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# Disruptive Business Model Innovation: Incumbent's perspectives and approaches to competitive advantage generation

by

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# Abstract

Today's rate and speed of disruption are more significant than ever, compelling firms to find innovative ways to meet ever-changing market demands. Aside from innovation in products and services, incumbent firms have been urged to create and offer new values by innovating their business models to meet these demands. Since minor changes to business models have proven insufficient for generating competitive advantage, it has been suggested that firms adopt Disruptive Business Model Innovation (DBMI). Due to the fact that prior research has been focused on dynamic capabilities to explain the nature of DMBI, this paper focuses on understanding the phenomenon of DBMI in relation to organisational capabilities. The study seeks to determine how DBMI unfolds in incumbent multinational firms, their strengths, struggles and key organisational capabilities (OCs).

Through the triangulation of data obtained through ten in-depth interviews and examining internal and external documents, the study conducted a thematic analysis to draw empirical conclusions. The research shows how incumbent firms are open to find alternatives and explore new approaches to their Business Model (BM)s despite the barriers and organisational structures that resist disruptive changes. By being aware of their strengths and actively working on improving their weaknesses, firms are implementing DBMI continuously to maintain a competitive advantage. In light of these research findings, the study contributes to the development of theoretical knowledge on DBMI and OCs, as well as practical insights into how DBMI can be implemented in incumbent firms.

## Keywords

Business Model, Business Model Innovation, Sustaining Business Model Innovation, Disruptive Business Model Innovation, Organisational Capabilities, Incumbents, Strengths, Challenges, Process

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# 1 Introduction

*This chapter introduces the research topic. By presenting the problem background and its relevance, the chapter outlines the concept of business model innovation (BMI), DBMI, and OCs. It provides an overview of the gaps in the field, identifies research aims and objectives, and outlines the research question to address them.*

## 1.1 Background

Intense global competition, increasing market volatility, ever-changing consumer demand, and shortened product life cycles have led to rapid changes in the environmental variables inspiring researchers to label the current century an era of continual disruption (Foss & Sibai, 2015; Kumaraswamy, Garud & Ansari, 2018; Schmidt & Scaringella, 2020; Tushman & Andersson, 1986). As a result, not only digital-based industries have been severely disrupted and forced to innovate, but also traditional industries such as hotels and taxis (Pisano, 2015; Rayna & Striukova, 2016). Although the current business model may be well functioning, the firm must simultaneously explore potential opportunities in order to remain competitive (Christensen, McDonald, Altman & Palmer, 2018; Si, Zahra, Wu & Zeng, 2020). Business Model Innovation (BMI), which is the successful recognition and exploitation of ideas for enhancing value creation, delivery, and capturing, is considered as one of the critical success factors for various firms (Foss & Sibai, 2015; Sosna, Trevinyo-Rodrigues & Velamuri, 2010; Wirtz, Pistoia, Ullrich & Göttel, 2016).

As a process, BMI can occur in various intensities, including *incremental*, *radical*, *open*, or *disruptive*, and is considered as an iterative process for identifying, evaluating, and exploiting ideas within the incumbent firm (Trott, 2012). These firms can respond to market conditions that endanger their existence in a variety of ways, including carrying on, as usual, adopting the innovation promptly or adopting it later (Zach, Nicolau & Sharma, 2020). In addition, they can also enter the market by utilising different business models than those currently in use (Markides, 2015; Zach, Nicolau & Sharma, 2020). The implementation process can be quite challenging though due to the bureaucracy, established values and norms as well as the complexity and barriers that exist (Chesbrough, 2010; Hoffman, 1999; Schneider & Spieth, 2013).

Another challenge for incumbent firms is keeping alignment across the organisations since multiple business models could be running simultaneously (Frankenberger, Weiblen, Csik & Gassman, 2013; Zach, Nicolau & Sharma, 2020). Challenges are often addressed by devising the right strategy (Pisano, 2015; Teece, 2010). The strategy a firm develops is generally individualistic, as firms in the same industry may end up devising different strategies in order to exploit the same business opportunity (Markides, 2015).

Such strategies to explore and exploit business opportunities in generating competitive advantage in today's volatile market conditions has been associated with DBMI. Since business model evolution, a fine-tuned business model change including voluntary and emerging changes (Demil & Lecocq, 2010) or business model adaptation, continuous business model changes to market conditions (Doz & Kosonen, 2010) are deemed insufficient in handling today's ever-changing market conditions (Christiansen et al. 2018; Foss & Sibai, 2015).

The DBMI which is considered as a creation of novel value offerings that ultimately disrupt the organisation or market (Zach, Nicolau & Sharma, 2020), has been widely viewed by many scholars as the most effective strategy for firms to remain competitive (Christiansen et al. 2018; Foss & Sibai, 2015; Schmidt & Scaringella, 2020). The ability to create novel offerings has been associated with organisational capabilities (OCs), which refers to the firm's ability to deploy resources in producing desired results (Helfat & Lieberman, 2002). Since business model changes are complex and involve many elements throughout the entire organisation (Chesbrough, 2010), it is considered vital that alignment be achieved to ensure success (Frankenberger et al. 2013).

Furthermore, because the environment changes continuously, managers and firms must take into consideration numerous factors. Failure to recognise the intricate and closely related OCs processes may result in a lack of adequate insights into how opportunities influence competitive advantage (Grewal & Slotegraaf, 2007). Thus, firms must adapt to the new strategy and utilise OCs in various ways to change their business model or the market itself so that they may gain a competitive advantage (Schmidt & Scaringella, 2020). It has been argued that organisational capabilities play a crucial role in managing the current business and implementing necessary changes (Rogers, 2004). The well-functioning organisational capabilities and the drive for innovation (Paap & Katz, 2004) have been deemed essential in enhancing the overall organisation's efficiency and productivity (Grewal & Slotegraaf, 2007; Mazzucato, 2013; Rogers, 2004).

## 1.2 Research Aim and Objectives

This study aims to gain insight into the phenomena of DBMI in relation to OCs, where there are currently unclarities and misunderstandings, as earlier research has focused mainly on studying the dynamic capabilities to explain the nature of DBMI (Lindgren, 2018; Hopp, Antons, Kaminski & Salge, 2018; Schmidt & Scaringella, 2020). By understanding the strengths and challenges as well as essential organisational capabilities, the study intends to find how DBMI unfolds in the incumbent firms. Additionally, since the DBMI concept lacks clearly defined theoretical constructs (Christensen et al. 2018, Foss & Saebi, 2015; Schmidt & Scaringella, 2020; Schneider & Spith, 2013; Si & Chen, 2020), this study aims to enhance current knowledge and understanding of DBMI.

## 1.3 Research Questions

The following research question has been prepared in order to achieve the research aim and objectives:

*How does disruptive business model innovation unfold in incumbent firms?*

The research question intends to explore the phenomena of implementing DBMI in incumbent firms, understanding the strengths and challenges as well as essential organisational capabilities.

## 1.4 Research Delimitations

There are some limitations to the research as with any empirical study. Firstly, the research includes only incumbents, i.e. firms that have been established for some time. Small and medium-sized firms, as well as start-ups, are not included in this study. As the primary operating locations of the firms are in the Scandinavian region, the report may not necessarily be applicable across all contexts. Further, this study also examines whether the firm is prepared to implement DBMI in the near future, though that is not the main focus of this study.

## 1.5 Outline of the Research

This research paper is divided into several chapters. The study's theoretical framework is presented in the second chapter. The third chapter describes the research methods, including research design, data collection and analysis, and the fourth chapter describes the empirical findings derived from the data collection. Following this, the fifth chapter provides an in-depth analysis and discussion of the data linking with the research aims and objectives. A summary of the research is presented in chapter six, along with implications and future research. The study concludes with references and appendices.

## 2 Theoretical Review

*This chapter introduces the current literature on business models, business model innovation, as well as sustaining and disruptive business models in conjunction with organization capabilities, which forms a basis for our research questions and research design. As a result, readers can better understand what is already known and what is relevant to the study.*

### 2.1 Business Model (BM)

Since the late 1950s, the term business model has been used in several different fields of study, including entrepreneurship, management studies, and innovation (Teece, 2020; Wirtz et al. 2016). By becoming a management lingo in the corporate world over the last two decades, it has been considered the company's strategic tool and source of innovation (Foss & Saebi, 2015). Despite the widely popular concepts in corporate and academia, it is rarely analysed and often misunderstood (Teece, 2010). In the absence of a theoretical basis, definitions vary widely (George & Bock, 2011).

According to Zott, Amit, and Massa (2011), a business model is a design structure such as a set of boundary-spanning transactions. Chesbrough and Rosenbloom (2002) define it as a path that translates innovation into value. Osterwalder & Pigneur (2010, p.14) describe it as the "rationale of how an organisation creates, delivers and captures values". Similar definitions have been seen from various scholars (e.g. Doz & Kosonen, 2010; Leih, Linden & Teece, 2015; Teece 2010). Over time, the following understandings of the business models have been gradually converging. According to Foss and Saebi (2015, p.8), BM is defined as:

*The firm's core logic for creating and capturing value by specifying the firm's fundamental value proposition(s), the markets and market segments it addresses, the structure of the value chain which is required for realising the relevant value proposition and the mechanisms of value capture that the firm deploys, including its competitive strategy.*

The definition covered how an organisation creates, delivers and captures value which is the primary purpose of a business model (Osterwalder & Pigneur, 2010; Teece, 2010; Zott, Amit & Massa, 2011), and therefore, was selected for this study. As a means of describing business models, various frameworks have been used. Johnson, Christensen and Kagermann (2008) used four key components models (fig.1) to describe BM; customer value proposition, profit formula, key resources, and key processes.

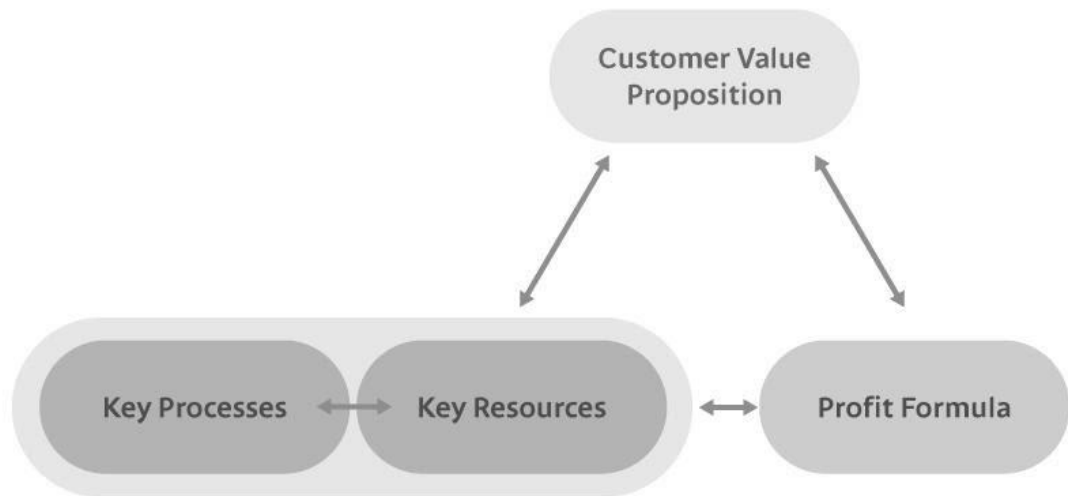


Figure 1: The Four-Box Business Model (Johnson, Christensen & Kagermann, 2008)

Another framework developed by Osterwalder and Pigneur (2010) has become increasingly popular among researchers and practitioners today. This framework contains ten components (fig.2) of the business, including both internal and external components. According to the authors, a change in just one of these elements can lead to an entirely new business model.

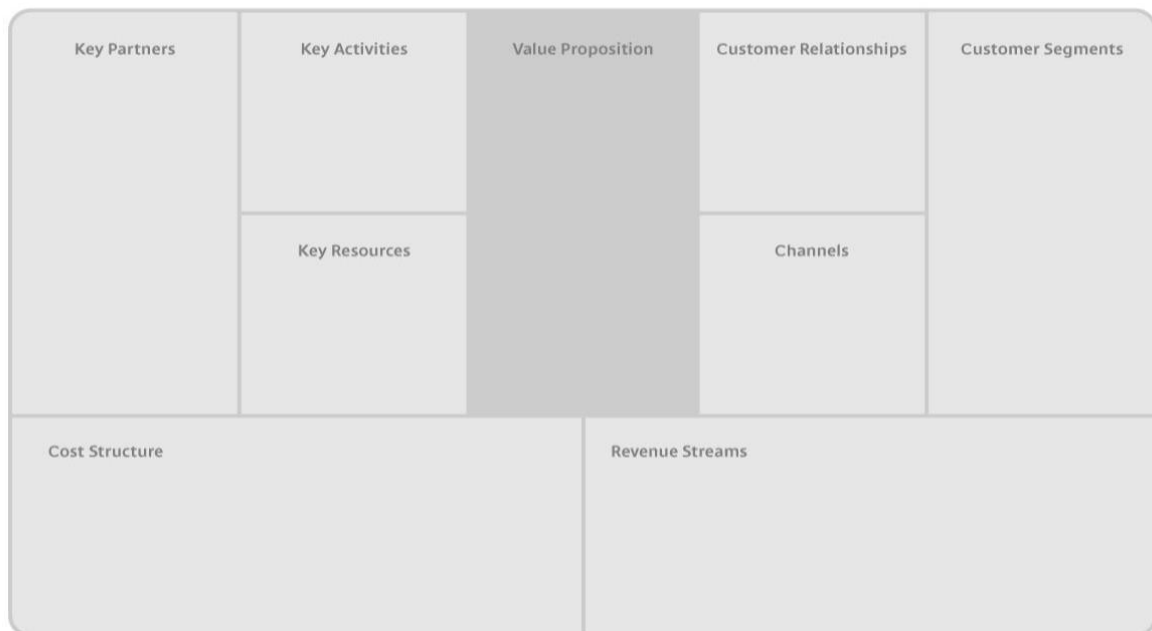


Figure 2: The Business Model Canvas (Osterwalder & Pigneur, 2010)

In today's highly competitive business environment, incumbent firms must have a sound business model to create, deliver, and capture value (Chesbrough, 2010; Teece, 2010). At the same time, given the instability and disruptive forces that are constantly affecting existing models, it should be dynamic, incremental, and experimental (Doz & Kosonen, 2010; Foss & Saebi, 2015; Teece 2010).

## 2.2 Business Model Innovation (BMI)

Business Model Innovation is conceptualized as the art of enhancing value in an existing business model by making changes to it and is viewed as the tree of innovation (Lindgren, 2018; Taran, Boer, Harry, Lindgren & Peter, 2015). It has gained traction in both academia and the corporate world (Chesbrough, 2010; Pohle & Chapman, 2006; Teece, 2010; Zott, Amit & Massa, 2011). In an academic world, different terminologies such as *business model evolution* (Demil & Lecocq, 2010); *business model renewal* (Doz & Kosonen, 2010); *business model replication* (Dunford, Palmer, Benveniste, 2010); *business model erosion* (McGrath, 2010); *business model reconfiguration* (Massa, Tucci & Afuah, 2017) exist. Similar to the definitions, there are various viewpoints on what constitutes innovation, whether it is novel or radical, and how it impacts a company's performance (Foss & Saebi, 2015; Petrovic, Kittl & Teksten, 2001; Schneider & Spieth, 2013). Some scholars argue BMI as an innovation to existing value proposition, revenue model or operating model (Giesen, Riddleberger, Christner & Bell, 2010; Lindgart, Reeves, Stalk & Deimler, 2009), while others argue as a new thing in the industry (Bucherer, Eisert, & Gassman, 2012; Foss & Saebi, 2015; Markides, 2006).

Some authors have taken the softer approach in defining BMI, such as Lindgart, Reeves, Stalk and Deimler (2009), who define it as innovation in the value proposition, revenue model, and operating model. Similarly, Zott, Amit, and Massa (2011) define it as a structure describing how an organization manages and develops its business at the overall business and system levels. Those applying a stricter definition include Mitchell and Coles (2004), who define business model innovation as the process by which an old business model is replaced with a new one aimed at providing products and services that were previously unavailable. Similarly, Markides (2006, p.20) defines it as the "discovery of a fundamentally different business model in an existing business". Regardless, it is evident that BMI represents the change in the way firms create and capture value for themselves and their customers (Sosna, Trevinyo-Rodrigues & Velamuri, 2010). This study considers BMI as "designed, novel and nontrivial changes to the key elements of a firm's BM and/or the architecture linking these elements" (Foss & Saebi, 2017, p.216).

Within the corporate practice, BMI has been regarded as a promising approach for firms to respond to changing environmental contingencies that are intentional and deliberate (Foss & Saebi, 2015; Pohle & Chapman, 2006). Typically, the critical challenge in incumbent firms is not innovation itself but rather the conflict between the existing business models (Chesbrough, 2010). In addition, challenges are further exacerbated by the inherent inertia of the firm and the rapidly changing market conditions; therefore, various factors should be taken into consideration during the process. The list of factors that need to be considered for successful BMI has been outlined in the integrative business model innovation framework developed by Wirtz and Daiser (2017).

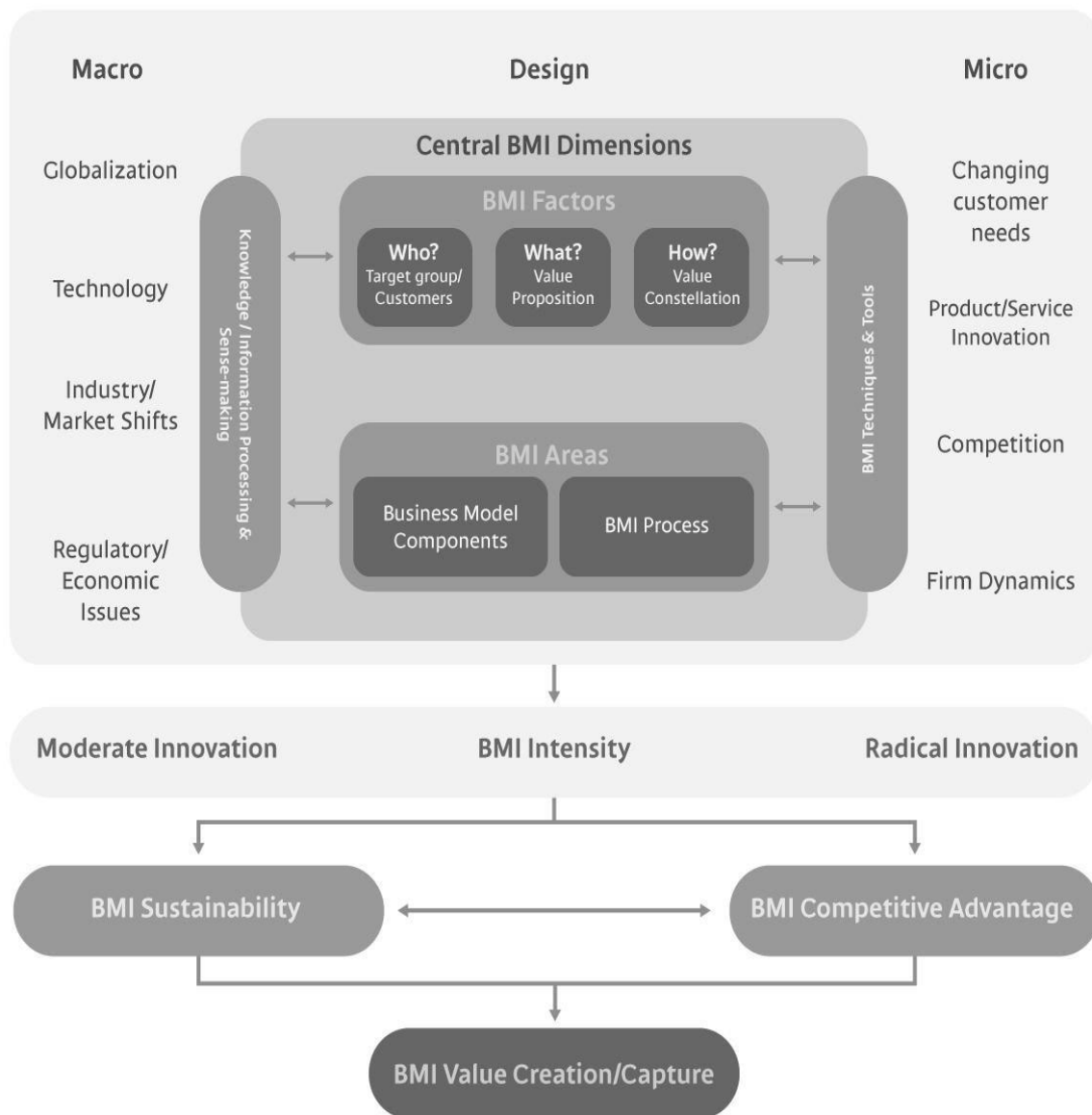


Figure 3: The Business Model Innovation Framework (Wirtz & Daiser, 2017)

Numerous scholars have stressed the importance of processes as critical aspects of the BMI process (Foss & Saebi, 2015; Schneider & Spieth, 2013). A four-stage model has been developed to demonstrate how the BMI is implemented (Frankenberger et al. 2013). By identifying four phases of the process, the authors have included four central dimensions of the framework; who, what, how and why. Accordingly, the study identifies two types of BMIs, as suggested by Christensen (1997), which agrees with Wirtz and Daiser (2017) definitions of innovation presented hereafter.

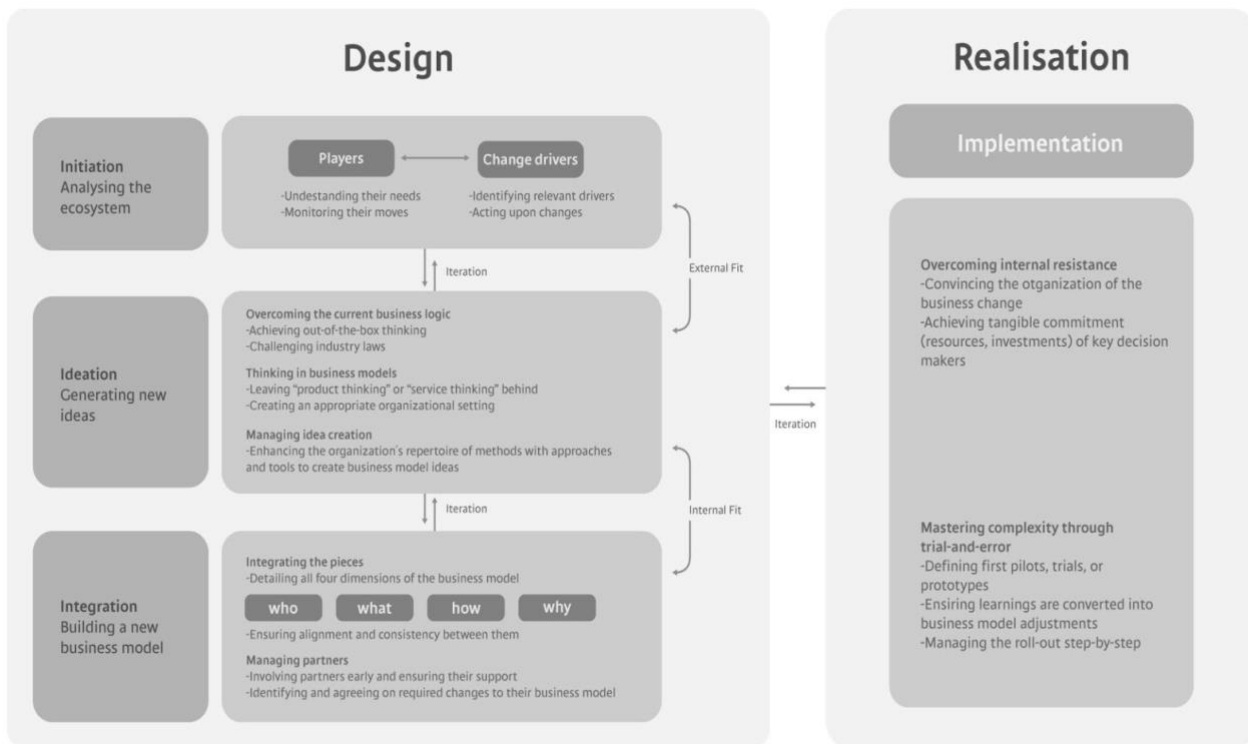


Figure 4: The BMI Process (Frankenberger et al. 2013)

## 2.3 Sustaining Business Model Innovation (SBMI)

According to the concepts demonstrated in this theory, SBMI is *incremental* innovations (Christiansen et al. 2018). It is the change in the existing business models to improve existing products or services, thereby sustaining the current market position (Christensen & Raynor, 2003; Mohan, Ramesh, Cao & Sarkar, 2012). The absence of a standard terminology has led to several scholars using various topologies to describe the BM change. Norman and Verganti (2014) use the term incremental BMI to describe continuous change within a given frame of solutions. Similarly, Foss and Saebi (2015) classify these changes into two categories: *business model evolution* and *business model adaptation*. The first concerns the effective standardisation, replication, implementation and maintenance of the existing model (Demil & Lecocq, 2010), while the second concerns the company's intentional changes to adapt to changing market conditions (Teece, 2010).

In SBMI, companies make minor changes to their products and services to improve performance, cost, and desirability without creating new markets or value networks (Norman & Verganti, 2014). Generally, improvements are carried out after listening to the customers and making the necessary changes to meet their needs (King & Baatartogtokh, 2015). Improving consistently, often being better than before, targets demanding high-end customers with a better offer than previously offered (Mohan et al. 2012; Schmidt & Druehl, 2008). They further contend that a spin-off does not necessarily occur in SBMI as innovation is intended to improve SBMI's ability to serve the needs of its current customers base.



## 2.4 Disruptive Business Model Innovation (DBMI)

Many scholars perceive the concept of DBMI to lack an adequate understanding of its core principles (Christensen et al. 2018; Foss & Saebi, 2015; Schmidt & Scaringella, 2020; Schneider & Spieth, 2013; Si & Chen, 2020). Many consider DBMI to be a disruptive innovation, and the terms are often used interchangeably (Christensen et al. 2015; Gilbert & Bower, 2002; Mao, Su, Wang & Jarvenpaa; Markides, 2006). The concept of disruptive innovation was initially proposed by Christensen in 1997 and has been widely discussed and employed for over two decades (Christian et al. 2018; Schmidt & Scaringella, 2020; Schneider & Spieth, 2013). This was defined in the first place as the introduction of new products or services, ultimately disrupting the current market and value chain and replacing the incumbent business and value propositions as well as alliances (Christensen, 1997).

As a consequence, many scholars believe that DBMI is a process through which new entrants disrupt the market, bringing a radical change to the market, disrupting leading and stabilised companies, and making their existing business models obsolete (Christensen & Raynor, 2003; Cozzolino et al. 2018; Gassmann, Frankeberger & Csik 2013; Johnson, Christensen & Kagermann, 2008; Markides, 2015). In time, this concept, which originated with product and service disruptions, has been observed to expand to a wide range of innovation categories, including business models (Lindgren, 2015; Mao et al., 2020). As such, DBMI is viewed as a form of innovation in the business model and its elements, in addition to value propositions and technologies, and changes to any of these elements can result in DBMI (Foss & Saebi, 2015; Lindgren, 2015; Giovana, Behr & Marcolin, 2018). In their opinion, the DBMI is an integral part of the BMI, which is regarded as the tree of innovation, and therefore the two are interconnected.

In addition, two perspectives of DBMI conceptual definition can be seen in academia. One argument contends that the DBMI should be new to the firm, its customers, industry, and even the world (Christensen et al. 2018; Markides, 2015), while others contend that the strategy involves seeking new forms of value creation rather than simply delivering a new product or service (Bashir, Yousaf, Verma. 2016; Lindgren, 2018). Based on these various perceptions, Giovana, Behr and Marcolin (2018) have elaborated the characteristics that conceptualise and qualify disruptive business models.

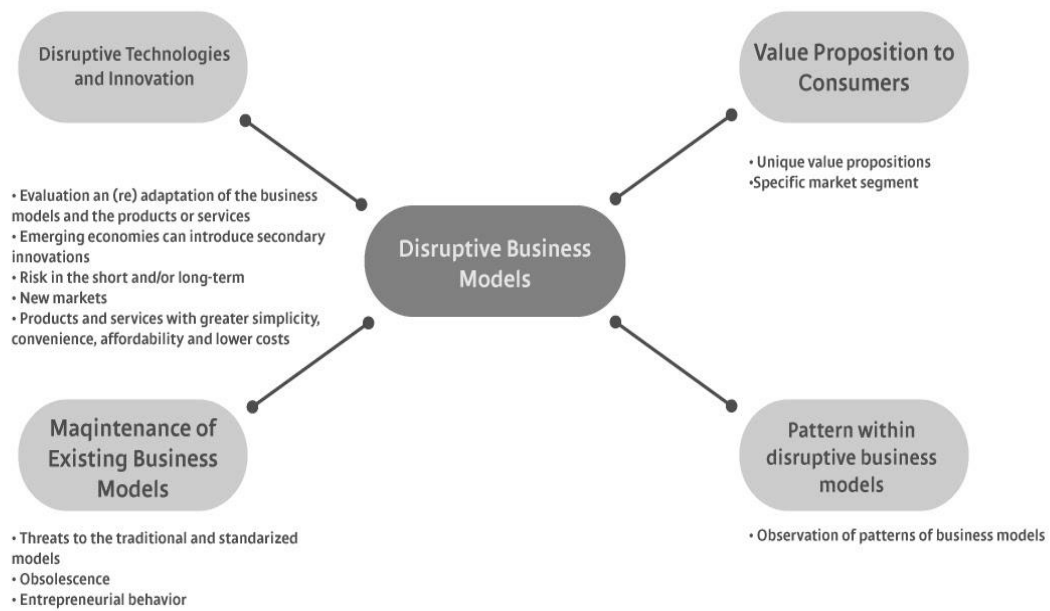


Figure 5: Characteristics of Disruptive Business Models (Giovana, Behr & Marcolin, 2018)

Theoretically, scholars have attempted to define DBMI in a variety of ways. For example, Zach, Nicolau, and Sharma (2020) define DBMI as creating new offerings and, at times, new actors in the marketplace. Markides (2015) asserted that DBMI creates new markets by retaining current customers and attracting new customers. Foss and Saebi (2015) noted that it is a mechanism for rewriting the rules of the game by introducing novel ways of creating, delivering, and capturing values. Cozzolino et al. (2018, p.1170) stated that DBMI is the business model change that "disrupts the established model or redefines what value creation and capture mean". Others have expressed similar views (e.g. Giovana, Behr, and Marcolin, 2018; Kumaraswamy, Garud & Ansari, 2018). Considering these existing concepts, this study defined DBMI as:

*A firm's response to market conditions by creating novel value offerings, either by disrupting its existing business model or by disrupting the marketplace to generate a competitive advantage.*

There has been the observation that well-known incumbent firms retain their competitive advantage by continuously leveraging their BMs, BMIs, and DBMIs (Lindgren, 2018). Airbnb and Uber have disrupted business logics and ecosystems through business models based on the sharing economy, disrupting the taxi industry and hotel industry, respectively (Aminoff et al. 2017). With the introduction of new mobile operating systems, applications, and ecosystems, Apple and Google disrupted the market, nearly eliminating market leader Nokia (Ansari & Krop, 2012). Similarly, Sony and Microsoft have disrupted the video game industry by introducing PlayStation and Xbox (Mao et al. 2020), and RyanAir has disrupted the European airline industry by introducing low-cost airlines (Lindgren, 2018).

Interestingly, the same companies have been observed to disrupt their own business model or market in different contexts. A typical example of this is Netflix, which initially disrupted the market when it introduced online movie rentals and enhanced customer experiences. It then disrupted itself by entering into streaming media and later into production (Lindgren, 2018). The same can be said of IKEA, which disrupted the furniture industry with the flatpack revolution and has disrupted its business model multiple times since, such as entering the food business, second-hand furniture sales, and the modular house business (Milne, 2020). As yet another example is Apple, who disrupted the market of Walkman's, CDs, MP3 players, record stores with the release of the first iPod-portable media player and later their own business model with the introduction of iTunes, media library and music marketplace (Anthony & Putz, 2014).

## 2.5 Organisational Capabilities (OCs)

As pioneered by Penrose in 1959, the concept of capabilities has a long history and is believed to have deep roots in the organisations (Day, 1994). Since capabilities are considered the primary means by which firms identify sources of sustainability, they have received considerable attention from the academic community (Daviers & Brandy, 2000; De Saa & Garcia-Falcon 2002; Rogers, 2004). The terms *ability*, *competence* are used interchangeably with capabilities (Ulrich & Smallwood, 2004).

Numerous scholars have defined organisational capabilities in a similar manner. For example, De Saa and Garcia-Falcon (2002) define OCs as a firm's ability to use its resources to achieve the desired outcome. Day (1994, p.38) defined it as the "complex bundles of skills and accumulated knowledge, exercised through organisational processes, that enable firms to coordinate activities and make use of their assets". To Ulrich and Smallwood (2004), organisational competence consists of an organisation's collective expertise, skills, and competencies to meet changing customer needs. In a similar manner, Goldstein and Hilliard (2008) view OCs as an organisation's ability to mobilise and allocate resources most competitively.

It was argued by Helfat and Lieberman (2002) that OCs are the ability to deploy resources accordingly, which, if applied in a manner aligned with the market opportunities, will result in competitive advantage (figure 5). A recent article by Grant (2018) stresses the importance of not mistaking the OCs of a firm with a simple result on the resources on which they are based. At the same time, he elaborates on the outcomes of OCs that are implemented over time, producing highly developed standardised and efficient routines with reliable coordination; this, when applied to routinely processes, generates reliable outcomes, but when facing new situations or in this case innovations, may bring some difficulties due to the static qualities of these routines.



Figure 6: The links between resources, capabilities, and competitive advantage (Grant, 2018)

For this research, researchers considered a specific definition of OCs that encapsulates all the variables for understanding its role in DBMI. "Information-based tangible or intangible processes that are firm-specific and are developed over time through complex interactions among the firm's resources" (Amit & Schoemaker, 1993, p. 35). This definition leaves the door open to any kind of process, tangible or intangible. Processes that a firm knows how to implement over time to accommodate to a specific outcome, by leveraging and combining existing resources, but most importantly the mentioning on the firm specificness, which implies uniqueness and therefore an aim for competitive advantage, as the quest for it stimulates the search for innovation and successful innovations allow some firms to dominate their industries (Grant, 2018).

In the core base of a firm's internal structure lies the resources, defined as the firm assets that can be categorised as tangible (financial and physical resources), intangible (technology, reputation, and culture), or human (specialised skills and knowledge, communication, and motivation) (Grant, 2018). Rather than something available to a firm, a resource is something it has access to (Größler & Grübner, 2006), as individual resources do not confer competitive advantage; they must be combined to create organisational capabilities (Grant, 2018).

## 2.6 DBMI and OCs

Organizational design and capabilities had been perceived as distinct entities, but these are now considered to be interconnected with business models (Foss and Saebi, 2017). The authors also argue that change in the business model may have an impact on organizational structures, urging firms to have a good organizational design, sufficient resources, and the ability to recognize opportunities and exploit them in a timely manner. Due to the fact that the OCs support multiple lines of business (Day, 1994), they are recognized as critical elements to the management of the current business as well as changing the business model in order to achieve sustainable growth and generate competitive advantage (Rogers, 2004).

Since the disruption of BMs and entire industries is emerging as the new norm, environments have become more unstable, making internal resources and capabilities much more reliable bases for strategy than what external markets have to offer (Grant, 2018). This is important since it has implications for the ability of a company to shape its internal practices when faced with new challenges including changes in its boundary and organizational structure and control (Foss & Saebi, 2015; Zehir & Acar, 2006). It is therefore imperative for companies to identify and determine which are the resources and capacities present or absent, in order to maintain a competitive advantage (Day, 1994).

## 3 Methodology

*This chapter presents and discusses the research methodologies, including research design, data collection, and analysis. By presenting and discussing the study's methodology, the chapter describes the reliability and ethical considerations of the study and illustrates the process by which the study arrived at its conclusions and discussion.*

### 3.1 Research Approach

Considering the methods for approaching the thesis; deductive, inductive and abductive, the *abductive* method seemed most suitable given the nature of the research, which aims to explore and provide the best explanation of the DBMI concepts and phenomena. The deductive approach implies testing the theory and working with the hypothesis, whereas the inductive approach involves examining the occurrence of a particular issue and thereby contributing to the building of theories (Saunders, Lewis & Thornhill, 2009). The third approach, the abductive method, starts with the enigma and surprise of the phenomenon and seeks to discover and explain it (Bell, Bryman & Harley, 2019).

### 3.2 Research Design

Taking into account the qualitative, quantitative and hybrid methods of research design, the study chose the qualitative approach. Quantitative research is usually connected with a deductive approach, working with numbers and statistics in falsifying or confirming the predetermined hypothesis, whereas qualitative research is connected with exploring human understandings and perceptions and generating or adding theory (Bell, Bryman & Harley, 2019; Denscombe, 2010). Given the lack of existing research on how DBMI unfolds in incumbent firms, the research is complex and exploratory, requiring an in-depth understanding of the topic, and thus, suited for qualitative methods (Denscombe, 2010; Bell, Bryman & Harley, 2019; Randolph, 2008).

Furthermore, the study adopted a cross-sectional approach by examining firms of varying sizes and collecting data at a single point in time (Bell, Bryman & Harley, 2019). With triangulation in collecting data to enhance the validity and credibility of research, data was examined and compared with previous research and insights were provided in relation to the research topics and questions (Saunders, Lewis & Thornhill, 2009). In addition to the primary method of collecting data, i.e. interviews, the study also collected information from the internal and external documents of the firms.

### 3.3 Data Sampling

Since the study aims to provide information about complex topics of DBMI and OCs, samples selected in the study were based on expertise, skill and experience. This fits into the purposive sampling, a *hand-picked* sampling where the selection of units (e.g. people, firms, and documents) are chosen with a direct reference to the research questions (Bell, Bryman & Harley, 2019). Here, researchers usually know about the specific people or industry and are more likely to access and receive disclosed data (Creswell 2007; Denscombe, 2010). Similarly, sampling was based on both context and participant perspective. The context and participant sampling are common in qualitative research methodology (Bell, Bryman & Harley, 2019).

When it comes to context, the researchers selected multinational, incumbent firms. As mentioned earlier, DBMI is even more challenging in incumbent firms making interesting topics for exploration. The size and years of operations in the market are vital components to the selection. For the research purpose, a company with more than 15 years of continuous operations in the market has been considered an established company. The market experience, brand recognition, customer loyalty, internal economies of scale, and development of specific core capabilities are taken into consideration for the study.

The last factor in consideration for the sampling on the company's side was the geographical and economic landscape. Being the Scandinavian region, one of the world's most thriving hubs for innovation and recognized by a considerable number of multinational corporations founded, provides a varied sample of companies that have been proficiently innovative since its foundation. The table below presents the descriptions and characteristics of six companies. The companies are represented by the code names associated with their respective industries to guarantee anonymity.

*Table 1: Sample firm's profile and characteristics*

<b>Company</b>	<b>Description</b>	<b>Characteristics</b>
<b>Furniture Retailer Co</b>	Designer and seller of ready-to-assemble furniture as well as kitchen and home appliances.	Swedish multinational company with approximately 220,000 employees. Operating in more than 50 countries. Founded in 1943.
<b>Food Processing &amp; Packaging Co</b>	Food packaging and processing company, offering a broad range of food storage, packaging, distribution and processing solutions.	A multinational company with operations in 160 countries and over 25,000 employees, based in Sweden. Founded in 1943.
<b>Information &amp; Communication Technology Co</b>	Network and telecommunications company that offers a wide range of services, software, and infrastructure for telecommunications worldwide.	Multinational company with over 99,000 employees in 180 countries with headquarters in Sweden. Founded in 1876.
<b>Fintec Co</b>	A financial service provider offering online financial services to online retailers, both direct and post-purchase.	Swedish-based, with over 3500 employees working in 17 countries. Established in 2005.
<b>Investment Management Co</b>	The software provider for investment management.	Danish company with over 1800 employees and operating in over 20 countries. Founded in 1971.
<b>Community Development Consultancy Co</b>	A consulting firm that specializes in urban development and infrastructure.	Based in Sweden and operating in five countries, with more than 2200 employees. Founded in 1942.

In terms of participants, experienced and knowledgeable individuals working as innovation, research and development as well as business development managers in those firms were approached. Due to their close involvement with the firm's business strategy, these managers provided in-depth insights into our research questions. It is generally believed that managers can provide reliable information about the firm's innovative practices (Snihur & Wiklund, 2019). The following table summarizes the details regarding the respondents. For reference and anonymity purposes, respondents have been given unique names such as "R1" for respondent one, "R2" for respondent two, and so on.



Table 2: Professional background and experience of participants

<b>Respondent</b>	<b>Company</b>	<b>Profession</b>	<b>Experience</b>
<b>R1</b>	Investment Management Co	Head of Open Innovation	20+ years of experience in business strategy development and innovation.
<b>R2</b>	Furniture Retailer Co	Innovation Leader	15+ years of experience creating engaging, meaningful, and innovative user experiences.
<b>R3</b>	Food Processing & Packaging Co	Project Management & External Innovation	20+ years of international experience in business development, product management, project management, marketing, sales, and research and development.
<b>R4</b>	Furniture Retailer Co	Product Owner	8+ years of experience in start-up, management consulting, project management and product management.
<b>R5</b>	Furniture Retailer Co	Roadmap Leader	8+ years of experience in business development.
<b>R6</b>	Information & Communication Technology Co	Senior Program Manager	10+ years of experience as an entrepreneur, innovation manager and strategic business leader.
<b>R7</b>	Information & Communication Technology Co	Global Program Manager	15+ years of experience as a project manager, R&D manager, and program manager.
<b>R8</b>	Consultant	Innovation Consultant	15+ year background in start-ups and product development, supporting numerous firms in their intrapreneurship.
<b>R9</b>	Community Development Co	Innovation Manager	10+ years of innovation, business development, marketing, and start-up experience.
<b>R10</b>	Furniture Retailer Co	Global Head of Accelerator Hub	20+ years of experience in new business development, innovation, and portfolio management.
<b>R11</b>	Fintec Co	Engineering Management Specialist	10+ years in several management specializations, including: Business strategy and operations, design thinking, six sigma, lean manufacturing

## 3.4 Data Collection

Typically, data were collected in two ways; primary and secondary. Primary data collection consists of collecting new fresh data, while secondary data analysis consists of re-analysing existing data (Saunders, Lewis & Thornhill, 2009). Since the research aims to gain an in-depth understanding of how DBMI unfolds in a firm, their relationship with OCs and the process behind, the interview was a preferred primary data collection method. Qualitative interviews allow researchers to obtain a comprehensive understanding of the interviewee's experience without limiting the potential findings (Creswell, 2007; Randolph, 2008). As a result of the researcher's connections to the target samples and adequate time, the primary concerns for the interview method were allayed (Randolph, 2008).

With multiple interviewing methods such as one-to-one, in groups, and over the internet, interviews can be either structured, semi-structured, or unstructured (Denscombe, 2010). In structured interviews, the format of structured interviews is closely controlled, while semi-structured interviews provide flexibility for the researchers to choose from a list of topics and for participants to provide further discussion and raise concerns (Bell, Bryman & Harley, 2019). Unstructured is a very flexible interview in which the researcher introduces the topic or theme, and the interviewee develops ideas and thoughts from there (Creswell, 2007).

A *semi-structured interview* was a preferred choice for the study, which is well suited for understanding process and human behaviour (Denscombe, 2010; Saunders, Lewis & Thornhill, 2009). It also enables researchers to follow respondents in a structured manner and dig into relevant topics during the interview (Bell, Bryman & Harley, 2019; Randolph, 2008). The interviews were conducted primarily one-on-one due to their convenience and digitally, as most individuals were required to work from home due to the Covid-19 pandemic during data collection.

Moreover, the study included a focus group interview to enrich the data. Focus groups cover participants with similar characteristics and gather in-depth data on a particular topic (Randolph, 2008). The respondents can support or challenge certain views, thereby assisting one another to identify and define problems in the domain (Creswell, 2007). For *secondary data*, the data was collected by reviewing *internal and external documents* of the sample firms.

## 3.5 Interview Design

Ten interviews were conducted between April-May 2021. Prior to the interview, participants were provided with a consent form which provided brief information about the research and researchers. In accordance with research ethics, respondents were asked to provide consent before the interview. Using a set of questions that had been pre-constructed to guide the interview, presented in Appendix A, additional questions were added or modified as appropriate to allow respondents to develop ideas and discuss the subject openly.

This session began with the introduction of researchers, participants, and research. Then, a deep dive into the topics of DMBI and OCs were conducted. The interview was concluded by asking the respondents to provide any missing information and provide supporting documentation. With the time length of approximately forty-five minutes to an hour and a half, all the interviews were conducted in Zoom and Microsoft Teams, recorded and subsequently transcribed. While we believe responding respondents were aware of the topic, we provided concepts of DMBI and widely known examples to establish a conceptual basis (Schmidt & Druehl, 2008). Data collection was stopped after reaching a saturation point, a point where no more codes were found.

### 3.6 Ethical Considerations

Conducting qualitative research has many ethical considerations, from dealing with interviewees to analysing and presenting data (Bell, Bryman & Harley, 2019). By following the research ethics guidelines provided by LUSEM, scientific integrity was maintained throughout the entire research process. The study avoided invading participant's time, space, or privacy by being as transparent as possible regarding the intention of the research and by clearly indicating and following the interview's time and location. The study respected the firm's and participant's expectation of privacy and anonymity, which is reasonable by concealing their identity (Denscombe, 2010; Bell, Bryman & Harley, 2019).

In order to protect the interests of the respondents, personal data were not collected. The data was secure, as the researchers are obligated to protect the information they obtain (Miller, Birch, Mauthner & Jessop, 2012; Randolph, 2008). The study ensured the participant's reasonable expectation of not being harmed mentally or physically (Miller et al. 2012). The data analysis was performed cautiously to avoid misstatements, misinterpretations, or fraud (Creswell, 2007). The procedures and evidence of the research were presented as deemed necessary. Data was handled ethically, in accordance with the law.

### 3.7 Research Quality

As there is no trustworthy knowledge without the quality of the research, efforts have been made to improve it throughout the study. Qualitative research presents a challenge due to its focus on context and its reliance on soft data. Nevertheless, its quality can be determined by *authenticity* and *trustworthiness* (Bell, Bryman & Harley, 2019). To ensure authenticity, it is crucial that the data presented is fair and reflects the social context within which it is presented (Cope, 2014). By providing the context, the data collection and analysis process, including actual quotes from respondent's study, has ensured the authenticity of the data. For the trustworthiness assessment, four main categories were employed: credibility, transferability, dependability, and confirmability (Bell, Bryman & Harley, 2019).

As a first step, the sample selection and the interview content and question formulation were checked with supervisors to ensure *credibility*, which is considered a common method for assessing credibility (Noble & Smith, 2015). Similarly, the researchers used data triangulation, a method for credibility recommended by (Bell, Bryman & Harley, 2019). In qualitative research, *transferability* is a factor to evaluate whether the findings can be generalised, as a relatively small sample is used in a specific context (Cope, 2014). To address this, context, process and related info have been provided, allowing the readers to apply knowledge in their settings.

In terms of *dependability*, which refers to the study's trustworthiness and independence: if independent researchers are to analyse the collected data, they must arrive at similar results in order to ensure that the data are used and interpreted correctly (Cope, 2014). The study is open to supplying data on request to independent researchers. Additionally, the research approach, results, and assessment results were submitted to several peer-reviews to ensure the research's dependability (Bell, Bryman & Harley, 2019).

*Confirmability* implies that the researcher is independent of bias and that no data manipulation has occurred (Bell, Bryman & Harley, 2019). In an attempt to address this, although it was not possible to ensure complete objectivity, personal values and theoretical biases were avoided whenever possible by interviewing individuals who had no prior relationship with the researchers. Furthermore, the research questions were subjected to several external reviews in order to avoid bias. In addition, actual quotes from respondents were incorporated into the study, a necessary step to ensure trustworthiness and confirmability (Cope, 2014).

### 3.8 Data Analysis

It has been noted that the lack of clearly defined rules for analysing qualitative data may make it difficult to analyse (Bell, Bryman & Harley, 2019). The data analysis in this research study was iterative (data collection and analysis coincided) and researcher-centric (the value and experience of the researcher affected the analysis) following Denscombe's (2007) explanation of the principle of qualitative data. Qualitative research emphasises the researcher's roles in creating and analysing data, considering them critical measurement factors (Denscombe, 2010; Randolph, 2008). The study considered two approaches, thematic and grounded theory, and chose the *thematic approach* since it is relatively flexible in analysing qualitative data compared to the grounded theory approach (Braun & Clarke, 2006).

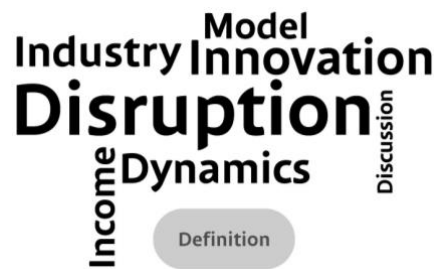
Grounding theory refers to developing theories based on data, whereas thematic theory seeks to identify patterns and themes in data (Braun & Clarke, 2006). The process of transcribing and analysing the data was completed using Otter and NVivo software. As qualitative data relies on interpretations from perceptions and opinions, it should be categorised (Saunders, Lewis and Thornhill, 2009). Attempting to extract meaning and patterns from the data pertinent to the study purpose and outlined questions, the data was carefully analysed by excluding irrelevant data. Data were analysed with the help of Yin's five-phase model (2011): a collection of the data, dismantling of the data, remounting the data, interpretation of the data, and concluding.

As a first step, the interview was transcribed using an Otter-based tool, and annotations, explanations and observations were made to the interviewee's statements. After that, the data was dismantled, and the text was marked and coded. Codes represent the most fundamental element of data and can be used to make inferences in a meaningful way (Braun & Clarke, 2006). Furthermore, remounting of the data was performed to gain a sense of the *codes* to uncover patterns. A word cloud was used to visualise the data, and then the data was reinterpreted in light of the research purpose. An analysis of the data was performed in order to determine the themes that emerged from the mapping, according to which conclusions were made and recommendations made for further investigation.

## 4 Research Findings

*This chapter presents the empirical findings drawn from interviews and the analysis of internal and external documents of firms. Here, the perspectives of interviewees are presented, as well as the observations of the researchers. Results are presented in the form of themes. The following themes were identified from the data analysis: concepts, efforts, strengths, challenges, processes, and capability, which are presented together with the research questions.*

### 4.1 DBMI Conceptual Definition



*Figure 7: DBMI Conceptual Definition*

Although the majority of the respondents agreed on the DBMI definition and examples, some observations provided further discussion around the topic. On the concept of disruption and its relevance to the industry, one of the respondents provided a viewpoint on how disruption can be achieved through other dynamics such as the evolution of technology which eventually produces or allows disruption for the incumbents or the industry. There was an emphasis on how the disruption in the market has to be measured. A disruption that does not remain and properly develops in the market cannot be regarded as a relevant disruption even if the effort itself matches the definition. As respondent R6 mentioned:

*It is not only about creating disruption, you can be very disruptive, but if that innovation does not stick, it does not create a market standard if Uber did not become our new way of taking a taxi. If IKEA did not become our new way of shopping for furniture, they would not be as relevant.*

Respondents indicated that there was potential for other types of innovations to be disruptive. Innovations coming from evolving technologies can produce a considerable disruption in the market as an enabler of new business models that adopt that technology to create new value propositions. In that regard, researchers find the approach quite relevant given that the initial definition contemplates both internal and external disruptions, opening the scope and realm of possibilities to different innovations to fill the description. It becomes a matter of observation and behaviour of the market and industry in response to those innovations in order to consider them as disruptive. As R6 argued:

*So, it is great to be disruptive but also thinking of how you can evolve market dynamics. It is also great to evolve with technology and create standards around it so others can disrupt in different ways.*

Another discussion took place regarding the notion of disruption from the theoretical standpoint and how a small change in the business model can be regarded as disruptive. This discussion emerged from the examples provided by the researchers. These examples imply a major disruption in the internal structure and capabilities of the company. However, as respondent R9 elaborated, there are ways to disrupt the market without being that radical in the BM change.

*I think sometimes disruptive business model innovation is actually a lot simpler. So, it can be a little bit smaller. For example, you are taking a consulting company, and you change the pricing model, or you change the income model just a little bit, (...) all you have to do is change that, everything else basically remains the same, and it enables quite a lot of disruption.*

On the same topic and connecting with the small changes, the respondent also elaborated on how simple those changes can be when looked at from a theoretical perspective. When it comes to implementing and the subsequent changes that this small innovation generates in the whole organisation structure, the small change suddenly does not look that small. What seemed easy becomes a cascade of major changes that the incumbent might not be able to deploy. Respondent R9 continued:

*So, you innovate your income model a little bit. That can drastically change what the business is supposed to be doing through and through. So, when you innovate the income model, suddenly your channels change. (...) When you change the income model, suddenly your key activities change, as well.*

This level of complexity in terms of change is also addressed by the respondent R8 who firmly believed that a disruption in a company does not start as a disruption but as an attempt to explore a certain area without aiming for such a radical impact from the beginning. He elaborated on examples of how the main disruptions in history did not start as such, arguing that the company's structure is in a sense built specifically to resist disruption and keep the current business model protected.

*Because everyone who is working on the current business model is not incentivised to disrupt themselves, they are incentivised to keep the boat afloat. So, the issue about disruption is that most disruptive things that have happened in history started as an attempt at something. (...) and then it kind of grew and became a disruption.*

This particular argument poses an intriguing question, given that even incumbents within the research admitted to being in a current disruption process or in need or search for disruption in their business model. The process for these disruptions is to be mentioned and analysed in the upcoming sections.

## 4.2 DBMI Attempts



Figure 8: DBMI Attempts

In the specific case of the successful DBMI attempts, respondents provided examples of previous efforts made by the company. However, in most cases, there were doubts if the examples could be portrayed as successful disruptive BM. A constant in the answers provided is that the initial disruptive innovation that made the company what it is today is the most substantial of them all through the years. Most incumbents are rooted in early disruptions in the industry and a following improvement and evolution of that disruption. As Respondents R1 agreed along with also many others:

*R1: So I think the main innovation brought to the market is based on the foundation for (brand) becoming an early day unicorn (...) And that has carried us forward in many ways because it is a key building block upon which we can add a ton of different other things. So, we have made a lot of big investments around that, over the ensuing years.*

On the missing opportunities for DBMI, most respondents could not provide a specific case where the company could have exploited an opportunity but did not. The provided question aimed to understand the company's attitude towards certain opportunities and why some are not taken. Although respondents could not provide a specific one, R1 provided an interesting reflection on the missed opportunities and on how the challenge also resides in finding a balance in between taking or passing on the opportunities that for this kind of incumbents are many:

*Some of them will not happen because they might be considered a bit too far out for the company. And I think you actually have to be in a situation where you have those opportunities you cannot act on because if you don't have them, either you are operating in a completely freewheeling way where you build up a ton of risk, or you are not pushing yourself hard enough.*



In contrast with the missed opportunities, the respondents provided more examples in a specific DBMI case and in the set-up of teams and ecosystems dedicated to exploring these opportunities. For the most part, the lack of success of these initiatives resides in the missing strategy, key performance indicators and overall goal for these attempts. R2 and R3 agreed that these efforts do not get the desired results without a clear framework or a difference in expectations.

*R2: But because there was no strategy, (...) as to what we are trying to achieve and our mission, it has not landed anywhere. It is now gone.*

*R3: The main factor for failure was a misalignment between the expectations that we had and the expectations that the third party had.*

Apart from the KPIs and clear goals for the failed disruptive innovations, respondents provided varied reasons why the attempts failed on a major scale, mentioning factors like overconfidence in the brand reputation, lack of team ownership and even geopolitical factors. Here is an example from R9:

*We lacked a sense of ownership from the team. So, we did not give the team enough incentive to own the innovation. I think that was actually probably the number one reason for failure because, in the end.*

### 4.3 Process of Implementing DBMI

In this section, we explore and present the mindset and structure behind DBMIs. The respondents provided the tools, frameworks and strategies behind every step, from recognition to evaluation and exploitation. Based on this information, the research aims to find patterns and discrepancies between incumbents in order to expand the knowledge about the constantly changing methodologies around DBMI.



Figure 9: DBMI Process

### 4.3.1 Recognising Opportunities

One of the main resources amongst almost all companies to recognise and realise new opportunities is implementing internal open innovation platforms or practices. The compilation of ideas and solutions from the company's staff is a tool to gather concepts and a whole innovation system where several stages are implemented, so the ideas get the proper development. The stages involved in this process proved to be quite similar across companies, where an engaging journey is presented to the employees who get inspired and rewarded for their initiatives. Seed programs where anyone in the company can participate, starting with an ideation box to a final Dragon's Den where participants can get access to the funding and experience a radical shift in their initial functions to dedicate full time to their solution.

There is a consensus on how early-stage ideas are not the most challenging step of the process of successful innovation. The opportunity of participating in these innovation programs involves a set of structured steps that require a big commitment from the participant, much more commitment than just thinking about an idea and submitting it. The process is what enriches this initial concept. Respondent R9 elaborated on this process:

*And then we allow them to go through what we call a seed program, which is a 50 hour basically, design thinking driven, inspired program. So, you are trying to figure out what the customer actually wants, what is the business model, etc. Doing a really fast business design sprint (...) So we have an employee-driven innovation program. So, all ideas basically start with our internal employees.*

The respondents agreed on the importance of the motivation and rewards systems, given that employees are not in a sense compelled to create these solutions; these come from personal motivations and are not part of the day-to-day operations, and therefore do not occupy the employee's mind to a great extent. As R7 explained:

*It is super important that the line is aware of what the employees are working with and motivates them to spend a certain amount of time on new ideas and innovation. So, in some areas, they dedicate time, like 10% of the time should be spent on innovations and improvements. (...) What is good now is that there is an award system.*

The future indicators and trends and how far the company project should devise opportunities seem to be quite different. The range of foresight varied between companies, starting on one year up to ten to thirty years in some departments, where the research process changes, still based on design thinking but focusing the research not on the customers but rather consulting with experts capable of spotting weak but telling signals that can drive upcoming innovations. Apart from the timespan, the primary focus also became determinant while doing research. Some developments work on not yet existing customers or are more driven around the technologies that can be created before there is a need for them. These variables added a level of complexity when evaluating ideas. However, it is a challenge that incumbent companies are actively looking for in order to maintain and expand their competitive advantage.

### 4.3.2 Evaluating Opportunities

In the evaluation phase, there are different criteria between companies. The incumbent's priorities and mindset on disruptive innovations are visible in the evaluation criteria. In some cases, the narrowing down of the ideas available is quite direct, utilising straightforward methodologies to evaluate the business case of each idea and its potential to generate income as the main criteria. On the other extreme, other incumbents are more open to incentivise a further exploration of the initial concept, allowing up to 75% of the initial ideas to go through the first stage. R1 exposed their criteria:

*Everything boils down to the business case. So, we may put a lot of effort into maybe a ton of assumptions, you can always accuse us of being pseudoscience, but at the end of the day, we can produce a euro amount that is either higher or lower than something else.*

Although the evaluation approaches differed, there was a commonality in the fact that the need for more structured and defined evaluation criteria was made explicit in some cases. Nonetheless, some frameworks were mentioned. For example, one that provides ten general goals that the company is aiming for in the future. It is used as a guide to evaluate ideas and assess the fit with the company's direction, aiming to align the evaluated opportunity with at least one goal. Similar to that, Respondent R9 mentioned a couple of criteria to evaluate and classify their innovations, using the renowned *Three Horizons model* to categorise the level of disruption and implementation time, and on the other hand for the evaluation, utilising a model based on thirteen fixed criteria:

*R9: We have 13 criteria that we make that decision of. And we rank each idea and then have a vote based on the reflection of those certain criteria (...). We look at, for example, the scalability of the concept. We have criteria around if it is in line with our business strategy at the company, for example.*

The Dragons Den as a final stage before developing the idea is a commonality amongst several companies. Managerial roles are presented with the finalised solutions and budgets needed for the development. This key stage in the process means a unique opportunity for the team involved in the idea and a great responsibility to make the best out of the case and present it as best as possible. The ability to sell the idea at the end is what ultimately provides the chance to get the go from the board.

### 4.3.3 Exploiting Opportunities

On the exploitation side, the information collected got less specific about DBMI attempts in the past. The two initial stages present a defined methodology and criteria, where the recognition, compilation, evaluation and consideration of ideas have much more specific frameworks. The exploitation of each idea might vary too much within projects, producing less defined frameworks. Nonetheless, the respondents were clear on how this process is the most difficult of them all. In the case of R2, the process has a considerable number of barriers to overcome, which makes the process quite slow, but also, there seems to be a missing structure for the financial aspect.

*R2: We have too many processes that we have to go through. And a lot of times, for us to be more innovative or to see results, we have to work very quickly. (...) We have to pilot, and that takes money. We do not have a process or even a structure in place to monitor on the finance side to enable these pilots and tests to run quickly.*

Another key aspect mentioned by several respondents regarding the exploitation phase is the difficulty in providing the employees with the right incentives and enough space to scale up the ideas. Employees seem to be struggling to fulfil their regular duties while developing the scaling and prototyping of the idea. As respondent R2 argued about employees involved in the process:

*R2: I feel as if their role is not structured around the success of these innovative initiatives for them to really go ahead with piloting and testing.*

Respondents agreed on the importance of exploiting the opportunities at a small scale initially, as in the design thinking method adopted by many incumbents, the phase of prototyping and testing is key to the process where a substantial amount of knowledge and learnings can be extracted. As Respondent 11 stated:

*Innovation at (...) follows the design thinking process, where starting small and learning fast is the most important principle. It allows for fast experimentation and agile technology development.*

## 4.4 Strengths and Challenges in Implementing DBMI

A certain commonality in the strengths between the companies involved is a reputation built through the decades. Maintaining leadership in the market and the customers top of mind is regarded by many as one of the biggest strengths when implementing disruptive innovations. On the challenges when facing DBMI incentives, the respondents provided a substantial amount of different types of friction and setbacks for the whole process.



Figure 10: Strengths and challenges in implementing DBMI

#### 4.4.1 Strengths

The majority of respondents stated that the brand is an intangible asset that serves as a guarantee or a strong validator not only for customers but also for employees. The brand and its reputation are at the core of a compelling message to the customer when communicating disruptive ideas and new ways of providing value. This established image that the brand transmits is felt as a motivating force to drive employees to transfer the company's values into new business opportunities.

*R3: I think something that makes (brand) unique is it is a little bit how people are as well so proud of working in the company and how they are happy about this. (...) People believe in it. It's the sentence that always pops out of everybody's mouth.*

The brand as an intangible enabler of innovation provides incumbents with better and more opportunities to cooperate and acquire ideas and solutions. Reputation is always a determinant factor when it comes to attracting a considerable pull of external innovations. Being able to rely on a tradition of innovation and market leadership is a key factor in discovering new ways of disrupting the industry. As Respondent R3 exposes:

*R3: I think that the start-up appreciates that we are well recognised in the (...) industry. So, they know we are attractive. They could partner with a well-known player.*

A key aspect that brands with such notable trajectory enable is to contemplate decisions aligning with what the brand represents. Iconic brands provide a solid mission, vision and values that generate a framework to evaluate and decide on these opportunities. Incumbent companies like no other have a combination of possibility and constraint in their brand that helps employees align every effort to their trajectory. The brand itself becomes a key factor when recognising and exploiting new business opportunities. This is regarded as a particular differential for R4:

*One factor that might be heavier than in any other company (...) when opening a new opportunity is the brand, the values. (brand) is not doing anything everywhere, because we can make-a-buck company. (...) I think countless decisions, countless initiatives have been shut down because they were deemed by decision-makers not to fit the brand, not to fit our values. It may be a great monetary opportunity, but they did not fit the brand. They did not fit the long-term direction of the brand.*

The trajectory and build-up of a reliable customer base bring incumbent much knowledge about the market, the customer behaviour and preferences. In this sense, all incumbent firms agreed on the importance of knowing the customer and having several ways of reaching and interacting with them. As R6 argued:

*Another strength is the relationship with the customers with the operators. So being close to the customer and listening to their pain points is a great tool and a great, great strength to have.*

The overall knowledge as a strength for the incumbent firms is not a guarantee of the success of innovation and, more so, a disruptive innovation. It is still a resource that only companies this size have, and the successful leveraging of this asset combined with other resources and capabilities. R9 referred to their internal tools and capabilities:

*So, we are starting at a super high level of knowledge, which does not have academic evidence to show for success. But when you have high knowledge, and then innovation capability, a really in-depth understanding of design thinking and other innovation methodologies, and you have Agile software development in the company above this, you can surround these individual ideas with them, it gets really awesome.*

Other common strengths that these incumbent firms also stated and coincided with are the financial and technical capabilities that have been refined and developed through the years to deliver high standard outcomes. All companies agreed on the availability and disposition of financial investment from the company to research, recognise and exploit new alternatives. As R10 mentioned when addressing the corporate-start-up status:

*In the corporate-start-up, we have strong funding supporting us. So actually, if we have a good idea, we can easily find the sponsor to pitch in the idea and go to the try-out.*

#### 4.4.2 Challenges

Although varied, the challenges in most cases were common between companies regardless of the difference between industries. On companies this successful and of such extensive capability, the constant need for DBMI might not be that urgent, as the threats might not be perceived as a determinant pressure to change. As R1 said:

*I think when you are reasonably successful, that basically, we have never had red numbers, for instance. So, because of that, we do not have a burning platform; we do not have that really strong, clear pressure to change.*

That sense of security and solidity, although a healthy indicator, also poses a challenge when it comes to identifying threats or looking actively for new opportunities. According to R1, the sense of urgency provides a motivation within the company to look for alternatives rather than only focusing all the efforts in the day-to-day operations. The motivation and mindset that drives innovative thinking in such an environment prove difficult, and much needed to respond to the market dynamics with disruptive propositions. As R1 elaborated:

*So, all the change has to come from within; we have to really find that in ourselves to prioritise it. The market does not do it for us yet. By the time the market does, it is too late for us to react. And that is probably the biggest challenge because it basically means that it is hard just to motivate people, to rally people to prioritise this thing over some other things.*

Following motivation, respondents also added on the difficulty of promoting innovative thinking in the employee's mindset. The constant involvement and emphasis on regular operations are not directly connected to innovative thinking. When asking employees to adopt these practices on top of their current tasks, they face some resistance. An apparent misalignment of the employee goals in the company poses a barrier as R2 stated:

*We also are asking people here to do this innovation on the site in addition to what they do. So that also causes a lot of discomforts. I guess they are not quite comfortable with it all, but then, you know, how does this meet my goals? I feel as if their role is not structured around the success of these innovative initiatives for them to really go ahead with piloting and testing.*

This mindset is not only a matter of the disposition for attempting innovation but also a skillset that, according to Respondent 2, is not that developed in the whole company. There is a learning curve that employees need to adopt to have the disposition and the skillset to recognise, evaluate, and exploit disruptive ideas. The innovative process is iterative and manages a high level of uncertainty. The constant exploration, trial and error, is something that many people are not used to. R2 argued:

*Yes, everyone should be entrepreneurial. But not everyone has the competence or skill set to do that. And it does take some skill. You cannot just learn it overnight. And learning can be a bit scary for some people because they do not see the result immediately. So that mindset is not there.*

Of all the challenges stated by the respondents, the one that is more common and was perceived as the most difficult is the idea exploitation stage. The process around the development, implementation and scalability of DBMI poses the most significant barriers in terms of technologies, structures and frameworks for that specific stage. Respondents R2, R5 and R10, agree on the need for a more structured framework and process to prototype, launch and scale these ideas. Speed is the main factor here, and as the market is in constant change, the ability to turn ideas into reality as fast as possible is a current problem for implementing DBMI.

*R2: We have too many processes that we have to go through. And a lot of times, for us to be more innovative or to see results, we have to work very quickly. (...) We have to pilot, and that takes money; we do not have a process or even a structure in place to monitor on the finance side to enable these pilots and tests to run quickly.*

*R5: It's not built on modern technology architecture, which enables things in a different way. So even if you identify the best disruptive idea and supervisory board and everyone is on board (...), you could already be five years after the market basically, or like you could already be too late in that essence.*

*R10: The first challenge is how to scale the solution into the market in a speed up way.*

In contrast to the two previous ones, this third stage of the innovation process is far more challenging. All the respondents were assured that they had built a sound capability to recognise opportunities and generate ideas. Internal open innovation platforms and different methodologies adding with the vast human resource and knowledge provides these companies with great confidence in that area. That is why the contrast is perceived when talking about exploitation and scalability. There are major improvements and hurdles to overcome, according to the respondents. Here, respondents R8 and R9 agree basically on both their idea generation confidence and their execution struggles.

*R8: And I guess my belief in where innovation happens is the people who are actually working on building something. So, it is not the idea part. That is actually the easy part. But the person or people or team that actually has to make it become a reality.*

*R9: We are very good at idea identification. We are very good at selecting and filtering the best ideas. Actually, I think we have gotten very good at that. But the back end, when you start getting into commercialisation, and scale and growth, is where we are putting a lot of effort right now because we are just not very good at it.*

## 4.5 Organisational Capabilities for implementing DBMI



*Figure 11: Essential Organisational Capabilities*

When facing the question of what are incumbents missing or what is that much-needed factor in making disruption possible, one of the most common answers contained a high component of human resources and how to attract, leverage, motivate and protect the much-needed talent that provides a unique mindset. This is hard to cultivate in the rigour of the day by day operations. The culture around this mindset aims to create an appropriate space within the company with enough freedom to explore and without losing track of the business. R2 elaborated on this:

*I think we need to get the right people who have that mindset already, protect them from the line of business, but still allow them the opportunity, (...) we are allowing them to do whatever they need to do. But at the same time, sharing that information and sharing that process with the line function or the good function. And mindset also requires the right people.*

The cultural shift within the company is a constant emphasis made by the respondents. Culture and mindset as the root of the issue before addressing tools, methods or frameworks to facilitate innovation. The ability of the company to look for talent that brings a fresh and flexible mindset and drives the already working staff to develop these capabilities. According to the respondents, the mindset covers the ability to think critically and constantly explore and a posture towards execution way above only ideation. Understanding external factors, customer insights, and market dynamics to shorten the gap between ideation and execution has proven to be a constant challenge. The exploitation capability of the ideas and the effort that has to be done to bring this practice in the company's mindset seems to be one of the essential capabilities to explore for incumbents. Respondents R2 and R6, although coming from two almost opposite industries, provided similar answers.



*R2: It is always the mindset for me. I can throw as many templates and tools at you. But if you had no idea how to use one or when to use another, it does not matter how much I could give you ten books. You can be very entrepreneurial. (...) But if it is not rooted in data, if it is not rooted in the mindset of what you are trying to do, you are going to have many magical and shiny objects, but it is not going to land anywhere, and you will also fail.*

*R6: It is always about it is not about tools or processes or having the right ideation software. I think it is much more about the cultural aspect. Do we empower people to come up with their ideas, and the world is full of ideas? We have great ideas. It is 100% on execution(...). Empowering culture. It is not about tools or processes.*

There was a commonality in putting the human capital and the capability of the company to develop the knowledge needed for exploitation as one of the primary aspects. Without much hesitation, most of the respondents involved in DBMI processes are emphatic about the need for employees with a strong entrepreneurial mindset with critical thinking. By surrounding them with the right knowledge and the capability to explore the ideas further, ideas that are rooted in a disruptive mindset, where the pursuit of chance is nurtured and sponsored. As R3 stated, without that radical shift, there is no financial capability to make a difference.

*So, because you can have money, but if you do not have the good people or the knowledge behind it, it does not make any difference. Money will make no change in the way we work at all.*

To this knowledge base recognised by several incumbents, it also adds that most of this knowledge has to come from a deep understanding of the customer. The ability to generate new channels of interaction and feedback to base the innovations on solid and reliable data and not on isolated efforts that do not have the potential to impact the market. As R9 outlined in complement to the previous analysis:

*I think it is key to be able to empathise with customers and try to take the customers perspective from day one. I think that is super key.*

One of the next major factors mentioned by the respondents is the capacity to deploy the ideas quickly to keep on with the momentum of the recognised opportunity. There were different reasons attributed to this issue. Whether it is technology, management, or even selection criteria for the available ideas, the bottom line is that incumbents agree on the considerable gap of time between an opportunity being recognised and evaluated to make the jump to actual execution. In the case of R4, the main component that can contribute to fix this was a technological feature that improves the idea testing:

*So, getting a technology foundation that can handle fast movements. But yeah, being light on the feet and not sort of stuck in the mud. Even though you have the most incredible idea in the world, in big multinational conglomerates, if you do not have a technology that is light on the feet, it does not help because you will be out of business before you manage to realise the opportunity.*

On the same issue, R8 argued on the importance of decision making and the considerable amount of time needed to kickstart innovation. As a disruption, the layers and hurdles increase. As those are decisions that mean considerable changes and impact in the company, the managerial roles face a considerable challenge between the impact and the urgency to act immediately.

*So, who decides something continuing or not continuing? And what are they making decisions based on? And how long does it take? Actually, the last one is probably the more important one.*

Respondents R8 and R9 elaborated on two different issues of the same general problem. The capability to manage these opportunities as fast as possible affects the process of disruptive innovation execution. It also impacts the process of idea evaluation. Without a structured filtering mechanism in the decision-making process, it becomes difficult to say yes or no to any idea. It is time wasted on both sides, missing opportunities or waiting too long to discard them.

*R8: I have an idea I have validated with customers. Who can tell me if I can get enough money to build this now? And I need an answer within 24 hours, then that is basically impossible in most corporations.*

*R9: It is tough to say no. It is one of the hardest things. And so, having rigid control over your process and having the filtering mechanisms to be able to say no, when it is an unnatural act for most people.*

In a general sense, the respondents agree on several main capabilities needed to implement DBMI. Respondents were asked to name any specific thing they would like to have to enhance the whole process. It was significant to observe how most of them agreed on cultural, managerial, knowledge, mindset, and talent as primary factors to be considered as essential for this process. The researchers elaborated on the specific organisational capabilities that these factors represent in the discussion chapter.

## 5 Discussion

*This chapter discusses the empirical findings in relation to the theoretical frameworks and methodological choice presented in earlier chapters. The discussion aims to provide adequate data to be able to answer the research questions and outline perspectives to the conclusion. The empirical findings have contributed to a deeper understanding of the implementation of DBMI in five main areas: DBMI beliefs, implementation experiences, DBMI processes, strengths and challenges, as well as organisational capabilities essential in implementing DBMI which are presented in more detail below.*

### 5.1 DBMI Beliefs

The research shared conceptual definitions and examples for capturing the DBMI framework to identify if common definitions and alternative thoughts existed. This was an essential aspect of the research, as the sole definition of the concept implies a mindset and posture that affect the process and outcomes. In terms of examples, the DBMI examples provided by the researchers were well-known disruptions made by well-recognised companies. In this regard, participants expressed that DBMI may be occurring in various firms and industries of different sizes without becoming publicly known.

As in the theoretical framework, the discrepancy concept in DBMI was fairly evident in the findings too. Although all the respondents agreed on the concept, some had viewpoints leading to in-depth discussion. This was mainly in terms of whether firms disrupt their business model intentionally or not. The conclusion and subsequent research pointed out that disruptions do not necessarily start with the aim to disrupt; there are several examples of how small innovations gained traction and eventually disrupted the business and subsequent industry. When incumbents are open to exploring opportunities without the disruption component posing a threat to the current business, there are more possibilities and openness to explore and scale more ideas. As Respondent R8 mentioned:

*Most disruptive things that have happened in history started as an attempt at something. They did not, from day one, say: I am going to disrupt everything, I am going to disrupt this whole industry. They said I am going to try, I think this is an exciting problem, and then it grew and became a disruption.*

Regarding this notion aligned with the example of 5G technology as a disruptive innovation, the researchers agree that DBMI has many origins from a strategic standpoint. The initial motivation might not be to disrupt the business model, but the perseverance to pursue different opportunities eventually force this disruption. For the researchers, what is vital for the DBMI belief is the openness from incumbents to explore these possibilities and be open to making the necessary changes to embrace the new disruption eventually.

Nevertheless, regardless of how the innovation starts from a strategic standpoint, the need to adapt and transform the current BM is constant as the environment poses many new threats or possibilities. In agreement with scholars (e.g. Foss & Saebi, 2015; Lindgren, 2018; Giovana, Behr & Marcolin, 2011), study found that firm view DBMI as a necessary component for retaining or enhancing competitive advantage. Similarly, DBMI implementation was easier due to multiple business models running at the same time, allowing for testing in certain part before scaling.

In this regard, this research supports Lindgren (2018, p.284)'s research findings, which concluded that "disruption can also be related to different and or new combinations of BM dimensions, BM's and business model ecosystems". Also, he indicated that incremental changes to the BM might result in DBMIs but that more research is required to confirm this. Scholars (Habtay & Holmen, 2014; Giovana, Behr & Marcolin, 2018) have expressed similar views. As presented in the theoretical framework about whether disruptive technologies and innovations differ from DBMI, based on the results and previous research, researchers do not discern a considerable difference as disruptive technologies and innovations tend to reinvent or create new business models eventually.

## 5.2 Experiences from DBMI Attempts

The research questions were designed to explore and explain DBMI by examining examples from past experience, ultimately revealing the incumbent's attitudes toward DBMI, successful factors, learnings from unsuccessful or incomplete attempts, and the main causes of those outcomes. As one of the respondents noted, almost all companies wish to be perceived as highly innovative companies in order to attract talent and increase brand value, posing a substantial risk to the research that the examples provided by respondents would not prove to be DBMI. Nevertheless, analysing the examples provided by respondents concerning the concepts presented, most examples are consistent with the DBMI concepts.

In most cases, respondents referred to the initial disruptions that led to a competitive advantage. Although DBMI was reasonably comprehensible from the respondent's perspective, there appears to be a challenge when applying the concept to actual cases. Researchers also observed some difficulties for participants in classifying certain innovations as DBMIs, although definition and examples were provided. The difficulties were primarily around whether the innovation could be classified as a DBMI or not. Participants in one case provided the example and left it up to the researchers to make a decision. As categorisation and terminology are different from one scholar to others, the confusion can be seen as normal (e.g. Christensen et al. 2018; Foss & Saebi 2015; Lindgren, 2018). In the case of confusion, researchers clarified definitions and then provided further examples.

In line with researchers (e.g. Giovana, Behr & Marcolin, 2018; Pereira, Imbrizi, Freitas, & Alvarenga, 2015), the study found that the incumbent firms and their managers have been significantly placing the focus on innovating their business models besides innovating products or services. In that regard, respondents provided numerous examples of successful implementation of DBMI that companies had attempted in the past. In Ansari and Krop (2012)'s research, they found an increase in the number of incumbent firms implementing DBMI.

This is partly supported by Mckinsey (2015), who found that the DBMI attempts have seen an increase after the advent of digital disruptions from Facebook, Netflix, Udacity, and Uber. The example cases of IKEA, Apple, Google, Sony, Ryanair or Airbnb presented in the previous chapters can aid on these findings. In addition to the past, the research also found that firms have been stepping up their efforts in support of future disruptive business model changes.

Additionally, the study also found that the substantial success of most incumbents resides on the initial DBMI that generated the whole direction of the company. By building on top of that disruption, in most cases, incumbents seem to struggle when exploring new directions or not until the market forces the change. These findings correlate with the research from Chesbrough and Rosenbloom (2002), who stated that exploration of new technology or change in the market often requires the firms to change their business models. In light of the findings of this study and previous research (e.g. Chesbrough, 2002; Christensen, 2002; Giovana, Behr, & Marcolin, 2018), it is evident that disruptive technology or innovation often goes hand in hand with business model change. Another finding of interest seems to be the general issue of expectations and general motivations for DBMI initiatives, mobilising, aligning, and motivating people to enter into new unexplored directions.

To our surprise, the study received a few examples of unsuccessful attempts. Some of the participants indicated that they are constantly trying out new ideas and, as such, they would not classify them as failures but rather routine activities. In terms of the missed efforts, some participants attributed it to the timing. According to scholars (Christensen, 1997; Yin, Ansari & Akhtar, 2017), incumbents should implement BM changes before disruption threatens the industry, otherwise, it becomes increasingly difficult to compete (Christensen et al. 2015; Markides; 2015).

Similarly, the findings for not pursuing the ideas were also connected to the risks involved with it. Many researchers (e.g. Chesbrough & Rosenbloom, 2002; Christensen et al. 2018; O'Reilly & Tushman, 2016) have highlighted these risks stating that profound modifications of existing business models are required in many instances during or after disruptions. As in Markides and Oyon (2010), we could also discern a similar mindset among the participants, that not all DBMI are necessarily better than the existing ones. As a result, the research shows that the firm aspires to test out new disruptive ideas and scale them after seeing some potential rather than pursuing all incoming opportunities.

### 5.3 DBMI Process

In terms of implementing DBMI, key insights have emerged about the mindset, methodology, tools, and strategies employed by incumbents when releasing new business opportunities in general. As stated by Zhang et al. (2019, p.591), "DBMI stems inherently out of new opportunities, and its innovation process refers to a dynamic and complex process of converting these opportunities into economic value inclusive of different phases in the process". Therefore, he argues that the DBMI process encompasses similar phases, i.e. opportunity recognition, evaluation and exploitation phases as evident in the entrepreneurial literature. For each of the three steps of the process, respondents provided frameworks, tools, challenges and methodologies that provided the research with a better understanding of the general DBMI process.

One of the most interesting findings was that the process of identifying, evaluating, and leveraging disruptive innovations was not significantly different from that of other kinds of innovations. These findings support those of Zhang et al. (2019). Further, in line with previous research (e.g. Christensen, 2006; Doz & Kosonen, 2010; Karimi & Walter, 2016), the study found that potential threats to the market are one of the factors that prompt incumbents to try something disruptive. DBMI seems to arise at a stage in which emerging technologies or innovations become impractical to the current business model. Kaplan and Vakili (2015) also observed that the effect of external technological change on firms and their managerial attention increased as they see as an imminent threat of obsolescence to existing business models.

In terms of risk and difficulties, in almost all cases, respondents agreed that the recognition stage where ideas get created, opportunities are recognised and compiled is the phase where they find less friction. In this phase, there was overall confidence in the capability for generating ideas internally with the help of open innovation platforms. A study found that firms experienced a dilemma when evaluating business opportunities, as suggested by scholars (Markides, 2015; Karimi & Walter, 2016), as not all opportunities are worth pursuing. Therefore, there is a need for careful evaluation of the opportunities. In that regard, incumbents had several frameworks in place to rank ideas mostly based on the brand's internal values and the future goals and mission that the company aims. As scholars (Foss & Saebi, 2015; Grant, 2018) stated, strategy is a link between a company and its environment, making it an important decision-making aspect. Researchers agree that brand consideration is a big factor for incumbents with such a reputation, and these frameworks can help align ideas with the company's values.

During the implementation phase, respondents agreed that the implementation of the opportunities was the primary challenge in their DBMI process. Many scholars (e.g. Lindgren, 2018; Markides, 2015) have also pointed out the higher risks associated with DBMI implementation. Some scholars (e.g. Chesbrough & Rosenbloom, 2002; Lindgren, 2015) have additionally mentioned that the profound changes of existing BMs of firms are required during or after the DBMI. It has been observed that the firm's structure, hierarchy, and administrative processes cause the whole innovation effort to lose momentum in that last phase. Several incumbents appear to have difficulty understanding the motivations and cultures underlying the implementation and scaling up of efforts.

Another important finding was that DBMI was regarded as a lengthy process for five or more years, making the whole process even more challenging from the employee side to be able to see results, measure the impact of their efforts and trust in the success of this long process. These findings coincide with the findings from Christensen and Michael (2000), who stated that DBMI is a time-consuming innovation process compared to incremental or adaptational BMI. Frameworks like the mentioned *three horizons model* place this kind of innovations far away in the future, bringing friction when motivating and mobilising employees to jump on.

Moreover, the results indicated that from the conception of disrupting processes to their actual implementation, there appears to be a challenge on both the part of the mindset and the capabilities. However, the study findings, supported by previous research (e.g. Frankenberger et al. 2013; Lindgren, 2018; Zach, Nicolau & Sharma, 2020) elucidate that there might be multiple business models operating simultaneously in multiple parts of the organisation, making it easier for firms to explore and exploit opportunities.

In order to implement DBMI successfully, as Markides (2015) explains, the key ingredient is to create sound processes. A second approach might entail acquisitions or alliances as suggested by authors (e.g. Cozzolino et al. 2018; Habtay & Holmen, 2014), which they consider the fastest method of implementing DBMI. The study observed that the formation of partnerships and alliances is quite developed at most incumbent firms, while acquisitions seem to be growing in popularity.

## 5.4 Strengths and Challenges in implementing DBMI

In order to identify the firm's specific strengths and challenges to implement DBMI, the researchers examined the factors in place and those that were lacking and developed a framework based on the incumbent's experience regarding how to improve and enhance DBMI practices. On the strengths side, the incumbent's size and traction were found to bring security when it comes to accessing financial resources to scale up ideas. Although some respondents still wished for a broader budget for DBMI and a more structured system to scale ideas, the confidence of the incumbents, financial resources was a specific strength that most of the companies share. The findings correlate with previous research (e.g. Lin, Dresner & Windle, 2001; Robinson 1988; Zehir & Acar, 2006) study, where they claim that the larger incumbents firms usually have financial resources capable of bullying an entrant out of the market.

A further crucial finding, the main factor that is leveraged by incumbents when it comes to generating, evaluating, perceiving and communicating DBMI projects, was the power of the brand. The reputation and positioning in the consumers top of mind were believed to bring confidence to explore and present new concepts to the market. Although unique for incumbent firms, this feature may also pose a challenge in the fact that such powerful brands also bring strong constraints to the possibilities that can be explored. Furthermore, customer insights and knowledge were acknowledged as additional strength. Respondents were confident in the customer research they had at their disposal and their years of interaction and feedback with stakeholders. The present findings are consistent with previous studies (e.g. Srinivasan, Lilien & Rangaswamy, 2004; Zehir & Acar, 2006) that have found incumbent firms to have strengths such as market knowledge, brand equity, and customer relationships.

As for the challenges associated with the pursuit of DBMI, the study focused on getting an insight into the industry's pains when making such innovations. Exploration was made on the sentiment and experiences of the innovation experts when implementing DBMIs. The findings of the study, rather common between respondents or unique, provide new insight into the key challenges that companies encounter concerning DBMI strategies, processes, tools, methods, resources, key skills and mindsets. Moreover, the lack of structured financial plans, clear expectations and objectives, among other issues, are significant. These findings are aligned with previous research (e.g. Ferrary, 2011; Chesbrough & Rosenbloom, 2002; Gilbert & Bower, 2002; Hoffman, 1999; Markides 2015; Teece, 2010) that found that incumbents face formidable challenges due to inertia, arising from market orientation, values, and capabilities, bureaucracy, resource limitations, established norms and values while implementing DBMI. Scholars (e.g. Foss & Saebi; Markides, 2015) list managing multiple business models and losing market share as additional challenges. Although researchers did not find these issues in the study, these are recognised as potential stumbling blocks.

One of the other main challenges observed is the culture and mindset related to disruptive change and its frequency. The sense of stability engendered by these companies and structured processes and activities directly contradicts the culture required to adopt the DBMI framework. Respondents agreed on the crucial need to improve the motivation from employees to embrace change and get out of the line of duty to explore new possibilities, that although perceived not urgent or determinant for the company might as well be the key to the next path that the whole organisation takes. It is important to note that these findings support the findings of Habtay and Holmen (2014). They stated that without a positive organisational culture and entrepreneurial mindset among employees, it is almost impossible to implement DBMI.

Another major difficulty identified was the speed factor while taking advantage of the DBMI process. The organisation structure and the intricate processes render the final phase of the DBMI process incompatible with current market dynamics. Scholars (e.g. Lindgren, 2018; Chesbrough, 2010; Schneider & Spieth, 2013) have reported this finding who observed the bureaucracy and complexity as one factor that hindered DBMI implementation at the desired speed.

## 5.5 Organisational Capabilities for implementing DBMI

Exploring the strengths and challenges of an incumbent, previous insights related to pursuing DBMI about resources, processes, tools, and capabilities, exploration was made to find essential OCs in place or lacking that are deemed necessary to deploy DBMI. The outcomes provided alternatives and sources of exploration within incumbents to enhance their innovation practices aligning them to the right OCs. The research confirms that the implementation of DBMI is closely related to organisations structures and capabilities. The same findings were reported by scholars (e.g. Day, 1994; Foss & Saebi, 2015; Gant, 2018) who said that organisational capabilities enable the firm to conduct business activities. Therefore, they are interrelated and can be applied to various activities such as innovation, product creation, order fulfilment, and service delivery. Researchers have identified the difficulties faced by firms attempting to acquire capabilities necessary for business activities and enhancing distinctive capabilities. Day (1994) has also noted similar difficulties faced by incumbents in developing distinctive capabilities.

This research, in accordance with Markides (2015), found that OCs vary within companies according to their organisational structure and their overall strategy, yet the study was able to outline four key organisational competencies essential for DBMI implementation. Of them all, the most mentioned one from respondents was related to the deployment of human resources, whether it is the ability or disposition to hire new talent with entrepreneurial skills or train the current staff to embrace and adopt this mindset. The company's ability to motivate and manage employee's expectations around DBMI was a key ingredient for success, and this was also evident in the exploitation process, where an employee's commitment, time and goals management during prototyping and testing were seen as key factors for success. Being able to protect employees involved in innovation from the traditional line of business and its constraints were required. The researchers define this OC as *Human Talent Management Capability*. These results corroborate with the previous research by Lewrick, Raeside and Omar (2012), who found that capabilities like human resources and their knowledge acquisition, change mindset and interaction between organisations are crucial for fostering innovation.



In terms of decision-making, a key aspect of the DBMI process, the research found that many barriers and hierarchies exist within the organisation that must be overcome to deploy a DBMI effort fully. Manager roles ability to certify or deny certain initiatives on time has been recognised as a key factor. The time constraints that DBMI imposes require managers to delegate certain tasks in order to allow employees to make more decisions without constant supervision. Part of the managerial capabilities not only resides in the ability to impart decisions but also in the ability to delegate certain decisions down the organisation's hierarchy in order to make the whole process more horizontal and agile. This OC is defined by researchers as *Innovation Management Capability*. The results corroborate the findings of much of the previous literature (e.g. Foss & Saebi, 2015; Teece, 2010; Zehir & Acar, 2006), which found that organisational performance relies heavily on management's ability to manage organisational conditions, whether positive or negative, making it a critical organisational capability.

On the side of the tools and frameworks to facilitate the DBMI process, the study identified a gap in the technology used to manage, administer and monitor the whole process. Incumbents with a large trajectory tend to base certain operations on outdated technologies, and the update of these to keep up with the constant change and acceleration of the market is a challenging task that increases with the companies' size. Respondents agreed on the need for a better deployment of the technology in this process. The researchers define this OC as *Technological Capability*. A similar conclusion was reached by Zehir and Acar (2006). The authors pointed out that one of the most important capabilities of an organisation to influence business performance positively is its technological capability, including its R&D capabilities.

An additional finding identified was related to the incumbent's strengths. One of these company's main differentiation factors is their knowledge of customers and markets. By being market leaders, the relationship and feedback with customers provide incumbents with updated knowledge of their market. This is considered by respondents as the prime strength of DBMI and poses a constant challenge for companies to identify new customer profiles and behaviours which are at the core of their activities and innovation goals. The researchers define this OC as *Market and Customer Orientation Capability*. These findings were also reported by Lwrick, Raeside and Amar (2012), who believe that interaction with markets and customers can significantly enhance an organisation's ability to enhance value creation.

## 6 Conclusion

*This chapter summarises the findings of this study concerning its aims and objectives and previous research. By highlighting the implications of the empirical findings, the chapter also provides recommendations for possible future research in the area.*

### 6.1 Research Aim and key findings

This research explored how the DBMI unfolds in incumbent firms by studying successful, unsuccessful or missed DBMI attempts. Since authors (e.g. Christensen et al., 2018; Foss & Saebi, 2015; Schmidt & Scaringella, 2020) highlighted the importance of disruptive BMI as one of the critical success factors for firms and presented theoretical and empirical gaps, calling for further investigation. Accordingly, research questions and interview guides were developed based on various articles, books, and the researcher's own experiences to better understand the strengths, challenges, and implementation of DBMI.

Given qualitative research's perceived advantages for studying an unclear phenomenon, abductive qualitative research was conducted to fulfil the purpose of the study and answer the research questions (Bell, Bryman & Harley, 2019; Saunders, Lewis & Thornhill, 2009). Using non-probability and purposive data sampling strategies, data collection was primarily based on one-on-one and group interviews, supported by the firm's internal and external documents. Ten in-depth interviews lasting from forty-five minutes to an hour and a half were conducted with eleven competent and knowledgeable representatives from six incumbent firms operating in the Scandinavian region. Following a thorough analysis of the data using a thematic analysis method, the following conclusions can be drawn.

Similar to Markides and Oyon (2010) observations, the study found that incumbent firms are threatened with the emergence of new and disruptive business models. Consequently, they have implemented several strategies to deal with these threats, including innovating business models in various intensities. They seem to constantly exploring and trying various tactics to enhance value creation, delivery, and capture. After all, the performance of a business ultimately depends upon its business model (Zott & Amit, 2007; Lindgren, 2018; Foss & Saebi, 2015).

Regarding the DBMI beliefs, the research provided a new understanding of what DBMI constitutes for incumbents. The attitude towards disruption, in general, influences how the process and outcomes unfold. Incumbents provided a broader framework of DBMI, in which small changes in the business model, innovation that takes less time to develop, and enhancements to existing products may have a significant impact on the business and the industry, causing disruption.

The industry is reconsidering the understanding of disruption as a third-horizon innovation that means heavy and painful reorganisations, and new approaches to disruption are being proposed. Still, both incumbents and researchers consider DBMI as the strategic road that leads to a successful business future, as stated by Lindgren (2018).

In relation to the DBMI process, researchers found that the ideation and evaluation processes were fairly structured and developed for most incumbents. The use of frameworks and systems to collect, rank, and evaluate ideas is quite advanced. However, the most challenging aspect lies in the exploitation phase. In general, the DBMI idea generation and evaluation process were similar for other types of innovations. In the exploitation phase and other instances, respondents identified several specific challenges and strengths associated with the implementation of DBMI. Based on those, and in line with various researchers (e.g. Foss & Saebi; 2015; Gant, 2018; Lindgren, 2018), the study believes that firms should develop the sound organisational capabilities essential for unfolding DBMI for long-term survival and generation of competitive advantage.

Regarding strengths and challenges, brand reputation, financial resources, and customer knowledge emerged as the most significant strengths. The lack of funding structure and systems, an entrepreneurial mindset that is lacking, and process barriers are the most significant challenges. Furthermore, some firms expressed their concern for a need for heavy investment in resources necessary for implementing DBMI due to their legacy and complexity. Overall strengths and challenges provided the researchers to propose the key OCs required to enhance the current DBMI process. The study identified capabilities in human talent management of innovation, innovation funding management, technological resources to enhance disruptive innovation, and customer knowledge.

Contrary to scholars (e.g. Aminoff et al. 2017; Christensen, 1997; Markides, 2015), who emphasised disruptive business models being new to the firm, its customers and suppliers, industry, and even the world, the study found that this is not always the case, as DBMI could start on different forms and intensities without being completely new. The research discovered that some companies began as disruptors, such as Fintec Co and Food Processing & Packaging Co, which began disrupting the financial sectors and food packaging industries, respectively. Additionally, we observed that many companies began on a smaller scale, such as the "Livat Solutions". A further finding is that innovative ideas can originate from anybody and at any time, as shown by the example of a furniture designer who came up with the idea of detaching the legs of the chair that led to the flatpack revolution.

Hence, innovation is not confined to prescriptions related to low costs, better management, and control, but also encompasses how value is delivered to consumers and stakeholders, thereby improving the overall performance. The extent of the BMs transformation today is inherently disruptive, encouraging businesses to do even more DBMI. As Lindgren (2018) stated, for businesses today, it is imperative that they remain at the forefront of their BMs, BMIs, and DBMIs, as practiced by market leaders such as Ryanair, Uber, Airbnb, and Netflix. Firms can, therefore, continuously think outside the box to make disruptive changes to their business models by applying identified key capabilities.

By acquiring missing capabilities over time, incumbent firms can develop unique capabilities to carry out the activities necessary to move their products or services through their value chain. By placing the innovation process, carefully evaluating opportunities, market conditions, as well as strengths and weaknesses, firms can implement DBMI gracefully. As a result of their efforts, they will be able to develop a disruptive business model, which will enable them to offer novel value to their customers and stakeholders, ultimately resulting in competitive advantages.

## 6.2 Research Implications

*Theoretical implications:* As stated, previous research in the area has been mostly limited and focused on the dynamic capabilities to explain the DBMI phenomenon, and as such, the DBMI and OCs area lacked theoretical knowledge, research, and clarifications. Hence, this study shed light on the DBMI process, its strengths and challenges, and the essential capabilities of organisations, contributing knowledge in the field of DBMI and OCs, which can be applied to educational institutions and societies in general.

*Practical Implications:* The findings of the research have practical implications too. As a result of conducting in-depth interviews with experienced and knowledgeable professionals from incumbent firms and examining their internal and external documents, the study provides insights into how the DBMI can be unfolded in the incumbent firms. These insights can be helpful to companies when implementing DMBI in the future, ultimately increasing the value of their employees and customers.

## 6.3 Future Research

The purpose of the research paper was to introduce, discuss and observe DBMI and OCs in a broader context. As the DMBI phenomenon is complex, future research on the topics could be carried out to expand understanding of both topics. Although the study employed data triangulation to strengthen its validity, the methodology was purely qualitative. Further research could use a hybrid approach, combining qualitative and quantitative methods to elaborate on the topics and research results. The study also acknowledges the limitations of interviewing respondents at a specific point in time, as there is a likelihood of the respondent's response being influenced by events occurring in his or her personal or professional life. This aspect can be eliminated in future research with a longitudinal data collection approach.

Additionally, while the study included firms from various industries, it was focused on firms located in the Scandinavian region. The DBMI phenomenon in different regions, cultures, economies, and respondent's perceptions can expand the knowledge about the phenomenon and provide different approaches and outcomes. As one respondent stated, it would have been interesting to learn about how firms in other regions implement DBMI. The research also provided a diverse array of incumbents from different industries; further studies can focus on companies within specific sectors to deepen the strengths and challenges that each market poses when incurring in DBMI.

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# Appendix A: Interview Guide

## Interview Questions

## Aim of the Questions

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### Part 1: Introductory Questions

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Could you please provide us with your background, including educational credentials and previous work experience?

Information collected for contextualising data.

Would you mind providing us with some information regarding your company and your role?

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### Part 2: Exploring the firm's past experiences of implementing DBMI

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Could you describe your company's business model? In other words, how does your company create, deliver, and capture value?

Preliminary question to get into the topic

In what ways is your company unique in the way it operates?

Supporting question to understand BMI or get info about the firm's strength.

Present DBMI definition + examples

Would you agree on the definition? Do you have anything to add or comment upon?

Establish a conceptual common ground

Would you consider yourself to have attempted a disruptive business model Innovation in the past? If so, could you share the experience of a successful attempt?

To get practical examples of attempts to DBMI.

What do you believe triggered the change?

The broader question in understanding the drivers behind DBMI.

What were the mechanisms (e.g. ideas from employees/customers or trends/imitate competitors) through which a disruptive idea was received?

The specific question in understanding how a firm recognises disruptive ideas.

What was the mechanism for evaluating such ideas?

Understanding how a firm evaluates disruptive ideas?

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What factors were considered when you made the decision to implement DBMI?	Finding essential organisational capabilities in evaluating DBMI
In what way did you develop the idea (e.g., corporate incubator or accelerator)?	Understanding how a firm exploits disruptive ideas?
Was there any difference in the way you conducted the particular disruptive business model innovation compared to regular innovation?	Understanding the DBMI process.
Did you change the business model for the entire organization or part of the organization?	Understanding the scale of DMBI implementation
What were the strengths of the firm in implementation?	Finding strengths of large established firms in implementing DBMI.
What do you believe were the key tools, resources, or processes without which DBMI wouldn't have been possible?	Understanding essential organisational Capabilities required for implementing DBMI.
What were some of the challenges that you faced, and how did you overcome them?	Finding challenges of large established firms in implementing DBMI.
Did you encounter issues with resources, tools, or processes?	Understanding essential organisational capabilities needed for implementing DBMI.
Did you have any unsuccessful disruptive business model attempts? If so, what did you believe to be the primary reason for failure?	Understanding unsuccessful DBMI attempts and the reason behind them.
Are there scenarios in which the company could have successfully exploited disruptive business opportunities but did not? If yes, then what was the reason?	Understanding missed DBMI attempts and the reason behind them.

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### **Part 3: Exploring the firm's current approach of implementing DBMI**

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Would you say that the company is in a constant state of innovation, and are you open to making DBMIs?	A critical question in understanding the organization's mindset towards DMBI.
Can you share the process of the current business model innovation process if you have changed it?	Understanding if firms are continuously improving their DBMI innovation process.

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Do you believe your organization has the resources and tools to identify, evaluate, and exploit opportunities at today's required speed?

Finding essential organisational capabilities.

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If you were to wish for anything such as resources, tools, or processes that could help you deploy an innovation of this magnitude swiftly, what would that be?

Finding organisational capabilities.

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#### **Part 4: Closing Questions**

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Is there anything else you would like to add that may contribute to our study?

Additional information for the research work

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Could you possibly provide any other information (for instance, internal documents) that could benefit our study?

Data Triangulation, looking for an additional source of data.

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May we contact you further if we have additional questions?

Getting agreement to contact for possible follow-up

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# Appendix B: Consent Form



SCHOOL OF  
ECONOMICS AND  
MANAGEMENT

Hello,

We are grateful for your interest in participating in this study. This consent form provides brief information about the study, the researchers, the expectations, and the benefits of the study.

## Research title

Disruptive Business Model Innovation: Incumbent's perspectives and approaches to competitive advantage generation

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## Research aim and objectives

The research aims to understand how DBMI unfolds in incumbent firms, including their strengths, challenges, and essential organizational capabilities. The new ideas and insights gained from this research will provide a theoretical, practical, and social contribution to the field of DBMI.

## Why do we need your assistance?

In order to better understand this phenomenon, we want to interview managers involved in R&D, innovation, and business development from multinational incumbent firms. We believe that you can provide us with meaningful insight into a company's DBMI

implementation process, together with organisational capabilities, strengths and challenges.

### **Procedure**

A one-on-one interview and focus group will be conducted via Zoom and will last approximately 45 minutes to an hour and a half. Participation is voluntary and withdrawal options are available at any time.

### **Anonymity and confidentiality**

The data will be used for academic purposes and presented in an anonymous manner protecting the identity of the firm and the individual.

### **Signature**

Signature of participant:	Place and date
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We would be pleased to answer any questions or concerns you may have.