Navigating Organizational Learning from Failure to Foster Innovation as a Process

Qualitative Case Study of Edtech Company
by
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Abstract

Title	Exploring Managerial Practices that Impact Organizational Learning from Failure to Enhance Innovation as a Process
Authors	Edwin Krishnariadi Djakaria and Halyna Shlapai
Supervisor	Anna Jonsson
Date & Place	May 20, 2022; Lund University School of Economics and Management
Aim	Contribute to the developing body of research on organizational learning from failure and innovation by bringing in the manager perspectives via a qualitative interpretative case study. By exploring the impact of managerial practice impacts organizational learning from failure and innovation as a process, we aim to support managers in navigating the complexities of learning from failure and innovation.
Methodology	This research encompasses a qualitative case study that followed an interpretative tradition of symbolic interaction and an abductive approach that enabled us to work with theory and empirical material simultaneously. Twelve semi-structured interviews, conducted with managers of the case company Vision & Co combined with desktop research materials, serve as empirical material for this thesis.
Theoretical Framework	The theoretical framework refers to literature grounded in organizational learning and organizational learning from failure, viewing learning as a dynamic and complex process. Therefore we further built on key processes in organizational learning developed by Crossan, Lane, and White (1999), integrating the key processes of organizational learning from failure by Cannon and Edmondson (2005) and the multi-dimensional framework of organizational innovation by Crossan and Apaydin (2010). The study also contributes to the call by Danneels and Vestal (2020), further exploring aspects that impact normalizing vs. analyzing failure to foster firm innovativeness.
Contribution	Our study identifies critical aspects of managerial practices that expand understanding of forms, codification, and communication of learning from failure in an organization for innovation as a process (Madsen and Desai, 2010; Danneels and Vestal, 2020). The key findings contribute to understanding the necessary elements of managerial practices that impact organizational learning from failure to enhance innovation.
Keywords	*organizational learning from failure, innovation, analyzing, experimentation, psychological safety, edtech company*

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Chapter 1: Introduction

"Success consists of going from failure to failure without loss of enthusiasm",

- Winston Churchill cited in Churchill & Langworth, 2008, p. 580.

The original context for Churchill's quote was much broader than organizational, which is the focus of this thesis. However, the idea that an individual's, group's, and organization's efforts are built upon a history of past experiences, particularly experiences with failure, resonates with managing, learning, and innovating in organizations. The quote, as mentioned earlier, reflects the spirit of organizational learning theories, echoes the growing literature on learning from failure, conforms to the booming popularity of innovation presumptions, and indicates the complexity of managing practice in a constantly varying environment. Therefore, it raises the question of how the "going from failure to failure" could also encompass learning from past experiences, not just making the same mistakes again and again in the journey to the desired success?

Organizations' capacity to learn is a fundamental strategic capability in a world of disruptive change (Fiol & Lyles, 1985; Christensen & Overdorf, 2000). What an organization knows and how well it is capable of generating, combining, exploiting, and exploring knowledge plays a vital role in its performance, strategic renewal, success, or failure (Fiol & Lyles, 1985; March 1991; Kogut & Zander, 1992; Grant, 1996). This premise has led to extensive research on organizational learning from diverse points of view, forming two core groups: some researchers study how organizations as whole systems adapt or change; others focus on how individuals embedded in organizations learn. According to organizational learning theory, organizations learn as their members observe, interpret, and codify lessons from experience into stable routines, structures, and procedures that serve to guide future activities (Cyert & March 1963; Levitt & March 1988).

An organization's ability to learn is at the center of resolving the tension between exploration and exploitation. A great deal of prior research has contributed to understanding the tension between exploration and exploitation (March 1991). Crossan, Lane, and White (1999) argue that attaining an effective balance between gaining new learning and exploiting what is known and understood is an essential activity and primary challenge for organizations.

Crossan, Lane, and White's (1999) organizational learning model, known as the 4I framework, is one of the most well-known bases for theory development in organizations to build explicitly on the complex phenomenon of organizational learning (Crossan, Maurer, & White, 2011). According to the 4I model, organizational learning is a multilevel phenomenon including four processes—intuiting, interpreting, integrating, and institutionalizing—that unfold over time and capture the tension between exploration and exploitation. By exploiting the organization's existing assets and discovering new opportunities through exploration, innovation in the organization emerges.

Innovation is widely recognized as a critical source of competitive advantage in an increasingly changing complex and high-speed environment (Dess and Picken, 2000; Crossan & Apaydin, 2010; Peschl, 2022), but is it as simple as it seems? In complex contexts, companies with the capacity to innovate will be able to respond to challenges faster and exploit new products and market opportunities better than non-innovative companies (Brown and Eisenhard, 1995; Miles and Snow, 1978). Whereas there are different views on what innovation is, for the purpose of this thesis, we view innovation as the process of making changes to something established by introducing something new. As there is an increasing number of books and publications in media on innovation among practitioners and the wide public, they often remain disconnected from the available academic research (Crossan & Apaydin, 2010). Moreover, the implementation of the frameworks that are so praised in writing could be much more complex, being in the real-life setting of an organization.On top of that, it is important to acknowledge that innovation is inseparable from constant learning through the success and failure of experiments.

Failure is a trendy topic these days. The call to embrace failure is widely spread, especially in business literature and social media. Actions are considered failures when their outcomes are not reached (Cannon & Edmonson, 2005), and all organizations, even those with outstanding overall performance, have plenty of them. Over the past decades, researchers have been developing an understanding of how organizations learn or don't from events, experiences, or other occurrences that fail to meet expectations (e.g., Cannon & Edmonson, 2005; Zhao & Olivera, 2006; Shepherd & Cardon, 2009; Madsen & Desai, 2010). These efforts to understand how organizations identify, perceive, and respond to failures across various industries could have, hopefully at least a little bit, contributed to positive transformations within the organizations willing to adopt best practices based on this knowledge. According

to Desai (2015), experiencing failure triggers deep reflection about managerial mental models and leads to a search for the causes of failure and a revision of thought paradigms. This is also vital, as among the organizational benefits of learning from experience, especially that of failure, is the improvement in innovation and competitiveness (Khanna, Guler, & Nerkar, 2015; Weinzimmer & Esken, 2017).

Cyert and March (1963) argued that firms learn mainly by solving problems rather than from their triumphs in the roots of organizational learning research. As years passed, more research in the area was developed. Yet, not many organizations learn systematically from failure (Cannon & Edmondson, 2005). In the study of Baumard and Starbuck (2005), fourteen telecommunications firms learned surprisingly little from their failures, defying the common expectation. In the context of innovation, where failure rates can be incredibly high, failing to learn from failure can be very costly since the lessons associated with failure are a vital source of value to be derived from the sunk costs of innovation. Therefore, figuring out how organizations could learn from failure, particularly how management practices could impact that, would be a beneficial contribution to the understanding of organizational learning and innovation management, essential for performance and strategic renewal.

Moreover, despite the rising popularity of embracing failure, there is little research in this area. The prior research has not directly observed organizational practices conducive to learning from failure, and there is little known about how failure actually promotes innovation and, if so, what are the conditions (Cannon and Edmondson, 2001; Desai, 2015; Khanna, Guler, and Nerkar, 2015; Danneels and Vestal, 2020).

This thesis responds to the calls for more research "into the mechanisms by which organizations deal with and learn from failure" (Madsen and Desai, 2010: 472) and contributes to investigating the forms, codification, and communication of learning from failure in the organization as was recently suggested for future research by Danneels and Vestal (2020). These aspects are highly related to exploring managerial practices that impact organizational learning from failure to enhance innovation. Whereas the processes of organizational learning and innovation are being explored by many scholars, including the aspects of that influence and its barriers, the gap in understanding the impact of the managerial practice is not being researched much. Moreover, the research on organizational learning from failure and innovation grew over the past decade; however, the quantitative

methodology is prevailing (57,5%), whereas the quantitative approach was used in 35% of the studies and 7.5% of articles encompassed a mixed approach to research (Rhaiem & Amara, 2021). Our research complements these and other studies by exploring which managerial practices (or their lack) in our case study company were beneficial to the innovation process and which were not. We aim to bring in a qualitative case study addressing the gap in understanding of how failure fosters innovation, a topic that has growing interest from both researchers and practitioners (Cannon and Edmondson, 2001; Khanna, Guler, and Nerkar, 2015).

The paper aims to contribute to the developing body of research on organizational learning from failure and innovation by bringing in the manager perspectives via a qualitative interpretative case study. The proposed research aims to deepen understanding of how managers' practice in response to failure impacts organizational learning from failure to facilitate the innovation process.

In order to achieve that, we aspire to address the following research question:

➔ How could managerial practice impact organizational learning from failure to enhance innovation?

To achieve our research goals, we conducted a comprehensive case study of an edtech company that has a strong focus on innovations. We chose the case-study method of one company as it provided the opportunity to obtain a clear picture of organizational learning from failure and innovation based on real-life situations, which were explored from multiple perspectives using interviews with managers and materials about the company (Sekaran & Bougie, 2016).

We have chosen the company Vision & Co as researchers because it reflected approaches to facilitating the culture of experimentation over the years and served as a critical case, which has not been studied comprehensively before. This company is also relevant as, during the outbreak of the COVID-19 pandemic and the extensive quarantine regulations, educational institutions, companies, and individuals have reacted by shifting teaching and learning activities to virtual spaces; whereas some industries faced a shock, edtech companies were able to adapt their business models to the changing market conditions and customer needs in

a situational way and sustainably innovate (Renz & Krishnaraja, 2020). For the purpose of this study, we define edtech companies (commonly abbreviated from education technology) as the organizations that encompass the combined use of computer hardware, software, educational theory, and practice to revolutionize education and its quality (Startup Genom, 2019).

Carrying out semi-structured interviews for primary data collection and further following the abductive approach for reasoning guided by the interpretative tradition of symbolic interactionism provided the opportunity to grasp insightful moments, further adapt, extend, and reject existing theories, and remain open to emerging issues (Alvesson & Kärreman, 2007). The empirical material is generated through 12 semi-structured interviews with managers from different departments of the company as primary data, public video-interview with the CEO, and company content related to the research topic as secondary data. The paper deepens understanding of successes, challenges, and lessons drawn from mainstreaming the "failure=information" approach into organizational practices impacting organizational learning from failure to facilitate innovation as a process.

The theoretical framework refers to literature grounded in organizational learning. experiential learning and organizational learning from failure, viewing learning as a dynamic, experiential, and complex process. Therefore we further built on key processes in organizational learning developed by Crossan, Lane, and White (1999), experiential learning (Kolb, 2015), integrating the key processes of organizational learning from failure by Cannon and Edmondson (2005), encompassing identifying failure, analyzing failure, and deliberate experimentation and the multi-dimensional framework of organizational innovation by Crossan and Apaydin (2010) focusing on leadership, managerial levers and business processes as determinants of innovation. We have chosen these theoretical frameworks as they reflect the multidimensional and dynamic nature of managerial work, organizational learning from failure, and innovation as a process. Though other researchers have further explored these frameworks, we didn't fin the proposed integration done before, which, in our opinion, could foster synthesis within the organizational sciences and provide practicing managers better understanding of navigating complex realities of an imperfect world (Klein, Tossi & Cannlle, 1999; Alvesson, Blom, & Sveningsson, 2017). Our research explores managerial practices that enable members to extract lessons from failure and engage in innovation as a process (Danneels & Vestal, 2020). We aim to connect managerial work with

organizational learning from failure and innovation as a dynamic process based on empirical material collected at Vision & Co.

The theoretical contribution made by this study is a synthesis and integration of organizational learning, managerial work, and innovation literature that facilitates exploring the linkage between management practices, learning from failure, and the innovation process in organizations. This study deepens our understanding of organizational learning from failure mechanisms. It examines how organizations draw the lessons from failure to enhance innovation, which is crucial for enhancing organizational and societal capacity for resolving collective problems sustainably and efficiently. This thesis contributes to the literature on organizational learning from failure and innovation by illustrating and interpreting Vision & Co approaches via a qualitative case study.

Failures have the potential to offer us new portals of discovery and opportunities to come up with new solutions. Though not all mistakes can be wonderful, there is hope that lessons can be learned, at least to some degree. Whereas not invariably achieving all the desired results is an inevitable part of life and managing in organizations, learning how to better respond to failure as a manager to ensure learning and innovation despite all the complexities could have a tremendous impact on individuals, organizations, and society.

1.1 Recap of Introduction

The introduction has provided an overview of the background of organizational learning, failure, organizational learning from failure, innovation, and managerial practice, which are the focus of this thesis. We also introduced our research purpose, guiding question, methodology, and case study company Vision & Co. The popular business press and academic articles have promoted the virtues of failure and learning from it, particularly in pursuing innovation. Surprisingly, a little systematic empirical study has supported this belief (Cannon & Edmondson, 2005; Danneels & Vestal, 2020), especially with a qualitative approach. Table 1. "Problematization and Methodology Overview" summarizes key aspects related to the problematization described earlier in this chapter to provide a recap to the reader of this thesis.

Table 1. Problematization and Methodology Overview (own representation)

Research Problem	There is little known about how failure actually promotes innovation and, if so, what are the conditions (Cannon and Edmondson, 2001; Desai, 2015; Khanna, Guler, and Nerkar, 2015; Danneels and Vestal, 2020).
	Not many organizations learn systematically from failure (Cannon & Edmondson, 2005.
	Lack of understanding of the forms, codification, and communication of learning from failure in the organization as was recently suggested for future research by Danneels and Vestal (2020).
	Prevailing quantitative research.
Research Aim	Contribute to the developing body of research on organizational learning from failure and innovation by bringing in the manager perspectives via a qualitative interpretative case study.
	Explore how managerial practice impacts organizational learning from failure and innovation as a process.
	Help managers navigate the complexities of learning from failure and innovation.
Research Question	How could managerial practice impact organizational learning from failure to enhance innovation?
Methodology	Qualitative case study of edtech firm following abductive approach.

1.2 Thesis Outline

This thesis is structured into six chapters: *Introduction, Literature Review, Methodology, Analysis, Discussion, and Conclusion*.

Chapter 1 has provided the reader with background and information on problematization and outlined our research aim, introducing the research question and overview of the methodology we pursue in this study.

Chapter 2 will introduce relevant theories on managerial work, organizational learning, failure, organizational learning from failure, innovation, and psychological safety.

Chapter 3 will outline our applied methodology and approaches to describe our underlying ontological and epistemological foundations. Moreover, we will introduce our case study company and explain how we have collected and analyzed our empirical data. In the end, we will reflect upon the quality of our data and point out its limitations.

Chapter 4 presents our empirical data, where we start with a brief overview of our case company's specific context. Afterward, we will introduce our empirical data, which is categorized into four themes addressing our research question:
- "Failure=Informtion" framing that encompasses the diverse emotions and reactions of managers when things didn't go as planned;
- "Growth and Experimentation are in our DNA" echoing the mindset for constant learning and managerial practices that foster experimentation and safe space to learn to fail for further development;
- "Psychological Safety as a Base for Candor Discussion and Experimentation" provides insights on the atmosphere at the company, no-blaming, and open dialogue approach;
- "Complexities of Managerial Practices" reflects managers' views on specific practices that impact the organizational learning from failure and innovation based on their experiences at the company.

This chapter is followed by a discussion (Chapter 5) where we interpret our data and link it with the theoretical background, diving deeper into and reflecting critically on:
- "Experimentation" and the processes related to testing, exploring the managerial practices that influence learning and innovation;
- "Normalizing vs. Analyzing" failure and implications for innovation as a process in the organization;
- Aspects related to psychological safety that is essential for experimentation, candor communication, and constructive conflict;
- Managerial practices discussion by integrating core processes of organizational learning and organizational innovation.

Lastly, we summarize our main findings (Chapter 6), stress theoretical and practical implications, and recommend future research areas.

Chapter 2: Literature Review

This chapter reviews the existing theories relevant to this research. The literature review will consist of five main themes: Managerial Work in Practice; Organizational Learning; Failure, Error and the Spectrum; Organizational Learning from Failure; Innovation; Psychological Safety. We will start by providing a brief overview of management in practice, discussing organizational learning, followed by a brief overview of different types of failure and moving to organizational learning from failure. Subsequently, we will dive deeper into the relevant theories on innovation, where we will provide the reader with the concept and interconnectedness with organization learning from failure. Lastly, we will elaborate on the particular aspect of organizational learning from failure: psychological safety. Here, we will align literature about managerial work, including ensuring psychological safety concerning organizational learning from failure. The chapter will end with a recap featuring key definitions and theories that we operated in this thesis.

2.1   Managerial Work in Practice

Managers and management have been the object of a lot of attention and are also at the center of the thesis. This section will shine the light on views on management in practice relevant to this thesis. While there are a lot of debates about management and its diverse aspects, in our study, we aim to focus more on the impact of managerial practices and organizational learning and innovation as a process.

From the organizational point of view, a manager is critical in navigating people in the organization as well as performance. Mintzberg (1973) shared that managerial roles consist of major categories: *interpersonal, informational, and decision-making*, which are presented in figure 2. "Henry Mintzberg's 10 managerial roles" (1973).

Interpersonal has internal and external elements. Internal is inclined towards figurehead and inspiration for the team, while external aspects mean manager would be a contact point with another group. Management and leadership critically impact building certain habits and mindsets in organizations. Interpersonal roles relate to the manager's behavior that focuses on interpersonal contact that involves people (subordinates and persons outside the organization) and other duties that are ceremonial and symbolic. The three interpersonal roles include

being: Figurehead (performs symbolic legal or social duties), Leader (builds relationships with employees and communicates with, motivates, and coaches them), and Liaison (maintains a network of contacts outside the work unit to obtain information). According to Dr. Henry Mintzberg (1973), these three interpersonal roles derive from the authority and status associated with managers' positions.

Informational roles involve receiving, collecting, and disseminating information. The informational roles include Monitor (seeking internal and external information about issues that can affect the organization), Disseminator (transmits information internally that is obtained from either internal or external sources), and Spokesperson (transmits information about the organization to outsiders).

Decisional roles revolved around making choices. Managers' interpersonal role leads to decisional roles. The four *decisional roles* include being an Entrepreneur (acts as an initiator and designer, encourages change and innovation), Disturbance Handler (takes corrective action when the organization faces important, unexpected difficulties), Resource Allocator (distributes resources of all types, including time, funding, equipment, and human resources), and Negotiator (represents the organization in major negotiations affecting the manager's areas of responsibility is a specific task which is integral for the spokesman, figurehead, and resource allocator roles).

As Mintzberg mentions, people in the organization look up to top leaders and see how the vision, communication, and implementation of certain values are consistently implemented. This is emphasized by Pavett (1983), who argues the higher one's position in the organizational hierarchy, the more critical the managerial roles are. According to Cunliffe, (2002), along with other organizational participants, managers author the shape of their organization activities, their sense of their own identities, and the identities of those around them.
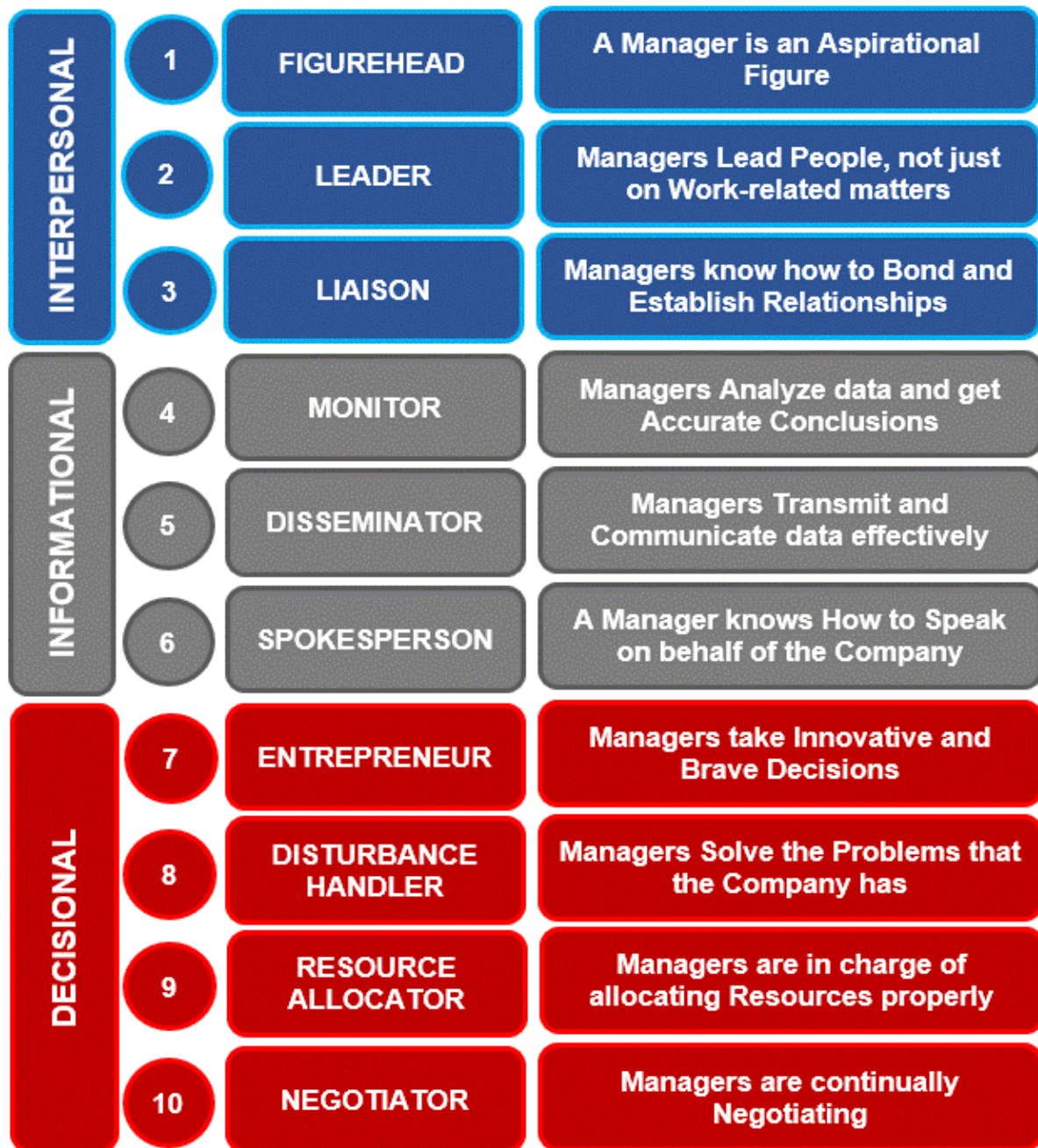
Figure 1. Henry Mintzberg's 10 managerial roles (1973)

Just like management, goal-setting is also getting a lot of attention, and it is important to provide an overview of relevant theories as they are essential to our thesis: Managing by Objectives (MBO) and Objective Key Results (OKR). Peter Drucker formulated "management by objectives," introducing the approach in his 1954 book "The Practice of Management" as a way to improve organizational performance. In essence, management by objectives describes a process of defining specific and clear objectives for employees and is designed to create a culture of working towards common organizational goals. The concept is

popular and has become the "norm" for many companies. Indeed, suppose you think of the traditional way of managing performance: the manager agrees on objectives with each employee, and then their performance (and compensation) is assessed against these objectives – this is precisely the approach of management by objectives. The objectives and key results (OKR) approach is getting a lot of publicity at the moment and has been popularized by tech companies like Google, therefore getting a lot of followers at the moment. Like MBO, the OKR approach is about setting strategic goals. However, it goes further than MBO, breaking down strategy and execution into two parts: the objectives (the Os) and the key results (the KRs). Essentially, this means that the process encompasses setting a goal and then defining to achieve it (Doerr, 2018).

In this thesis, we view managerial work and managerial practice(s) as the methods that managers use for organizing, acknowledging the interpersonal, informational, and decision-making aspects, and encompassing the combination of management and leadership. When talking about management, the topic of leadership arises inevitably. Alvesson, Blom & Sveningsson (2017) suggest 6 modes of organizing: five practices as alternatives and supplements to leadership, which often overlap and complement each other: three vertical (leadership, management, and power) and three horizontal (group, peers/networks, and autonomy). These six modes of organizing need to be selected carefully and could serve as a guide in understanding and carrying out change, facilitation of organizational learning from failure, and innovation which will be discussed in the next sections of this thesis.

2.2   Organizational Learning

Explicitly defining organizational learning is a challenge because there is no commonly held definition of the term. Organizational learning encompasses a considerable territory in the management literature; it is presented as occurring at different levels of analysis – from individuals (Argyris, 1982) to organizations (Levitt & March 1988) – and as applying to such disparate processes as the diffusion of information within an organization (Huber, 1991), how individuals interpret and thereby create their organization in dynamics (Weick, 1979; Daft and Weick, 1984), how interpersonal communication precludes detection and correction of error (Argyris and Schon̈, 1974), and the encoding of organizational routines (Cyert and March, 1963; Levitt and March, 1988). In some conceptions, organizational learning is prescriptive, that is, viewed as an outcome that can be brought about through intervention

(e.g., Hayes et al., 1988; Senge, 1990; Argyris, 1993); elsewhere, organizational learning is the focus of descriptive theories which document factors influencing or impeding organizational adaptation (e.g., Levitt and March 1988; Huber, 1991).

Organizational learning has existed in our lexicon at least since the 1960s, introduced by empirical analysis by Cangelosi and Dill. Over the last years, the interest in the topic has continued to grow. Numerous scholars have defined the primary debates in organizational learning literature vastly varying across two questions: 1) what is learning, and 2) can organizations learn, or is learning in organizations a function of what individuals learn? When further exploring what is learning, a question of whether learning is a cognitive process or behavioral arises. Over the recent decades, academics exploring learning have built from and beyond the cognitive-behavioral distinction relating learning with situation-specific practices (Esterby-Smth, Crossna & Nicolini, 2000). Moving beyond the dominating positivist assumption that knowledge is a commodity and exploring the highly social, dynamic, and situation-specific context that supports the state of knowing (Cook & Brown 1999). The notion of knowing tightly integrates learning with practice and application. Moreover, Cook and Brown (1999) suggest that knowing occurs when people interact with the intricacies of real-world challenges and improvise a new solution.

One of the recent definitions that will be used in this study implies that organizational learning mainly focuses on how the members of an organization learn by focusing on how individuals learn and how their learning process can be developed into organizational learning through practices and values to allow reflection and feedback (Hislop, 2018).

2.2.1 Process of Organizational Learning

Crossan, Lane, and White (1999) developed a 4I framework for the process of organizational learning, presenting organizational learning as four processes: (1) intuiting, (2) interpreting, (3) integrating, and (4) institutionalizing - linking the individual, group, and organizational levels emphasizing the dynamic nature of organization learning (Figure 1). Intuiting occurs when individuals recognize patterns in their own past or present experiences and identify their potential use in their current work environment. In many ways, this process is seen as a

preconscious process. Interpreting is the process through which individuals verbalize or put into action their own insights and ideas. Language and metaphors are often used to help individuals interpret and share their intuitions with others. As the interpretation process moves beyond the individual and the ideas become embraced by the group, integration occurs. Integrating is the collaborative development of a shared understanding of new ideas and of how to put them into action. When new ways of thinking and acting are recurrent and have a sufficiently significant impact on organizational activities, the changes become institutionalized. Institutionalization is the process of embedding learning that has occurred by individuals and groups into the institutions of the organization, including routines, diagnostic systems, rules, and procedures (Crossan, Lane & White, 1999). This implies that there is a deliberate effort to embed knowledge at the organizational level so that it may be used in the future and be available to all employees.
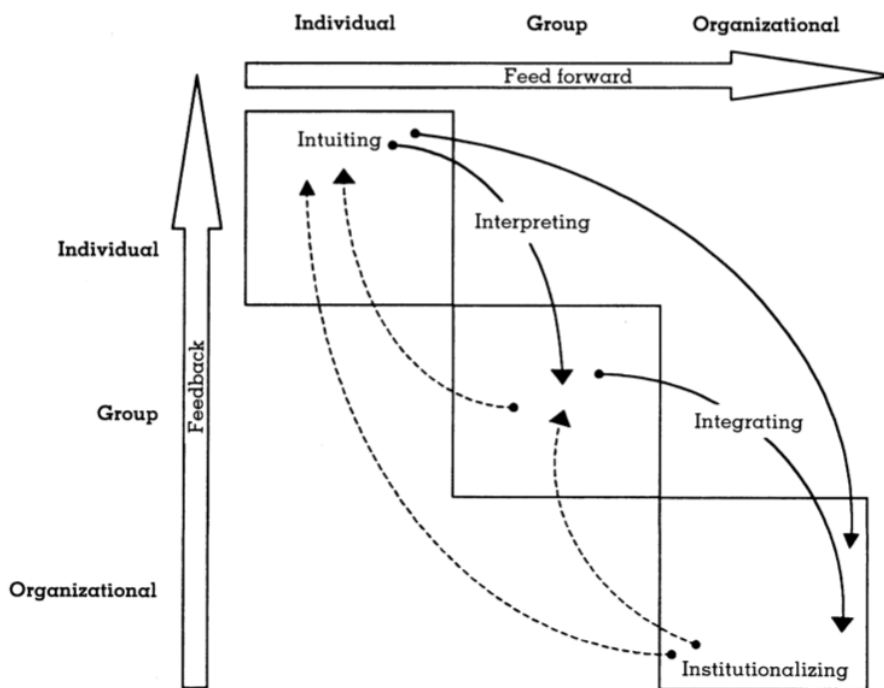
Figure 2. Organizational Learning as a Dynamic Process (Crossan, Lane & White, 1999)

The three learning levels define the structure through which organizational learning takes place. Our research is aimed at gaining a deeper understanding of what happens at the

individual, group, and organizational levels, especially focusing on how organizational learning processes can be institutionalized to foster innovation at the organizational level.

2.2.2 Experiential Learning Theory

As we aim to explore what happens in organizations and how managers influence learning from failure and innovation based on the experience of failure, the research by Kolb on experiential learning theory is also highly relevant. Kolb formulated the experiential learning theory in 1984 based on the philosophy of pragmatism, social psychology, and adult developmental theory (Kolb, Boyatzis, & Mainemelis, 1999). Kolb (2015) established learning as the significant process of creating knowledge through a transformation of experience. As an ultimate adaptation process, learning includes decision-making, problem-solving, and other, more specialized adaptive processes (Kolb, 2015). The main propositions of Kolb's experiential learning theory (KELT) are:

1. Learning is not a set of outcomes but the process of forming and transforming ideas through experience.
2. Learning is continuous and inseparable from experience.
3. Learning involves a dialectic relationship between the opposing modes of experiencing reality and adapting to it.

Responding to critics, Kolb later clarified that adaptation through learning is holistic and involves cognition, emotions, and physical experience of outcomes; learning requires constant engagement and exchange between an individual and the environment.

2.3 Failure, Error, and the Spectrum of their Reasons

There is literature on errors and literature on failures in organizations. They are related, and many of the mechanisms and findings overlap. In fact, they often use the same definition for errors and failures that they "deviate from expected and desired goals" (Sitkin, 1992; Cannon & Edmonson, 2005; Zhao & Olivera, 2006). The literature also differs as errors are incorrectly executed tasks or routines (such as a train engineer who drives a train over the speed limit or a nurse who gives the incorrect medication to a patient), whereas failures are undesired performance outcomes (a train accident occurring instead of the train getting to the destination as planned; a patient who dies after surgery instead of leaving the hospital

healthier than before entering it). This perspective of failure is also shared by Cozijnsen, Vrakking & van IJzerloo, (2000), who argue that failure means that one project does not meet its initial objectives. Liao & Cheng (2014) also mention a similar perspective when the project does not meet the initial expectation from consumers. Linberg (1999) shares that with a more extensive scope, failure is unable to meet quality and time plan; furthermore, the project is not profitable, and not learning is part of the failure.

Another perspective on failure shared by D'Este, Amara & Olmos-Peñuela (2015) is that failure means innovation is no longer being taken care of. Concerning errors, we would like to share classification by Rasmussen, Nixon, and Warner (1990) encompassing rule-based errors (breaking a known rule), skill-based errors (making a mistake or forgetting), and knowledge-based errors (not knowing enough).

2.3.1 The Types and Spectrum of Failures

Failures may be caused by a combination of errors, such as incorrectly executed routines and tasks, violations, risks, or chance factors; it can be avoidable or unavoidable and intentional or unintentional; involving human action and organizational processes and arrangements (Ramanujam & Goodman, 2003; Frese & Keith, 2015; Edmondson, 2011). Furthermore, not only is the result considered a failure (Tian & Wang, 2014) share their perspective that when an initiative does not meet the expected phasing is viewed as a failure. Nevertheless, it is also essential to acknowledge that not all errors, mistakes, or incidents necessarily lead to failure, especially regarding the innovation as a process which will be discussed later. Some errors and mistakes can even produce positive outcomes, such as discovering new organizational processes and innovation or being too insignificant to impact an event's eventual success or failure (Cannon & Edmondson, 2005). The study by Edmondson (2011) demonstrated that even if managers only saw 2-5% of the failures committed in their organizations as "bad" failures that deserved to be punished, 70-90% of failures were actually treated as "bad" and punished in different ways. Failures, defined as individuals decisions and behaviors that result in an undesirable gap between an expected and a real state and may lead to actual or potential negative consequences for the organizational functioning that could have been

avoided, are a natural aspect of work, especially in the context of innovation and dealing with the unfamiliar problems brought on by a crisis (Edmondson, 2011).

As pointed out by Amy Edmondson (2011), failures may range depending on the reasons from blameworthy (e.g. deliberate failures) to praiseworthy (failures that induce profound learning), which is demonstrated in Figure 3. The spectrum of Reasons for Failure by Edmondson (2011). Conceptualizing failures across a range from those resulting from the potentially useful exploratory testing of new approaches (praiseworthy) to those caused by conscious deviance from acceptable practice (blameworthy) provides organizations the ability to understand better and manage deviations; it also gives managers more clarity on needed response to ensure organizational performance, learning, innovation, and strategic renewal.

Figure 3. The Spectrum of Reasons for Failure by Edmondson (2011).
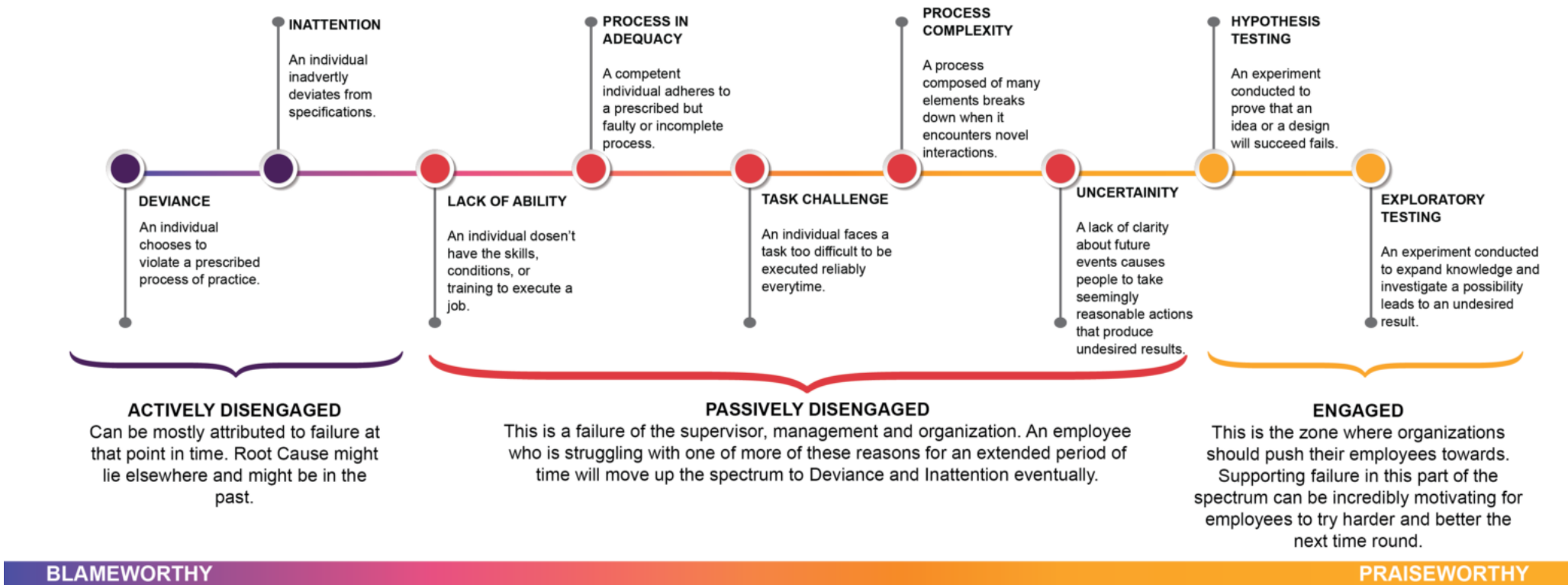
The recent study by Daneels and Vestal (2020) distinguishes two organizational approaches to failure: normalizing it (tolerating failure as a necessary part of the innovation process) and analyzing it (purposeful attempts to convert failure experiences into knowledge). According to this study, mere tolerance for failure has no effect on firm product innovativeness. In contrast, firms that make deliberate efforts to analyze past failures introduce more innovative new products. In the next section, we will discuss analyzing and other processes on organizational learning from failure in more detail.

2.4   Organizational Learning from Failure

Learning from failure has been widely discussed, especially recently from kids and student learning process to start-up and technology companies. The idiom "fail fast, often fail" expressed by many new start-ups has arguably flagged the importance of learning from failure in the organization. However, there lack of consistency in learning from organizational failures and ensuring continuous innovation, as multiple studies demonstrate that mistakes have a tendency to be repeated.

2.4.1 Background, Core Aspects, and Definition

A wide array of perspectives, theories, and approaches characterize the literature on learning from failure. Several studies richly delve into specific organizational cases and closely observe the particular processes through which knowledge is generated through failures, integrated into organizational routines, and used to guide future behaviors. Examples of such detailed analysis of individual cases of failure include Vaughan's (1996, 2005) work on the disasters of Challenger (a fatal accident in the United States space program that occurred on January 28, 1986, when the Space Shuttle Challenger broke apart 73 seconds into its flight, leading to the death of all seven crew members aboard) and Columbia (an incident in the United States space program that occurred on February 1, 2003, when the Space Shuttle Columbia (OV-102) disintegrated as it reentered the atmosphere, killing all seven crew members). Other studies carefully examine panels of organizations to test theories and evaluate predictions regarding how experience shapes actions or outcomes across organizations and over time.

Levitt and March (1988) highlight two core aspects of organizational learning that are particularly relevant to the research on learning from failures. First, routines adapt

incrementally to experience through a reinforcement process, and as a result, organizational action is history-dependent, encompassing it may take time (or, more correctly, accumulated experience) for organizations to change enough that their actions begin to reflect those underlying experiences. Conversely, some actions might persist despite new experiences suggesting these actions should be obsolete. Therefore, studies in this tradition examine the organizational effects of accumulated experience with sporadic or episodic events, such as failures, which the organization's members might either experience directly or observe vicariously. Levitt and March (1988) also highlight the second aspect of organizational learning that is extremely vital to the research on learning from failure: organizations and their members are oriented toward reference points (Cyert & March, 1963; Desai, Madsen & Maslach, 2017). That is, the classifications of experiences are performed against certain aspirations, targets, or expectations that were set for organizational performance in diverse dimensions. Organizational members often define their experiences as successes and failures in order to facilitate inferences about particular events.

Learning from failure in an organization or organizational learning from failure has not been defined explicitly. Nagayoshi & Nakamura (2017) supported this discussion which analyzes that there is no clear definition of a process in organizational learning from failure. Nagayoshi dan Nakamura elaborates that they review creation, experimental, and organizational learning processes. However, several elaborations relate indirectly to organizational learning from failure. Cannon and Edmondson (2005) elaborate that an organization's capacity to learn from its mistakes can be weighed by how the organization can manage the favorable and unfavorable variance from expected results with a variety of significance rather than an ability to handle the catastrophic situation. From the elaboration above, we can extract the essence of continuity and volatility in an organization learning from failure.

2.4.2 Organizational Learning from Failure: Major Themes and Relevant Frameworks

The literature on organizational learning from failure is vibrant and developing over the recent years (Desai, Madsen & Maslach, 2017). Recent publications in this literature point to several key insights related to how organizations and their members may draw

knowledge from failure experiences. Three major themes currently being addressed in recent work on organizational learning from failure, according to Desai, Madsen, and Maslach (2017), specifically:

- the moderating effects of characteristics of experience and organizations on learning from failure, aimed at examining contingencies that influence this process and provide (at least partial) explanations for diversity in rates of learning from failure across organizations. For example, Desai (2015) found that hospitals learned from failure particularly well during times the failures were widespread rather than concentrated in origin, perhaps suggesting that failures spur the most positive change when blame is difficult to be put on the concrete employees;

- the use of analogical reasoning in learning from failure, in particular by creating contrasts between failure experiences and other forms of experience. The study by Khanna, Guler, and Nerkar (2015) examines the conditions under which prior failures influence firms' R&D output in terms of amount and quality;

- the role of contextual factors in organizational learning from failure as the process takes place in the complex social environment (Cannon & Edmondson, 2005).

In this context, Cannon & Edmonson emphasize that both favorable and unfavorable differences from expected results can become critical learning opportunities. Cannon and Edmonson's model of shared beliefs (figure 1) suggests that the "Group Antecedent" condition needs to have a clear direction, leaders' involvement in coaching their team, and a supportive organizational context. This will create a learning-oriented mindset on failure in the organization. When this happens, people in the organization will be willing to discuss the error, issues and concerns can be solved directly, and conflict can be handled productively. Therefore, organizations will learn and improve through adaptation processes triggered by prior experiences and the feedback they receive from their environment.
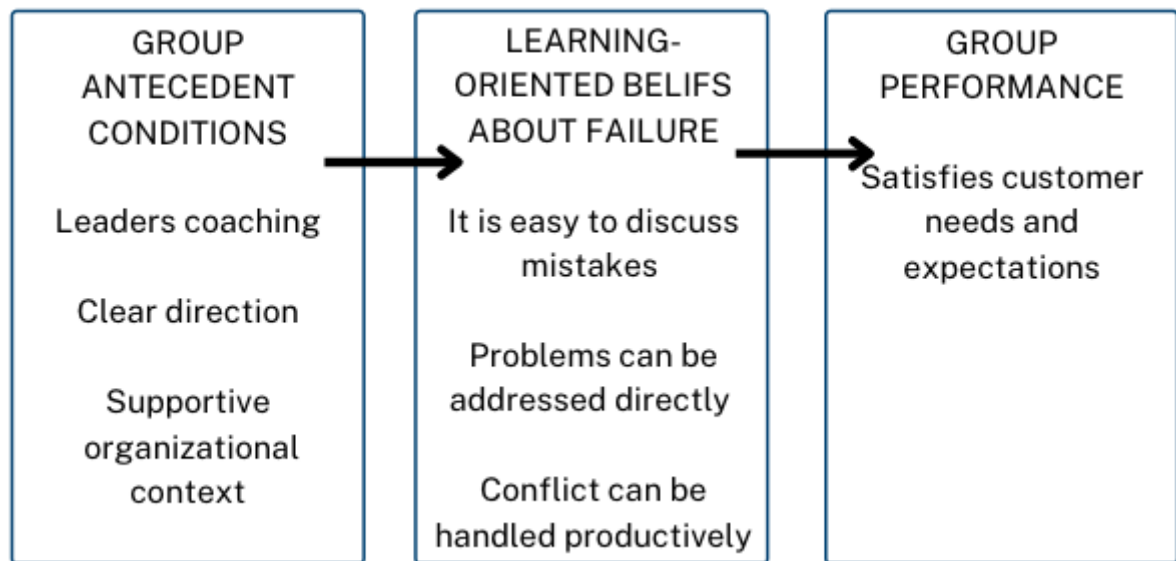
Figure 4. The Model of Shared Beliefs about Failure in Workgroups by Cannon and Edmonson (2001)

Within the scholarly discussion, the theme of detection, analysis, and experimentation is very prevalent. There is a firm understanding that detecting failure is an essential first step. Cannon and Edmondson, 2005 suggest that a company should instill a practice of learning to fail intelligently as a strategy to promote innovation and improvement. Identifying the barriers embedded in both technical and social systems makes such intelligent use of failure rare in organizations and offers recommendations for managers seeking to improve their organization's ability to learn from failure. As presented in figure 5, Cannon and Edmondson's framework for Enabling Organizational Learning from Failure (2005) identifies three distinct but interrelated processes for organizational learning from failure: (1) identifying failure, (2) analyzing failure, and (3) deliberate experimentation. The upper level of the framework describes the technical system barriers. It makes recommendations for mitigating these, including training, education, and technical expertise. In contrast, the lower level of the framework discusses the social system barriers and suggests recommendations for building psychological and organizational capabilities to engage in identifying failure, analyzing failure, and deliberate experimentation.

The first step is about having the capability to identify and discuss failure. The proactive identification of failure is an essential first step. Many organizations tend to suppress the awareness of failures to prevent a small insignificant failure and turn it into catastrophic failures further down the road. "Effective identification of failure entails exposing failures

as early as possible to allow learning efficiently and cost-effectively" (Cannon & Edmondson, 2005, p. 305). The second step is analyzing failure. The importance of this step hinges on the knowledge which can be gained by thoughtful analysis and discussion when a failure occurs. Analyses of failures require people to put aside their personal tendencies, and explore unpleasant truths and take personal responsibility. However, this process is not applied to many failures within an organization due to the rigor it would entail. This idea is what these authors are suggesting needs to be changed. This second step of analyzing information is incredibly important; whether by using transformative workgroups or hiring experts in the field, this information needs to be reviewed and processed to learn from failure. The final experiment step is the most proactive process an organization can use to learn from failure. The experiments are carried out "for the express purpose of learning and innovating" (Cannon & Edmondson, 2005, p. 309). This step involves experimenting and designing a culture to learn through the different processes. Incorporating deliberate experimentation stages throughout the process requires people not just to assume their views are correct but actually to test and design different experiments in which their views can be disconfirmed. The authors stress that it is essential to be doing continuous experiments on your organization's processes and systems to gain as much information on how the process is working successfully. Amy Edmondson revisits this work with her article entitled "Strategies for Learning from Failure" (2011), whereas the argument centers around organizational failures, and the fact that their lessons are lost, when there is no conversation happening, and organizations could use the lessons to become more successful.

Table 2. The Framework for Enabling Organizational Learning from Failure (Cannon & Edmondson, 2005)

	Key Processes in Organizational Learning From Failure		
	Identifying failures	**Analyzing failures**	**Experimentation**
Barriers embedded in Technical Systems	**Complex systems make many small failures ambiguous.**	**A lack of skills and techniques to extract lessons from failures.**	**Lack of knowledge of experimental design.**
Recommendations	*R1: Build information systems to capture and organize data, enabling detection of anomalies, and ensure availability of systems analysis expertise.*	*R2: Structure After Action Reviews or other formal sessions that follow specific guidelines for effective analysis of failures, and ensure availability of data analysis expertise.*	*R3: Identify key individuals for training in experimental design; use as internal consultants to advise pilot projects and other line (operational) experiments.*
Barriers embedded in Social Systems	**Threats to self-esteem inhibit recognition of one's own failures, and corporate cultures that 'shoot the messenger' limit reporting of failures.**	**Ineffective group process limits effectiveness of failure analysis discussions. Individuals lack efficacy**	**Organizations may penalize failed experiments inhibiting willingness to incur failure for the sake of learning.**
Recommendations	*R4: Reinforce psychological safety through organizational policies such as blameless reporting systems, through training first line managers in coaching skills, and by publicizing failures as a means of learning.*	*R5: Ensure availability of experts in group dialogue and collaborative learning, and invest in development of competencies of other employees in these skills.*	*R6: Pick key areas of operations in which to conduct an experiment, and publicize results, positive and negative, widely within the company. Set target failure rate for experiments in service of innovation and make sure reward systems do not contradict this goal.*

2.5 Innovation

Learning and innovation have been intensely discussed, especially for new companies with young employees. Technology and fast-paced communication also create demand for new ways of working and faster and easier products. Invention and innovation are accelerated like never before.

2.5.1 The Importance of Innovation in Competition

Innovation has gained more spotlight in the past couple of years, especially with the enhancement of technology. Innovation continues to play a major role in how organizations and companies run the business. In order to stay ahead in the market, companies need to adapt to the needs of the market and furthermore need to be ahead of the market. Innovation has been regarded as an important edge for companies, especially in a constantly changing environment such as today (Dess & Picken, 2000), as a competitive advantage from innovation is also an opportunity to stand out in the fierce and continuous hyper-competition.

2.5.2 Definition of Innovation

Innovation has attracted many scholars to discuss and build upon diverse aspects of the definition. One of the early definitions of innovation is an integration of currently available and novel knowledge and related factors, as shared by Schumpeter (1934). Schumpeter argues that innovation should be separated from the invention. Schumpeter also shares that we can see innovation from the new result, advanced method, and novel structure, which can be shared by performing work differently. Schumpeter also emphasizes that his argument about innovation was in the domain of the company and in the framework of business model, product, and process. Pittaway et al. (2004) emphasize more in the area of importance and relevance, and adequacy (Länsisalmi et al., 2006) have another view that focuses more on the intention. On the other hand, Camisón-Zornoza et al., (2004) define the benefit that inherits the innovation, and Hobday (2005) defines innovation from the perspective of its positive result. For the purpose of this thesis, we define innovation as a process that produces a novice product or way of working, explaining the background for this view in the next section.

2.5.3 Innovation as a Process

Innovation has several steps and processes that are needed to produce a novel product or ways of working. Kline & Rosenberg (1986) argue that we should not approach innovation in such a way that it is black and white, replicable, that can be clearly understood as it enters the economy at the exact time and date. Kline and Rosenberg emphasized the fact that the majority of critical innovation is a journey that goes through significant positive and negative phases. These changes in the journey of innovation most probably change their economic value. Furthermore, the innovation that we receive often has transformed into a significantly different form and also economic value. Therefore we often perceive innovation as a process that takes a long time. Klein and Knight (2005) argue that the newer technology innovation, the more possible it is that it is not reliable and far from ideal.

The discussion about innovation as a process is also shared by Crossan and Apaydin (2010), who developed the Multi-dimensional Framework of Organizational Innovation, which is presented in figure 6. Crossan and Apaydin (2010) identify two key aspects of innovation as a process: determinants and dimensions. According to the authors mentioned above, individual, group, and organizational levels play an interconnected role to drive innovation. The determinants of innovation are grounded in theoretical framework sequentially:

- Leadership grounded in Upper Echelon Theory: arguing for the vital role of top management in promoting innovative efforts at the initial creative stage, contributing to effective interactions among group members, and equally important emphasizing their ability of chief executives and boards to create conditions for the subsequent implementation of innovation;
- Managerial Levers based on the resource-based view and dynamic capabilities: consolidating firm-level variables supporting innovation into five levers: mission, goals and strategy; structure & systems; resource allocation; organizational learning and knowledge management; organizational culture;
- Business process accordingly in process theory: five concepts of organizational actions encompassing initiation and decision-making; portfolio management; development and implementation; project management; commercialization.

Innovations can be viewed as a process and as an outcome. Innovation as a process could happen at one or several levels (individual, group, firm); the driver of innovation can be external such as competition and government policy, and the internal driver, which can be skills and capital. Another is a source of innovation which can be internal such as invention, or external, such as improvement or enhancement from available innovation. The final aspect of innovation as a process is focused on whether the process happens in the firm only or in an open process. The innovation process could start at the top of the organization and then be delivered to the bottom or the other way around. On the other hand (Crossan & Apaydin, 2010) also shares another dimension of innovation as an outcome where it could encompass a range of form, magnitude, referent, and type. This multilevel framework provides a holistic perspective on managing innovation, creating an opportunity for practitioners to understand the "how-to" of the innovation as a process helping to understand the complexity of various elements.
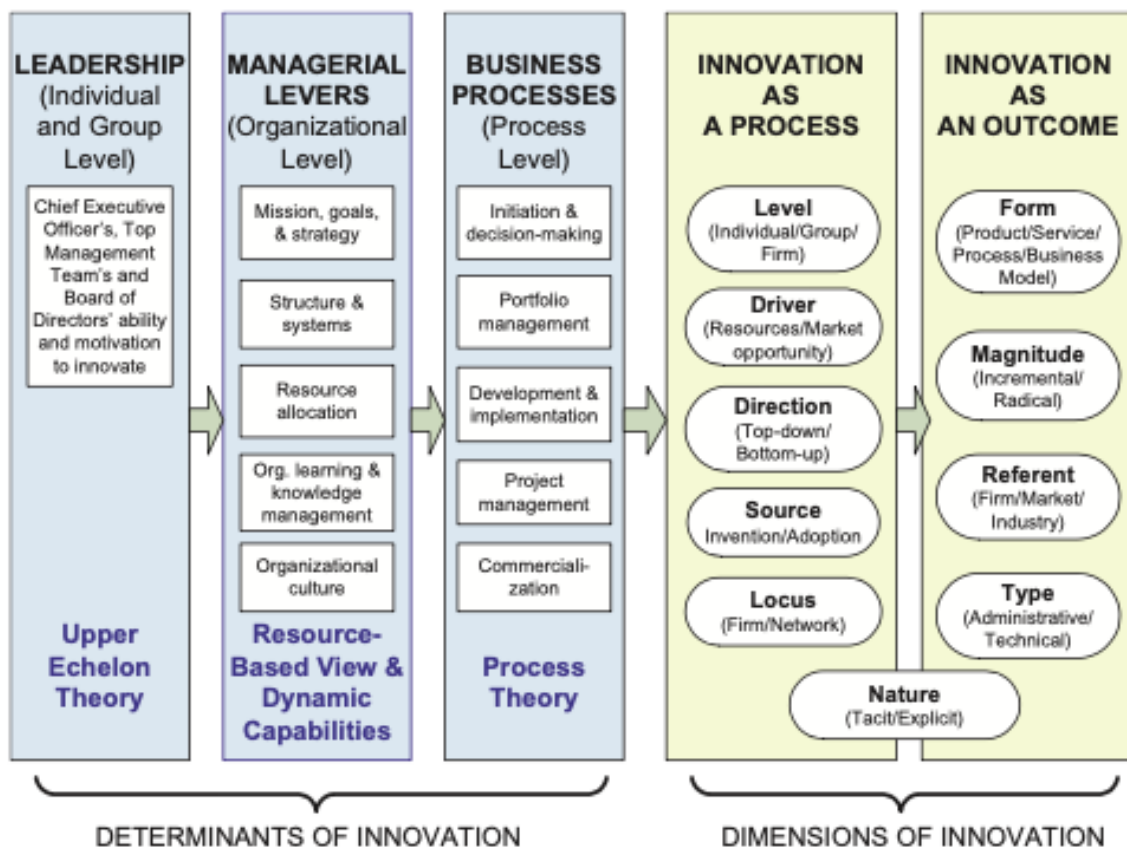
Figure 5. Multi-dimensional Framework of Organizational Innovation by Crossan and Apaydin (2010).

2.5.4 Managerial Practice For Innovation

Manager and managerial work are critical for driving innovation. Damanpour (1991) shares that the leaders build a learning atmosphere, which supports innovation and experimentation. For innovation to blossom in the workplace, the atmosphere needs to be safe and tolerant of failed ideas (Madjar, Oldham & Pratt, 2002). The risk-taking approach to learning also needs to be adopted when organizations aim to drive innovation, as shared by West and Anderson mentioned by Van der Vlist (1992). Furthermore, for innovation to be a habit in the organization, it must have an innovation culture. The culture can be obtained when leaders share and instill a clear vision, reachable and valuable to people in the organization (Pinto & Prescott, 1987). People also need to have the motivation to drive this innovation (Miller & Friesen, 1982). Lastly, to have successful innovation from project management, several key areas need to be obtained: project efficiency, tools, communication, and collaboration (Adams, Bessant & Phelps, 2006).

Many organizations and companies are aiming to do more innovation as part of the accelerated growth of the organization. The term innovation also has been discussed from different perspectives. Processes of novel thinking, objects and implementation are built. In an overall view, the method includes the conception of idea, development, adjustment, execution, and integration. Startups and companies that engage with accelerated growth companies can relate to the context that innovation is a process that continuously progresses.

2.6   Psychological Safety

Psychological safety in the workplace has been discussed widely in recent years in the context of a supportive workplace and working environment. Regarding supporting innovation, psychological safety is critical to ensure that people feel secure about speaking up and taking risks in the innovation process. Kahn (1990) emphasizes that psychological safety impacts the motivation of people in their engagement in the physical, cognitive, and emotional areas of their work. People need to feel safe first in the area before they can engage. Kahn (1990) argues that psychological safety consists of three conditions which are: meaningfulness, safety, and availability. Edmondson (1999) also argues that psychological safety is critical in the learning process, viewing it as a shared belief held by members of a team that the team is safe for interpersonal risk-taking. Carmeli (2007)

added that to ensure learning is happening in the organization; people need to have a favorable and positive quality relationship. To optimize learning from failure, it is critical that the learning process involves asking questions, feedback, experimenting, and discussing mistakes or unsuccessful attempts (Edmondson, 1999). Furthermore, the shared belief that psychological safety is critical and implemented is key for growing innovation in an organization.

2.7 Recap & Key definitions

This theoretical review has provided background on the fundamental concepts of the thesis, demonstrating the growing research on the topics and diverse perspectives that don't have a clear consensus on how organizational learning from failure impacts innovation but rather explores various aspects of the processes. In this thesis, we use the following operational definitions to address our research question:

- managerial practice(s) (managerial work) is considered as methods and processes that managers use for organizing, acknowledging the interpersonal, informational, and decision-making aspects, and encompassing it as the combination of management and leadership (Minzberg, 1973; Alvesson, Blom & Sveningsson, 2017);
- organizational learning from failure is identified as an organization's ability to deal with a range of large and small outcomes that deviate from expected results and happened in the past; encompassing the process of identifying failure, analyzing failure, and experimentation encompassing continuity and volatility (Cannon & Edmondson, 2005; Levitt & March, 1988; Kolb, 2015);
- innovation is characterized as a process that produces a novice product or way of working, acknowledging the multiple dimension where individual, group, and organizational levels play an interconnected role to drive (Crossan & Apaydin, 2010).

Chapter 3: Methodology

The following chapter outlines the methodological foundation of our study to create transparency, provide an understanding of our motives and clarify processes during this research. This enables the reader to explore how we came up with particular insights and what happened during our exploration. We start by providing "philosophical grounding" explaining the interpretive tradition of symbolic interactionism, which guided our study as it is highly appropriate in the case of business and management research due to the companies being complex and unique entities functioning as environments where individuals come together with certain purposes at specific times (Saunders, Lewis & Thornill, 2012). The "research design and process section" could be compared to a recipe for our thesis explaining our steps and decisions about the research approach, diving into the context and specifics of the case company Vision & Co, the process of collecting and analyzing the data. Finally, we address the "reflexivity and quality" issues to examine the influences and limitations of our research.

3.1 Philosophical Grounding

Our study explores managerial work concerning organizational learning from failure to foster innovations as a process. We aspire to do that by exploring the views of practicing managers in an enterprise that has established a culture known for constant experimentation, innovation, and growth; by seeing the processes in a company and the dynamics of human actions through their lenses, and by drawing up insights that affect the learning from failure in organization and innovation. This qualitative case study explores the meanings of a social situation in an institution "with the point of gravity being located on self or personhood" (Prasad, 2018, p. 19).

3.1.1 "Searching for Self and Meaning" and Institutionalization

We have been guided by the interpretive tradition of symbolic interactionism while designing and carrying out the research, as we aspired to gain a better understanding of multiple dimensions of what is happening through the lenses of managers of the company, considering human interpretations "Searching for Self and Meaning" as a start for developing knowledge and understanding about the world, and dynamic interaction

between the people constructs reality (Prasad, 2018). In our research, we viewed the organization as a complex social institution and aspired to understand the role of managers as "social actors" who interpret life in a particular way (Saunders, Lewis, and Thornill, 2012). According to Prasad (2018), the symbolic interactionism tradition takes its roots in German phenomenology and American pragmatism, emerging largely out of the ideas of Charles Horton Cooley and George Herbert Mead. The interpretive tradition emphasizes the subjective reality construction, the social dimension of everyday lifeworld with multiple realities and complexities, which guided our research and interest in narratives. As managers take multiple roles and identities, being symbolic carriers of meaning, sense-making, and perceptions in constant dynamics firmly built on interpretive notions (Prasad, 2018; Gubrium & Holstein, 1998), we aspire to explore the multiple social realities. The focus on stories by managers and exploration of their perceptions allows "to see more clearly the ways in which both coherence and difference, even authenticity, are socially assembled" (Gubrium and Holstein, 1998, p.166), shining a light on the complex construction of social realities and symbolic properties in th organization (Prasad, 2018; Berger & Luckman, 1967); Weber, 1949).

As we acknowledge the multidimensional characteristics of organizational context and focus our attention on the process of learning from failure and innovation, narrative materials from daily settings of managerial practice create an opportunity to explore the interplay of discursive actions and find a vocabulary for sensitizing analysis (Gubrium & Holstein, 1998). Corresponding to the symbolic interactionism's focus on multiple social realities, role-taking, and identity, and attention to process over the outcome (Prasad, 2018), the conversations with managers and exploration of their stories focused on *how* they perceived organizational approaches for learning, *what* they and their colleagues were doing. The interviews provided us with the valuable background knowledge that helped us to understand better and analyze the interpretations of realities by the practitioners in an institutional setting.

Many organizational structures arise as reflections of myths and rationalized institutional rules (Meyer & Rowan, 1977). German sociologist, Max Weber, observed bureaucracy as the most proficient form of organization, possessing specialized expertise, certainty, continuity, and unity. In actual experience, institutions generally manifest them selves in collectivities containing considerable numbers of people (Berger & Luckman, 1967). As

we aspire to gain a better understanding of what occurs in an organization, and in particular, how the institutionalization of learning from a failure takes place through managerial work, our research is also guided by institutional theory. The institutional theory is embedded in a distinctive tradition of social scientific approach that is preoccupied with the opportunity of developing more objective knowledge of what it conceives the social world to be; thus, it is a product of processes of institutionalization (Meyer & Rowan, 1977).

3.2 Research Design and Process

As we aspired to explore managerial work and gain insights on organizational learning from failure, we pursued a qualitative case study with an abductive approach of a firm that has been known for innovations over the years. During our research, we aimed to make sense of socially constructed interpretations of reality expressed by the representative of the chosen company, constantly moving between empirical data and existing knowledge. We have selected a company that has been known for innovation and constant changes growing significantly over the past decades. The semi-structured interviews with twelve managers of the company and exploration of materials featuring the company's CEO provided us with the opportunity to explore their practices, perceptions, and insights. We explored theoretical frameworks and the data from interviews during the research process, striving for reflexivity and a deeper understanding of complexities relating to managerial work, organizational learning from failure, management practices, and innovation. We aimed at conducting a qualitative exploratory case study aimed to explore those situations in which the intervention is being evaluated without a clear or single set of outcomes (Yin, 2003).

3.2.1 Abductive Approach to the Study

In our study, we followed the abductive approach for reasoning, aiming to grasp insightful moments from existing knowledge and our exploration of the field based on the case of a particular company. Abduction combines inductive and deductive methods, which we have followed in this study (Prasad, 2018). There is a fundamental distinction between the two methodological approaches: the deductive approach encompasses that hypotheses are derived from existing theory and tested through observations; with an inductive approach,

in contrast, empirical data serves to derive a theoretical foundation. Therefore, in our research, we were constantly guided by both existing knowledge (such as from the field of organizational learning, learning from failure, managerial work, and innovation) and our fieldwork exploring practical work in the company. With this approach, we intended to remain open to surprises and emerging issues within our empirical material, exploring mysteries and carrying out critical dialogues between the theoretical frameworks and empirical data (Alvesson & Kärreman, 2007). Therefore during the collection and analysis of our data, we remained open to new insights, adapting, extending, and rejecting existing theories while developing our interpretive approaches.

3.3 Research Context and Introducing the Chosen Case Study Company Vision & Co

To achieve our research goals, we focused on conducting a comprehensive case study of one company that has a strong focus on innovations and was able to maintain growth in the long term despite the changes in the external environment. During the research planning, we chose the case-study method of one company as it provided the opportunity to obtain a clear picture of organizational learning from failure and innovation processes based on the real-life situations, which were explored from multiple perspectives using interviews and materials about the company (Sekaran & Bougie, 2016). The focus on one company provided an opportunity for a deeper understanding of its embedded context, processes at organizations, and the construction of realities by managers.

We have chosen the company Vision & Co as researchers because it reflected approaches to facilitating the culture of experimentation over the years and served as a critical case, which has not been studied comprehensively before. The company was also recognized with multiple awards for innovations, culture, marketing, and breakthrough educational technologies and is regularly being featured in high-ranking media.

A case study as the method is also relevant for research that seeks to generate answers for 'What-', 'How-' and 'Why-'questions based on a particular context and its uniqueness (Saunders, Lewis & Thornill, 2012), which correlates with our research goals. In our study, it meant that firstly, we were interested in developing a rich understanding of what our case company does to implement organizational learning from failure to succeed in innovation and how & Co managers view organizational learning from failure, and the

factors that influence it, and thirdly why certain practices of managers enhance or restrict organizational learning and innovation.

Vision & Co is one of the world's leading education companies, which was established in 2002 and has headquarters in Kuala Lumpur, Malaysia. According to Vision & Co website, the mission of the company is to "create personal transformation that raises human consciousness." The company aspires to teach wisdom and transformational ideas that are being ignored by the traditional educational system. Vision & Co works with private customers, businesses, and state entities, including schools and governments. The company has gone from a small website with a few personal growth products to a huge ecosystem with a membership website with over 50 personal growth products, applications, events, and consistent new high-quality content.

As of the beginning of 2022, the company employs around 300 people representing 59 nationalities and engages over 200 authors actively hiring for multiple roles. The company has offices in Malaysia and Estonia. The business's community spans 100 countries and 10 million followers over media channels, while nearly 500,000 students engage with the Vision & Co-learning platform 333% better completion rate than the industry average annually, according to the company's website.

The company has an emphasis on experimentation with its products and approaches, which have evolved over the years, that are relevant for organizational learning, which is one of the core phenomena explored in our study. The management of Vision & Co combines adaptive processes in learning between the exploration of new possibilities and the exploitation of old certainties by engaging with activities that demonstrate stable results and carrying out experimentation with new ideas as part of their daily activities (Schumpeter, 1934; Holland, 1975; Kuran, 1988 cited in March 1991). The company has practices for organizational learning from failure aimed at identifying, analyzing failure, experimentation, and constantly strives for improvement. Vision & Co has been recognized by communities of practice in human resource management and marketing for its culture, fast tempo of innovation, breakthrough technologies, and frameworks. The company has 4.1 reviews on Glassdoor (recruiting website), based on over 209 reviews left anonymously by employees; 75% of employees would recommend working at the company to a friend, and 72% have a positive outlook for the business. Therefore, the

management practices of the company and its context are relevant for exploration to achieve the goals of our case study.

We've also been exposed to company activities before we pursued this research: one of us did an internship at the company, and the other one has been to company open events over five years ago. Our prior experiences contributed to higher awareness of company context and activities, thus in addition to initiated interviews, also leading to participative (rather than detached) observations (Prasad, 2018).

3.3.1 Research Access and Confidentiality

As one of us (Halyna) conducted an internship at the Vision & Co earlier, we started the communication with the company by accessing two people that had leadership roles related to the themes of our research: one current executive and one former top manager who have a solid background in people management, learning, and innovation. The initial zoom meeting with the former employee helped us to explore potential themes, confirm the relevance of the company to our research and discuss the potential interest of the company; the communication with the current employee and introduction of our research proposals resulted in verbal agreement to access the company for the purposes of the case study. The discussion was concluded by agreeing on "access as a continuing process and not just an initial or single event" (Gummesson, 2000; Marshall and Rossman 2006; Okumus et al. 2007 cited in Saunders, Lewis & Thornhill, 2012) as we were concerned that due to the exploratory nature of our approach we might have a need for engaging participants from diverse teams and reach out with follow up questions.

It was agreed that from the beginning that the name of the company and interviews would be changed; however, the context and all the collected data will be identified in the publication. From the beginning, we assured confidentiality as well as our respect for privacy boundaries to ensure compliance with ethical issues of the participants and the context in general.

It was agreed that all the interviews would take over zoom or other online communication technologies engaging employees from the Kuala Lumpur and Tallinn offices of the company or those working remotely in other locations.

3.4 Data Collection

As our goal was to explore the symbolic world and interpretations in the case company Vision & Co to address our research questions, we pursued the participant observation to get to "the bottom of the processes by which the individual constantly constructs and reconstructs his or her identity" as suggested by Saunders, Lewis, and Thornill (2012). The fieldwork was carried out to gather the needed data by both researchers (Edwin & Halyna).

Our primary sources of information are twelve interviews with managers of the company who are actively engaged in the process of organizational learning from failure and facilitating innovation in the company. The secondary data is public video interviews with the CEO and web content created by and about the company.

During fieldwork, we collected the following data:

- 9 semi-structured interviews with current employees (7 conducted over zoom and lasting 35-55 minutes; written responses to questions from one manager and recorded voice messages from one more);
- 3 semi-structured interviews with former employees via zoom (two employees who left the company just over a year ago and one employee interviewed right after her last working day in the company);
- public interview by the CEO on media about managerial insights on failure and leadership (around 15 minutes long);
- materials from company websites and social media.

3.4.1 Primary data: Semi-structured Interviews

Qualitative, semi-structured research interviews on the topics of our study were selected as the most appropriate method to gain deeper insight into the subject, providing an opportunity for in-depth exploration and gaining insights by going beyond the surface level and enabling description of processes (Saunders, Lewis & Thornill, 2012; Wengraf, 2001). This methodology of semi-structured or "non-standardized" in-depth interviews is most appropriate given our research goals and research approach, enabling the exploration of the phenomenon. According to Saunders, Lewis, and Thornhill (2012, p. 374), the semi-structured interviews encompass having a list of themes and possibly some key

questions to be covered, although their use may vary from interview to interview. Semi-structured interviews are highly relevant as we follow the interpretive epistemology of symbolic interactionism (Saunders, Lewis & Thornill, 2012), aiming to understand the meanings that managers ascribe to phenomena of failure, learning from failure, and organizational learning in the context of Vision & Co. This approach gave us an opportunity to explore the topics of our research and also go in-depth and 'probe' answers, whereas there was a need for interviewees to explain, or build on, their responses.

Therefore during our fieldwork, we focused on the key themes of understanding failure, managerial reaction to failure that influences organizational learning from failure and innovation, being people-oriented, and having an "issue focus," as suggested by Saunders, Lewis, and Thornill (2012). Openness to diverse flows of conversations enabled "going beyond written-down words" and exploring the diversity of interpretations by the managers (Wengraf, 2001). This interviewing style gave us the opportunity to guide the conversation in the direction of themes that we intended to cover for our analysis while not inhibiting the possibility of flexibly and spontaneously reacting to other clues that the interviewees gave us. The questions we formulated and used as a guide for our interviews were based on the above-mentioned issues we wanted to explore in order to address the purposes of our study.

3.4.2 Secondary Data: Public Materials Collection to Broaden Understanding of Context and Phenomenon

For the purpose of our study, we also explored publicly available materials created by the Vision & Co, content featuring the company and the views of the CEO in particular. This information has been created and collected for some other purpose, therefore can be identified as secondary data (Saunders, Lewis & Thornill, 2012).

We identified a video interview with the CEO by a representative of the media with a focus on response to failure and nurturing innovation which us around 15 minutes long, and used it for our study. During our research, we also collected information that was available on the company website and Vision & Co career website, as well as the content of social media pages (Facebook, Instagram, Youtube) about the company, organizational approaches to learning, and innovation.

Evaluating the suitability and usefulness of such data in relation to your research question and objectives, we identified that it could help to triangulate findings based on the interviews (Saunders, Lewis & Thornill, 2012). Such an approach provided us with the opportunity to gain insights into the views of the CEO and the "meaning-making" and "role-taking" as we were guided by the interpretative tradition of qualitative research (Saunders, Lewis & Thornill, 2012; Prasad, 2018).

3.3.3 The Company Contact, Participants, and Interview Process

Our primary source of empirical data was collected through twelve semi-structured interviews with top management, directors, and managers who are involved in organizational learning and innovation at the Vision & Co. As our research aimed at exploring managerial work impact on organizational learning from failure and innovation, we aimed to get views of top managers as well as their subordinates as it provided opportunities to explore multiple dimensions of organizational settings. As stated by Merriam (2019) and strongly agreed by us, it is vital to select the relevant interviewees in order to develop a deep understanding of the studied phenomenon. Therefore, we saw it crucial to interview executives, directors, and senior managers as these are the roles defining, guiding, and overseeing the organizational setting, having an essential role in the innovation process (Crossan & Apaydin, 2010); however, as we were interested in the processes of organizational learning from failure and how the company is "failing to learn," we realized that it is essential also to explore the views, routines, and approaches of subordinates (Cannon & Edmonson, 2005).

As mentioned earlier, the initial communication with the company was conducted through existing contact, and with the "snowball effect," new contacts were developed. We also asked our contact person to post messages on the company's internal communication channel via the "Slack" application with a form to leave the contacts for the interview; however, it didn't bring any direct result. When we reached out to employees of Vision & Co that were pointed to us via other channels (Email, Whats app, LinkedIn, Facebook), several people mentioned that they saw the announcement; however, they did not act upon it due to the time or lack of confidence that they are the "right" people to talk to and also multiple other commitments. As we reached out to them individually, they promptly agreed to hold an interview and were open to sharing their perspectives as well as refering colleagues to hold an interview.

We aimed at engaging key informants that would be able to give the most insights related to the research questions and also aspired to explore the views of representatives of different directions in the company as one. At the very early stages of our research, we thought about doing a case study about one particular innovation project that failed in the company; however, during the initial interview with a former employee, we've realized that the exploration of practices that contribute to institutionalizing experimentation provides an opportunity to address our research questions with a broader perspective.

During our fieldwork, we held interviews with managers who work in product development, tech, marketing, customer management, and people&culture directions at Vision & Co. We've interviewed representatives of the top management team of the company as well as middle managers and specialists. Such an approach exposed us to a variety of perspectives of managers and provided an opportunity to gain more holistic views on organizational learning and innovation in the Vision & Co. The managers we've interviewed also have diverse years of experience in the company: from slightly less than two years to over ten years.

We aimed at having 6-12 interviews with informants who currently work at the company and also those who left the company earlier, who had roles that were connected to innovation and facilitation of organizational learning from failure through managerial work. Our decision about the number of interviews was influenced by the Guest, Bunce, and Johnson research (2006), suggesting that meta themes were present as early as six interviews enabling saturation (enough information) to replicate the study occurred between sex and twelve interviews. This decision was also influenced by the factor that followed purposive sampling having predefined criteria for interviewees and the time limits of our study. W

Our aspiration with engaging both current and former employees was aimed at exploring a more comprehensive perspective to increase the reliability and validity of the study (Saunders, Lewis & Thornill, 2012). This also provided an opportunity to expand the time horizon of the research as we were aiming to explore how organizational learning and managerial practices for innovation were carried out based on the Vision & Co case.

The interviews lasted 35-55 minutes and had the same start with us welcoming the interviewee, introducing ourselves and the research purpose, agreeing on confidentiality,

and seeking permission to record the meeting for the purpose of analyses. Then we took turns in asking open questions and also clarifying the answers where needed. The first question we asked was about "the current role and scope of work at the Vision & Co". Thereafter, depending on the answer of the interview, we adjusted the questions accordingly, however, making sure that we received answers to the following topics "How is failure viewed in Vision & Co," "What are the reactions to failure," "How is learning from failure being implemented," "What approaches enhance or restrict organizational learning from failure." The prevailing majority of our questions started with or included one of the following words: 'what', 'how' or 'why'. The use of open questions encouraged participants to provide extensive answers, reveal attitudes, and overall reply as they wished, providing us with the opportunity to gain exposure to the interpretations of reality by the managers of Vision & Co (Saunders, Lewis & Thornill, 2012; Prasad, 2018). The list of guiding questions can be found in Annex 1, "Interview Questions."

As the topics we talked about were related to the discussion of failure in managerial work, which is a sensitive topic for many, it was highly important to ensure an environment where everyone feels "safe," as it has an impact on the quality of data (Saunders, Lewis & Thornill, 2012). In our interview process, we aimed to create a natural and open-dialogue setting where both the researcher and interviewee felt comfortable and "safe." During our meetings, we've also used probing questions to explore responses that are of significance, follow-up questions to explore certain issues more, interpretation and extension questions, seeking to explore the implications of an answer, providing silence as a space for thinking, and also offering more information, summarising previous answers to avoid a biased or incomplete interpretation (Saunders, Lewis & Thornill, 2012).

3.5 Data Analysis

As stated earlier, we followed an abductive approach to research, constantly engaging with theory and empirical material, aiming to gain a deeper understanding of the phenomena of organizational learning from failure and managerial work to innovate based on Vision & Co company. The data analysis process encompassed the preparation stage aimed at getting data rada for the analysis and carrying out the analysis itself. After each interview, we stayed longer or met shortly after, discussed the interview, and summarized our findings, despite having recorded all of our interviews. We also transcribed each interview

shortly after it was conducted, and once we finished the fieldwork, we focused on analysis. "Sorting, reducing, and arguing" was then performed to overcome the three rising problems of chaos, representation, and authority in analyzing the qualitative data (Rennstam & Wästerfors, 2018).

The analysis of the collected empirical data was conducted in the framework of switching between the 'what's' and 'how's' as suggested by Gubrium and Holstein (1997). Using this approach enabled us to reproduce the interviewees' social reality as well as to engage in an "interpretive practice," resulting in finding answers to the 'why' (Rennstam & Wästerfors, 2018; Saunders, Lewis & Thornill, 2012). This method by Gubrium and Holstein is supported by Alvesson and Sandberg's (2013) recommendation to look for clashes between the empirical data and theoretical assumptions in order to question existing theories and concepts. Uncovering breakdowns required our willingness and ability to discover unexpected angles as well as a rigorous interpretation process (Rennstam & Wästerfors, 2018). A mystery emerges from those breakdowns as the combination of the "researcher's preunderstanding, including access to the theoretical framework(s) and vocabularies, and the inspiration of empirical material" (Alvesson & Kärreman, 2007, p.1278). Finally, solving a mystery is done through the introduction of new ideas, perspectives, metaphors, or stories grounded in the analytical process (Alvesson & Kärreman, 2007; Styhre, 2013). By doing this, the analytical process resulted in a novel contribution showing "the ability to simultaneously look both backward and forward, to anticipate both the new and what is in the making." (Styhre, 2013, p.14). This analytical approach started during the fieldwork period (in particular during the after-interview discussion allowing) for the discovery of dominant themes, which we picked up or reexamined through further interviews (Rennstam & Wästerfors, 2018).

Firstly, we completed the transcriptions of all interviews using the Otter.ai software and finalized our notes made during interviews and post-interview discussions.

Secondly, we completed our notes individually, featuring the summaries of interviews after the review of transcribed interviews and featuring statements that emerged during conversations. These statements can be described as 'open-codes,' and the process can be defined as 'coding' (Corbin & Strauss, 1990)

Thirdly, we had a long discussion about the codes and their interrelations, comparing our notes, discussing the quotes of the interview and aiming for deeper understandings of the data. Initially, together we've identified ten initial themes and over forty subthemes, coding the data accordingly. During the discussion, we examined our data more in-depth and cross-reflected, meaning the one reflected upon the thoughts of the other, creating a new set of notes with these remarks. This step can be described as axial coding as we relate our various 'open-codes' with each other (Corbin & Straus, 1990). The Nvivo software program was used for coding purposes. Exploring data, we've identified that many themes were interconnected and some also were repeated, therefore, could be combined; as a result of this meeting, we've identified the five key codes and subcodes that we introduce in the data analysis chapter as four key themes "Failure=Information Framing", "Growth and Experimentation is in our DNA", "Psychological Safety as a Base for Candor discussion and Experimentation", "Complexities of Managerial Practices" and further discuss in Chapter 5.

During analysis, were largely inspired by Emmerson's method of creating excerpt-commentary units that follow a standardized four element structure of analytical point, orientation, empirical excerpt, and analytical comment with the benefit of linking empirical data with its interpretation guided by theoretical background to achieve effective argumentation (Rennstam & Wästerfors, 2018).

3.6 Quality and Reflexivity

As we pursued qualitative research, the data quality issues of reliability, forms of bias, generalisability, and validity are essential to address (Saunders, Lewis & Thornhill, 2012). The issue of *reliability* (whether another researcher would achieve the same results) is inevitable in qualitative research as the dynamic of the researched environment is constantly being shaped. Considering the semi-structured interview approach, coming up with the same results becomes even more challenging or even impossible. However, we aimed to address the possible issue of reliability by explaining in detail our method, the data collection, and analysis.

We did our best to eliminate the *bias* by exercising openness and reflexivity during all the stages of the research; however, it is essential to acknowledge that. The emotional side of

the chosen context and the ambiguity of the interpretations in qualitative research in general (Alvesson & Sköldberg, 2017) are important to acknowledge. We aimed to overcome bias by being open to diverse views and challenging each other to reflect, switch positions, and look at issues from different angles. The snowball effect contributed to the participation of employees from different departments (product, marketing, people, technology) and levels (chief executives and well as managers), current and former employees.

As we did a single case study, the issue of *generalisability* arises as we can not simply expand findings to all organizations across industries. As every company is subject to a firm's specific context, such as structure, products, business model, size, heritage, and national or international exposure, just to mention a few, a scientific generalization is problematic (Saunders, Lewis & Thornhill, 2012; Yin, 2003).

The *validity* of our semi-structured interviews was addressed by asking follow-up questions and "probing" meaning, summarizing, and reinterpreting the response of our interviewees to ensure the correct understanding and exploration of themes from diverse angles (Saunders, Lewis & Thornhill, 2012).

It is also important to acknowledge that we, as researchers, and our interviewees have diverse backgrounds, nationalities, and cultures within the teams. As we aimed to explore organizational learning from failure and innovation in relation to managerial work and institutionalization, engagement of participants from diverse teams enabled us to get broader views; however, the perceptions of managers and ours had multiple influences that constructed reality and impacted the results of the research.

We aspired to provide extensive information about the company and our research process while using and challenging existing theory to explain the phenomenon of Vision & Co, which will hopefully stimulate further research in this area. We want to emphasize that the company's nature is educational technology, and it has significantly transformed over the past two decades, with innovation being an essential part of its activities. Therefore this background is also crucial to reflect upon exploring the findings.

To conclude, we were fully aware of those constraints and constantly challenged ourselves to keep them in mind by probing and exercising reflexivity; however, every research has limitations, and so is ours.

3.7 Recap of Methodology

This chapter provided background on our research approach guided by the interpretative tradition that encompasses socially constructed realities. Further, building on symbolic interactionism, we view that individuals, and thus also managers, constantly make sense of objects, actions, and events and negotiate their individual meanings in social exchange. We highlighted why we decided to conduct a qualitative study and present our single case and its context by introducing the edtech Company Vision & Co. We explained how we collected our primary data (12 semi-structured interviews) and secondary data (public video with CEO and content about the company). Following an abductive approach, we took into account existing theory and frameworks but, at the same time, intended to question them with our material. Finally, we emphasized that we aimed to stay reflexive throughout our study and were critical of both sources and ourselves as researchers of this study.

Chapter 4: Analysis

In this chapter, we present the context of our case company and our four main themes, which we derived during the analysis of the empirical material, both from the interviews and desktop research. The first theme is "Failure=Information" framing, which encompasses the analysis of perceptions of failure and managers' reactions when things didn't go as planned. The second theme, "Growth and Experimentation are in our DNA," echoes the approaches for constant learning that foster experimentation to learn to fail for further development. The third theme, "Psychological Safety as a Base for Candor Discussion and Experimentation," provides insights into the company's atmosphere, no-blaming, open dialogue approach, and challenges voiced by employees. The fourth theme, "Complexities of Managerial Practices," reflects managers' views on mechanisms that impact the organizational learning from failure and innovation based on their experiences at the company, including the barriers and aspects that influence the processes of learning and innovation. We finish the chapter with a summary of our analysis.

4.1 Context of Vision & Co

Vision & Co is an edtech company that was established in 2002 and, over the years, grew into the leading provider of e-learning services focused on personal growth. The company has offices in Asia and Europe that unite around 300 employees. This is elaborated by Rudy, People Operations Manager that shared:

" (...) to our offices, that's in Malaysia, and also Estonia"

Maria, Senior Enterprise Account Manager, also shares the business model of Vision & Co, which cover Business to Customer and Business to Business models as elaborated below:

"(...) so Vision & Co, sells memberships to individual people just like you and us, or we can also do it via companies. So companies buy the product, and then they offer it as a benefit to their employees."

Vision & Co is known for novice practices in its products, marketing, and management. The company combines IT tools and educational practices. Emphasizing the importance of community building, Vision & Co also carries out live events with innovative formats.

The company has a strong orientation toward innovation as a process, learning from experience, and has been growing steadily, including through experiences of failure, according to Sharon, Head of Premium Subscription:

"We do a lot of experiments. Our general approach is doing a lot of tests and understanding what works not from books, or some other offices, but from experience itself".

Over the recent years, the company evolved from selling single courses to a subscription model that could be identified as a business model innovation, subsequently leading to the transformation of processes within the company. This significant company change is something the team has been working towards for a long time; however, it still requires a lot of adjustments. As Veronica, Product Marketing Launch Team Lead, stated:

"It's like we changed cars, but we are still driving the new car the way we tried while driving the old car."

This change didn't happen instantly, and during the transition to the new business model, failures in achieving results and processes occurred. However, the company enthusiastically continues the movement from one experiment to another, experiencing further growth in the thriving industry of edtech, which was accelerated by the COVID-19 pandemic.

4.2 Failure is Information Framing

In Vision & Co, people see failure as learning and often have the attitude of celebrating the things that went wrong as it could provide valuable insights. There is a certain reframing

of failure, where they see it as part of the way to hack growth and part of the journey towards progress. As mentioned by Mario, former Chief Marketing Officer:

"The other way is like a huge thing that I think that we brought a lot in terms of how to say, marketing approach was growth hacking, which is very based on failures, right? That's kind of a lot more towards celebrating failure, rather than, let's say, looking at a problem, and that what basically means is that we always had our team for about 20-30% of the time to try and test different tests on our marketing pages and product development."

Supporting the previous view about failure, they did not see this as a waste of time but as part of the process to improve the following improvement of work they are doing. They believe that the next process can be faster with this failure, as stated by Johnson, former Head of Product Development.

"yeah, just another idea, I think that with a team, it helps to, if the team understands that it's not failure, that it's not waste time. But it's a learning and we apply this learning to the next iteration of whatever that we are doing. You got skills, we even like the model. So skills, they still stay, certain learnings stay, and usually, the next iteration is faster to do"

The mindset perspective also occurs when they hear the word failure. They see this as a learning experience and believe that to be successful they need to. Veronica, Marketing Launch Team Lead, even believes that in order to have more success, you have to fail more often, as elaborated below:

"I think overall, every experience is a learning experience. And that's sort of the mindset that I think is the most helpful because I feel like in an attempt to achieve something, you'll fail more often than you will succeed?"

Vision & Co has a different perspective on failure in comparison to other organizations also mentioned by Rudy, People Operation Manager. Vision & Co people embrace failure and encourage failure as part of the culture:

"So one thing in Vision & Co is that we probably defined failure a little bit different than other organizations. So at least for me, personally, after being in a company for quite some

times, I can see that failure to us as the company is more of us. Stop trying, in terms of, you know, innovating our products, and coming up with new ideas. And we actually encourage failure as part of as part of our culture"

Hui Lin, Head of Community & Events also emphasized that she does not like the word failure and sees this as an opportunity to grow and learn.

"I personally always tried to see any failures. I don't. I personally don't like the word failure. But let's say an outcome that wasn't what was hoped for or planned for. I always tend to see this as an opportunity to grow and learn"

Lastly perspective is that people see failure as information. In the context of Asian culture where the company is based, where shame and guilt are a big thing, Vision & Co brings out totally opposite perspectives. Bobby, the Chief Executive Officer emphasize that it is not that Vision & Co will not fail, but they remove the negative association that comes with it and bring more positive perspectives:

"He says this is not true. Rather, your business, he says is the ultimate vehicle for your personal growth. In other words, if your business fails, it doesn't matter that you grow, if your business takes off, it doesn't matter that you grow. Failure is simply information. But in our world, especially in Asian culture, we see failure with guilt with shame, we associate failure with so many negative things. My greatest aha moment was completely eliminating failure from my life. Now, it doesn't mean I don't fail, I still make stupid decisions, and I still fail. And you know, I may give a speech and I make it completely bombed. I may invest in a company, it may completely collapse"

From the above quotes, we can see that a similar perspective was shared both between current employees and former employees. It is also the same message and perspective of failure shared by the head of the organization and the junior staff.

4.3 "Growth and Experimentation are in our DNA"

Based on our interviews Vision & Co employees see learning from failure as being aligned with their identity and also the identity of the organization as a personal growth company. This is one of the messages that was voiced ou by people from different functions and different levels. Rudy, People operation Managers as elaborated below:

"Well, one thing to note is that we are a personal growth company, meaning we encourage personal growth. And I guess that's the main point, right? Because we're always learning to be better. So overall, the organization I think it's very organic, for us to create a positive environment"

Furthermore, the perspective of the development of people is considered important by people in the organization from different functions and across levels. Audrey, current Head of Customer Experience shared a view that this is not only on a surface level, but also on a deeper emotional level as shared below:

*"Because like, if I am emotional, or like, if I'm taking it a bit personally, right, then like to you I made a mistake. So I, I take it also not only as your manager, but as a human being, so I care for you. And that's why I come and see, let's find solutions. But if I don't have that caring part, and I'm still emotional, or like first none, I'm like, What the ****? No, because I don't care about you. And one of the best concepts, I think, is radical candor. And it really explains, I don't know, if you're aware of it, and there's a book on it. It explains challenges directly versus secure personally. So I think this is also like if there's a culture of radical candor in the company, where I can challenge my team member, but at the same time care for them as people. This is where beautiful things happen"*

The Chief Executive Officer drives the narrative about personal growth and learning from the unsuccessful attempt. People felt the vision is consistently communicated and implemented from top management to everyone inside the organization. Rudy, the People Operation manager shared:

"I mean, it's not that if we don't successfully achieve those deliverables, then in the next quarter, we'll just, you know, try and have a more realistic timeline and deliverables. But

for us, the first thing is to have a good top-down approach, because that's encouraged by the top management themselves, especially our CEO. He's very ambitious."

Vision & Co employees shared a belief that they are not afraid of failure or making mistakes as they view this as what makes you an effective individual, team, and organization. On the other hand, the necessary framework and benchmark are needed to make people embrace learning coming from failure. This view is strengthened by Leo, Head of Subscription Marketing

" (...) this is what Vision & Co believes in, and this is what I believe in wholly solely, to have an effective team, to have a team which is not scared of failure, you have to make sure that you set all of these benchmarks and make sure that people know these benchmarks and know these rates of innovation, know this rate of failure, and then they can go on"

People are up to making mistakes and innovation is accelerated and highly demanded from the company. The business environment and competition in the technology area are fast-paced and hyper-competition. Leo, Head of Subscription marketing shares the context as below:

"When there are mistakes, especially in the culture that we have set within Vision & Co, the people are up to the mistakes because these innovations are supercritical."

Sharon, Director of Premium Subscriptions also shared similar views on Vision & Co's nature in experimentation. She shares how the perspective on culture in Vision & Co when the failure happened:

"So, our nature, in general, is doing a lot of experiments and understanding not from marketing books, or some offices, but from experience itself. So because we, in our, you know, all team meetings, always share mistakes and being together, yeah, that creates that culture. It's easy for us to acknowledge when things go wrong, oh, stand up and move on from that"

With the above quotes we can see alignment in how people in Vision and Co see how learning from failure and experimentation are critical in their business that leads to continuous innovation in all level across the function. The quotes also demonstrate the perception that failure is a part of growth.

4.4 Psychological Safety as a Base for Candor Discussions and Experimentation

Psychological safety has been a key essence of how Vision & Co ensures that learning from failure is happening in the organization. It is expressed and practiced in a different way, however, there is the spirit of giving the feeling of safety for people to try new things, and creating space for mistakes and failure. This perspective is shared by Johnson, former Head of Product Development, the following:

"So definitely, there is more like, I think analysis, so there is not much blame. It's more of okay, trying to investigate and understand what's happening"

This quote shares the atmosphere of working towards failure with more objective analysis and understanding of the root of the problem and not so much of pointing fingers at who is to blame for the failure happen. The supportive working environment in Vision & Co is also supported by Mario, a former Chief Marketing officer that breaks down the approach toward how failure and mistakes happen in the organization:

"So if a human error happened, then we will be looking there and understand, Okay, why did this happen? Do we have a process for that? Do we have a standard operating procedure that wasn't followed, do we have a checklist that could have prevented that. And what happened? And if there was a mistake, and that mistake was human, then we'll try to figure it out with a process. And then if somehow that person as if there was a process and the person was involved in the process, then we're like, okay, cool. This can happen once and cannot happen twice. Right. And, and obviously, we are not a company that if you make the same mistake twice, you're fired right now. But obviously, it's like something that is okay, that will go on your performance review. And maybe you can move forward or get a promotion or grow the company if you keep on making the same mistake over and over.

But if the mistake wasn't, let's say a mistake of setting up the test when we say we'll simulate the test, we're setting up nicely. It's just that the idea that we had didn't work. I mean, there is absolutely no blame on people."

The word "absolutely no blame for people" emphasizes that people should not be worried about being the target of what will happen when mistakes happen. It shows that the organization will review the mistakes, the process, and how to move forward and take learning from the situation as shared by Veronica, Product Marketing Launch Team as follow:

"It's not put on any individual person that like, Oh, you haven't done that. Because also, there are so many people involved in the decision making we don't play the blaming game of who didn't do what and who did what"

It is emphasized that the company support and no blaming habit, however, it is also mentioned that people should learn and not make the same mistake twice and analyze the causes.

Furthermore, psychological safety reflects the supportive working environment. People in the organization collectively work towards ensuring each other feelings and wellbeing. It is expressed by Johnson, as follows:

"Obviously, it's, I think, supportive culture in general, right. So it's more about taking care of feelings and ensuring that people are happy in their places. So might be it is a more humanistic, human-oriented than other companies"

Psychological safety in the context of Vision & Co also elaborates by how the line managers not only create a safe environment for their people to speak up and make mistakes but also they feel that the line manager will support also when plan adjustment is needed for the project to keep running. It is elaborated here by the Robin, a Full Stack Developer in Vision & Co who is an individual contributor level of tech team:

" (...) usually I manage this are all my mentors are all like very, we work with, we try the best to keep very open communication and transparency about all the stuff that is

happening. And when things are not going according to plan, my managers are normal, they are very, very understanding because they are also not surprised. And our responsibility is to make it clear, what's happening. So when something doesn't go according to plan, it's not a surprise, they already know. So if they understand and they adjust the original plan, it really feels like they got our back"

This elaboration is aligned with the vision and preferences that Andrew, Chief Technology Officer shared on how he wanted to ensure psychological safety occurs in the team.

"I think giving them some sort of safety net, or very clear boundaries or understanding of how, how bad it is something can go wrong. Because I mean, I don't think anyone would want to experience failure if they can help it. Right. I mean, is definitely not nice, right? It's not a nice feeling at all right. But if it's required, you know, part of the journey, then the supervisors' job is to make it clear. That is that say, and then it's okay that if you fail, right, if you say, no, no, that is how the journey right? So not you to get there, you have to first go to this day, right? In the understanding here, that is how the journey is not as bad as you think. Meaning that I'm here to help out if it really goes south and all that, like psychological safety"

Another angle for psychological safety is also that when the problem is happening and failure occurs in the project, it does not only belong to one person. Managers gather relevant people, discuss them together and learn from them. Hence, people feel that it is a collective problem rather than your problem alone. This perspective is shared by Audrey, Head of Customer Experience as follows.

"So with these retro reports, I think we're really brought forward okay, let's analyze and let's move forward. So I also witnessed that among other managers who do that. They come you know, they gather responsible people and one rule we discuss and then we learn from it. And I think this is beautiful. This is not like any without any personal attacks, and we really think about how to improve processes"

Another view of psychological safety is that it is not only about the care on the surface level, but people genuinely care about the concern and issues. Listening is one-way people

show that they care and really would like to understand what is happening. Audrey, Head of Customer Experience, emphasized the perspective below:

"Okay, so I think even leading personal meetings, I all I honestly wanted always to know how my team is doing. And like, while asking, how are you? It wasn't just like, Hi, how are you? Hi, how are you? But actually, how are you really, and I was listening, and whether the person is bringing something from the personal side, not worksite, I would be there. Because I know that if that's on their mind, it will be under your mind what they're doing tasks. So I think honest, care for how they're doing. Listening is important. Second, as a coach, I have this privilege I know how to coach people or lead them to some realizations. So I think I was using it all the time in meetings and helping them grow from any situation where it was objectively pretty good thing."

Trust also becomes one of the critical points in building psychological safety. People felt they can share more and open up about deeper topics. Trust creates a positive environment that makes people feel secure. Trust also build respect for each other which is critical in believing that people have done their best on the task that they do, hence when failure or mistakes happen, people can focus on evaluation and finding solutions rather than doubting the situation. Rudy, People Operation Manager describes this:

"So because we provide so much trust, and we respect each other, I guess, that's also like the pillar of, of how we manage to create those positive environments. And when people make mistakes, when people fail in something, we do not punish them, instead, we celebrate the progress that has led them to achieve whatever that they have achieved. Right. So I guess, we tried to turn the negative into positive things. And that's how we started to create the culture of trust, the culture of empowerment, and overall making it positive and in terms of making, you know, debate healthy in people a positive I guess. I guess, there are activities that do this, right. So in terms of having healthy debates, for example, so when leaders have their own meeting, realigning strategy in setting direction, because we respect each other, very, very much what everything that we say, people don't take it personally"

Safe environment to speak up and make mistakes does note means that people do not argue and exchange ideas and heated debate, however, the discussion felt healthy and people felt

they are working toward the most benefit of the company. Rudy, People Operations Manager emphasized the following:

"But so far, it's all very positive. From, what I can see frustrations happened. But of course, there will be a debate, especially in the leadership team, together with the senior managers, so, and that's all very healthy debates, right. And that's where they will be though, they would be aligning resources, basically, to work on the things that would give them the most benefit to the company. So I guess, yeah, I'm not too sure if I'm really answering this question, though. Because from my experience, so far, it has been good. But of course, there will be tension and healthy debates, basically."

Overall, the empirical data on psychological safety and the interview we have with people in the organization aligns with the vision of Bobby, Chief Executive Officer where he mentions that when failure happens we can focus on the learning as follow

" Those are failures. But it's the emotional state that emerges. Lack of fear, not only lack of fear, there's a lack of shame, there's a lack of guilt, there's Oh, I just learned something. What did I learn? That's a fantastic move on. When you can live a life that way. Things change. It's not even a positive spin. There's nothing to be positive about failure is merely information. Now if we can teach this in our education system, we can shift so much"

Vision & Co employee aware, practice and support psychological safety in the workplace and encourage debates to explore the situations that led to failure.

4.5 Complexities of Managerial Practices

Driving organizational learning from failure needs a systematic and consistent approach to making this happen. We will share our empirical data on managerial practices for organizational learning from failure and innovation.

Routine meetings are one of the simplest ways that are conducted by the marketing team in the organization to ensure continuous learning. One of the efforts was the growth meeting elaborated by Mario, former Chief Marketing Officer, as follows:

"So the reality is, this is that number one, where the specific cadence that we had this meeting, which we call the growth meeting, happening once a week, okay, and then what we will do is that we will say, everyone could arrive there, propose ideas, and based on this idea that could decide what will be implemented. Even if someone joined the company last month, the person could arrive and propose ideas, right? They were expected to do that"

Another practice that commonly happens in the organization is the retrospective meeting after a project ends or an incident happens. This is a critical practice that shows the people and organization put effort into assessing and learning from what has happened. In this meeting, the focus is on the effort that is working, not working, and looking for alternatives and solutions. One of the goals is the need to see the big picture of the problem, not only the details which didn't work, elaborated by Veronica, Product Marketing Launch Team Lead as follows:

"Well, as a team, we have a retrospective process in place. So every time we finish the project, we do a retrospective meeting with like all the stakeholders involved. And we see basically what went well, what could be better. That's it. And then there are like, after everyone sort of chimes in, like all of their insights. I personally like to kind of look at it from, you know, let's take a step back and look at it from like, a bit of a bigger picture view. Because some things are like, just like every little detail, you know, here and there that like, oh, somebody made a mistake, or, you know, something just went wrong."

This is also argued by Johnson, former Head of Product Development

"Yes, I think that it's very important to do a retrospective with a team in general on a regular basis. So the more you do it, the more the skill becomes that you just review. This is what happened and you don't like take it too personally. It's not like you are a failure, but it's just because we tried this didn't work. Let's try something else."

In the retrospective sessions, it is also clear it is not about blaming and trying to point fingers at whose fault is this. Besides ad hoc or retrospectives that happened after the project, Vision & Co also does regular retrospectives and post-mortem. To ensure

improvements and solutions are built. Problems and issues that discuss in this meeting also got escalated as shared by Andrew, the Chief Technology Officer:

"So for during each engineering team, you do retrospective, every two to four weeks. Do they, do it because they want to improve things? Right? Let's do the usual start, stop, continue nothing, right? That's for the regular team, the regular tech team. If there were any incidents, meaning, outages or some critical thing happened, then we'll do a post-mortem after the incident. Right? Because usually incidents got escalated. Right? And then we will then do we, of course, have a war room, we fix the problem, like everyone on the team fixes a problem. After that, we do a post-mortem. And we published the incident and post-mortem report to the team. So this kind of like what happens in tech."

One of the critical ways in learning from failure is the documentation process to record issues, solutions, and process, so people have a look and learn from mistakes or failure that is experienced by other people. One of them is the report that is shared every month and every quarter where they shared key learning as described by Veronica, Product Marketing Launch Team Lead as follows:

"are just standard sort of reviews at the end of every quarter or the end of every month, you view is status reacher the target? And ...there is a review that we do, and we have done, there is always the question of key learnings. Like all of our reviews and lists in our like product marketing team always includes the question of key learnings."

One of the essential efforts to build habit and culture is by integrating the process of learning and experimentation into the business process. In this case, Vision & Co integrated their learning process through a performance management framework called Objective Key Result as described in the statement below from Maria, Senior Enterprise Account Manager as follows:

"So when you when we list down our OKRs, then we have mindset years OKRs and may have initiative based OKRs. So and then then, because it is on our goals, and it is your priority, it helps you to prioritize your everyday work sometimes can be quite challenging, to be honest."

Not only OKR, but learning from failure in the context of driving innovation also conducted by Vision & Co. They allocated a certain percentage of the time to innovate and learn as shared by Sharon, Director of Premium Subscription as follows

"Think positionally that we have meetings where people share these experiments. It's part of the OKRs of the teams where they need to do certain things, to share the experience. Yeah, shared experience, then you need to plan those experiments. As we always say that innovation is one of our values. So you need to plan certain things to grow your OKRs. So it's embedded in your day-to-day activity. You kind of need to spend 20% of your time on experiments"

Large organizations with a fast pace has their own complexities and challenges in driving learning from failure. Each individual and team naturally will try to find the most convenient and efficient way to achieve their Objective and Key Results. With various functions and people, the way they do learning can differ from one another. In some ways, this might affect the quality of learning from different people and different functions. Furthermore, the majority of people do not know the process of learning from failure that is conducted by other functions. The worse condition is that the learning from failure fails to serve its purpose as people did not well informed about the learning process that is done by other people or other functions. For instance, the marketing team has demos as part of their learning from failure process, however, it is mentioned it is a department base, so perhaps the learning from one team could not be applied in other functions as shared by Mario, former Chief Marketing Officer as follow:

"I definitely feel that the marketing team does for sure demos, in which this was a methodology. In other cases, this wasn't implemented in this way. So what I would say is that it was very department base, rather than company wise, and what I will say is that, to me, the failure in the way in which we're approaching it was also because we were really able to look at failure from a point of view from a data point of view"

Robin, Full Stack Developer shared that the technology team has their own retrospective meeting which simple and efficient, however, Robin does not know how another function is learning as elaborated below:

"I don't know, I can tell. I really don't know. But the tech teams use most of the tech teams use Retrium, the app that has different templates for like this kind of retrospective meetings, the ones that we normally do is one that we have like just simply a simple like three columns, like things that we can do better things that went really well"

Another instance from another department is the focus on the implementation of learning from failure their part of the organization and don't really know that is happening in other function beside marketing as shared by Leo, Head of Subscription Marketing:

" Absolutely, I think this is one of the number one things that I'm trying to implement within the company is that everybody should be a part of innovation within the company. Because right now, it's just a few teams, marketing teams does it, you know, the tech team doesn't, but what about other teams, so for a company to grow, you know, on a rate of what nobody has ever seen, everybody in the company should be able to look at, you know, these loopholes, because everybody talks to different members and Vision & Co users, they have a lot of these things. So what I'm trying to implement is this culture of innovation, across the company, not just a few teams, and making sure that everybody in the company can actually send ideas and can innovate from their own side, and we can educate everybody in that."

Our empirical data also shows that even for the company-wide processes such as people performance management, some people or some function does not see how it is fitted with them and decided not to put priority. OKR Framework for instance is not really applied to the tech team and they don't discuss it as described by Robin, Full Stack Developer.

"Okay, the Vision & Co the tech team is a bit different in terms of the organization of work, what happens is the company as a whole has OKRs, and most of the employees have even been like their personal OKRs that they track and that they're used for their evaluation. Within the tech team, we don't have our personal OKRs. And we don't work directly with the OKRs. On a daily basis, what happens is that some of our tasks, the epics, are kind of linked together with the OKRs of the company. And they prioritize like accordingly. But on a day-to-day basis, we don't really see the OKRs. We don't talk about the OKRs."

And this view also appear both in individual contributor like Robin and also coming from Andrew, Chief Technology Officer. He also shares how the tech team as a support group will adjust with other functions.

"Right now? Okay, this is something that tech doesn't actually follow right now. Right? So the reason is, that we have no, we are not figuring out how to do it best because right now technology functions more like a support group. Right? Meaning, that we have a lot of departments and marketing business and all that. Right. They hope they all have the OKRs. Right. Okay, requires technology to do something. Right? Hmm. The conflict here is that if we also have our own okiya, how do we then prioritize between them? Right, it becomes a conflicting thing, right? So we ought to not do Okay, on our end. Right, prioritize between our business needs. And then we do that thing, right? So if we need any OKRs or any kind of goal setting, we do it internally, in our own team, right?"

4.6 Recap of Analysis

To summarize, based on our analysis Vision & Co shares the view that failure is information and acknowledges the need for analysis. Vision & Co people also "Walk the Talk" in their learning from failure. Managerial practices that they use show that it is practiced across departments and across levels. Marketing and Technology departments especially share continuous practices, meetings, discussion, and regular analysis in their business process. Allocating space, time, and resources to learn from failure appear constantly in their routines. However, we also acknowledge the complexities of practices by managers and the "silos" approach to practicing learning from failure, whereas the analysis is focused within the teams and is not sufficient at the organizational level.

Chapter 5: Discussion

This chapter interprets our data and links it with the relevant theories. The analysis of our empirical material presented in the previous chapter has explored managers' views on facilitating organizational learning from failure for innovation following the Vision & Co business model change process. In this chapter, we discuss our empirical findings together with our theoretical framework and relevant literature, diving deeper into and reflecting critically on: "Experimentation" and the processes related to testing, exploring the managerial practices that influence learning and innovation; "Normalizing vs. Analyzing" failure and implications for innovation as a process in the organization; Aspects related to psychological safety that is essential for experimentation, candor communication, and constructive conflict; Managerial practices discussion by integrating core processes of organizational learning (Cannon and Edmondson (2005) and the multi-dimensional framework of organizational innovation by Crossan and Apaydin (2010).

5.1 Analyzing and Experimentation

Technology have pushed human beings into more efficient and effective in managing their lives, especially in the business environment. In the case of Vision & Co, the business of education technology is one of the most impacted. Hyper-competition is experienced by Vision & Co, which pushes them forward to win the match. This argument is aligned with Dess & Picken, (2000), who view innovation as one of the critical elements for the organization as their unique selling point in such a changing environment. Vision & Co, from our empirical findings, put experimentation as part of their daily business process. People experiment with new ideas, products, and solutions; the allocation of needed resources creates a base for testing, which is aligned with recommendations for removing barriers by Cannon and Edmondson (2005).

Another element of organization learning from failure shown by Vision & Co is the experimentation process. In Vision & Co, the technology and marketing departments create processes where they specifically create room to identify, analyze, and experiment with new ideas for products and solutions. This is aligned with the key processes of organizational learning from failure (Cannon & Edmondson, 2001).

Furthermore, the marketing department intentionally allocates 20% to 30% of their total time to trial and test a new approach for their product or website. We see this as awareness and direct implementation of learning from failure. The marketing department sees the need to make a failure and learn from it. The technology team has regular retrospective meetings, where people review the recent project or incident and analyze its learnings. These processes show that analyzing part is an integrated and inseparable element of organization learning from failure (Danneels & Vestal, 2020; Cannon & Edmondson, 2005; Danneels & Vestal, 2020).

We see that people in the organization have beliefs and create a working atmosphere that encourages addressing problems directly and productively, as well as experimenting to learn. This is also aligned with the concept of Edmonson (2001) about the shared belief of learning from failure in workgroups. The above analysis strengthens the argument that Vision & Co prioritizes experimentation and embraces learning from failure to support innovation.

5.2   Normalizing versus Analyzing

Our analysis shows that failure is normalized in Vision & Co and viewed as a needed step for the innovation process, which aligns with Danneels and Vestal (2020), who argue that only analysis is contingent on constructive conflict promotes innovation. The company managers also identify diverse practices for analysis, and the view is a significant activity. The key practices of Vision & Co on normalizing and analyzing are summarized in table 3.

Whereas the practices for normalizing create a base for experimentation, which was discussed earlier, it is essential to move beyond "it's okay to fail", which is now fashionable, especially in tech companies to learn from failure, which doesn't happen automatically.

Whereas the failure is the information approach of Vision & Co creates shared meaning, just failing without identifying, analyzing, and reflecting upon takeaways could lead to the repetition of the same mistakes. The practice of retrospective analysis meetings, aimed at reflecting upon the past to improve the future based on projects or incidents, enables the

organizations to withdraw learnings from experiences and remove the technical barriers (Cannon & Edmondson, 2005).

As we've discussed analyzing and experimenting earlier, it is also essential to acknowledge the importance of routines, systems, rules, and procedures often viewed as "deal-breaker" in institutionalizing organizational learning at the organization level (Crossan, Lane, and White, 1999). The practice of retrospective analysis, OKR goal-setting process based on past quarter learning, documentation of activities in a convenient way to withdraw learnings and encouragement of data-driven decisions, and regular meetings that encompass diverse types of analysis, all these practices have the potential to leverage the learnings of the individual members.

Table 3. Managerial Practices for Normalizing vs Analyzing based on Danneels & Vestal (2020) featuring Vision & Co Case-study

Normalizing: tolerating failure as a necessary part of the innovation process	Analyzing: purposeful attempts to convert failure experiences into knowledge
Practicing shared belief that failure is information, that is promoted by CEO and management	Ensuring analysis and shared takeways by by carrying out regular team retrospective meetings and having incidental discussions
Viewing failure as part of innovation and setting up process for hypothesis testing, experimentation	Creating space for discussion through prompt daily meetings (daily scrums), weekly ideas evaluation meetings, management team and cross-functional get-togethers, and sharing key learning across organization
Allowing failure to happen without instilling mechanism to learn from it	Using past learning and results of innovation processing for goal-setting via OKRs
Creating safe space for discussion and acknowledgement of failures	Documenting experiments, hypothesis testing, learnings (databases of experiments, reflections and lessons learnt)
Micromanaging the experiments taking away ownership for the result	Empowering employees to fail to learn by creating safe space, providing resources and learning, and ensuring alignment of experimentation with organizational goals

5.3 Psychological safety

One of the aspects that appear significant in Vision & Co is how the majority of the interviewees mention "no blame" was implemented when they face failure in the process of innovation or operational activities.

This approach was shared across levels from top management down to individual contributors. Most of the managers mentioned that focus on analyzing the cause of the problem and seeking the proper solutions. No Blame was ensured by the managers in the process of analyzing hence it creates psychological safety in Vision & Co working environment. This is aligned with Kahn, (1990) that emphasizes that people in the organization need to feel safe first before they can be open and clear in discussing the failure or issues that happen in the workplace.

Furthermore, psychological safety is one of elements to ensure happened in organizational learning from failure is a key process (Edmondson, 1999) In the identifying process, we need open communication, and candor in the discussion that will enable the organization to clearly see what is the issues and learning from failure. Identifying the root cause is the base and foundation for good analysis. All of these supportive environments is critical to the learning process which is an important element of innovation and learning can only happen when people in the organization experience favorable and positive relationship (Carmeli, 2007)

Looking at Cannon & Edmonson's (2001) concept on learning-oriented beliefs about failure, we analyze that people in Vision & Co discuss mistakes and error in a more comfortable situation. This means that people don't hold back, or cover mistakes and failure. Vision & Co practices open communication and candor discussion which support psychological safety in the organization.

5.4 Managerial Practices

We propose a combination of managerial practices based on the Vision & Co case study, that contribute to withdrawing lessons from failure to enhance innovation across two dimensions:

- key processes of organizational learning from failure: identifying, analyzing, and experimentation that we proposed by Cannon and Edmondson;
- determinants of innovations that reflect dimensions of leadership (management and board ability to innovate), managerial levers and business processes.

This integration reflects the multidimensional view on learning and innovation in the organization process in an organization, the practices contribute to intuiting, interpreting, integrating, institutionalizing learning, links the individual, group, and organizational level by identifying practices that help withdraw, codify and communicate lessons learned from unsuccessful attempts (Crossan, Lane, & White, 1999; Cannon & Edmondson, 2005; Kolb 2015; Crossan & Apaydin, 2010); Danneels and Vestal, 2020).

At the leadership level, we've identified three practices for identifying failure to innovate: Growth mindset, the CEO's ability to tackle failure as an opportunity to learn; acknowledging failure when happened, which are aligned with the concept of shared belief by Cannon and Edmondson (2001) and growth mindset by Dweck (2006). We would like also to point out that not acknowledging failure in time raises the risk of losing information and repetition of mistakes, therefore it is essential that the manager creates space for discussion and analysis of what happened.

The managerial lever for identifying failure is exercised by the practice of goal-setting using OKR whereas it is also necessary to state lessons learned in the past quester, and open communication across levels with openness to explore the roots of the causes. This approach resonates with Danneels and Vestal, (2020) views on the necessity of constructive conflict for innovation.

At the business process level Vision & Co fosters learning and innovation by having daily scrum meetings that enable sharing if something went wrong; growth meetings for ideation where propositions for experiments are being discussed, assessed, and prioritized. The shared view on the importance of documenting experiments and learnings in a convenient way reflects the exploratory testing approach, that is suggested to encourage across the organization by Edmondson (2011).

The practices for analyzing and experimentation reflect the shared belief of the necessity of failure and investigation. The company weekly meetings "Awesomness-Report",

provide a platform for sharing key learning across the organization along with other information about the company. At the business process level, the marketing team's approach for regular evaluation of experiments (hypothesis), testing, and retrospective (debrief) team sessions contributes significantly to codifying, exchanging learnings, and ensuring the institutionalization of new knowledge.

Our case study shows that experimentation is an essential part of Vision & Co, and balancing the exploration and exploitation for strategic renewal is performed through practices across organizational levels (Levitt and March 1988; Crossan, Lane, & White 1999). At the leadership level, the engagement of top management in experimentation signals the vital importance and the behaviors for learning; the company's "directly responsible individual" practices enable to empower more junior employees to "learn to fail" by providing the opportunity to lead (Cannon & Edmondosn, 2005). The company also allocates time and resources needed for innovation, instills routines, and creates space for discussion, enabling overcoming barriers embedded in social and technical systems (Cannon & Edmondosn, 2005).

Our conversations with Vision & Co led us to discover a combination of practices; however, by exploring the perspectives of diverse team members, we have also found out the lack of consistency and, in some cases, regularity expressed by employees and sensed by us through analysis. An important discovery is that customization of practices in each department creates the feeling that learning happens in silos of function or project teams; however, as Andrew, Chief Technology Officer, pointed out, "the muscle for a retrospective on organizational level could be strengthened." However, the fragmented nature and diversity of practices across teams also demonstrated that despite the lack of communication between "silos," innovation is happening, but that influences the tempo of innovation.

Table 3. Managerial Practices Fostering Organizational Learning from Failure and Innovation Framework (integrating the key processes of organizational learning from failure by Cannon and Edmondson (2005) and the multi-dimensional framework of organizational innovation by Crossan and Apaydin (2010)

Level / Process	Leadership (Individual and Group Level)	Managerial Levers (Organizational Level)	Business Process (Process Level)
Identifying	Growth mindset CEO ability to tackle failure as opportunity to learn Acknowledging failure when happened	Goal-setting using OKR considering lessons learnt Open communication and constructive conflicts	Daily Scrum Meetings Growth Meeting for Ideation Documentation of Experiments / Activities
Analyzing	Shared belief about failure being a part of innovation process Managerial capability to encourage reflexivity	Weekly all-company "Awesomeness Report" Exchange of learning from failure between teams	Growth Meeting for Evaluation Retrospective analyses / Debrief; using Retrium online platform Weekly top management meeting include analysis Incidental top management meeting get together
Experimentation	Engaged CEO and Management Direct Responsible Individual method: instilling ownership for innovation	OKR: considering learning for quarterly planning 20% - 30% of time allocation for innovation Knowledge Database of Experiments Time & Budget for Learning & Development	Hypothesis Testing Approach / Experiments Weekly Growth Meetings for Ideation & Evaluation Rate of innovation

5.5 Recap of Discussion

In summary, Vision & Co has shown their focus on organization learning from failure and innovation. Starting from the way Vision & Co management and team members encourage and practice experimentation that is aligned from the strategic level in top management down to the individual contributor level. The experimentation context in Vision & Co also strengthens with how they promote normalizing and the analysis in the innovation process across functions and levels. Failure is considered normal and part of the process for innovation, and not only that, analyzing process appear in almost all core function in Vision & Co. To emphasize, Vision & Co have several practices, especially in the respective function of an experimentation and analysis framework, such as trial and testing and dedicated 20%-30% time for experimentation. This will encourage risk-taking in learning and drives innovation. The learning from failure processes is also supported by the consistency and continuity of people in the organization. Vision & Co has continuous analysis meetings and retrospectives, both regular and ad hoc. Vision & Co also have people from top management to individual contributor to analyze, monitor, and make improvement in their respective innovation process.

On the other hand, in the implementation stage, how each function practices learning from failure is various. For instance, the Marketing and Technology team have different ways, systems, tempo, and depth in their respective learning process, even though they shared the same beliefs on the importance of learning.

Therefore, we see it will add value if we can integrate the key processes of organizational learning from failure by Cannon and Edmondson (2005) and the multi-dimensional framework of organizational innovation by Crossan and Apaydin (2010) to help managers in organizations in navigating learning from failure and navigating innovation process.

Chapter 6: Conclusion

In our qualitative case study, we aimed to explore how managerial practice could impact organizational learning from failure to enhance innovation.

The key findings from the case study of Vision & Co are the following:

- consistent and continuous managerial practice across company levels and functions can ensure the enhancement of organizational learning from failure to foster innovation as a process;
- the practices, the depth, and the tempo of managerial practices for identifying failure, analyzing learnings from failure and experimentation need to be adjusted to the function, however the shared belief "failure=information and requires analysis" has to be instilled across all company employees;
- lack of communication of learning between functions and teams could reduce the capacity of organizational learning from failure and restricts innovation as a process.

Our key theoretical contribution is deepening our understanding of organizational learning from failure and innovation as a process by integrating the key processes of organizational learning from failure (Cannon & Edmondson (2005) and the multi-dimensional framework of organizational innovation (Crossan & Apaydin, 2010) via the managerial practices. Our study proposes a combination of managerial practices that shine a light on forms, codification, and communication of learning from failure in an organization for innovation as a process (Madsen & Desai, 2010; Danneels & Vestal, 2020).

We will now provide an overview of our study's empirical findings, theoretical contributions, limitations, future research, and practical implications.

6.1   Empirical Findings

Our first finding is that Vision & Co employees and former employees have a shared belief in how they see failure, which is aligned with the statements by the CEO. They essentially see failure as a process and information included in their personal or even organizational

learning. Even several employees instantly responded that they don't see a situation where things are not working as expected as a mere failure. Managers and organizations did not only engage with the idea but also applied it by providing space for innovation and a certain percentage of their working time to fail. The executives also shared that providing an opportunity to learn through failure for their junior staff is an essential element, which gives space for growth.

Our second finding is that psychological safety is critical in building a working environment that supports innovation and organizational learning from failure. The managers emphasize that in post-mortem evaluation, retrospective or critical incidents, the focus is on the problem and multiple dimensions that influence certain issues rather than on blaming. The habit of no blaming is seen across functions and levels. The importance of trust and a safe environment is emphasized by employees.

Our third finding is that people inside the organization have little information on how other departments function and are learning from failure. They focus on the practices and habits that matter to their team or department. The engineering department, in this case, even uses the Objective Key Result (OKR) system differently from other departments as they see this as not really relevant to their ways of working. We analyze this organization's focus and incline to silo in the context of the learning process, which creates freedom for choosing routines for each team, however, restricts overall organizational learning.

Our fourth finding is that as a company that has fast pace innovation process or an amount of innovation that is consistently high, then there is a need to ensure the learning from failure as well as the knowledge management system is working well. We found the retrospective process felt not deep enough to really understand the core of the problem, and yet the organization does not have time to go deeper as they need to rush for the next innovation. We found that there is a risk of repeating similar mistakes or solutions that come up that are not addressing the critical problem or even not acknowledging it happened. Furthermore, the knowledge management system and its documentation are critical in learning from failure to ensure people who are now involved in the process can still learn and avoid the same mistakes. Building culture on written documentation of the learning process and inter-function sharing sessions can strengthen the organizational learning from the failure process.

Our fifth finding is that to build learning from failure process, consistency and continuity are essential.

6.2 Theoretical Contributions

First contribution is that our research findings are aligned and emphasize the relevancy of frameworks on organizational learning from failure. Our findings of shared view and framing on failure are also emphasized by Cannon & Edmonson (2001), who argue the importance of shared belief that initiation by the leadership teams. How managers ensure no blaming culture and psychological safety for the team is aligned with the concept of Edmonson (2003) where she emphasized the importance of providing space for people to speak up and give ideas. Our case study also demonstrates the need not just to normalize failure, but also for ensuring the analysis, which is argued by Danneels and Vestal (2020). Thus, we contribute to the growing body of research on organizational learning from failure and innovation by bringing in the manager's perspective.

Secondly, we contribute to understanding the mechanism by which organizations learn from failure by integrating the key processes of organizational learning from failure (Cannon & Edmondson (2005) and the multi-dimensional framework of organizational innovation (Crossan & Apaydin, 2010) via the managerial practices. By carrying out Vision & Co case study, we give further clarity on the consequences and aspects that impact the ability of groups and organizations to learn from failure and create conditions for innovation.

6.3 Limitations

Throughout our thesis, it became clear that our case company, Vision & Co, can be considered a complex and unique case due to its specific focus on education and personal growth. On the one hand, this invites research; given the limited studies available, on the other hand, it also entails the limitation that our findings can not be simply generalized across other companies or industries, as mentioned earlier. However, despite being aware of this limitation, we believe that our findings regarding the practices for fostering organizational learning from failure can be considered as an inspiration and possible tools

for contemporary organizations across all industries. Especially among industries that work in the IT sector and education.

6.4   Future Research

We believe that future research will benefit from exploring managerial practices' impact on organizational learning from failure to enhance innovation in other industries, in particular, marketing companies, as their environment encompasses a fast-paced innovation process. Moreover, it would be helpful to research the process of institutionalizing organizational learning from failure to foster innovation, ensuring the interconnection of the lessons learned between diverse teams and routines that contribute to continuity and consistency. Additionally, the research could be done to understand the specifics of communication of organizational learning from failure and innovation by exploring the practices of managers of different organization functions, as this could provide more context-specific and comprehensive insights.

6.5   Practical Implications

After analyzing our findings and connecting them with current situations and future possibilities, there are major areas that can be referenced for organizations in building a culture of learning from failure. Our findings are specifically relevant also for organizations and industries that are facing constant demand to produce innovation.

Starting from individual interaction between subordinates and managers. It is critical for managers to create a relationship that fosters psychological safety for the team. Building the mindset about failure as an opportunity to learn can be the first step to having an individual and team have a positive and constructive attitude toward failure. Investing time and effort to ensure people in the team and organization have the same belief will be critical.

Listening and empathy can be the next step to making more effective learning from the failure process. It will enable managers to have a better understanding of the situation and different perspectives before taking the right steps.

Subsequently, at the organizational level, routines and tools in place will support the continuous learning from failure that will improve innovation as a process in an organization. Routines such as regular retrospective and post-mortem discussion. This will grow the discussion toward the issues and solutions rather than blaming people for failure that happens. Managerial work to plan, implement, track and monitor the continuous improvement of the learning process will be critical to ensure learning is absorbed and used for creating better processes and innovation. The overview of the management practices is reflected in table 4, integrating key processes of organizational learning from the failure framework by Cannon and Edmondson (2005) and the multi-dimensional framework of organizational Innovation by Crossan and Apaydin (2010) based on the case study of Vision & Co. This framework helps the managers navigate the learning from failure and innovation, considering its complex and multilevel processes.

Ultimately, we hope that shining light on learning from failure, experimentation, analysis, and innovation, will benefit practicing managers and academics. As we resonate with Roosevelt that "A smooth sea never made a skillful sailor," we hope that our research will help managers navigate the complexity of environments to foster organizational learning and innovation.

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Annexes

Annex 1. Interview Questions

The list of questions that were used during the interviews is presented below. However, as we carried out semi-structured interviews, the questions were adjusted depending on the role of the interviewee and conversation flow.

1. Could you share about your current role in the company?

2. What kind of project/innovation is considered a failure in your company?
   ○ How do you identify failure in your work at Vision &Co?
   ○ Could you share some examples of projects/innovations that failed?

3. What are your reactions as a manager when failure happens?
   ○ What did you feel or experience? How do you behave?
   ○ What are your practices to respond to failure as a manager?

4. What about your supervisor/boss/ direct report reactions?
   ○ Which of your manager's reactions enhance organizational learning from failure?
   ○ How do your manager's reactions restrict organizational learning from failure?
   ○ How do you see learning from failure and experimentation being implemented at your team and Vision & Co as an organization?

5. How do you see learning from failure being implemented at Vision & Co?
   ○ What practices contribute to analyzing failure at Vision & Co?
   ○ What practices foster experimenting at Vision & Co?
   ○ What restricts learning from failure at Vision & Co, in your opinion?
   ○ What approaches to organizational learning from failure could be improved?

Annex 2. List of Case Study Participants from Vision & Co company

In this annex, we present the list of representatives of Vision & Co who took part in the research.

The initial conversation was also held with the former Head of People and Culture to explore prospective topics for the study and influenced the research design; however, we didn't include this conversation in empirical data as it was held during the very early stages of research and was not recorded.

1. Chief Technology Officer - Andrew
2. Chief Marketing Officer (former) - Mario
3. Director of Premium Subscriptions (contact person) - Sharon
4. Full Stack Developer - Robin
5. Head of Community & Events - Hui Lin
6. Head of Customer Experience - Audrey
7. Head of Marketing Communication - Will
8. Head of Product Development (former) - Johnson
9. Head of Subscription Marketing - Leo
10. People Operations Manager - Rudy
11. Product Marketing Launch Team Lead - Veronica
12. Senior Enterprise Account Manager - Maria
13. Chief Executive Officer - Bobby *

*A public video interview with the CEO of Vision & Co was analyzed in this case study