving and sustaining contextual ambidexterity
	"Delegation is crucial, it creates time and space for the manager to think about the future"	
3 (Large)	"Delegation is one of the most important traits for doing both activities in my opinion"	Delegation plays a strong role in achieving and sustaining contextual ambidexterity
	"For doing bot activities simultaneously, delegation is very important"	
	"When a leader is not able to delegate, he will not be able to think about the future"	
4 (Small)	"Delegation is important, you cannot do everything by yourself"	Delegation plays a strong role in achieving and sustaining contextual ambidexterity
	"For doing both activities delegation is crucial"	
5 (Medium)	"By delegation I am able to think about today and tomorrow needs" "A manager needs to delegate otherwise he is not able to manage a	Delegation plays a strong role in achieving and sustaining contextual ambidexterity
	_	ambidexterity

Table 4.3, Delegation quotes, characteristics.

#### 4.1.4 DETERMINATION LEADER

According to the data, several subordinates show that determination of the leader could play a role to achieve and sustain ambidexterity. Determination is the ability to decide, and stand behind the decision that has been taken. By lacking the ability of determination, followers do not know exactly what to do when, and will not work efficiently. Leaders therefore should be determent and make decisions which they think are the best solution for that moment. Overall determination can be seen as a general trait.

"My manager helps me to make decisions which I cannot make on my own. Determination is an important trait if you ask me for doing both activities simultaneously"



Also, according a subordinate, "determination is important to reach a goal". Most of the business unit managers do not name determination explicit, "it is important, but I think every leader should have it, it does not only help with innovation and routine tasks".

Determination		
Business unit:	Quotes	Characteristic
1 (Large)	"Every leader should be determinant in general"	Not an explicit trait for achieving and sustaining contextual ambidexterity
2 (Large)	"Determination is important, not only for doing both tasks but more in general as a manager" "A manager should be determinant at all times, otherwise he is not a good leader"	Not an explicit trait for achieving and sustaining contextual ambidexterity
3 (Large)	"Determination is a general trait, always needed"	Not an explicit trait for achieving and sustaining contextual ambidexterity
4 (Small)	"Every leader needs determination for his or herself to lead"	Not an explicit trait for achieving and sustaining contextual ambidexterity
5 (Medium)	"Determination could help to do both activities, it grants the leader the ability to steer the followers"	Plays a minimal role in achieving and sustaining contextual ambidexterity

Table 4.4, Determination quotes, characteristics.

#### 4.1.5 COGNITIVE ABILITY OF THE LEADER

One of the needed traits for contextual ambidexterity according the data is the cognitive ability of the leader. Cognitive ability of the leader is how intelligent the leader is, higher intelligence lead to a vision, strategy and plan how to achieve and sustain ambidexterity at the business unit. According the data on of the subordinates says:

#### "It helps to separate main tasks from side tasks and enables the helicopter view"

High intelligent leaders are able to make decisions quicker, solve complex problems faster and are able to switch between routine tasks and innovation. Also, higher intelligence helps to understand the tasks of the subordinates and what is needed to fulfill the tasks. It works also vice versa with followers, one of the business unit managers:

"I can clearly see the difference between someone with a post-secondary school, bachelor, or master grade. The higher the intelligence, the less words and steering is needed with the follower and the easier he or she can switch between the innovation and routine tasks"

When the intelligence of the leader is too high and the leader cannot translate his abstract vision or plans to the followers, it works in a negative way. Subordinates then do not understand where to go and how to fulfill the tasks which leads to frustration of followers and leaders:

"Sometimes my manager gives me a task which I do not understand. He tells it on a very abstractive way and walks away. I am a little bit lost then, but that is maybe my own intelligence problem" "I am willing to provide information and how to reach the goal to my followers, but after two times of explanation I get a bit frustrated when I need to explain it again, I then think by myself, is it that hard to understand?"

One of the followers says that he found it inspiring when his leader has a higher intelligence, because this grants him the opportunity to become more experienced or better at the job/tasks the leader gives to him. Intelligence also helps to think about the future, and enables to create a plan how to reach the future with the team.

#### "With a higher intelligence you can create work methods and you are able to create a planning"

Also, as mentioned, education plays a role to achieve and sustain contextual ambidexterity. The higher the education of the leader, the more vision, strategy and contextual ambidexterity was available at the business unit. This resulted in business units which are more organized then business units with leaders that were less educated. Intelligence was found very important within the empirical data.

#### 4.1.6 STRATEGY & VISION OF THE LEADER

In line with the higher intelligence of the leader, the empirical data shows that business units with leaders that have a strong vision and strategy and are able to translate it to the followers, are more contextual ambidextrous than business units that lack, or have a less strong vision and strategy. With the strong vision and strategy, which comes from the top management teams, business unit managers can create a roadmap for the business unit and followers for now and the future. Some business units lacked the vision of the top management team, which leaded to a less organized business unit, with followers that did not know where to go now and in the future:

"I think that you need a vision and strategy where to go with the business unit, but I am missing the strong leader who tells me the vision and strategy so I do not know what to do first or last. We live by the day, which in my opinion is not good"

One of the business unit managers who had a strong vision and strategy was able to translate it to the followers. Paths and goals for the coming years were very clear and this was one of the reasons the business unit was able to conduct contextual ambidexterity.

"I try to translate the vision and strategy of the organization to my business unit and followers, it is our main goal to achieve it and if we are not able to make it or it changes, I try and will adjust the vision and strategy and communicate this with the followers"

Another business unit manager creates the vision and strategy together with his followers, which provided also a very stable basis for followers and the business unit as a whole:

"I like it more to create a vision and strategy with all heads together. I only try to explain my vision to the followers, why I think it is a good vision, but of course if the followers have a better idea I am open to change it"

Followers of the above business units are all in line with the need of a strong vision and strategy,

"Vision and strategy are a roadmap, you cannot live by the day but need some kind of future plans"

Concluding, leaders play a prominent role in setting a vision and strategy. To be able to build a strong vision and strategy, intelligence plays a role and can be seen as a match between vision/strategy/intelligence.



Intelligence, Cognitive Ability / Strategy - Vision		
Business unit:	Quotes	Characteristic
1 (Large)	"Intelligence helps to switch between routine and innovation" "Strategy & vision is needed to do both activities, one for doing todays demand and two for doing future demands"	Plays a strong role in achieving and sustaining contextual ambidexterity
	"Intelligence is needed for solving complex problems with followers and within the business unit"	
2 (Large)	"Strategy & Vision is a road map, it is needed for doing both activities" "A manager must be intelligent to think about the future and today" "Intelligence helps to remain calm in complex, different situations"	Plays a strong role in achieving and sustaining contextual ambidexterity
3 (Large)	"Intelligence is one of the most important traits a leader should possess to do both activities" "Intelligence is needed to create a plan and strategy/vision for a business unit"	Plays a strong role in achieving and sustaining contextual ambidexterity
4 (Small)	"Intelligence of the leader plays a role, but we have a small team with a lot of experience. It is not crucial to do both tasks/activities" "You always need a strategy or vision to stay ahead of competitors, also for doing both activities"	Plays a role in achieving and sustaining contextual ambidexterity
5 (Medium)	"My manager needs to be intelligent. He needs to be the captain on the ship, we follow him" "Strategy and vision or a roadmap are crucial for doing both innovation and routine jobs"	Plays a strong role in achieving and sustaining contextual ambidexterity



#### 4.1.7 INSPIRATIONAL LEADER

According the empirical data, an inspirational leader can contribute to achieve and sustain ambidexterity in a certain way. Most of the followers do not see the leader as inspirational source for achieving and sustaining contextual ambidexterity, but more on the experience, quick responding and answers of the leaders to the problems that occur. The quick responding and answers to problems that occur can be seen as inspirational for contextual ambidexterity, because leaders need to act quickly on situations to achieve and sustain contextual ambidexterity.

#### "It fascinates me that he has for every problem a quick solution"

On the other hand, leaders that are according to the followers not inspirational, are most of the time out of office, or chaotic with lack on structure of the business unit. This leaves the followers with issue's and unanswered desire to solve problems together with the leader. Most of the followers then will try to solve the problems with surrounding colleagues instead of the leader. The leader should take a role model position for the followers, to promote contextual ambidexterity.

"My manager is a little bit careless, and most of the time out of the office, that is why I do not see him as an inspirational source. I try to solve my problems with my colleagues who are willing to help me instead of the manager"

Several followers who have leaders who are not an inspirational role model, will try to learn by themselves and on their own initiative according the data.

Inspirational			
Business unit:	Quotes	Characteristic	
1	<i>"I think inspirational is a</i>	Not an explicit trait for	
(Large)	more general trait"	achieving and sustaining contextual ambidexterity	
	"It fascinates me that he		
	has a solution for every		
	problem"	Plays a minimal role in	
2		achieving and sustaining	
(Large)	"In general, it is a general	contextual ambidexterity	
	trait, not for doing both		
	innovation / routine tasks"		
3	"Inspirational is what every	Not an explicit trait for	
(Large)	leader's needs"	achieving and sustaining	
		contextual ambidexterity	
4	"I do not think it is crucial	Not an explicit trait for	
(Small)	for doing both activities,	achieving and sustaining	
	more a general trait"	contextual ambidexterity	
5	"When a leader is	Plays a minimal role in	
(Medium)	inspirational for his	achieving and sustaining	
	followers it could help to do	contextual ambidexterity	
	both activities quicker"		

"I try to learn on my own initiative, I need my leader for it but if he is not present or does not have time to help me I cannot force him to do so"

Table 4.6, Inspirational quotes, characteristics.



#### 4.1.8 Self-confidence of the leader

The empirical data shows that self-confidence of the leader could play a role in achieving and sustaining contextual ambidexterity. According to a few business unit managers, self-confidence is needed to bring the message to the subordinates, but also important to be confident to stand behind your opinions and vision. It is a general trait, not explicit for contextual ambidexterity.

"If you want to bring over the message to your followers, you have to be self-confident. Followers do not want a leader who is not sure and confident about his or her-self"

Not only for bringing the message and vision it is important, another business unit manager shows that it is important because as a leader you will be constantly under attack by the organization. Therefore, leaders need to be confident in what they do and how they want to achieve it.

"As a business unit manager, you are constantly under attack, you need to be self-confident to defend yourself and your business unit"

On the other hand, too much self-confidence of the leader leads to arrogance and not open for new ideas of the followers. This could contribute in a negative way to ambidexterity, therefore self-confidence needs to be at a normal level.

"Sometimes, my manager is to self-confident about himself, which is quite annoying and not professional, we are all grown up and we all have sometimes good ideas. He needs to listen then, but that is hard sometimes for him"

Self-Confidence				
Business unit:	Quotes	Characteristic		
1	"A leader must be self-	Plays a minimal role in		
(Large)	confident about the	achieving and sustaining		
	decisions he or she makes	contextual ambidexterity		
	and him or herself. This			
	could help to do both			
	activities simultaneously"			
2	"Self-confidence could help	Plays a minimal role in		
(Large)	to do both activities; the	achieving and sustaining		
	leader knows then which	contextual ambidexterity		
	way to go and we follow"			
3	"Self-confidence is just like	Not an explicit trait for		
(Large)	determination, a more	achieving and sustaining		
	general need"	contextual ambidexterity		
4	"I think self-confidence is a	Not an explicit trait for		
(Small)	general trait needed by	achieving and sustaining		
	leaders"	contextual ambidexterity		
5	"Self-confidence is a must	Not an explicit trait for		
(Medium)	for every leader, not just for	achieving and sustaining		
	leaders who need to	contextual ambidexterity		
	manage both innovation			
	and routine activities"			

Table 4.7, Self-confidence quotes, characteristics.



#### 4.1.9 TECHNICAL KNOWLEDGE OF THE LEADER

According the data, several business unit managers have a lot of experience and technical knowledge of the products and technical knowledge in general. This kind of knowledge can be useful to help subordinates with complex product and technical issues/problems. Overall this kind of knowledge is most of the time in business units that are relatively small. It is a general trait.

"My manager has a lot of knowledge and experience with technical problems and machines. This helps us greatly when problems occur, with brainstorming sessions"

On the other hand, it can be negative as a leader to have too much technical knowledge, empirical data shows that some followers do not want a leader that have a lot of experience and technical knowledge. This forces the leaders to act on helicopter view over the business unit, and not interfere with the daily routine jobs and innovation tasks. In this light, it works negative on ambidexterity because it limits the follower's ability to act free on issues and problems, if the leader is constantly providing the solutions. When technical knowledge is higher at the leader, it can help to understand why some targets are not being met according planning. This is positive for the relation between the follower and leader.

"Our leader is a really technical leader. Sometimes this bothers me, I cannot act freely on my own because he already tells or brings solutions. He needs to be more at the background. On the other hand, it helps that he understands our problems and sometimes we cannot meet the targets"

Technical Knowledge			
Business unit:	Quotes	Characteristic	
1	"Technical knowledge of	Plays a minimal role in	
(Large)	the machine could help to	achieving and sustaining	
	do innovation"	contextual ambidexterity	
2	"When having technical	Plays a minimal role in	
(Large)	knowledge, it could help to	achieving and sustaining	
	solve problems for both	contextual ambidexterity	
	innovation and routine		
	jobs"		
3	"Technical knowledge is a	Plays a minimal role in	
(Large)	nice to have for innovation	achieving and sustaining	
	and routine tasks"	contextual ambidexterity	
4	"I think it could help if you	Plays a minimal role in	
(Small)	have technical knowledge	achieving and sustaining	
	to do both innovation and	contextual ambidexterity	
	routine jobs. You know then		
	were and how to talk		
	about"		
5	"Technical knowledge is	Plays a minimal role in	
(Medium)	good to have to do both	achieving and sustaining	
	innovation and routine	contextual ambidexterity	
	activities"		

Table 4.8, Technical Knowledge quotes, characteristics.

#### 4.1.10 CHARISMA OF THE LEADER

The empirical data shows that charisma of the leader could play a role in achieving and sustaining ambidexterity. According to several followers, charisma is needed to act as a role model and tell the way where to go. *"Charisma in my opinion is needed, because it is the way you are bringing your story and vision to the subordinates. Subordinates need to think "wow" when he starts talking. My manager* 



*is lacking charisma on this point"* When lacking charisma, to bring the needs and vision will be harder, but not impossible. According a business unit manager:

#### "Charisma is a nice to have, but is not really necessary in my opinion. If you have a good story and the followers trust you, it is not needed"

Charisma can lead to a better trust relationship according to followers, because the leader "is the one who knows everything and will help me". This could contribute to contextual ambidexterity, when trust and confidence in the leader is high and leaders are able to bring over the message of ambidexterity. Overall charisma was seen as a general trait.

"Charisma could help to increase trust in the leader which wants to do simultaneously innovation and routine jobs. He is the one that is the role-model then and knows the answers to the problems"

Charisma			
Business unit:	Quotes	Characteristic	
1	"Charisma is a general trait,	Not an explicit trait for	
(Large)	nice to have"	achieving and sustaining	
		contextual ambidexterity	
2	"Charisma is what every	Not an explicit trait for	
(Large)	good leader need in	achieving and sustaining	
	general"	contextual ambidexterity	
3	"Charisma could help	Plays a minimal role in	
(Large)	minorly in innovation and	achieving and sustaining	
	routine tasks. When a	contextual ambidexterity	
	leader is a strong and big		
	guy/woman this could help		
	to let followers follow"		
4	"Charisma is what every	Not an explicit trait for	
(Small)	leader need"	achieving and sustaining	
		contextual ambidexterity	
5	"Charisma is a general trait	Not an explicit trait for	
(Medium)	needed by every leader"	achieving and sustaining	
		contextual ambidexterity	

Table 4.9, Charisma quotes, characteristics.

#### 4.1.11 REPRESENTATIVE FOR FOLLOWERS

According the empirical data, most of the subordinates find it very pleasant that the business unit managers is a representative for the followers. The business unit managers defend the total group of the business unit and helps the followers for example to bring ideas to a higher level. Also, when the business unit manager is able to be representative for the group, his emotional and social abilities according the empirical data is high. The followers then trust the leader, which can help to achieve and sustain contextual ambidexterity. Overall this is a general trait.

"I can say about myself that I am a people-manager. I want to defend my followers for the organization and want to get the best out of them, that is also by doing social talk about the families and problems. It helps to build on trust, which is in my opinion important for doing both innovation and routine tasks"

"My manager never forgets my birthday for example, and always tries to help me. Therefore, I trust him very much and we are able together in this way to improve the business unit"



Charisma				
Business unit:	Quotes	Characteristic		
1	"Every leader should be a	Not an explicit trait for		
(Large)	representative for his	achieving and sustaining		
	followers, it is a general characteristic″	contextual ambidexterity		
2	"A good leader stands for	Not an explicit trait for		
(Large)	his team, this is in my	achieving and sustaining		
	opinion what every leader should possess"	contextual ambidexterity		
3	"A good leader stands for	Not an explicit trait for		
(Large)	the team"	achieving and sustaining contextual ambidexterity		
4	"When leaders are able to	Plays a minimal role in		
(Small)	stand for the team's	achieving and sustaining		
	outcome, it could help to do	contextual ambidexterity		
	both tasks and activities			
	together because trust			
	becomes higher"			
5	"It could help if leaders are	Plays a minimal role in		
(Medium)	representatives for the	achieving and sustaining		
	team to make quick decisions"	contextual ambidexterity		

Table 4.10, Representative quotes, characteristics.

#### 4.1.12 SUMMARY TRAITS IN CONTEXTUAL AMBIDEXTERITY

Trait	(Large) BU1	(Large) BU2	(Large) BU3	(Small) BU4	(Medium) BU5	Overall playing a role in achieving and sustaining contextual ambidexterity
Working Experience	++	+	+	-	-	+
Flexibility	-	+	+	-	+	+
Delegation	+	+	++	++	++	++
Determination	0	0	0	0	-	0
Intelligence, cognitive ability	++	++	++	+	++	++
Strategy & Vision	++	++	++	++	+	++
Inspirational	0	-	0	0	-	0
Self-confidence	-	-	0	0	0	0
Technical knowledge	-	-	-	-	-	-
Charisma	0	0	-	0	-	0
Representative for followers	0	0	0	-	-	0

Table 4.11, Traits in contextual ambidexterity according empirical data.

-- = Not playing a role in achieving and sustaining contextual ambidexterity;

- = Playing a minimal role in achieving and sustaining contextual ambidexterity;
- 0 = Not an explicit trait for contextual ambidexterity;
- + = Playing a role in achieving and sustaining contextual ambidexterity;
- ++ = Playing a strong role in achieving and sustaining contextual ambidexterity.



# 4.2 BEHAVIOR LEADERS

According to the empirical data, several behaviors can be identified after analyzing the traits of the business unit managers and subordinates that have been interviewed. The behaviors that have been identified are: chaotic, trust-based, transformational, transactional, coaching and laissez-fare or passive behavior. The behaviors will be explained in below chapters.

## 4.2.1 CHAOTIC BEHAVIOR

According the data, some of the business unit managers find themselves chaotic, which is acknowledged by the followers of the business unit managers. One of the subordinates explains that the chaotic behavior comes from the technical background of the business unit manager:

# "My business unit manager is chaotic with everything that has to be arranged on paper. This is because of his technical background. Technical people do not like the paperwork and presentation works"

When the business unit manager is chaotic, followers find it hard find out which way to go. The business units that had a chaotic business unit manager, have strong (senior) teams with short lines and strong ties with colleagues to solve the problems by themselves without the need of a business unit manager. Therefore, the business unit is not underperforming on contextual ambidexterity, but the knowledge about the vision and strategy of the business unit can be described as diverse among the followers, or they do not even know the vision of the business unit (manager).

"My manager is never in the office, and he is very chaotic. We are lucky that we have a strong senior team and awe can manage most of the problems by ourselves. Although the strong senior team, I do not know which way we want to go in the future"

One of the business unit manager who finds himself chaotic, does not see it as a problem. Because he is chaotic, he needs strong team members who are structured to make it one strong business unit. Also, he gives his followers a lot of freedom which is according the business unit manager positive.

"I know I am chaotic, that is why I need strong team members. Luckily, I have a lot of seniors in my team, which can provide the structure that is needed. The business unit as a whole performs in that way good. It is like Ying-Yang, you need to find a team that can fil up the lacks you have as a business unit manager."

### 4.2.2 TRUST BASED BEHAVIOR

The empirical data showed that trust is a common behavior between the business unit managers and followers. It can have positive and negative sides, positive is if trust is high business unit managers and followers have a lot of freedom to act on problems and tasks. This contributes to contextual ambidexterity, because freedom of followers and business unit managers enhances creativity which is needed for exploration activities.

# "I like to work on the basis of trust, it forces my followers to think by themselves and they are not tied up to my ideas or creativity"

On the other hand, too much trust gives too much freedom and followers then become "a bit lost" what to do first or last like the chaotic behavior in previous chapter. This is negative for achieving and sustaining contextual ambidexterity, because a lack of a clear structure and a business unit manager who will lead the way.

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> "My manager trusts us too much, therefore he lets us totally free. Sometimes I do not know which way to go then, innovations or routine tasks. Because of this freedom I also sometimes miss the "fist on the table". We as followers need to make the decisions by ourselves.

## 4.2.3 TRANSFORMATIONAL BEHAVIOR

Several business unit managers according the empirical data show transformational behavior to followers. Transformational behavior contributes to explorative activities, which let the followers free to make their own choices and motivate them with the common goal that has been set by the business unit manager. It also contributes to the needs and to get the best out of the followers. When business unit managers were conducting transformational behavior, it effected both explorative and exploitative activities. It also activated the followers to do more, and think about how to do the routine processes more efficiently

"My manager has a high expectation of me, he activates me for doing more than the tasks he is asking. He only corrects me if it is really necessary. This helps to do more innovative tasks, for routine tasks I think the freedom should be less"

One of the business unit manager explains why transformational behavior and freedom is good for both exploitation and exploration activities.

"When I let my people free, they will think by themselves for creative ideas. This can also be useful for routine tasks, it does not only work on innovation or creativity tasks"

One of the followers explains that his manager always is trying to develop the followers, which can help to improve efficiency, but also effectively contribute to innovation because of the experience that has been gathered with the exploitative activities.

"My manager is always trying to develop me and my colleagues, he is never busy with his KPI's or his own development. One way that is good for us, but bad for him.

In line with the transformational behavior of the business unit manager is the freedom for followers granted by the business unit managers. Empirical data shows when transformational behavior is being conducted, subordinates feel a lot of freedom. This freedom is needed, as mentioned to conduct exploration activities or tasks. On the other hand, empirical data shows it is also applicable for exploitative activities or tasks.

# "My manager leaves me totally free to do both routine and innovation tasks. I have to come by myself to him with problems, he does not come to me"

Freedom is according to business unit managers needed for doing exploration. With the freedom, followers will make mistakes and by making these mistakes, business units will become eventually better in innovation tasks. It is an important task for the business unit managers that he or she supports making mistakes and not tries to punish the followers for it. This will eventually lead to fear for making mistakes, which will not contribute to innovation and ambidexterity.

"Freedom is in my opinion needed for innovation. Followers do not need to have fear for mistakes, because then you will take away their creativity which is needed for innovation"

For creativity of the followers, most of the business unit managers agree on the fact that freedom is important. If the business unit managers create borders in the cognitive ability of the follower's



creativity, it will be negative for explorative tasks. Furthermore, business unit managers that let followers free create an environment, where the followers can create problem-solving skills by themselves, instead of asking the business unit manager all the time.

"I think it is important to let your followers free. It grants them the ability to create and sustain problem solving skills. That helps me again to create a vision and strategy for example"

On the other hand, too much freedom with the transformational behavior leads to lack of structure and how to reach the goal. This is in line with the trust and chaotic behavior chapter. It is important for business unit managers to switch between more and less freedom among the followers. This can be a hard task, some of the business unit managers are according the empirical data able to do this, which leads to more and better ambidextrous behavior than business unit managers who are not able to be flexible switching between more or less freedom. For example, the quote of a business unit manager who is able, when the followers are beginning to ask more questions, to switch between the two types of freedom:

"I let my subordinates extremely free, sometimes I think a little bit too much. This leads to more questions and then I am aware I need to act a little bit more directive and in boundaries again"

One of the business unit managers who was not able to switch flexible between the freedom for the followers, does also not see a difference in leader behavior between exploration and exploitation.

"I let my followers very free, it does not differ between innovation or routine tasks. It is the responsibility of the follower's self in my opinion to come to me with problems"

This behavior of the business unit manager works counterproductive on follower's ambidextrous behavior. Where freedom normally is positive for followers, it changes when it becomes too much freedom with no boundaries or direct steering from the business unit manager.

"I like my freedom and individual approach of my manager, but sometimes this works counterproductive on routine tasks. Then he should be a little bit harder"

Or

"My manager lets me very free, but I miss the motivation which can be obtained by for example a speech. He activates me, but does not check my performance, of nobody actually, therefore as a business unit we will not come any further in my opinion"

### 4.2.4 TRANSACTIONAL BEHAVIOR

According to empirical data, several business unit managers conduct transactional behavior towards the followers. Transactional behavior consists of strict borders, less freedom and to reach the main goal the business unit manager uses contingency rewards. For exploitative activities this can be a good behavior, but according to follower's freedom is also necessary to develop themselves and make the processes more efficient. When the business unit manager was conducting more or less only transactional style, the business unit was not able to act ambidextrous as a whole. This was limited then to a few (senior) stiff team members of the business unit.

"My manager is very stiff, defines the borders where we can act and if we cross the border he will intervene to reach the goal as he planned to reach it"



Also, when business unit managers only conducted transactional behavior, followers explain that the business unit manager is only working on the goal to reach with the business unit, not per individual a plan to improve the followers. This is in line with the literature, which explains that transactional behavior only is for reaching goals, not for individualized goals per individual.

"My manager does not spend much time to me how I can improve myself"

"My manager does not see it when followers are having too much work on their desk. It is all about reaching the goal, this is not a good behavior in my opinion"

On the other hand, when managers are able to switch from transformational to transactional and viceversa it works very well. Business unit managers explain that for routine work, the behavior needs to be different because of the time and commercial aspect. For explorative tasks this is less needed and some business unit managers are able to switch then to a more transformational style.

"When we have to push through regular orders, I need to create the borders for the followers otherwise we will never finish it"

"With routine tasks, I need to speed up and activate my followers then. It just needs to be done and sometimes followers do not like it if I act like that but someone has to do It"

"The routine tasks are more bordered than the innovation or new tasks. If followers do not act within the borders with routine tasks, I kindly remember them what agreements we had and we go on most of the time without arguing"

In line with the transactional behavior is a structural way of working, empirical data shows that when transactional behavior of the business unit manager was conducted, more structural ways of working were present. This leaded to more exploitation activities and less freedom was available for the followers which was less positive for achieving and sustaining contextual ambidexterity.

"In my opinion if followers have more boundaries and structural way of working, they can perform more efficiently. Planning is mandatory, you can monitor as a manager your followers and correct them if they are making mistakes"

Followers find it pleasant to get some direct leadership and boundaries if they encounter problems or are not able to solve it by their own. Too much boundaries works counterproductive on contextual ambidexterity.

# 4.2.5 COACHING BEHAVIOR

Another behavior that can be identified from the empirical data is a more coaching style. The coaching style is in the middle between transactional and transformational. Followers find it pleasant that the business unit managers ask questions, instead of giving directly answers to the problems that occur. Also, the business unit managers who act more like a coach teach the followers to think together with the business managers instead of the business unit manager alone about for example the vision or strategy.

"My manager is a coach. He never gives directly answers to my problems. Sometimes this s frustrating but most of the time it is enlightened for me. I can learn from his experience"



The coaching behavior leads to a mix of exploration and exploitation. Overall this contributes to achieve and sustaining contextual ambidexterity.

"I work like a coach towards my followers, I am cheering if they come with their own ideas. I only ask questions. I can provide them help with getting it on the right department for example. For bot innovation and routine tasks, it works in my opinion in a very sufficient way"

Some of the followers see the more coaching style in the business unit manager as a person who they can ask and get aligned with. This helps to solve complex problems together, which is good for the business unit as a whole.

"My business unit manager and I sometimes sit for one hour having a good conversation about a complex problem. He can use his experience and I can use my knowledge. Together we come to the most brilliant ideas which gives me and him a good feeling"

### 4.2.6 LAISSES-FAIR OR PASSIVE BEHAVIOR

A minority of the empirical data according to the followers and business unit managers show a more passive or laisses-fair behavior. Laisses-fair or passive behavior according the empirical data is the business unit manager does not act actively on problems or challenges and does not make any decisions. This kind of behavior does not lead to contextual ambidexterity and can be seen in smaller business units.

"My manager uses a more passive leadership behavior. He does not act on problems and thinks everything is all right. It is just like he does not care"

According the business unit managers the laisses-fair or passive behavior can work, because it does not intervene with the team. The team will be more self-steering.

"Because I am a bit more passive, my team or followers act more actively. I am not the boundary for them and I think that they like that.

Behavior	Overall contributing to Contextual Ambidexterity
Chaotic	
Trust-Based	+
Transformational	++
Transactional	+
Coaching	0
Laissez-Fair/Passive	0

### 4.2.7 BEHAVIOR IN CONTEXTUAL AMBIDEXTERITY

Table 4.12 Behaviors contributing to contextual ambidexterity according empirical data.

- -- = Not contributing in achieving and sustaining contextual ambidexterity;
  - = Minimal contributing in achieving and sustaining contextual ambidexterity;
- 0 = Not an explicit behavior for contextual ambidexterity;
- + = Contributing in achieving and sustaining contextual ambidexterity;
- ++ = Strongly contributing in achieving and sustaining contextual ambidexterity.



# 4.3 RELATION BETWEEN THE SUBORDINATE-LEADER

After several interviews have been conducted, results showed that the relation between the business unit managers and followers also plays an important role to achieve and sustain contextual ambidexterity. It turns out that business unit managers lead the followers in different ways. When the business unit manager for example knows the follower for a longer time, or knows better what the experience and expertise of the follower are, output is higher and less words are needed to understand each other to reach the common goal.

"Leadership in my opinion is different per follower. For example, I know one follower for a much longer time and his expertise. Few words are needed to understand each other to reach the goal"

One of the business unit manager explains that he does not intervene directly. He tries to find out if the follower likes more innovation or routine tasks and tries to create in that way a strong team with follower who are doing the tasks their passion lies.

"I do not intervene my followers directly. I try to find out where the passion of the follower lies. If I know the expertise and passion of the follower, I try to find a suitable task for them. In that way I am trying to build a strong team and keep the followers happy and willing to improve themselves and the business unit"

Personalities that are the same between the business unit manager and the followers works in a positive way for achieving and sustaining contextual ambidexterity. Understanding between the business unit manager and followers becomes higher and few words are needed to get tasks done. When the personalities of the business unit manager and followers are not the same, more words are needed and understanding of each other's needs is harder to reach.

"Within my team I have followers who I know for a long time and they have the same personality. This leads to very quick understanding of each other's needs and problems with only a few words. On the other hand, I have followers who have totally different personality relative to me. This requires other approaches and takes more time to achieve the same goal"

Followers find it important that the business unit manager takes care of building a good relationship with the followers. According the empirical data of the followers, when the relation is at a higher-level flexibility and achieving goals is much easier. It starts with being a social, open leader who tries to be there for the team when needed.

"Every morning my manager opens the day and we talk about for example, our families. He puts a lot of effort in building a strong relationship, this helps to achieve goals and helps building trust in the manager"

On the other hand, not only the followers but also some of the business unit managers agree with the followers who find it important to build strong relationships.

"Every morning I start up the day with getting everyone coffee and a chat about for example family. This creates a good atmosphere and great relationships. Followers trust me, want to do more for me and all together we can achieve a higher level as business unit"



Relation BUM-Follower				
Business unit:	Quotes	Characteristic		
1 (Large)	"When having a good relation with your followers, you are able to do more with the business unit. It generates trust" "Because the relation with my manager is good, we trust each other and we can help each other to bring the business unit at a higher level"	Higher quality relations play an important role in achieving and sustaining contextual ambidexterity		
2 (Large)	"The relation with my followers is very important for me. It helps to build trust and to achieve mutual goals" "I trust my manager, he knows everything from me, also personal. This helps to do sometimes more than asked"	Higher quality relations play an important role in achieving and sustaining contextual ambidexterity		
3 (Large)	"Relation with your followers is key for doing both innovation and routine jobs" "Better relation with your followers enables them to make decisions by themselves instead asking every problem"	Higher quality relations play an important role in achieving and sustaining contextual ambidexterity		
4 (Small) 5 (Medium)	"Having a good relation with your manager helps to make decisions by yourself. This is because the manger trusts you" "The better the relation with the followers in the business unit, the more you can do with innovation and routine activities simultaneously"	Higher quality relations play an important role in achieving and sustaining contextual ambidexterity Higher quality relations play an important role in achieving and sustaining contextual ambidexterity		

Table 4.13, High Quality Relations, contributing to contextual ambidexterity according empirical data.

RSM ERASMUS UNIVERSITY RASMUS UNIVERSITY

## 4.3.1 LEADER-MEMBER EXCHANGE SEVEN QUESTIONS SURVEY

To find out how the relationships between the subordinates and business unit managers are, a Leader-Member Exchange survey of seven questions has been conducted with every interviewee. This seven questions survey gives insight if the subordinate is in the "in-group" or "out-group" with the particular score the subordinate has. It focuses on three dimensions, trust respect and obligation between the subordinate and leader and vice-versa. By crosschecking it by doing the seven questions survey with the business unit managers, conclusions can be taken how the relation between the subordinate and the business unit managers are and how it can affect the effectiveness of contextual ambidexterity.

Business Unit	BU Manager <-> Subordinate 1	BU Manager <-> Subordinate 2	BU Manager <-> Subordinate 3	Largeness Business Unit
1	25-26	27-25	31-23	Large
2	22-22	28-26	27-27	Large
3	27-28	26-25	28-29	Large
4	21-26	32-29	34-27	Small
5	27-25	31-25	27-25	Medium
Business Unit	<b>Relationship BUM-</b>	<b>Relationship BUM-</b>	<b>Relationship BUM-</b>	Effect on Contextual
	SO-1	SO-2	SO-3	Ambidexterity
1	High	High	Moderate	+
2	Moderate	High	High	+
3	High	High	High	++
4	Moderate	High	High	+
5	High	High	High	++

Table 4.14 Results LMX seven survey scores.

- -- Extreme negative effect on achieving and sustaining contextual ambidexterity;
- = Negative effect in achieving and sustaining contextual ambidexterity;
- 0 = Not an explicit effect on contextual ambidexterity;
- + = Effecting achieving and sustaining contextual ambidexterity;
- ++ = Extremely effecting achieving and sustaining contextual ambidexterity.

The scores can be interpreted according below scheme:

Very Low = 7 -14 / Low = 15-19 / Moderate = 20-24 / High = 25-29 / Very High = 30-35. Largeness Business Unit: Small = 15-20 subordinates / Medium = 20-30 subordinates / Large = 30-50 subordinates.

Overall the relationship between the business unit managers and subordinates can be defined as high quality relationships. Most of the interviewed subordinates conclude that the relationship with the business unit manager is sufficient and pleasant. None of the subordinates find the relationship with his or her business unit manager bad or low, but also none of the subordinates find the relationship extraordinary good. Most of the subordinates are in the "In-group" of the business unit manager, and this contributes to achieve and sustain contextual ambidexterity.

A few subordinates have a moderate relation with the business unit manager, or do not understand the business unit manager's needs. This may be due to the intelligence difference of the subordinates and business unit managers. This can be seen in the scores which are very divided between the business unit manager and subordinates.

The small and medium business units show a high relation between the business unit manager and the subordinates. Because the business units are smaller, business unit managers have the ability to create



a good and strong relationship with every single subordinate. When business units become larger, it becomes harder for the business unit manager to create a strong relationship with every single subordinate. Therefore, the larger the business unit, the harder to achieve and sustain ambidexterity for the business unit manager.

## 4.4 STRUCTURE AND ORGANIZATION OF THE BUSINESS UNIT

The final aggregate dimension is the structure and the organization of the business unit. Empirical data shows that the organization of the business unit and the team structure plays a role to achieve and sustain contextual ambidexterity.

### 4.4.1 BUILDING A STRONG TEAM

Several business unit managers are convinced that a strong team is needed to achieve and sustain contextual ambidexterity. Also, the business unit manager should "fit" with the business unit and the followers, according to one of the business unit managers this is crucial to achieve and sustain contextual ambidexterity.

"I think as a business unit manager you should fit with your followers and the products in the business unit. Only then you are able to achieve goals like doing innovation and routine tasks together"

The business unit manager, according the empirical data, must be able to keep the team and followers together to reach a common goal. When the followers and business unit manager form a team together, contextual ambidexterity can be better achieved and sustained. Also, the business unit manager should be willing to reach together with the followers the goal, not by only telling the goal to the followers but actively participate with the followers.

"I am trying to keep the team together, only then we are able to solve complex problems and reach our goals"

"As a business unit manager, you need to participate in your team and be pragmatic to solve the problems and reach goals. Only then it is possible to do innovation and routine tasks together in my opinion"

According to several followers of the business unit managers, empirical data shows the strong teams are needed to achieve and sustain ambidexterity. When a strong team has been built within the business unit, the business unit manager does not have to intervene constantly or act with transactional behavior to the followers.

"When a strong team has been built, the business unit manager does not have to intervene over and over again. This only works counterproductive"

According followers, to achieving and sustaining contextual ambidexterity you need a team that have both explorative and exploitative team members. Use the power and expertise of the followers on both activities. All together according the empirical data should lead to ambidextrous business units.

"I think that you need a team that can do both activities or tasks. Use the expertise of the team members to do it both together in the business unit. You need to know as a manager which qualities your followers have"

When business unit managers are granting the followers of the business unit much freedom, strong (self-steering) teams are mandatory according followers to achieve and sustain contextual ambidexterity. The self-steering teams make the decisions by themselves with the senior team members and expertise that is in the team. The business unit manager than plays a less crucial role



and the ability to achieve and sustain contextual ambidexterity shifts to the team. The business unit manager is only needed than for making the "final decisions" like budgets above a certain amount and changes that have impact on the business unit as a whole.

"We have a very strong team, that is because our business unit manager is not always in the office. Therefore, we do not really need a business unit manager to make the decisions"

"Because our business unit manager is most of the time away, we created with the senior team members a more self-steering team. That is the luck he has, we are able to manage ourselves"

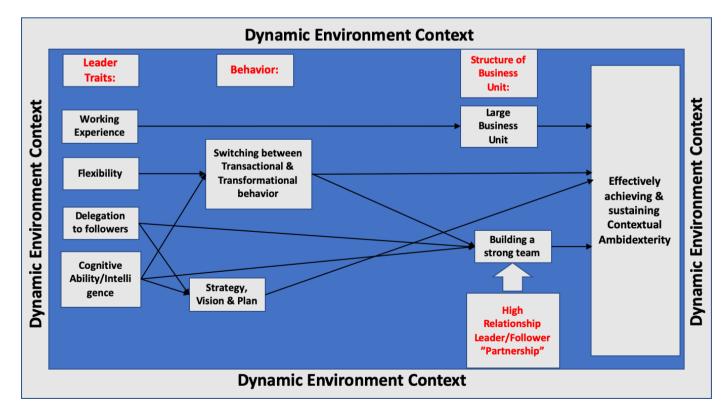
### 4.4.2 ORGANIZATION / STRUCTURE OF THE BUSINESS UNIT

When business units become larger, achieving and sustaining contextual ambidexterity becomes harder to be managed by the business unit managers. Empirical data shows that the smaller the business units are, the more contextual ambidexterity is being conducted. According to business unit managers the smaller the business units, the easier to manage.

"We are a small business unit, that is much easier to manage than the bigger ones in the organizations. We have very short lines with the team and can make decisions very fast"

According to several followers, the smaller the business unit the better the relationship with the business unit manager which leads to achieving and sustaining contextual ambidexterity much easier. When business units become larger, the business unit manager need to delegate the tasks to coordinators, or senior followers to get the tasks done. The business unit manager is than less attached to the team which can be negative for achieving and sustaining contextual ambidexterity.

"I do not see or speak my manager that much. It is more the coordinator who I am working with. I do not really know what his vision is for the future, I just do my job"



### 4.4.3 CONCEPTUAL MODEL MOST IMPORTANT EMPIRICAL RESULTS



# 5. DISCUSSION & CONCLUSION

## 5.1.1 CONTRIBUTION TO LITERATURE

This research contributes to the literature in a several ways. It contributes to the literature how to achieve and sustain contextual ambidexterity and which specific leaders' traits and followers' behavior are needed. Second, it contributes to the Leader-Member Exchange theory in combination with contextual ambidexterity, less research has been done on how Leader-Member Exchange can be combined with contextual ambidexterity (Rosing, Frese, & Bausch, 2011). Also, it contributes to the literature of leadership, with integration of leader traits in combination with Leader-Member Exchange theory on achieving and sustaining contextual ambidexterity. Most of the time researched is conducted on single traits or behaviors of leadership, in this study several traits are being studied in combination with leader-member exchange (Burns, 1978).

# 5.1.2 CHARACTERISTICS/TRAITS OF THE LEADER

Several traits and characteristics that play a role have been found in the empirical data. In this section the traits and characteristics that play a role on achieving and sustaining contextual ambidexterity will be discussed. The working experience of the leader was one of the traits that contributed to achieving and sustaining ambidexterity. According the literature, experience of the leader leads to effective leadership (Derue, Nahrgang, Wellman, & Humphrey, 2011; Northouse, 2016). This is in line with the founded empirical data in large business units, when leaders had working experience with achieving and sustaining ambidexterity in previous work or environments this contributed to effectively achieve and sustain contextual ambidexterity in business units that were not ambidextrous. Not all business units had the effectiveness that the literature proposes with the experience of the leader. When business units were smaller, the experience of the leader was less important to achieve and sustain contextual ambidexterity. Within the smaller business units' leaders play a different role than in larger business units (Lubatkin, Simsek, Ling, & Veiga, 2006). Larger business units have more hierarchical layers and coordinators, and therefore leaders do not have operational and strategical roles simultaneously. In smaller business units the leaders play different roles simultaneously and therefore (general) experience is less needed. Decisions can be made more quickly and the experience of all business unit members can be used (Lavie, Stettner, & Tushman, 2010). Experience with technical knowledge according the empirical data could help to solve problems, but also works negative on the creativity of the followers.

### **Proposition 1:**

# When leaders have (working) experience with ambidexterity, it plays a role to effectively achieve and sustain contextual ambidexterity in larger business units. In smaller business units this is less relevant.

Flexibility of the leader can be seen in different ways. Within the empirical results flexibility was seen as the ability to switch between exploitation and exploration activities. This flexibility contributes to achieve and sustain contextual ambidexterity and is in line with the existing literature (Zaccaro, Gilbert, Thor, & Mumford, 1991). In the existing literature flexibility is the ability of the leader to respond "equally well to very different situations". Other literature shows that individuals that are flexible are able to act ambidextrous (Mom, Van den Bosch, & Volderba, 2007). As the empirical results show, when leaders were not able to be flexible in their behavior, exploitation tasks took the overhand and contextual ambidexterity was less or not available at the business unit. The difference between the



larger and smaller business units is in line with the working experience trait. Leaders in smaller business units are able to do more tasks simultaneously.

#### **Proposition 2:**

When leaders in large business units are able to flexible switch between exploration and exploitation and transformational/transactional behavior, this plays a role to effectively achieve and sustain contextual ambidexterity with the business unit.

The cognitive ability or intelligence of the leader plays an important role to achieve and sustain contextual ambidexterity. According the empirical data intelligence is important for both leader and follower, the higher the intelligence the better the understanding and common ideas about goals and strategy of the business unit and thus contextual ambidexterity. When intelligence is lower, the leader also builds up a less strong relation with the follower. When the relation is less strong, it contributes negative to contextual ambidexterity according the empirical data. Within the existing literature, cognitive ability is the most studied trait of leadership and is the most consistently predictive variable (Good & Michel, 2013) . The study of Good & Michel (2013) shows that cognitive ability is needed to achieve individual ambidexterity. Intelligence is the ability to understand the context and adapt accordingly. It grants the leader the ability to flexible shift between the two activities exploitation and exploration. Other studies show that higher intelligence leads to better leadership effectiveness and thus, better organizational performance and contextual ambidexterity (Derue, Nahrgang, Wellman, & Humphrey, 2011).

With a higher intelligence of the leader, strategy & vision of the business unit can be better developed and aligned. Empirical data shows when leaders are more intelligent, the business unit had a clear and structured vision in contrast to leaders that were less intelligent. To achieve and sustain ambidexterity, studies show that having a clear strategy and shared vision is important (Jansen, Van den Bosch, & Volderba, 2008). When having a strong strategy & vision, followers are able to know where the leader wants to be in the future with the business unit. When there is not, or a less strong strategy & vision, followers will not be aligned, exploitation and ad-hoc tasks take the overhand in the business units. The larger the business units were, the more intelligence played a role to achieve and sustain contextual ambidexterity.

When leaders are intelligent and have a strong strategy & visions, followers are seeing leaders more inspirational according the empirical data. Intelligent leaders are able to help the followers on complex problems, can manage to hold the helicopter overview and have strong ideas to bring the business unit to a higher level. This is in line with the transformational leadership behavior, leaders are inspirational and are willing not only to help themselves but also the followers to a higher rank (Bass, 1990; Northouse, 2016). Inspirational leadership can lead to achieve and sustain contextual ambidexterity, but does not play the most crucial role according the empirical data.

### **Proposition 3**

*Higher intelligence plays a prominent role in achieving and sustaining contextual ambidexterity in business units. It leads to a strong strategy & vision and helps to solve complex situations and problems.* 

Delegation of tasks and activities by the leader is according the empirical data needed to achieve and sustain contextual ambidexterity. Delegation grants the ability to the leader to have spare time to think and determine the plan, vision and strategy of the business unit, instead of doing operational and strategical tasks simultaneously. Other aspects to delegate tasks according the empirical data is needed if the leader searches for the other side of his personality characteristics to build a strong team to achieve and sustain contextual ambidexterity. This is in line with the literature of building a strong team to achieve contextual ambidexterity (Gibson & Birkinshaw, 2004). Within the existing literature, non or very limited studies have been conducted on delegation of tasks. Delegation therefore is a new and important finding for contextual ambidexterity.

### **Proposition 4**

Leader delegation plays an important role to achieve and sustain contextual ambidexterity. It grants the leader the ability to think about a plan and a vision. Also, delegation is important to build a strong team when the leader searches for other characteristics that he or she possesses.

Determination of the leader is the ability to get the job done and is according the literature combined with traits dominance, initiative, persistence and drive (Northouse, 2016). Determination is needed in every leadership style and strategy of an organization and thus does not explicit play a role in contextual ambidexterity. The empirical results show that determination was most of the time used to direct followers, which fits more to exploitation activities and transactional leadership style (Jansen, Van den Bosch, & Volderba, 2008).

In line with the inspirational leaders, self-confidence of the leader is a trait which helps to achieve and sustain contextual ambidexterity according the empirical data. Self-confident leaders are able to bring the message to the followers and is part of the transformational leadership (Bass, 1990). Not only for bringing messages to followers, but also leaders need to be self-confident with themselves. A strong leader needs to stand behind his or her ideas and knows how to present them to his or her followers (Yukl G., 2013; Northouse, 2016). Again, this is a more general trait of leadership.

Charisma is according the empirical data a "nice to have" for leaders to achieve and sustain contextual ambidexterity. Charisma is needed for leadership in general (Yukl G., 2013), but does not play a crucial role to achieve and sustain contextual ambidexterity. Charisma in combination with trust can help to achieve and sustain contextual ambidexterity. When leaders have a high charismatic status, followers will see the leader as a role-model. Charisma is part of the transformational behavior, which is positively contributing to ambidexterity (Northouse, 2016; Gibson & Birkinshaw, 2004).

In combination with charisma, the empirical data shows that the leader should be a representative for the followers. This trait builds on trust and relation with the followers, which could help to achieve and sustain contextual ambidexterity. When leaders are able to be a representative for the group, the emotional and social abilities of the leaders are high, which is in line with the literature to achieve ambidexterity (Good & Michel, 2013). Also, this trait will lead to transformational behavior which is positively contributing to ambidexterity. This is a more general finding.

### 5.1.3 LEADER BEHAVIORS

Although the research has a focus on leader traits and the leader-member exchange theory, it is impossible to skip leader behaviors for achieving and sustaining contextual ambidexterity in combination with leader traits. According the literature, leader traits lead to a certain behavior (Yukl

G. , 2013; Yukl, Gordon, & Taber, 2002) and the behavior resulting from the traits can explain how to achieve and sustain contextual ambidexterity.

The empirical data shows several behaviors, one of the behaviors is a more chaotic form which can be combined with the laissez-faire or passive leadership form. To achieve and sustain contextual ambidexterity, transformational leadership behavior has been found the most appropriated for innovation (Jansen, Van den Bosch, & Volderba, 2008; Rosing, Frese, & Bausch, 2011). The chaotic form and laissez-fair passive leadership style leads, according to the empirical data to a less structured business unit which is not able to do both exploration and exploitation simultaneously. Although the leadership behavior does not help to achieve and sustain ambidexterity, on the other hand when having senior team members with a lot of experience the chaotic and laissez-fair behavior does not have to be a boundary for achieving and sustaining contextual ambidexterity according the empirical data. Within the literature proposes are made that having a strong team is needed for achieving and sustaining ambidexterity (Jansen, Vera, & Crossan, 2009).

The coaching behavior is a behavior that is in the middle between transactional and transformational leader behavior. Within smaller business units it can help to let the subordinates think by themselves and grant them more freedom (Yukl G. , 2013). In larger business units it gives the opportunity for the business unit manager to delegate the tasks and train the followers. Other forms of behavior that have been found in the empirical results is trust-based between the leader and follower. It can have both positive and negative effects; positive effects are the freedom and self-reliance of the followers, which leads to creativity and thus innovation. Negative side is the leader grants the followers to much freedom, without guiding which leads eventually to unstructured business units without a strategy or vision. Within the literature, trust is important for the relation between the leader and follower (Derue, Nahrgang, Wellman, & Humphrey, 2011; Graen & Uhl-Bien, 1995).

Two of the most studied leadership styles on ambidexterity are transactional and transformational leadership behavior. Within this study, both of the styles have been identified, were transformational leadership was most present. According the literature, transactional leadership is connected to exploitative tasks and routines and transformational leadership to innovation and renewal (Vera & Crossan, 2004; Birkinshaw & Gupta, 2013). According the empirical data, some of the business units conducted both leadership styles when pursuing exploitation and exploration. Other business unit used only transactional behavior, to set hard borders and to create exploitation structured business units. When conducting innovation and exploration tasks, a more freedom and transformational style was conducted in most of the business units, some used transactional behavior but the business units were then less busy with exploration. This is in line with the theory, were results show that flexible switching between transactional and transformational is beneficial for achieving and sustaining ambidexterity (Rosing, Frese, & Bausch, 2011). When leaders were only conducting transactional leadership style, exploitation task took the overhand and only a few senior team members which were very stiff were busy with innovation task on their own with no support from the business unit manager. It is remarkable to see in the empirical data, that transformational leadership is more being accepted than transactional leadership among the followers. Too much freedom was seen by the followers as not appropriated for making decisions. Too much transformational behavior leaded to a lot of freedom, resulting in only exploitation. The same effect occurred with too much transactional behavior; the business unit then focused more on exploitation.



### **Proposition 5:**

Swiftly switching between transactional and transformational leaderships behaviors by the business unit manager plays a role to effectively achieve and sustain contextual ambidexterity in business units.

### 5.1.4 RELATION BETWEEN LEADER-FOLLOWER

The relation between the leader and follower plays an important role to achieve and sustain contextual ambidexterity according the empirical data. By researching the relation between the follower and leader on the disciplines mutual trust, obligation and respect the researcher was able to find out what the effect was on achieving and sustaining contextual ambidexterity. The disciplines were studied with the Leader-Member exchange 7 questions survey which lead to a score how the relation between the leader and follower is. In line with the theory about Leader-Member exchange, the higher the score the better (organizational) performance is being achieved (Graen & Uhl-Bien, 1995).

As the LMX theory developed over time in stages, this research is contributing on stage three, leadership making. Most of the leaders and followers knew each other for a long time, which helps building a good and strong relation between the leader and the follower. On the other hand, some of the followers were only working with the leader for a few months, or just one year. This can be seen in the results of the LMX survey; the scores of the follower about the relation with the leader were lower than the leader gave to the follower. This may be the cause of intelligence difference between the leader and the follower. When leaders and followers get to know each other better, it is possible to shift to the "partnership" phase and strong relationship can be build (Graen & Uhl-Bien, 1991). According the empirical data, most of the followers and leaders have a high-quality relation and are in the "in-group" which means that trust, respect and obligation is on a high level between the leader and thus, achieving and sustaining contextual ambidexterity can be done. When the scores were high the business unit according the empirical data achieved and sustained contextual ambidexterity.

### **Proposition 6:**

A better relation between the leader and follower plays a role to effectively achieve and sustain contextual ambidexterity. When leader and follower are in the partnership stage, contextual ambidexterity can be achieved and sustained easier.

### 5.1.5 STRUCTURE AND ORGANIZATION OF THE BUSINESS UNIT

According the empirical data, building a strong team is important to effectively achieve and sustain contextual ambidexterity. Some of the business units have built a team with several expertise among the followers, some doing exploitation and some doing exploration which creates a dynamic, strong ambidextrous team. This is in line with the theory, were contextual ambidexterity consist of mixed generalist and specialist (Gibson & Birkinshaw, 2004). When leaders grant the followers much freedom and are less active in managing the team, strong (self-steering) teams are needed to achieve and sustain effectively contextual ambidexterity.

### **Proposition 7:**

To achieve effectively contextual ambidexterity in larger business units with passive leaders, strong (selfsteering) teams are needed.



When business unit are smaller, contextual ambidexterity is being achieved and sustained easier. The empirical data shows that the relation and decision making between the leader and follower can be achieved and done more easier in contrast to larger business units. According to the existing literature small enterprises or business units feel the direct pressure of the market to do exploitation and exploration simultaneously and teams can make decisions more quickly (Lubatkin, Simsek, Ling, & Veiga, 2006). When business units become larger, more hierarchical layers will exist and the role of leaders changes to a more helicopter view instead of doing both operational and strategical tasks.

### **Proposition 8:**

# When business units are small, contextual ambidexterity is being achieved and sustained easier in contrast to larger business units.

### 5.1.6 LIMITATIONS & FUTURE RECOMMENDATION RESEARCH

This research has several limitations, firstly by doing 20 interviews in two organizations in the technology sector. Dynamic environments, were contextual ambidexterity plays a crucial role to sustain a competitive advantage, can be in several sectors with other antecedents then found in the technology sector. Therefore, the empirical results can only be used in the technology sectors; when conducting the research in other sectors new data needs to be collected again to ensure the subjective and same outcomes.

Secondly, integration of the data cannot be done in a proper way within this research. Traits that were found like intelligence, can be seen as one of the important traits needed to achieve and sustain ambidexterity. Although this is the case, it is important for future research to do quantitative research on the traits named in this research and see the interdependency of the traits together. Also, by researching other antecedents like culture, subsidiary organizations in foreign countries can lead to new insights which traits play a role in effectively achieve and sustain contextual ambidexterity.

Third, some of the business units had more than 50 members. Only three of the followers of the business unit manager were interviewed. By selecting the followers which had all (almost) the same characteristics, like working experience with the leader, time employed, the generalizability will be in general good. Future research should focus on more interviews to guarantee the outcome of the total business unit and improvement of the generalizability of the leader traits outcome.

Third, both organizations had a lot of pressure on exploitation at the moment which could influence the empirical data. The empirical data has been analyzed with great care and exploitation and exploration activities have been identified which were representative for this research. To improve the generalizability of the future research, longitudinal data over a longer period should be done to prevent bias on exploitation outcomes.

Last, one of the organizations that was used for generating the empirical data is currently the organization where the researcher is working. The researcher knows all the business unit managers and followers therefore, the subjectivity of the answers of the interviewees could be different than when asked by a researcher outside the organization. Although the interviews were all recorded and the empirical data was generated purely with the answers of the interviewees this could be a limitation for generalizability. In this research the second organization was not known by the researcher and therefore the results, which are almost similar for both of the organizations are marked as valid.

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### 5.1.7 MANAGEMENT IMPLICATION

Leader traits and the relation between the leader and follower play a role in achieving and sustaining contextual ambidexterity and this research knows several implications for management. This research can help organizations and top management teams to carefully select the leaders and followers who are having the specific traits to help the organization achieve and sustain contextual ambidexterity at business unit level. For business unit managers it can help to find out where training is needed for themselves how to act ambidextrous which leads to followers copying the behavior of the business unit managers. Top management teams can introduce assessments for business unit managers which focus on the trait's intelligence, the ability to flexible switch between transactional and transformational behavior and delegation. Another implication for management is to focus on the relation between the leader and the follower; as results show, the higher the quality of the relation between the leader and the follower the better the outcome and performance of the business unit. The structure of the business units also played a role to achieve and sustain contextual ambidexterity. Implications for management is when business units are smaller, leader and follower relations are built quicker and contextual ambidexterity is achieved faster in contrast to large, stiff business units. Therefore, when possible business units should be small groups with transformational leaders to achieve ambidexterity. Another option is to rotate with the business unit managers; sharing knowledge and experience can be helpful to achieve and sustain contextual ambidexterity.



# Appendix

### LEADER MEMBER EXCHANGE 7 QUESTIONNAIRE

*Instructions:* This questionnaire contains items that ask you to describe your relationship with either your leader or one of your subordinates. For each of the items, indicate the degree to which you think the item is true for you by circling one of the responses that appear below the item.

# 1. Do you know where you stand with your leader and do you usually know how satisfied your leader is with what you do?

Rarely 1	Occasi 2	onally	Somet 3	times	nes Fairly Often 4			Very 5	Often
2. How well does your leader understand your job problem and needs?									
Not a bit 1	A little 2		Fair amount 3		Q 4	Quite a bit 4		A grea 5	at deal
3. How v	vell doe	s your leader re	cognize	your potentia	al?				
Not at all 1			Mode 3	rately	N 4	Mostly 4		Fully 5	
4. Regardless of how much formal authority your leader has built into his position, what are the chances that your leader would use his power to help you solve problems in your work?									
None	Small		Moderate		Н	High		Very	High
1	2		3		4			5	
5. Again, regardless of the amount of formal authority your leader has, what are the chances that he would "bail you out" at his or her expense?								ances	
None	Small		Moderate		Н	High		Very	High
1	2		3		4	4		5	
6. I have enough confidence in my leader that I would defend and justify his decision if he were not present to do so									
Strongly disag	ree	Dis-agree	Neutra	al	A	gree	Strongly		agree
1		2	3		4		5		
7. How would you characterize your working relationship with your leader?									
Extremely ineffective 1		Worse than average 2		Average 3		etter than verage	Extrem effectiv 5	•	

Although the LMX 7 is most commonly used by researchers to explore theoretical questions, you can also use it to analyze your own leadership style. You can interpret your LMX 7 scores using the following guidelines: very high = 30–35, high = 25–29, moderate = 20–24, low = 15–19, and very low = 7-14. Scores in the upper ranges indicate stronger, higher-quality leader-member exchanges (e.g., in-group members), whereas scores in the lower ranges indicate exchanges of lesser quality (e.g., out-group members).



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