# A step towards Successful Implementation of Business Model Innovation: Philips Perspectives

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# CME 2001 - Master Thesis Report (2018/19)

A research report for Master's graduation thesis on

# A step towards Successful Implementation of Business Model Innovation: Philips Perspectives

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Cheers!

Abhishek Umesh Neeli

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# Executive Summary

In today's fast growing and competitive environment, keeping up with changing trends has become a necessity for firms to beat the competition. The evolution of technology and customer demands has prompted firms to rethink ways of doing traditional business. A relatively new form of innovation with a growing community of people have stated that Business Model Innovation is essentially the key to successful organizations nowadays. Inspired by companies like Netflix, Google, Xerox etc. who have a proven track with respect to Business Model Innovation, corporations in the market are facing troubles in achieving similar feat.

Several companies are failing to achieve this in practice particularly in the implementation of new Business Models. This is attributed mainly because professionals in organizations find a lot of ambiguity, when it comes to the definition of Business Model and Business Model Innovation. They also lack information as to which are the key barriers that hamper the process of implementation and key enablers that help in overcoming these barriers. Furthermore, they are unclear about key drivers that lead to making a go-decision for projects.

This graduation research is carried out to tackle the problems as mentioned above in apprehending the key drivers, key barriers and key enablers along with process of a successful Business Model Innovation within Philips. The problem statement which is examined in this research is as follows:

**Professionals lack insights on key drivers, key barriers & key enablers that help in the process of a successful Business Model Innovation essential for transforming business within companies**

Based on the problem description, the main research question is formulated. An answer to this main research question will address the aforementioned problem statement. The main research question is:

***"How can insights about various drivers, barriers and enablers help in the process of a successful Business Model Innovation transforming business within companies?"***

A total of five sub research questions are devised to answer the main research question and are described in chapter 1. By answering the sub research questions sequentially, an answer to the main research question will lead to achieve the research objective. The objective of this research is mainly threefold:

1. To study the ecosystem of Business Model and Business Model Innovation in developing an adequate comprehension on their definitions.
2. To identify key barriers, key enablers and key drivers that are associated with the process of Business Model Innovation.
3. To develop a process framework for Business Model Innovation based on exploratory content.

To achieve this objective, the research was segregated into three main stages namely ***Literature Study, Phase 1, Phase 2***.

In ***Literature Study***, the basic understanding of Business Model Innovation concepts was made aware. A thorough academic review was carried out by exploring Scientific Articles, Theoretical books and Thesis reports. The various ambiguity in definition of Business Model and Business Model Innovation was studied with respect to their evolution and relevance. After having a clear comprehension, the literature study forayed into desk research where Secondary Articles like Harvard Business Review in addition to documents from within the companies were reviewed. A list of **Drivers**, **Barriers** and **Enablers** were identified from literature review alone along with several inputs for framework. Thus, ***Literature Study*** facilitated the development of questions for conducting interviews in Phase 1 of the research.

In ***Phase 1***, semi-structured interviews were conducted to support the findings from a practical perspective. The target group included practitioners from different functional background dealing with Business Model Innovation of some sort and were considered as subject matter experts. A total of 11 participants were interviewed. A transcription of the audio recordings was done and a first order and second order coding of data was carried out for easier analysis. The recommendations provided by the interviewees along with an in-depth literature helped to identify a total of **16 Drivers, 32 Barriers** and **22 Enablers**. The several stages of the process for the integrative framework were identified which are ***Aware, Create, Validate*** and ***Scale***. Each of the stages were divided into sub components that were answering some of the main questions during a process of implementation of Business Model Innovation.

Following the analysis, the research proceeded with ***Phase 2***. Here a survey was devised. This was done to rank the various **Drivers, Barriers** and **Enablers**. A total of 32 participants answered the questionnaire and the top three of each of **Drivers, Barriers** and **Enablers** are listed here below:

**Key Drivers**: *Consumer need or Consumer experience, Technological Developments, Untapped Market Opportunities.*

**Key Barriers**: *Focus on immediate benefits, Long lead time to implement, Missing Resources and Tools.*

**Key Enablers**: *Leadership driving the innovation, Right profile or mindset of people across functions and disciplines, Leadership buy-in*

Further to this, the above-mentioned findings added to the integrative framework. This framework was based on 4I process framework by Frankenberger, Weiblen, Csik, & Gassmann (2013). Inputs from interviews, survey and in-depth analysis went on to adding components to the framework. The validation of empirical results and relevance of the framework was confirmed in the final pitch, where a detailed discussion with panel of attendees was conducted. Based on the feedback received from the final pitch, the changes were incorporated and process for Business Model Innovation was created shown in the next page in ***Figure 1.***

The proposed framework contributes in two ways: First, it lists a comprehensive list of key drivers, key barriers and key enablers which come up during the process of Business Model Innovation. Secondly, a process model of Business Model Innovation with key tasks have been outlined. As literature suggests so far there has been no process model developed for Business Model Innovation. This integrative framework incorporates the quite dispersed literature and helps to organize existing contributions and in identify any "blind spots" of Business Model research.

Among the many other Recommendations, an important one is that the scope of the research in developing the conceptual framework is at a holistic level, since the key focus of the research was to identify key drivers, key barriers and key enablers that incorporates various perspectives. When Business Model Innovation is being undertaken at a rapid pace within the company it would be interesting to analyze in-depth on the individual elements of the framework. It would also be interesting to develop metrics around the drivers, barriers and enablers which could be adopted within projects of any nature.

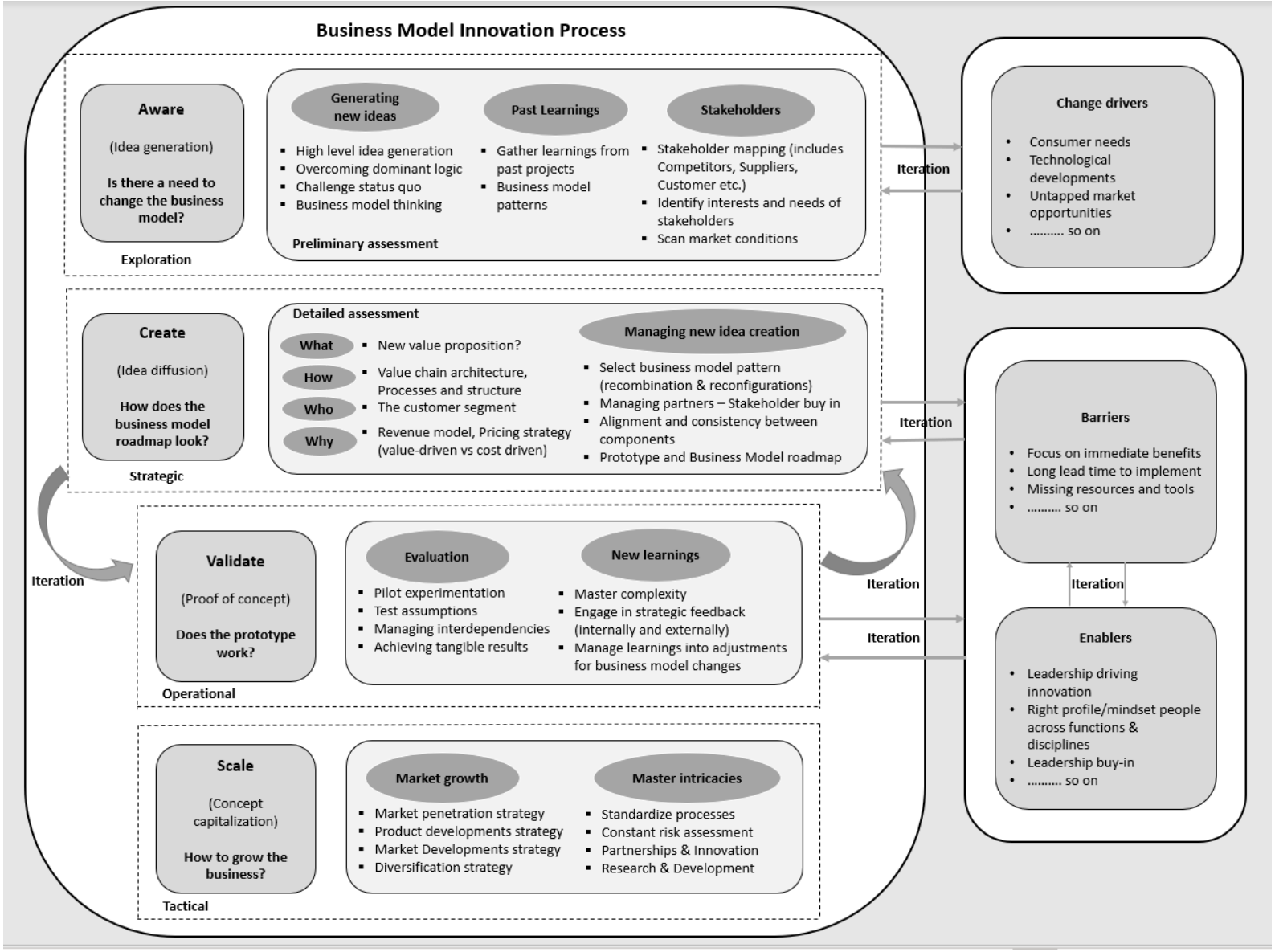


*Figure 1. Business Model Innovation process integrative framework.*

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# 1

# Introduction

## 1.1 Background

In the present era of cutthroat competition, engaging in innovation of some kind has become of prime importance for companies to survive in the market. Before 2000's, innovation was mostly centered on new products and new services, where improved products and services helped to beat the competition and create additional value for the consumers (Osterwalder & Pigneur, 2010). However, due to widespread of information and economic developments, there has been an evolution of technology and customer demands for which traditional offerings are withering out and companies are constantly seeking for new ways to gain a competitive advantage (Enev & Liao, 2014). In fact, more attention on the commercialization of products and services using Business Model has witnessed limelight.

Frankenberger, Weiblen, Csik, & Gassmann (2013), have stated that Business Model Innovation is "A novel way to create and capture value by changing one or multiple components of a Business Model". A relatively new form of innovation with a growing community of people who have stated that Business Models are essentially the key to successful organizations (growing and established companies) (Osterwalder, Pigneur, & Tucci, 2005; Zott, Amit, & Massa, 2011).


***Figure 2. Companies that centered their success around Business Model Innovation.***

If we see the story of the three successful companies as mentioned in *Figure 2*, Netflix is an inspirational example of a company that shifted their Business Model several times, from renting out DVD's to information based offering available online on a subscription basis. Whilst Google with its hidden revenue model, where users don't pay for the service or product offered rather revenue is generated based on the advertising money spent by businesses bidding on keywords. Finally, Xerox which realized that the cost of ownership of the copier machines was so huge, they innovated their Business Model and went on to sell copies instead. The reason for their success is that these companies constantly challenged their status quo, recognized the customer needs and were continuously striving to evolve and beat the competition (Cuofano, 2019).

Over the last few decades, there is an increasing amount of attention to Business Model Innovation amongst management researchers as well as professionals. A search on the keyword "Business Model Innovation" in Scopus has shown 9318 publications on Business Models and Business Model Innovation with trend-line from 2011 to 2018 seeing a sharp increase as seen in *Figure 3*.

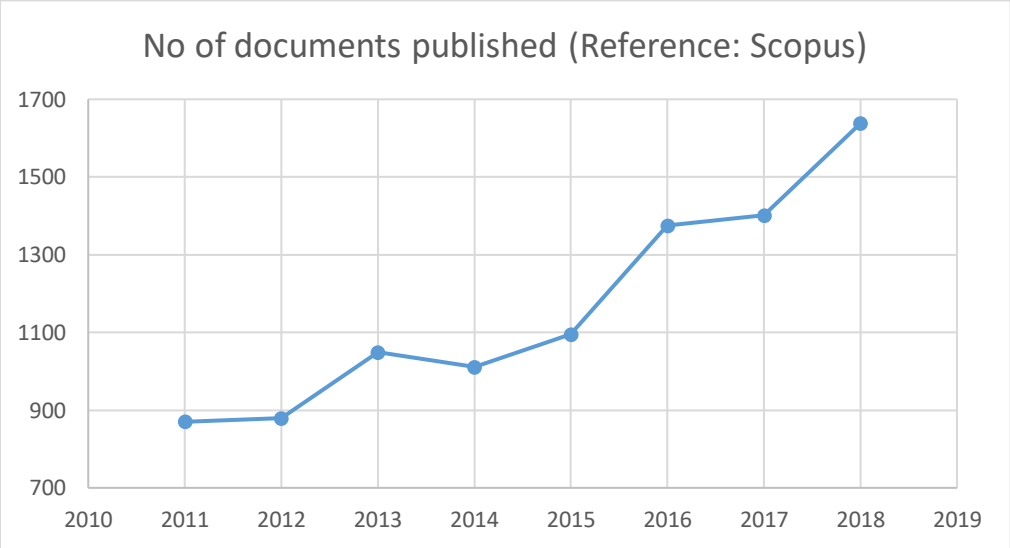



***Figure 3. Rise in Business Model Innovation publications from 2011 to 2018 (Reference: Scopus search).***

Despite the growing popularity, there is lack of theoretical underpinning and empirical enquiry when it comes to addressing important phenomenon in the literature, a concentrated effort in research seems necessary (Foss & Saebi, 2017). The stages of implementing (sustaining) and upscaling (growing) of Business Model Innovation are relatively underdeveloped (Chatterjee, 2013; Kesting & Günzel-Jensen, 2015). In addition,

given the high rate of failure of implementation of Business Models, it is surprising to see the scant research in this area (Mentzer, 2011), this furthermore validates the urgency to focus on implementation part of Business Models.

## 1.2 Problem Analysis

Business Model Innovation gives companies an edge over competitors (Porter & Kramer, 2011), as mentioned above the missing academic underpinning in literature, a few problems ought to be addressed.

Problem 1: **Practitioners find a lot of ambiguity, when it comes to the definition of Business Model and Business Model Innovation. Scattered viewpoints make it hard for professionals to adopt the same in businesses.**

From an IT-enabled or digital industries perspective Business Model is seen as a tool that depicts, innovates and evaluates business logic in startups and existing organizations (Veit et al., 2014). Foss & Saebi (2015), have defined Business Models as a company's value proposition and market segments, the structure of the value chain required for realizing the value proposition, the mechanisms of value capture that the firm deploys, and how these elements are linked together.

As far as Business Model Innovation is concerned, the general definition aims at capturing and creating value by innovating new ways to create and deliver existing products or services (Yang, Evans, Vladimirova, & Rana, 2017). Casadesus-Masanell & Zhu (2013) define it as "The search for new logics of the firm and new ways to create and capture value for its stakeholders; the primary focus lies in finding new ways to generate revenues and define value propositions for customers, suppliers, and partners".

Literature is fragmented with various perspectives from industries, authors and practitioners. Recent findings have outlined that there has been some consensus on Business Models (Wirtz, Pistoia, Ullrich, & Göttel, 2016). However, the term 'Business Model' is not consistently applied, there is a misunderstanding of the term as a "business concept", "business strategy", "revenue model" or an "economic model" (Magretta, 2012; Massa, Tucci, & Afuah, 2017). The same holds good for Business Model Innovation, there exists strong disagreements between practitioners and researchers about the interpretation of the meaning of Business Model Innovation (Zott, Amit, & Massa, 2010). Such voids necessitate bringing in clarity and hence a further exploration is vital.

Problem 2: **Professionals lack information as to why the implementation of Business Model Innovation in firms is failing. It is unclear about which are the key barriers that hamper the process of implementation and key enablers that help in overcoming these barriers.**

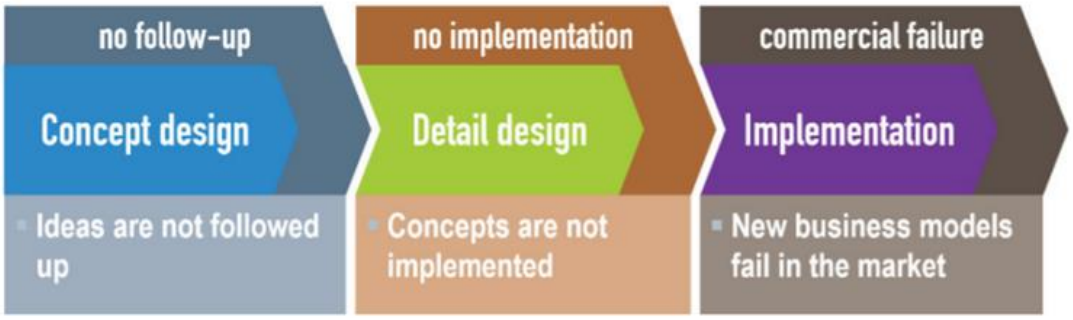



***Figure 4. The design-implementation gap of sustainable Business Model Innovation* (Geissdoerfer, Savaget, & Evans, 2017).**

As seen in *Figure 4*, new Business Models face commercial failure in market (Geissdoerfer et al., 2017). When there is lack of insights about risks, managers tend to resist to radical changes even though there is a business opportunity (Burmeister, Luettgens, & Piller, 2016; Cavalcante, Kesting, & Ulhøi, 2011; Rudtsch, Gausemeier, Gesing, Mittag, & Peter, 2014). Besides, an ever changing environment is also stopping company professionals to implement Business Model Innovation (Trimi & Berbegal-Mirabent, 2012). Some previous research undertaken on these lines states that conflicts are a result of firms adopting new components to innovate their Business Models as mangers resist experimentation that might threaten the value of the company and find it better not to innovate (Amit & Zott, 2001; Chesbrough, 2010).

Company Professionals are often limited by scope of control and responsibility to successfully implement changes in new Business Models (Burmeister et al., 2016). Not all changes in a Business Model results in value creation, the lack of knowledge about the challenges (which are loosely perceived) and several associated factors result in managers resisting the changes at large. In addition, other factors such as dominant logic and informal power distribution also hamper the implementation of Business Model Innovation. The existence of scant research and a slow pace of exploration provides more reasons to research on key barriers that hinder implementation in these field and key enablers that help in overcoming.

Problem 3: **Practitioners lack information on what are the elements that lead to the implementation of Business Model Innovation. It is unclear what drives managers to make such a decision; in addition, Managers find it hard to distinguish between the key drivers.**

Business Model innovators usually are motivated to implement because of some kind of disruptive change in the market they are operating in, requiring to rethink about their current states (Casadesus-Masanell & Ricart, 2010). Changes in Business Model can also be technology - driven necessitating innovation (Habtay, 2012). Pisano, Pironti, & Rieple (2015), state that trends have been playing a vital role in the transformation of business landscape especially the Business Models. Since Business Models are helping firms and some are successfully articulating it, the lack of insights into the extent of the drivers that determine implementation is not much explored in literature and hence needs further dive.

## 1.3 Problem Statement

In this section, the three problems analyzed in the previous section will be summarized and they will be translated into a problem statement. The problems analyzed are:

a. Professionals find a lot of ambiguity, when it comes to the definition of Business Model and Business Model Innovation. Scattered viewpoints make it hard for professionals to adopt the same in businesses.
b. Professionals lack information as to why the implementation of Business Model Innovation in firms is failing. It is unclear about which are the key barriers that hamper the process of implementation. In addition, there is lack of information when it comes to understanding the key enablers that help in overcoming these barriers.
c. Practitioners lack information on what are the elements that lead to the implementation of Business Model Innovation. It is unclear what drives managers to make such a decision; in addition, Managers find it hard to distinguish between the key drivers.

By addressing these above analyzed problems, a contribution will be made towards the solution. Therefore, the problem statement for the research is:

**Professionals lack insights on key drivers, key barriers & key enablers that help in the process of a successful Business Model Innovation essential for transforming business within companies**

## 1.4 Research Objective

The contribution of this research is mainly threefold:

4. To study the ecosystem of Business Model and Business Model Innovation in developing an adequate comprehension on their definitions.
5. To identify key barriers, key enablers and key drivers that are associated with the process of Business Model Innovation.
6. To develop a process framework for Business Model Innovation based on exploratory content.

## 1.5 Research Questions

Based on the above stated problem statement and the research objective, the following main research question is devised as:

***"How can insights about various drivers, barriers and enablers help in the process of a successful Business Model Innovation transforming business within companies?"***

The theoretical significance of this study is to address the failure of a Business Model Innovation process, to enhance the understanding of the barriers that can hinder the successful implementation, in addition to comprehending the enablers, which help in overcoming the barriers. Furthermore, the drivers that facilitate the process in making it successful are also explored in the research.

To answer the above stated main research question it is essential to break it down into sub-research questions which are as follows:

1. **What are the most adequate definitions of Business Model & Business Model Innovation by way of conceptualization?**

   The first sub-research question addresses the ambiguity in defining Business Models and Business Model Innovation from perspectives of researchers & practitioners.

2. **What are the key barriers associated to a successful Business Model Innovation?**

   This sub-research question will help in identifying the factors that hamper the implementation of Business Model Innovation.

3. **What are the key drivers associated to a successful Business Model Innovation?**

This sub-research question will help in identifying various drivers that overcome the implementation of Business Model Innovation.

4. **What are the key enablers or success criteria for a successful Business Model Innovation?**

   This sub-research question will help in identifying various enablers or success criteria that help in driving through the barriers for a successful Business Model Innovation.

5. **What is a suitable approach for the process of achieving a successful Business Model Innovation within firms?**

   This sub-research question will help in developing a conceptual framework that acts as systematic process to achieve Business Model Innovation

Conclusively, answering the five sub-research questions would enable in answering the main research question.

# 2

# Research Design

In this chapter, a detailed overview of the Research Methodology, Research Approaches & Philosophies, and Research Strategy along with Data Collection methods undertaken for answering the research question will be elaborated. The Research Onion as described by Saunders, Lewis, & Thornhill (2009), represented in *Figure 5* is chosen as the basis for research discussion.

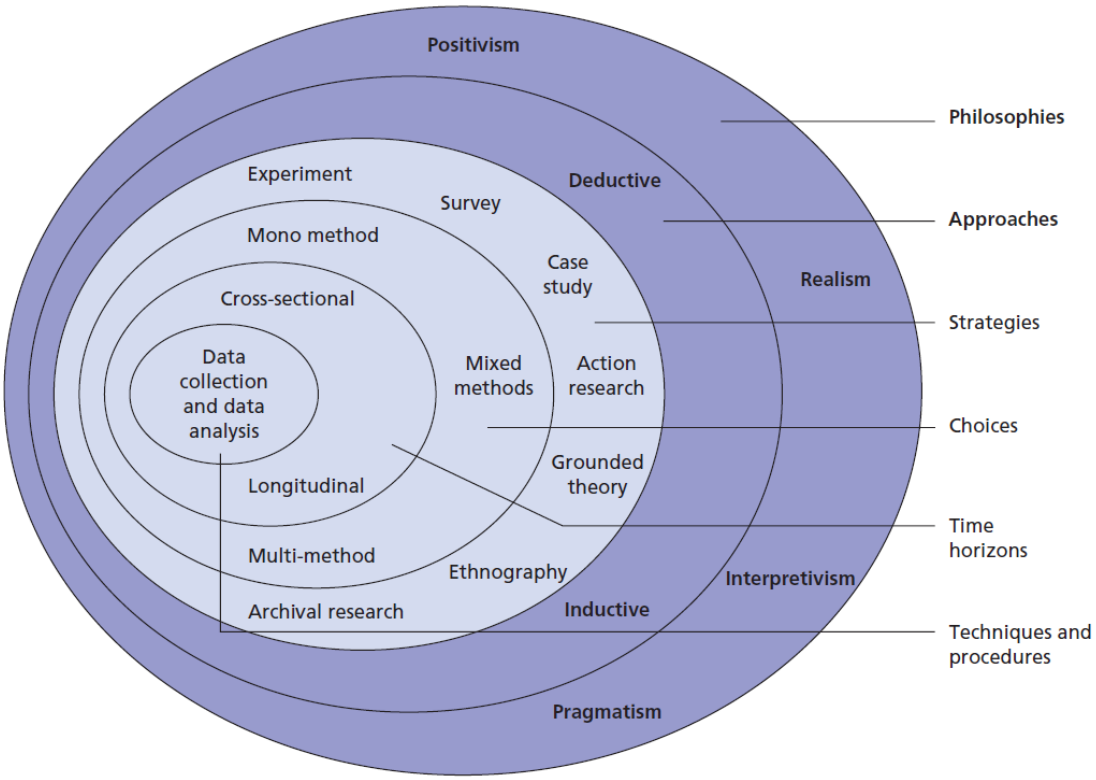



***Figure 5. The research onion* (Saunders et al., 2009).**

## 2.1 Research Approach and Philosophy

In this section, the research approach and philosophy adopted for the research will be elaborated. Research approaches and philosophies indicate the important assumptions about the way in which subjects are viewed. The philosophy adopted will mainly influence the relationship between knowledge and the process by which it is developed (Saunders et al., 2009) or in other words the direction of the research strategy. The research approach helps to describe the nature of the research. Saunders et al., (2009), have categorized them in four different ways as seen in *Figure 5,* which are ***Realism***, ***Positivism***, ***Interpretivism*** and ***Pragmatism***.

The objective of this research is to address real-time problems and to understand the human experience attached to particular scenarios. Since the research is intended to solve problems relating to the process of Business Model Innovation at Philips, the **pragmatic philosophy** is highly apt and hence chosen for this research.

As far as the research approach is concerned, data from the literature is being tapped to induce a theory; an inductive approach focuses on gaining a better understanding of the human perspectives attached to events. Hence, in order to achieve the aforementioned goals as mentioned in section 1.4, an **inductive approach** is selected.

## 2.2 Research Methodology

This section provides a detailed overview of the research methodology that is undertaken for answering the research questions.

Saunders et al., (2009), have classified researches in four kinds of studies (refer *Figure* **5**) in order to understand the purpose of the research and the way in which research questions are framed, these are:

a. ***Exploratory studies:*** This type of study clarifies the understanding of the precise nature of the problem. It aims to seek better understanding of what is happening; to seek new insights; to ask questions and to assess phenomena in a new light (Robson, 2002).
b. ***Descriptive studies:*** This type of study aims to depict an accurate profile of people, events or situations. Usually an antecedent or descendant to exploratory research, descriptive studies are usually observational in nature and show some sort of interrelationship with variables such as person, place and time (Saunders et al., 2009).
c. ***Explanatory studies*:** This kind of study is conducted in order to help understand a problem that was not studied before in-depth. It helps to establish causal

relationships between variables and explains the underlying phenomena of a particular thing or a situation (Saunders et al., 2009).

The research chosen here is a combination of **Exploratory** and **Descriptive studies** because it involves exploring the various barriers, enablers and drivers to get better insights about the subject that is relatively new as compared to traditional business concepts in the industry. Moreover, the human perspectives are essentially involved to build on the existing knowledge and also helps in building the process framework.

The next step would be to choose a research strategy that fits the intended goals trying to achieve as mentioned in section 1.4. Saunders et al., (2009), have designated seven kinds of research strategies (refer *Figure 5*), which are ***Experiment, Survey, Case study, Action research, Grounded theory, Ethnography*** *and* ***Archival research***.

The type of study being undertaken here is **Grounded theory** because it involves the collection of data without the formation of an initial theoretical framework. It is apt to develop insights from literature about various drivers, barriers and enablers, which then further with a series of observations and understanding helps to develop a theory. This generally leads to the theory being tested and building up the process framework from observations through interviews and survey that may develop predictions furthermore.

In addition to the content discussed earlier, it is quite essential to know about the terms **quantitative** and **qualitative**. These terms are used widely in business and management research to differentiate both data collection techniques and data analysis procedures. **Qualitative research** is a scientific method to gather non-numerical data in the form of observations. These observations can be in various forms such as interviews, case studies etc. (Saunders et al., 2009). **Quantitative research** is a scientific method to gather numerical data and employ computational, statistical or mathematical techniques to conduct analysis.

While choosing between **Qualitative** or **Quantitative** type of research, this thesis will encompass a greater understanding of the various perspectives, experiences of individuals all of which is necessary to find barriers and drivers of a successful Business Model Innovation. Hence the aptness of **Qualitative Research** and a bit of **Quantitative research** when it comes finding the key barriers, enablers and drivers.

Saunders et al., (2009), mention three methods (refer *Figure 5*) that can be employed using quantitative and qualitative data for conducting research. These three methods are as follows:

a. ***Mono method:*** In this method, a single data collection technique and the associated analysis procedure is undertaken. Meaning, if mono method is chosen then a combination of either a single quantitative data collection technique (E.g. Questionnaires) with associated quantitative data analysis will be undertaken.
b. ***Multi method:*** This method involves using multiple data sources (either a quantitative or qualitative) and corresponding analysis techniques to conduct the research. However, it should be noted that in multi method it is not possible to mix quantitative and qualitative techniques and procedures.
c. ***Mixed method:*** This method involves using multiple data sources and corresponding analysis techniques procedures. Generally applied when both quantitative and qualitative data collection techniques and analysis procedures are used in a research design.

The relevance of current research towards business management study has steered to choose a **mixed method** approach of qualitative research to gain an in-depth understanding of phenomena (Easterby-Smith, Thorpe, & Lowe, 2008; Saunders et al., 2009). In this approach, multiple sources to gather data like **Interviews, Desk Research** and **Literature Review** are explored. In addition, as Saunders et al., (2009) highlight the importance of time horizon that is being considered for the research. They mention two types as seen in *Figure 5*, which are **cross-sectional studies** or **longitudinal studies**. **Cross-sectional studies** involve study of a particular phenomenon (or phenomena) at a particular point in time. **Longitudinal studies** involve the study of change and development through the course of research. It involves studying interaction of variables over a longer duration of time.

Since the current research is for academic purpose and necessarily time constrained, the focus will lie on apprehending the perspectives at one point in time and hence a **cross-sectional study** will be adopted.

## 2.3 Data Collection Method

In this section, the various methods chosen to collect the data are elaborated. This research will entail a process of a review of literature, interviews, survey and a desk research. To explain on the same below:

***Literature Review:*** The objective of the literature review was to establish the context and understand the theories behind the problem from an academic standpoint. This process helped to narrow down on the content and provide basis to understand key concepts,

which provided inputs to frame questions to the interviewees also in answering the sub research questions.

As for information sources, the focus will be to explore articles, scientific books, thesis reports etc. from sources like Scopus search, Conference proceedings, University repositories, Google scholar among others. Keywords like "Business Model", "Business Model Innovation", "Barriers & Enablers", "Healthcare" and so on were primarily used.

***Desk Research:*** The main intention of this Desk Research was to accumulate secondary findings from professional organizations, business journals (Harvard Business Review etc.), websites and internal documents of Philips. This process was carried out under the supervision of company supervisor to incorporate a greater understanding of the content from a practical perspective.

***Semi-structured Interviews:*** After the problem was defined, the root causes and consequences were further studied. To develop ideas and build on the content not identified from the literature review and desk research the semi-structured interviews were carried out.

Snowballing sampling is commonly used when it is difficult to identify members of the desired population. After making a contact with one of the desired participants, referral to identify other participants and new cases further on helps to generate sample size to the desired sample for the interviews (Saunders et al., 2009). A minimum of twelve interviews are considered sufficient for a research that aims to understand the commonalities within a fairly homogenous group.

The selection of the participants was done by targeting employees that are closely related to Business Model Innovation and the snowballing sampling used to identify further interviewees within the company. These contributors are seen as 'experts' to Business Model Innovation which helped to ask deeper conceptual questions that provided richer insights.

**Interview protocols:** Each interview will be audio-recorded and further transcribed. The transcribed notes will be resent to the interviewees to follow up on minor corrections, if any. In addition, transcribing assists in easy analysis of the qualitative data. The duration of each interview will be planned in accordance with the number of questions that will be framed from the literature.

***Survey Questionnaire:*** Twelve interviews are sufficient for a research that aims to understand the commonalities within a homogenous group (Saunders et al., 2009). To

determine the key barriers, enablers and drivers that are associated with the process of a successful Business Model Innovation, the experts were surveyed. The survey will be conducted with the help of Vovici Survey Tool, the invites for the survey will be sent via email. Given the time constraint and schedule of the professionals, reaching out to around 70 participants is the target with a minimum of 30 respondents. The survey questionnaire includes 'rating questions' using a Likert-style rating scale. This scale includes questions in which the respondents are asked how strongly they agree or disagree with a statement or series of statements usually on a five-point rating scale (Saunders et al., 2009).

In *Table 1,* the particulars of data collection method that will be used to answer the sub-research questions is elaborated.

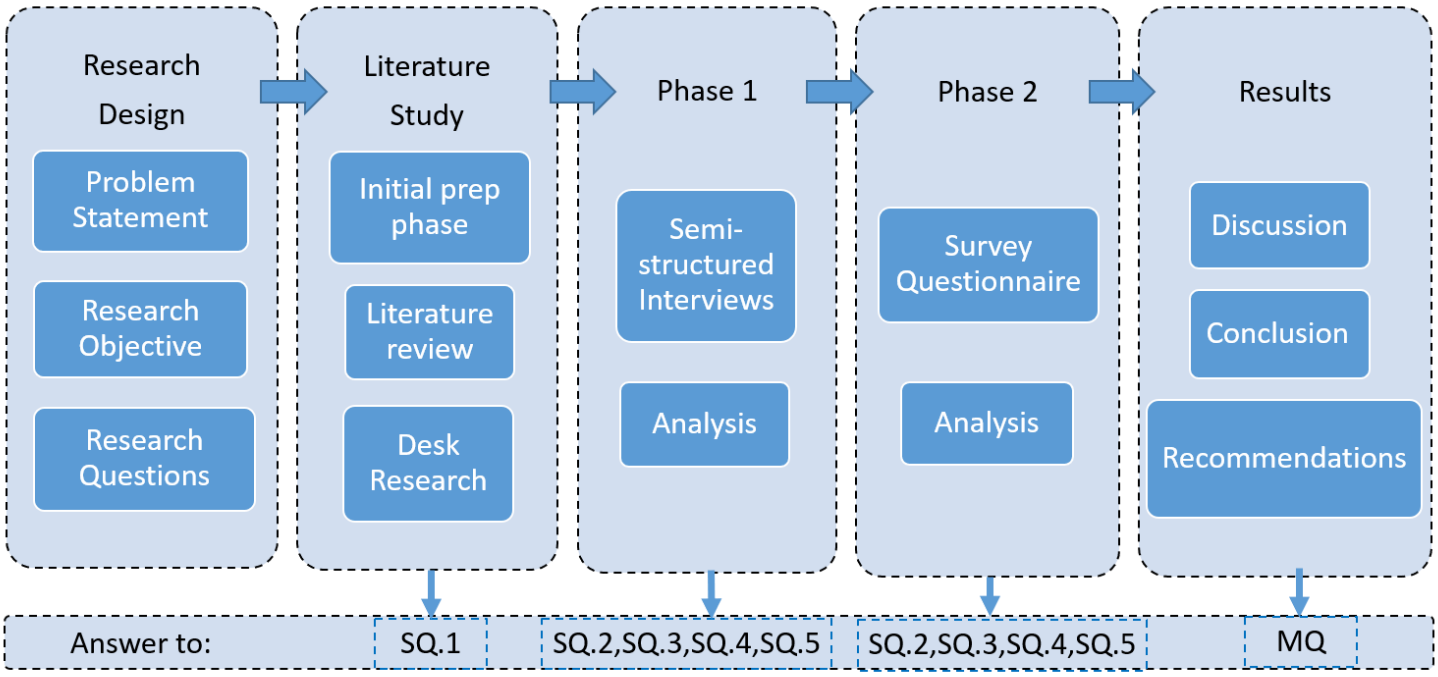
***Table 1. Particulars of data collection method used to answer research questions***

| Sub-Research Question | Data Collection Method |
|---|---|
| 1. What are the most adequate definitions of Business Model & Business Model Innovation by way of conceptualization? | Literature review, Desk Research, semi-structured interview |
| 2. What are the key barriers associated to a successful Business Model Innovation? | Literature review, Desk Research, semi-structured interview, Survey Questionnaire |
| 3. What are the key drivers associated to a successful Business Model Innovation? | Literature review, Desk Research, semi-structured interview, Survey Questionnaire |
| 4. What are the key enablers or success criteria for a successful Business Model Innovation? | Literature review, Desk Research, semi-structured interview, Survey Questionnaire |
| 5. What is a suitable approach for the process of achieving a successful Business Model Innovation within firms? | Literature review, Desk Research, semi-structured interview, Survey Questionnaire |

## 2.4 Research Strategy

In this section, the research strategy that is used to answer sub research questions and the main research question is highlighted in *Figure 6*. The research is categorized into five sections beginning with *Research Design* and ending with *Results*. The horizontal arrows indicate flow of work, moving from left to right and the vertical arrows below indicate the respective stage that answers a sub-research or the main question. After analyzing the problem, in *Research Design* the problem statement is defined along with laying out the research objective and answering the research questions. In *Literature Study* a thorough analysis of the academic and non-academic documents is carried out. In *Phase 1* semi-structured interviews are carried out along with an analysis of the same. In *Phase 2* with the help of survey questionnaire ranking of the findings is carried out. Finally, in *Results* section, the findings will be discussed and concluding remarks and recommendations will be carried out.

***Figure 6. Outline of the Research Strategy (Self-illustration).***




**Note**: *SQ: Sub-research question.
*MQ: Main research question.

# 3

# Literature Review

## 3.1 Business Model in a Nutshell

### 3.1.1 Business Model – a concept at debate

Business Model acts as a link between planning (strategy), and the operative implementation (process management) in a company (Wirtz et al., 2016). In *Figure 7*, a converging view on the development of Business Model literature is presented. The modern Business Model sphere is converging to developing right consensus from a technological, organizational and strategical point of view (Wirtz et al., 2016).

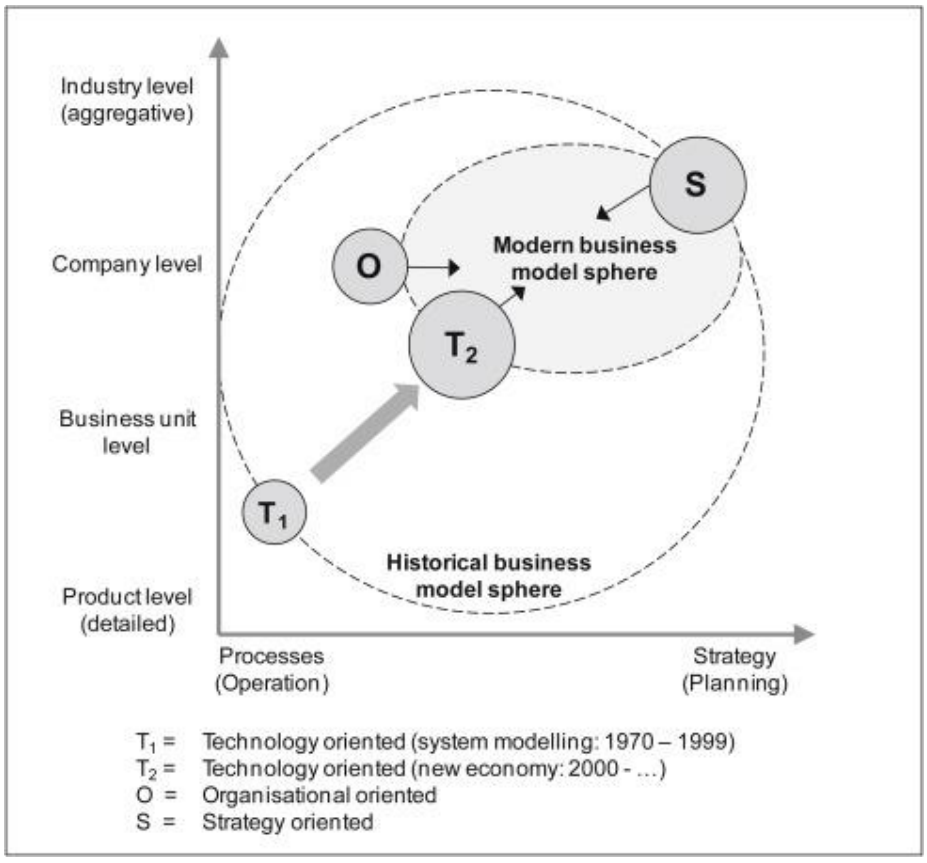



***Figure 7. Development of the three basic theories into the direction of a converging Business Model view (Wirtz et al., 2016).***

Regardless of the growing popularity amongst academicians about the purpose of the Business Model, still there is some lack of clarity in literature due to its historical development (Wirtz et al., 2016). The reason behind this is that literature is fragmented with various perspectives from industries, authors and practitioners. Recent findings have also outlined that there has been some consensus on Business Models (Wirtz et al., 2016). However, the term 'Business Model' is highly inconsistent, there is a misunderstanding as a "business concept", "business strategy", "revenue model" or an "economic model" (Magretta, 2012; Massa et al., 2017).

Especially with authors increasingly viewing Business Models from a strategy-oriented view, the distinction between a 'Business Model' and 'strategy' is frequently questioned. Even though the two terms intersect, they are unique terms: a Business Model is the direct result of strategy but is not, itself, strategy (Casadesus-Masanell & Ricart, 2010).

### 3.1.2 Origin and Development

With the boom of internet and globalization, the hurdles and differences between industries are withering out; companies are constantly in a pursuit to discover new ways of accomplishing their goals. This has compelled firms to rethink and redesign means of achieving their profits, growth or social impacts. This sense of urgency in incumbent firms has eventually steered the exploration of scholarly literature on Business Models to beat the system and the competition (Kim & Min, 2015; Osiyevskyy & Dewald, 2015).

The term Business Model was first conceptualized in the article 'On the Construction of a Multi-Stage, Multi-Person Business Game', published in 1957 (Bellman, Clark, Malcolm, Craft, & Ricciardi, 1957). For more than sixty years now, the term Business Model has been evolved and involved in many discussions both at academic and industry levels.

Technology and all other innovations remain latent unless there is an efficient channel to exploit the benefits these have to offer. Business Models are often used to commercialize new ideas and technologies of companies (Chesbrough, 2010). Managers also use Business Models as a recipe for innovation, experimentation, to motivate and communicate strategic and organizational change (Foss & Saebi, 2018).

The simplest definition that management scholars first categorized Business Model is "an illustration of a company's logic behind value capturing and value creation and the mechanisms that are hidden underneath" (Hacklin & Wallnöfer, 2012).

Business Model has evolved overtime and defined in a numerous set of ways in literature construct. Zott, Amit, & Massa (2010), have found through their research that the theme of the term Business Model is claimed to follow one of the below mentioned categories:

- Statement
- Description
- Representation
- Architecture
- Conceptual tool
- Conceptual model
- Structural template
- Method
- Framework
- Pattern

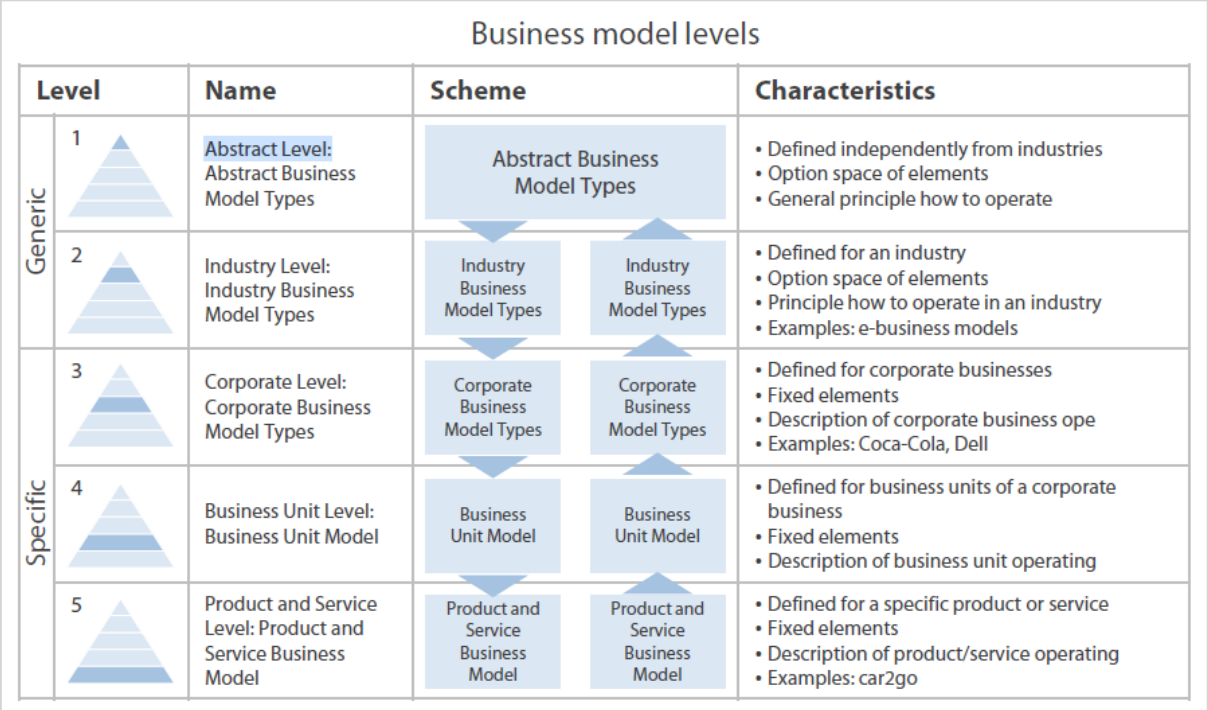



***Figure 8. Business Model Levels. Source: Adapted from (Wirtz, 2011).***

In addition, a Business Model can be viewed from different aspects and different levels of detail. Five Business Model levels can be found in literature as seen in *Figure 8*, which are at industry level, corporate (company) level, business unit level, product level and an abstract level (Casadesus-Masanell & Ricart, 2010; Schallmo & Brecht, 2010; Wirtz, 2011).

In spite of this dynamic nature, often the successful Business Models have played a key role in making companies profitable. For instance, Google listing a paid-advertising Business Model or Xerox leasing their copier rather than selling it (Afuah, 2014). A global study undertaken by IBM in which 765 managing directors were interviewed revealed that the financial success of companies is equated to successful Business Model management (Giesen, Berman, Bell, & Blitz, 2007). A research conducted by Boston

Consulting group reveals that total shareholder returns of Business Model innovators was on average four times greater than process or product innovators, also helped in eliminating competition (Lindgardt, Reeves, Stalk Jr., & Deimler, 2012).

### 3.1.3 Emergence of the concept and definitions of Business Model

The several regions like Technology & Innovation Management, Strategy Development, Environmental Sustainability and Social Entrepreneurship have seen the growing importance of Business Models in the last three decades consequently giving rise to notion of Business Model Innovation (Dodgson, Gann, & Phillips, 2014; Seelos & Mair, 2011).

Since the last two decades, there has been continued interests in research with scientific journals such as Long-Range Planning, International Journal of Product Development, Strategy and Leadership, Journal of Management among others showing increasing publications. In Appendix A, an overview of various definitions of Business Models, as compiled by Baden-Fuller & Morgan (2010) is shown in *Figure 28*.

Referring to *Appendix A*, from an academic perspective, Teece (2010) defines Business Models as "How firms deliver value to customers and convert payment into profits". Amit & Zott (2001) have defined Business Model as "a system of interdependent activities that transcends the focal firm and spans its boundaries". These definitions of Business Model are centered on interdependencies of various components beyond firm boundaries (Baden-Fuller & Morgan, 2010).

Business Model is also defined as, "the logic of the firm, the way it operates and how it creates value for its stakeholder (Casadesus-Masanell & Ricart, 2010). This definition correlates the value of Business Models to stakeholders, these stakeholders might be internal or external which is apt from a people's perspective as they are the ones who are involved in the entire transaction of Business Model. However, even though the definition by Casadesus-Masanell & Ricart (2010) sets it apart from other the previous definition (which are centered on monetary terms), yet it is debatable what is logic and the way in which a firm operates.

From an industry-oriented perspective, the definition of Business Model at Philips is termed as the rationale of creating, delivering and capturing value. Business Model is represented by a set of elements that addresses the customer, value proposition, organizational setup (and ecosystems) and revenue streams (Philips, 2018a).

Williams (2018), from the Business Model Company, depicts a comprehensive description of Business Model in the form of a triangle of value. The three key elements

(to create value, to deliver value, to capture value) in combination with the other boxes as shown in *Figure 9* are aimed to address the definition of a Business Model, covering a practical and theoretical perspective.

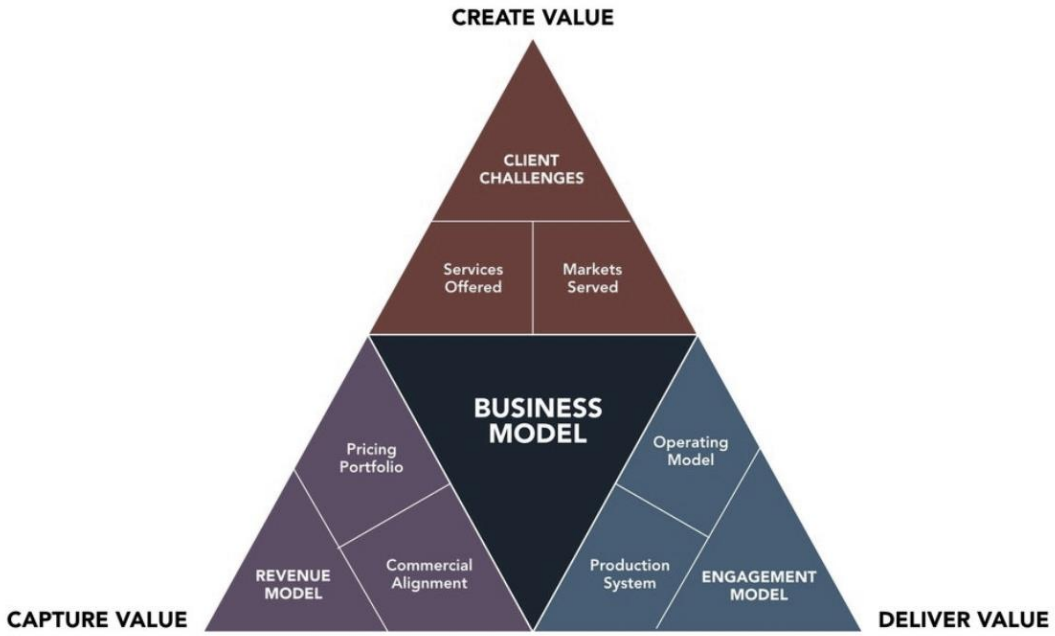



***Figure 9. Triangle of value describing the definition of Business Model* (Williams, 2018).**

Recognizing all of this, as mentioned earlier, the intersection of Business Model concepts with various strategic concepts makes the term delusional at first but are clearly distinct in their own ways as per the discussion above (Al-Debei, El-Haddadeh, & Avison, 2008; Casadesus-Masanell & Ricart, 2010). The term Business Model is an outcome of a strategic initiative but not strategy in itself. The definition of Business Model as defined by Williams (2018), covers the three main regions of any business and of prime importance from both an academic and practical perspective hence will be opted for further research.

## 3.2 Business Model Innovation in a nutshell

### 3.2.1 Business Model Innovation Approaches

Business Model Innovation is critical for a business transformation as seen by various organizations. Mainly to target issues like which Business Model shift will help to achieve good performance, avoid risking the core business, how can capabilities help to test and scale the changes in Business Models etc. (Girotra & Netessine, 2014). To answer such questions, it is important to understand that not all efforts put to achieve Business Model Innovation are the same, different circumstances demand different approaches to address

the problems. In order to help executives in decision making to choose the right approach we see four approaches as mentioned by Boston Consulting Group is shown in *Figure 10* and are elaborated below.

1. ***The reinventors approach:*** undertaken when there is a fundamental industry challenge such as new regulation or commoditization, in which Business Model

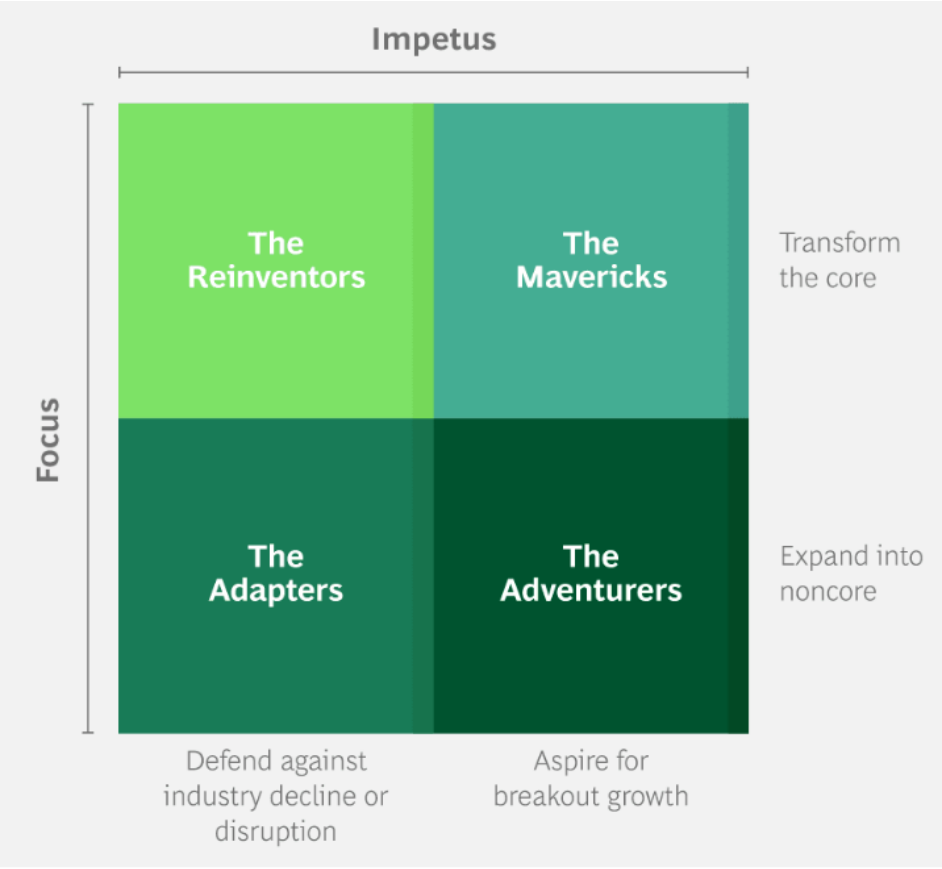



***Figure 10. Four approaches to Business Model Innovation*** *(BCG, 2016; Girotra & Netessine, 2014)*.

are deteriorating with no scope for growth. In such a situation, reinvention of customer value proposition with a superior offering along with realignment of operations will help in Business Model Innovation.

2. ***The adapters approach:*** undertaken when reinvention is unable to combat the fundamental challenges. In such a situation, exploring adjacent businesses or markets (maybe exiting from core business entirely) is a way forward. Adapters approach is to focus on innovation engine that constantly drives experimentation to find a successful Business Model.
3. ***The mavericks approach:*** undertaken with an intention to scale up a potentially more successful core business. The core advantage of the company is capitalized

to revolutionize and set new standards by continuously evolving the competitive advantage and driving the business towards growth.

4. ***The adventurers approach:*** To increase the footprint of the business by exploring new ventures in adjacent territories. A clear comprehension of company's competitive advantage paired with a careful bet will help to succeed in new markets.

### 3.2.2 Origin and developments

The need for innovation on a continuous basis is not just for start-ups but also equally essential for well-established companies (Burmeister et al., 2016). Business Model Innovation is a difficult endeavor to achieve. In an annual research on the most innovative companies conducted by Boston Consulting Group reported that 94% (total: 1,500 senior executives) of the participants engaged in achieving some degree of Business Model Innovation but only 6% were actually satisfied with their innovation performance (Lindgardt & Ayers, 2014).

The success of a business depends equally on Business Model design and implementation as it does on the selection of technologies and the operation of tangible assets and equipment (Teece, 2018). In reality, Business Model Innovation is hard to achieve, the dynamic nature of the Business Models poses challenging tasks for professionals; the several hindrance factors that are associated with Business Model changes hamper the successful implementation of innovative Business Models (Broekhuizen, Bakker, & Postma, 2018). Most of the discussion in literature revolves around how firms should translate technologies or new ideas to a Business Model. Additionally, concentrating more on frameworks useful to conceptualize Business Models essentially ignoring the implementation part of Business Models (Solaimani, Heikkilä, & Bouwman, 2018; Veit et al., 2014; Wirtz et al., 2016).

On basis of increased digital capabilities, importance roles like software developers, data aggregators and platform operators are emerging to be vital for companies. These circumstances threaten the Business Models of incumbent companies by data-driven companies such as Google, Amazon, and Apple. Perhaps even more surprising are the recent accounts that show that a traditional industrial powerhouse like Germany is already lagging behind America and China in implementing this new paradigm (Zühlke, 2015).

### 3.2.3 Emergence of the concept and definitions of Business Model Innovation

The various disagreements as seen for Business Models also holds good for Business Model Innovation, there exists strong disparities between practitioners and researchers about the interpretation of the meaning of Business Model Innovation (Zott et al., 2010). This necessitates that there is more clarity and hence a further exploration is vital.

| | | Scope | |
|---|---|---|---|
| | | **Modular** | **Architectural** |
| **Novelty** | **New to firm** | Evolutionary BMI | Adaptive BMI |
| | **New to industry** | Focused BMI | Complex BMI |

***Figure 11. Business Model Innovation Typology* (Foss & Saebi, 2017).**

Foss & Saebi (2017) have noted that the literature associated with Business Model Innovation differs with respect to the degree of ***novelty*** *and* ***scope*** (refer *Figure 11*). The different degrees of novelty are categorized in terms of "new to the firm, industry or world". As Bock, Opsahl, George, & Gann (2012) have argued earlier that Business Model Innovation in terms of novelty these days is restricted to new to firms only, which is true in case of Philips. Business Model Innovation at Philips is already seen in the industry and world are being adopted at a firm level, there is some form of innovation within firms also but the concept itself is not new to the industry or world. Another important dimension, *scope* has to do with how much of a Business Model is affected by Business Model Innovation (Foss & Saebi, 2017). Business Model Innovation can affect a single component or multiple components of a Business Model, some people link it to architecture[1] and some people link it to modular[2] changes but at the end meet the underlying definition of Business Model Innovation. At Philips the scope can be either modular or architectural, this depends on the complexity of innovating product or service. Hence the Business Model Innovation can be categorized into Evolutionary or Adaptive BMI.

Business Model Innovation extends the boundaries of the traditional view about innovation (related to product, process or organizational changes). Experts and

[1] **Architectural innovation** changes the nature of interactions between core components, while reinforcing the core design concepts (Galunic & Eisenhardt, 2001).

[2] **Modular innovation** may result in the complete redesign of core components, while leaving linkages between the components unchanged (Galunic & Eisenhardt, 2001).

professionals are repetitively using the concept of Business Model as a means of social, environmental and economic value creation. In Appendix A, Foss & Saebi (2016), have summarized the various definitions of the Business Model Innovation as seen in *Figure 29* from a theoretical outlook. It gives clear idea of the dynamic nature of Business Model Innovation as seen from different viewpoints.

From an academic perspective, Bucherer, Eisert, & Gassmann (2012), have defined Business Model Innovation as, " A process that deliberately changes the core elements of a firm and its business logic". Constantinos Markides (2006), has defined it as, "The discovery of a fundamentally different Business Model in an existing business". These definitions cover the broader perspective of logic and discovery, which makes it easier to understand and builds of the consensus of existing literature.

In addition, from a practical perspective the famous consulting company Boston Consulting Group has defined it as "the art of enhancing advantage and value creation by making simultaneous—and mutually supportive—changes both to an organization's value proposition to customers and to its underlying operating model (Deimler & Kachaner, 2017)". At Philips, the definition of Business Model Innovation is "To improve how we identify, evaluate, develop, and manage Business Models to adapt to changing customer needs: pursue the right Business Model faster ".

Recognizing the content as discussed above, Business Model Innovation is a unique process that creates inspiring customer benefits and unique selling propositions. The definition of Business Model as stated by Boston Consulting Group covers the entirety of all the aspects essentially the novelty and scope, hence will be opted for further research.

## 3.3 Drivers, Barriers & Enablers for a successful Business Model Innovation

### 3.3.1 Drivers of a Business Model Innovation from literature

In general, a driver is factor that makes a particular phenomenon to happen or develop (Griffiths & Lambert, 2013). In this section, drivers that influence Business Model Innovation are being reviewed from literature.

Technological change and Technical expertise are driving industries to efficiently manage their current processes and evolve their current Business Models to new ones (Zott et al., 2011). Casadesus-Masanell & Ricart (2010) have stated that drivers such as technological change, globalization and deregulation have shown to have profound impact on Business

Model Innovation. These authors have also concluded that firms engaging in socio-economic development for the Bottom of the Pyramid (BOP)[3] segment are forcing other firms to review and innovate their Business Models (Casadesus-Masanell & Ricart, 2010).

Identifying an opportunity that is not being serviced in the market and also to extend footprints in this untapped market is found to be a driver for firms to engage in Business Model Innovation to realize prospects (Hacklin, Björkdahl, & Wallin, 2018; Mudaly, 2016). Additionally, It can also be seen that firms that pursue Business Model Innovation when there is market crisis or vital changes being observed in the market (Comberg, Seith, German, & Velamuri, 2014). Turbulent markets prove to be crucial for companies to rethink the past and reimagining the future (Kaplan & Orlikowski, 2014).

Many a time the competitive advantage of companies helps them to be unique and difficult to be replicated by the competitors and new entrants in the market. A Business Model Innovation thus is a result of companies pursuing their competitive advantage to leverage and capitalize market (Teece, 2010). This competitive advantage can only be protected by coupling strategy with Business Model analysis (Teece, 2010). There is also the threat of new entrant who seem to have fairly similar customer value proposition, these entrants seem to challenge the traditional firms who then introduce new Business Models dissimilar to the market offering which help them to capture market share and growing new customers in that segment (Mudaly, 2016).

Pioneers (first movers) who used their capabilities and capitalized on their offering have stated that the ability to capture market share by being the first movers in the space has led them to experiment Business Model Innovation with Xerox subscription service as an example (Markides & Sosa, 2013). High impact in sales and revenue were seen with such companies. The other Companies who have tried to imitate the same have failed miserably (Markides & Sosa, 2013).

Often companies who recognize that their existing Business Model are failing, employ Business Model Innovation to survive in the market and beat the competition (Spieth, Tidd, Matzler, Schneckenberg, & Vanhaverbeke, 2013).

Changing stakeholders, which includes key executives, shareholders and the board within the firm could be seen time and again that has led to firms undertaking Business Model Innovation (Mudaly, 2016). The changing views of these stakeholders being in the

[3] BOP refers to the largest but the poorest socio-economic group who are estimated to be around 2.7 billion people living on less than $2.50 a day (Prahalad, 2012).

leadership position or in a powerful position has compelled organizations to think differently from the current market offering (Mudaly, 2016).

Apart from the drivers mentioned above, a majority of organizations indulge in Business Model Innovation because environmental trends like sustainability and circular economy have driven changes in Business Models to ensure that there is continued delivery of value into the future (Rauter, Jonker, & Baumgartner, 2017). Considering environmental trends into Business Models helps companies to thinking in a way to optimize resources at hand. Reusing and refurbishing is given priority rather than recycle because it saves energy with having to dismantle and re-manufacture products (Geyer & Blass, 2010). In *Table 2,* a summary of drivers from literature are specified.

***Table 2. Summary of the drivers for a Business Model Innovation from literature.***

| Abbreviation | Drivers (DR) | Author(s) |
|---|---|---|
| DR1 | Globalization | Casadesus-Masanell & Ricart (2010) |
| DR2 | Technological developments | Casadesus-Masanell & Ricart (2010); Zott et al. (2011) |
| DR3 | Competitive advantage | Teece (2010) |
| DR4 | Threat from new entrants | Mudaly (2016) |
| DR5 | Untapped market opportunities | Hacklin et al. (2018); Mudaly (2016) |
| DR6 | Changing environment (government, market crisis and turbulent market) | Kaplan & Orlikowski (2014); Comberg, Seith, German, & Velamuri (2014); Mudaly (2016) |
| DR7 | Changing stakeholders | Mudaly (2016) |
| DR8 | First mover advantage | Markides & Sosa (2013) |
| DR9 | Recognizing a failing Business Model | Spieth et al. (2013) |
| DR10 | Environmental trends (sustainability etc.) | Rauter, Jonker, & Baumgartner (2017) |

### 3.3.2 Barriers for Business Model Innovation from literature

In general, a barrier is factor that hampers, delays or blocks things to be achieved or prevents people to communicate or progress (Hueske & Guenther, 2015). In this section, barriers that influence Business Model Innovation are being reviewed from literature.

Chesbrough (2007a), states that to create a new Business Model it is essential that a considerate amount of time is spent by experienced leaders to drive the innovation, but

due to the organizational culture of companies where such experienced professionals keeping changing positions and roles inhibits a successful Business Model Innovation. Also, there is inadequate leadership capabilities within organizations who can't deal with new Business Models (Doz & Kosonen, 2010). In addition, especially with bigger multi-unit corporations when the central organization is trying to bring in transformation through Business Model Innovation, the changes towards one unit of the firm may be in conflict with the strategic operations of another unit (Santos, Spector, & Van der Heyden, 2009). The organizational culture is also a key barrier, the changing attitudes of professionals within firms negatively affect the innovators (Santos et al., 2009). The lack of creative space (intrapreneurship) with promoting environment fueled by corporate politics is seen as a huge barrier for a Business Model Innovation (Tikkanen, Lamberg, Parvinen, & Kallunki, 2005).

Marinating the status quo or resisting changes to Business Model is widely seen as barrier not because of apt reasons but rather because mere reluctance to change to new model (Chesbrough, 2010; Mudaly, 2016). Big corporations are not willing to allocate resources around things that might not work which then resists them innovation and maintaining status quo (Mudaly, 2016; Nair & Paulose, 2014).

Dominant logic is defined as set of heuristic rules, norms and beliefs created by senior professionals in a company (Prahalad, 2012). Dominant logic is usually employed when exploring innovations within an organization and this might indeed restrict ideas or actions that do not conform to the logic, this can be seen as a loss to the competitive advantage as well (Wrigley, Bucolo, & Straker, 2016).

Due to difficulties and failures in the path, there is often a letdown when it comes to Business Model Innovation. The interdependency of the components of a Business Model makes the development harder and complex, the nature of configurations of an effective Business Model make things intricate (Mudaly, 2016). A form of experimentation tests the logics and assumptions, which will help to reduce the complexity while implementing in large scales (Mudaly, 2016).

The high investment requirements and low-to-none margins act as barriers for adoption of new Business Models as mangers tend to resist the change mechanisms and sticking to conventional methods, they do not trust on recouping the returns from the entire process (Chesbrough, 2010; Hellström, Tsvetkova, Gustafsson, & Wikström, 2015). This mindset of focusing on immediate benefits is also a key challenge to the industry where professionals are reluctant to changes in Business Model due to focus on immediate gains forgetting the long-term picture (Bilgeri & Wortmann, 2017). In addition, an inadequate

stakeholder support during new ventures leads to failure of new Business Models being incorporated into a company and hence managing stakeholder in various steps of Business Model Innovation proves to be a barrier (Chesbrough, 2007b; Shafer, Smith, & Linder, 2005; Teece, 2010).

The process of Business Model Innovation usually takes so much longer time for the actual implementation of it given the complex nature and various inter connected components, that years pass altogether for the implementation when the Business Models have actually lost their meaning they were designed (Mudaly, 2016).

Switching costs are those tangible or intangible costs that a consumer has to bear due to changing suppliers, brands or products (Grant & Kenton, 2019), in this case changes incurred due to changing Business Models. (Johnson, Christensen, & Kagermann, 2008) state that the higher switching costs (which is usually the case while innovating Business Models) makes it harder to acquire new customers due to increased prices of products (Johnson et al., 2008). This is usually not dealt with in an efficient manner in firms, hence one of the important barriers.

The most important and essential barrier is that companies often tend to forget the customer needs and focus on cost optimization, these companies engage in Business Model Innovation for the sake of not meeting the customer needs but as a stunt to show shareholders that steps are being taken to innovate within the company (Mudaly, 2016). Lacking customer centricity while designing Business Models usually leads to huge losses to companies who pursue Business Model for the sake of it and not because of customer is the center of discussion and Business Model design (Mudaly, 2016). In *Table 3*, a summary of all the barriers from literature are specified.

***Table 3. Summary of the barriers for a Business Model Innovation from literature.***

| Abbreviation | Barriers | Author(s) |
|---|---|---|
| BR1 | Low-to-none margins | Hellström, Tsvetkova, Gustafsson, & Wikström (2015) |
| BR2 | High capital requirements | Chesbrough (2010) |
| BR3 | Long lead time to implement | Mudaly (2016) |
| BR4 | Switching costs | Johnson, Christensen, & Kagermann (2008) |
| BR5 | Complexity while innovating | Mudaly (2016) |

| | | |
|---|---|---|
| BR6 | Focus on immediate benefits | Bilgeri & Wortmann (2017) |
| BR7 | Resistance to change the current model (maintain status quo) | Chesbrough (2010); Mudaly (2016); Nair & Paulose (2014) |
| BR8 | Improper resources allocation | Mudaly (2016) |
| BR9 | Lack of customer centricity | Mudaly (2016) |
| BR10 | Organizational structure | Santos, Spector, & Van der Heyden (2009); Mudaly (2016); Teece (2010) |
| BR11 | Organizational capabilities | Doz & Kosonen (2010) |
| BR12 | Organizational culture | Santos, Spector, & Van der Heyden (2009); Tikkanen, Lamberg, Parvinen, & Kallunki (2005) |
| BR13 | Managing stakeholder | H. W. Chesbrough (2007); Teece (2010); Shafer, Smith, & Linder (2005) |
| BR14 | Dominant logic | Wrigley, Bucolo, & Straker (2016) |

### 3.3.3 Enablers for a successful Business Model Innovation from literature

In general, an enabler is a formal or informal lever that leaders, teams, and individuals can intentionally enforce to make something possible (Osterwalder, Pigneur, & Guppta, 2016). In this section, enablers that help to achieve Business Model Innovation are being reviewed from literature.

It is noticed within firms that when there is presence of a strong leadership in the top management level that is intending to drive innovation through the lower layers of organization, there have been numerous events of success for overcoming barriers because of complete buy-in for processes to be achieved (Chesbrough, 2007a; Mudaly, 2016; Santos et al., 2009). An associated enabler is the presence of adequate resources without which nothing is possible. Only big companies seem to manage barriers in an efficient way because of plenty of resources at hand (Morris, Schindehutte, & Allen, 2005). In addition, it is seen that in presence of adequate resources people were more prone to taking risks because the downside is controlled financially (Mudaly, 2016).

A collaboration with internal and external stakeholders in the entire value chain is an important means of becoming successful in the process of Business Model Innovation. Companies were coherent in their thinking and approach, meaning concentrating on the

core business instead of simply concentrating to solve problems in the value chain (Berman, 2012).

An attitude of always to challenge the status quo, never to settle for something easy and a headstrong determination was seen as a mindset which engaged in continuous strategic feedback loop (Mudaly, 2016). An action, reaction, change mechanism ensured positive feedback was incorporated in the loop with higher chance of success at each stage.

The customer centricity was seen as an important enabler because the value proposition is set right keeping in mind the structure and design of the new Business Models. With customer as the theme, value creation is noticed for customers rather than a traditional offering proving to have given companies a competitive edge and helped in growth (Mudaly, 2016).

An organizational culture that is receptive to innovation and changes was noticed as one of the key enablers because such an environment persistently allows challenging the traditional ideas and promotes appropriate thinking necessary for Business Model Innovation (Comes & Berniker, 2008; Santos et al., 2009). If innovation is set in the core values of the organization, the mindset and culture will eventually overpower skills and capabilities (Mudaly, 2016). In *Table 4*, a summary of all the enablers from literature are specified.

**Table 4. Summary of the enablers for a Business Model Innovation from literature.**

| Abbreviation | Enablers (ER) | Author(s) |
|---|---|---|
| ER1 | Leadership driving the innovation | Santos et al. (2009); Mudaly (2016); H. Chesbrough, (2007) |
| ER2 | Adequate resources | Morris, Schindehutte, & Allen (2005); Mudaly (2016) |
| ER3 | Collaboration with all the parties | Berman (2012); Mudaly (2016) |
| ER4 | Continuous strategic feedback loop | Mudaly (2016) |
| ER5 | Clear understanding of the value proposition | Mudaly (2016) |
| ER6 | Supportive Organizational culture | Santos et al. (2009); Comes & Berniker (2008); Mudaly (2016) |

## 3.4 Conclusion

In order to develop an understanding of Business Model and Business Model Innovation, a literature review is conducted. The objective of this literature review was basically twofold:

1. To gain knowledge and understand key concepts about Business Model and Business Model Innovation. The evolution of these terms from their origin to the current state was apprehended as seen in section 3.1.2 and 3.2.2. In addition, the most adequate definitions were conceptualized for these terms as seen in section 3.1.3 and 3.2.3.
2. To develop insights about various Drivers, Barriers and enablers, a first step was taken towards finding their meaning. Furthermore, a total of 10 Drivers, 14 Barriers and 6 Enablers were found. These terms are beneficial to make the list which goes in the process framework.

# 4

# Empirical Results

## 4.1 Desk Research

### 4.1.1 Barriers and enablers from a Philips perspective

So far, we have explored literature, in this section the various secondary documents from different organizations and reports within Philips are analyzed. In *Table 5* and

*Table* **6**, a set of Barriers and enablers as seen in internal documents of the company are listed. The relationships of these barriers and enablers with project specifics within Philips will not be elaborated because of the sensitive nature of the project details. The content of *Table 5* and

*Table* **6** are self-explanatory and will not be elaborated in detail.

***Table 5. Barriers as seen from Philips perspectives.***

| Abbreviation | Barriers |
|---|---|
| BR15 | Complex Organizational structure |
| BR16 | Method/tools to compare and prioritize variety of BM |
| BR17 | Lack of Experienced people with mindset fail=learn |

***Table 6. Enablers as seen from Philips perspectives.***

| Abbreviation | Enablers |
|---|---|
| ER7 | Sufficient people across functions/ disciplines who have a profile/mindset. Either select, hire or train. |
| ER8 | Select team carefully based on mindset & competence |
| ER9 | Innovation-Lab environment & capacity (either in-house or external) to test multiple cases in parallel in-market |
| ER10 | Use demonstrators not only to learn, but also to get stakeholders on board |

| | |
|---|---|
| ER11 | Tools: allow non-standard tools to be used (like start-ups do) for speed |
| ER12 | Seek early market feedback to lower risks and convince stakeholders |
| ER13 | Use standard approaches/ processes where possible, but accept waivers for sake of speed |
| ER14 | Grow the (access to) IT & data analytics capacity |
| ER15 | Benchmark solutions (in broadest sense) externally |
| ER16 | Put team in start-up mind-set |

## 4.2 Interviews

This chapter forays into the current scenario of Business Model and Business Model Innovation in Philips. To get an insight into the current practices and support the findings from literature, interviews were conducted. Section 4.2.1 elaborates on the interview protocol which was employed. Furthermore, section 4.2.2 provides an in-depth analysis of the data which was acquired from these interviews. As will be explained in section 4.2.2, data is further categorized into first order coding and second order coding, this is done for generalizing observations into groups for making logical conclusions.

### 4.2.1 Interview Design & Protocol

Turning now to the actual interview protocol, this chapter elaborates on the semi-structured interviews undertaken with the stakeholders. The Interviews were conducted with 11 participants with average experience of around 12 years, who worked in different functional departments such as Research and Development, Marketing, Engineering among others. These professionals were closely related to and had occupied various positions in the teams dealing with Business Model Innovation projects. The interviews were conducted over a month and half. The approximate duration of interviews was planned to be around 35-50 minutes, but it varied from person to person depending on the availability, willingness to discuss etc. The actual time of interviews spanned from 16:39 mins to 41:09 mins. The consent of each participant was taken before starting the interview in terms of recording and using the content for the thesis. All of the interview questions are shown in Appendix B. The names of the interviewees will be kept anonymous for confidentiality reasons.

*Table 7* gives an overview of the interviewees and the departments in which they work. Members from different functional departments were chosen for the interview. The details are described briefly as follows:

*Table 7. Overview of interviewees with their background and associated functional departments*

| Name of contributor (coded) | Job Title | Background & Experience | Interview time (mins) |
|---|---|---|---|
| A | Senior Manager Procurement Engineering | Business Administration, Specializing in Logistics, Materials & Supply Chain Management. Work ex – 9 years. | 31:25 |
| B | Global Consumer Marketing Director | Economics, Marketing, Management and Leadership. Work ex – 9 years. | 20:54 |
| C | Global Digital Innovation Director | Business Studies, International Marketing, Economics and International Commerce. Work ex – 23 years. | 21:55 |
| D | Global Digital Product Marketing Director | Industrial Design Engineering, Business Studies, Strategy and Business Transformation. Work ex – 19 years. | 41:09 |
| E | Business Development Manger | Business Transformation, Innovation Management. Work ex – 4 years. | 35:49 |
| F | Senior Manager Sustainability | Industrial Design and Engineering, Sustainable Design, Business Studies. Work ex – 8 years. | 29:03 |
| G | Program Manager Value Proposition Creation | Industrial Product Design, Value Proposition Creation, Innovation Expert. Work ex – 13 years. | 39:17 |
| H | Senior Manager New Business Creation | Industrial Product Design, Management of Innovation, Strategy and Operations. Work ex – 8 years. | 32:19 |
| I | Professional Marketing Manager | Digital and Online Marketing, Brand Management. Work ex – 11 years. | 16:39 |
| J | Business Development Director (Research) | Industrial Design and Engineering, Business Transformation, Strategy | 39:13 |

| | | | |
|---|---|---|---|
| | | Consultant, Marketing. Work ex – 20 years. | |
| K | Director Business Model Innovation | Strategy, Marketing, Digital Business Models & Portfolio Management. Work ex – 13 years. | 29:24 |

### 4.2.2 Data analysis

*First order coding of the findings*

The data as acquired from the interviews was used to analyze and answer the research questions. With this data, we aimed to identify and classify views on the objectives as mentioned in section 1.4. The transcriptions were coded using two rounds. Coding is the process of assigning labels to phrases, sentences, or paragraphs that hold underlying meaning. In a qualitative data analysis, it essentially determines the themes that will be generated from which we can defer conclusions (James, 2019). The first round of coding aimed at identifying specific themes as seen by stakeholders, in an inductive manner (Strauss & Corbin, 1998). The second round of coding was to re-group the first order from empirical research and literature because of the diverse nature of first order codes into more abstract second-order codes that can be synthesized into distinct classes of themes. In *Table 8*, a summary of first order coding for the various drivers is shown. Since there are only 16 drivers as identified from interviews and literature, a second order coding will not be undertaken because of the low number and also that it is evident that drivers are not covering diverse themes for generalization. However, the second order coding has been undertaken for categorizing the barriers and the enablers. In *Table 9* & *Table 10*, a first level of coding for barriers and enablers as extracted from interviews are listed.

***Table 8. Summary of first order coding – Drivers (DR)***

| Author | Empirical Results | First order coding | Abbreviation |
|---|---|---|---|
| B | *"Unlocking the potential of a business involves building loyalty of consumer; Loyalty of customer is built by keeping the consumer at the center of attention".* | Consumer Need or Consumer Experience | DR11 |
| D | *"A business is successful if it rightly addresses a clear consumer need".* | | |
| H | *"A clear Consumer need".* | | |

| | | | |
|---|---|---|---|
| J | *"Businesses are entirely driven by how the customer wants to have a relationship with the company".* | | |
| C | *"The whole idea of beating competition is give best experience to the consumer".* | | |
| A | *"Businesses are driven by Economics; to grow market share by getting more customers".* | Increase Market Share | DR12 |
| B | *"Unlocking the potential of the business, involves market penetration".* | | |
| C | *"Drivers from inside the organization include increasing sales".* | Internally within the firm to increase Sales | DR13 |
| J | *"Sales department is driven by order intake".* | | |
| I | *"Projects were undertaken to drive extra sales".* | | |
| B | *"Unlocking the potential of the business, actually involves revenue maximization".* | | |
| G | *"Inspiration led – We can do something really cool with Business Model, the opportunity to capitalize on idea".* | Opportunity to Capitalize on Idea | DR14 |
| I | *"Looking at market and competition, we drove the project to beat the competitors".* | Competition related | DR15 |
| J | *"Sometimes projects are driven by technology".* | Technology driven | DR16 |

***Table 9. Summary of first order coding – Barriers (BR)***

| **Author** | **Empirical Results** | **First order coding** | **Abbreviation** |
|---|---|---|---|
| B | *"The technology that we have cannot do everything; there are several limitations for instance in privacy perspectives".* | Privacy issues with use of Technology | BR18 |
| A | *"Setting up supply base for a service supplier who can support in all the things even if there is so much logistics was missing".* | Setting up a Supplier Base | BR19 |
| B | *"The tools that we can onboard on the shorter term cannot be used on the long run"* | Missing Tools | BR20 |
| B | *"There is data in different systems which is not of good quality and hence the insights that you can get is not great".* | Unavailability of Proper Data | BR21 |

| | | | |
|---|---|---|---|
| C | *"We do not have a smooth-running process from start to finish, which might enable us to run Business Models from a P&L perspective".* | Missing End to End Processes | BR22 |
| D | *"We have to fit in new KPI's that are more relevant to new Business Models because KPI's are not changing there will be no focus on the new Business Model".* | Key Performance Indicators (KPIs) | BR23 |
| D | *"We need to maintain our current business, but sometimes new Business Models require longer time to be proven as it takes longer time to bring a product to the market and get it tested but we are quick and cancelling the project since we are such a traditional company".* | Neglecting Long-Term Thinking | BR24 |
| E | *"Lack of integration, which is inherent of the business. In a way indirect because things are not made in a circular way".* | Lack of integration | BR25 |
| E | *"Products are more recycled and some parts discarded rather than fully refurbish and reuse".* | Recycle vs Refurbish (Reuse) | BR26 |
| F | *"There is no infrastructure with respect to setting up a new Business Model".* | Lack of infrastructure | BR27 |
| F | *"There is lack of resources to set up the new infrastructure".* | Lack of resources | BR28 |
| G | *"Organizational support by middle layers is posing a challenge. The focus is more on Profit & Loss, there is less room for innovation".* | Missing Organizational support by middle layers | BR29 |
| I | *"When there are multiple parties involved, there seems to be a lack of collaboration".* | Lack of collaboration | BR30 |
| I | *"We have noticed that the prices are too high or not on par with competitors pricing".* | High Pricing in terms of competition | BR31 |
| J | *"We need stakeholders that can convey to the consumers that our product is doing things better and differently".* | Absence of Change management capabilities | BR32 |

***Table 10. Summary of first order coding – Enablers (ER)***

| Author | Empirical Results | First order coding | Abbreviation |
|---|---|---|---|
| D | *"Organizational Structure can be further improved especially in how to validate the proposition with the stakeholders"* | Organizational structures | ER17 |
| E | *"It is important that processes are in place to bring out the best performance"* | Available end-to-end processes in place | ER18 |
| F | *"We need a supportive culture where there is complete buy-in of leadership to take on risks"* | Leadership buy-in | ER19 |
| F | *"Proving that the customers are willing to move towards the new solution will get traction to convince stakeholders"* | Proving Customer willingness | ER20 |
| G | *"Employees need to be given some kind of flexibility to test the components of Business Model in market"* | Flexibility to test components of Business Model | ER21 |
| G | *"There is a lot of push towards collaborating but no playing with partnerships; small activity on small scale would be helpful"* | Partnerships with external stakeholders | ER22 |

*Second order coding of the findings*

In this section, the second order coding of all the findings from literature and desk research are incorporated. Second order coding is only carried out for barriers and enablers and the reason for this is mentioned in section the previous section of "*First order coding of the findings*". In

*Processes*

1. Project related
2. Tools/Resources
3. Finance

**Table 11** & *Table 12*, a summary of second order coding for Barriers and Enablers respectively is enumerated. In

*Processes*

4. Project related
5. Tools/Resources
6. Finance

**Table 11**, five categories of second order coding can be seen, this categorization helps in ease of understanding. The five categorizations of second orders are described here below:

7. Organizational
8. Processes
9. Project related
10. Tools/Resources
11. Finance

***Table 11. Summary of second order coding – Barriers (BR)***

| Second order coding | First order coding |
|---|---|
| **Organizational** | Resistance to change the current model (maintain status quo) |
| | Complex Organizational structure |
| | Missing Organizational support by middle layers |
| | Lack of collaboration |
| | Neglecting Long-Term Thinking |
| | Absence of change management capabilities |
| | Key Performance Indicators (KPIs) that lack innovation indicators |
| | Managing multiple stakeholders |
| | Dominant logic |
| | Lack of Experienced people with mindset fail=learn |
| | Organizational capabilities |
| | Lack of collaboration between internal and external stakeholders |
| | Organizational culture |
| | Lack of customer centricity |
| **Processes** | Lack of integration |
| | Missing End to End Processes |
| | Setting up a Supplier Base |
| **Project related** | Long lead time to implement |
| | Complexity while innovating |
| | Recycle vs Refurbish (Reuse) |
| | Privacy issues with use of Technology |

| | |
|---|---|
| **Tools/Resources** | Method/tools to compare and prioritize variety of BM's |
| | Unavailability of Proper Data |
| | Improper resources allocation |
| | Lack of infrastructure |
| | Lack of financial resources |
| | Missing Tools |
| **Finance** | Low-to-none margins |
| | High Capital requirements |
| | Switching costs |
| | Focus on immediate benefits |
| | High Pricing in terms of competition |

In *Table 12*, four categories of second order coding is shown for enablers, this categorization helps in ease of understanding, the basis for this is taken from company files. The four categorizations of second orders are as below:

1. People
2. Processes
3. Tools/Resources
4. Structure

***Table 12. Summary of second order coding – Enablers (ER)***

| Second order coding | First order coding |
|---|---|
| **People** | Leadership driving the innovation |
| | Collaboration with all the parties |
| | Open or Long-term mindset overcoming traditional thinking |
| | Clear understanding of the value proposition |
| | Right profile mindset professionals |
| | Sufficient people across functions/ disciplines who have a profile/mindset. Either select, hire or train. |
| | Partnership with external stakeholders |
| | Proving a customer willingness for buying |
| | Select team carefully on mindset & competence |
| **Processes** | Continuous strategic feedback loop within processes |
| | Use standard approaches/ processes where possible, but accept waivers for sake of speed |
| | Available end-to-end processes in place |

| | |
|---|---|
| **Tools/Resources** | Adequate infrastructure/tools in place |
| | Tools: allow non-standard tools to be used (like start-ups do) for speed |
| | Budget to take on risks |
| | Grow the (access to) IT & data analytics capacity |
| **Structure** | Supportive Organizational culture |
| | Innovation-Lab environment & capacity (either in-house or external) to test multiple cases in parallel in-market |
| | Enable it from the top. |
| | Put team in start-up mind-set |
| | Leadership buy-in |
| | Flexibility to test components of Business Model |
| | Seek early market feedback to lower risks and convince stakeholders |
| | Benchmark solutions (in broadest sense) externally |
| | Use demonstrators not only to learn, but also to get stakeholders on board |

## 4.3 Survey

A thorough literature study, desk research, data analysis from interviews was done before finalizing the list of drivers, barriers and enablers that will be used for answering the research questions as mentioned in section 1.5. In the upcoming sections, a discussion about the design and analysis is carried out.

### 4.3.1 Survey Design

The survey was undertaken by all of the interview participants, in addition to in-house DfX consultants, Junior Professionals who have worked on BMI projects. The questions were then formulated based on first and second order coding as seen in section 4.2.2. A total of 13 questions were included in the survey. Most of the questions required the respondents to rank the drivers, barriers and enablers on a Likert scale. This scale had five options to choose from based on importance or relevance.

The survey was designed on an in-house web-based platform, Vovici tool. The survey link, an introduction pdf with definitions of all the terms was sent to the respondents. The data was collected for one month. Given the holiday period, a total of 32 participants responded to the survey, even though the survey was sent out to around 85 participants due to their unavailability. A reminder mail was sent as a follow up along with the link

to the survey to improve the response rate. On an average the survey took about 7 mins to fill in.

The ranking (scores) of the entire list can be seen in Appendix C. When it comes to analyzing the survey, the various options for ranking were as follows:

1. ***Drivers*:** Highly important, Slightly important, Neutral, Low importance, Not at all important.
2. ***Barrier*:** Highly relevant, Slightly relevant, Neutral, Low relevance, Not at all relevant.
3. ***Enablers*:** Highly important, Slightly important, Neutral, Low importance, Not at all important.

The weightage for the options was based on a five-point scale with *Highly important/relevant* weighing 5 points and following a decreasing order with *Not at all important* weighing 1 point. An average weighted score was given to each of the answer choice, to determine which answer choice was preferred overall. The ranking as follows:

$w$ = weight of ranked position
$x$ = response count for answer choice

$$\frac{\sum_{i=1}^{n} X_i W_i}{\sum_{i=1}^{n} X_i}$$

***Figure 12. Formula to find out the ranking.***

The most important and least important of the elements will be shown in bar charts in section 4.3.2, the top ranked option is always weighted the highest and the bottom ranked is weighted the lowest. For example, in a question with five options the highest ranked option would have a weight of 5 and the lowest ranked option has a weight of 1.

### 4.3.2 Data Analysis

The results are presented in bar charts for only top 3 and bottom 2 of the drivers, barriers and enablers, this is done to show the variation of opinions and to limit the list to 5 factors, since the list is huge and confuses when all the elements are presented on bar graphs. In Appendix C, the entire list of ranking for drivers, barriers and enablers is shown.

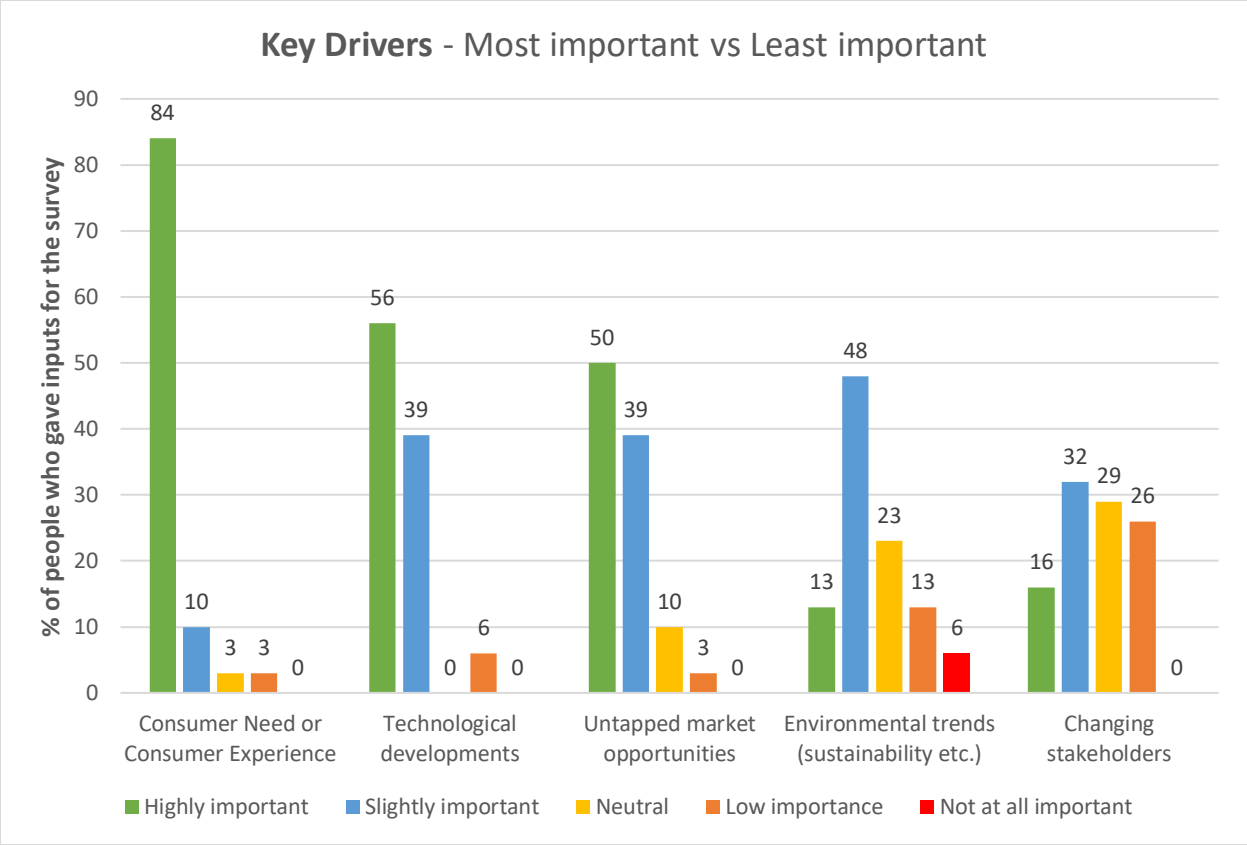



*Figure 13. Ranking of top 3 and bottom 2 drivers*

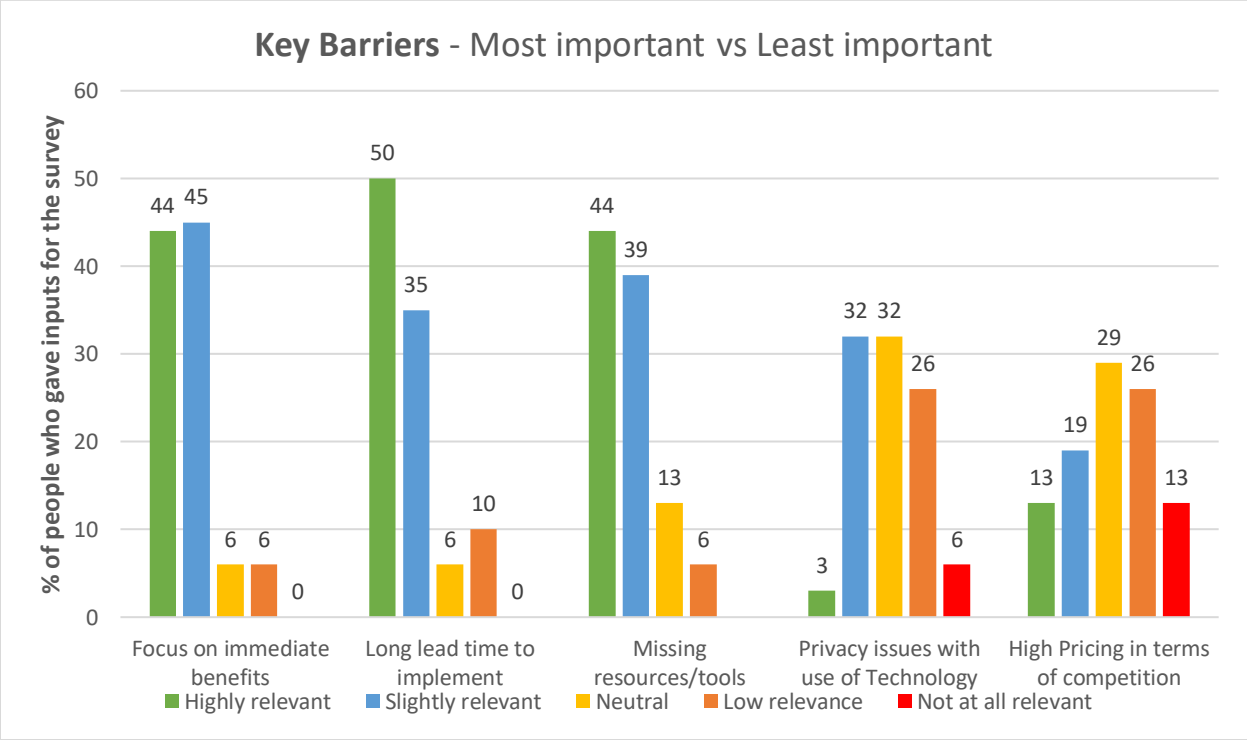
In *Figure 13*, from the list of 16 drivers the most important driver is ***Consumer need or Consumer experience***, this is the because companies focus on building customer loyalty. The core reason why any product/service-oriented company is functioning is because they address the needs of customer; customer centricity is the key for any successful company. A profitable customer base results when projects have the core driver of addressing the consumer need. This also benefits in getting leverage in market because many companies do not focus on customer experience while innovating, which leads to fallout of companies. The next important driver is ***Technological Developments***, this is because companies that face turbulent economic environments are seeking ways to improve and adapt to changing environment. The use technology is a key source of innovation and is also crucial in enabling business challenges and maintain commercial advantage. The shift from traditional optimization to leveraging technology, has had a significant impact on the way companies operate, especially with the potential to be used to influence new commercial strategies and shape businesses. The next important driver is ***Untapped Market Opportunities***, a few of the participants mentioned that the process of innovation generally includes discovering new ways of doing things and part of that innovation includes finding new market opportunities to generate more revenues,

Business Model changes also occur with such an exploration to gain market share of opportunities which are not currently being catered to. When it comes to ***Environmental trends*** such as sustainability, circular economy etc., these drivers are not so important because they have already been incorporated in Business Models years ago, these trends are implied and not the reason for Business Model change today, however, a constant pursuit of driving sustainability and other environmental trends is still the underlying ideology but not explicit driver for change. Lastly, ***Changing Stakeholders*** is not so important driver because in an ever-dynamic economy, stakeholders such as suppliers, investors keep on changing and if companies keep changing Business Models based on their needs, companies will loose on their originality and just keep satisfying stakeholders rather than customers.

In *Figure 14*, the most important barrier as seen within firms is ***Focus on immediate benefits***, firms often fail to realize that Business Model changes take longer time for transformation to generate high revenues. An attitude of sticking to the traditional thinking most of the time leads to focusing on immediate financial outcomes and little scope for taking risks, even though costs increase in the initial stages than the revenues, most of the projects are stopped or ending up not being implemented because of such an attitude. The next important barrier is ***Long lead time to implement***, interviewees have complained that although a lot of projects once started do not reach the stage of implementation due to several factors such as lack of infrastructure, resources in addition to project complexity which requires certain capabilities missing in organizations, all of which furthermore prolongs the lead time. The next important barrier ***Missing Resources and Tools***, most of the interview participants mentioned some sort of connect with this barrier. Most of them companied that projects undertaken to bring in Business Model Innovation usually lack financial resources, skilled capabilities or tools. Many a time, there is no budget to play around, even the most dedicated staff will perform weakly due to constant stress of cash-strapped businesses operating with marginal resources.

Companies such as Uber had to undergo a lot of financial challenges before reaching the success and such a support is missing within companies (Wilhelm, 2016).

***Figure 14. Ranking of top 3 and bottom 2 Barriers.***




The ***privacy issues with the use of technology*** is seen as not so important barrier because Philips handles privacy issues in a very careful and sensitive manner. Since it is a Healthcare company, sensitive information regarding customers, patients or any other entity is handled with utmost care, several experts are appointed externally to help in maintaining database, developing processes to deal with privacy. The next barrier which is not so important is ***High pricing in terms of competition***, this is not so important barrier because the pricing strategy employed for a product or service is based on customer centricity. At company, a value-based pricing is followed which focuses on the benefits of the product or service offered to the customer, this eliminates the focus on high pricing adopted to beat the competition. Most of the competitors followed a cost-based pricing, wherein the pricing focused on the features and characteristics of the product or service.

In *Figure 15*, the most important enablers as seen within organizations are shown. ***Leadership driving the innovation*** is the most important enabler because creative visionaries are the ones who have big ideas and, most importantly, can motivate people around them to turn those ideas into reality. A leader seeks novel solutions and approaches, pushing across boundaries and systems. He also facilitates cooperation

between various groups working on similar opportunities. He also promotes making strategic and structural changes to accommodate innovation.

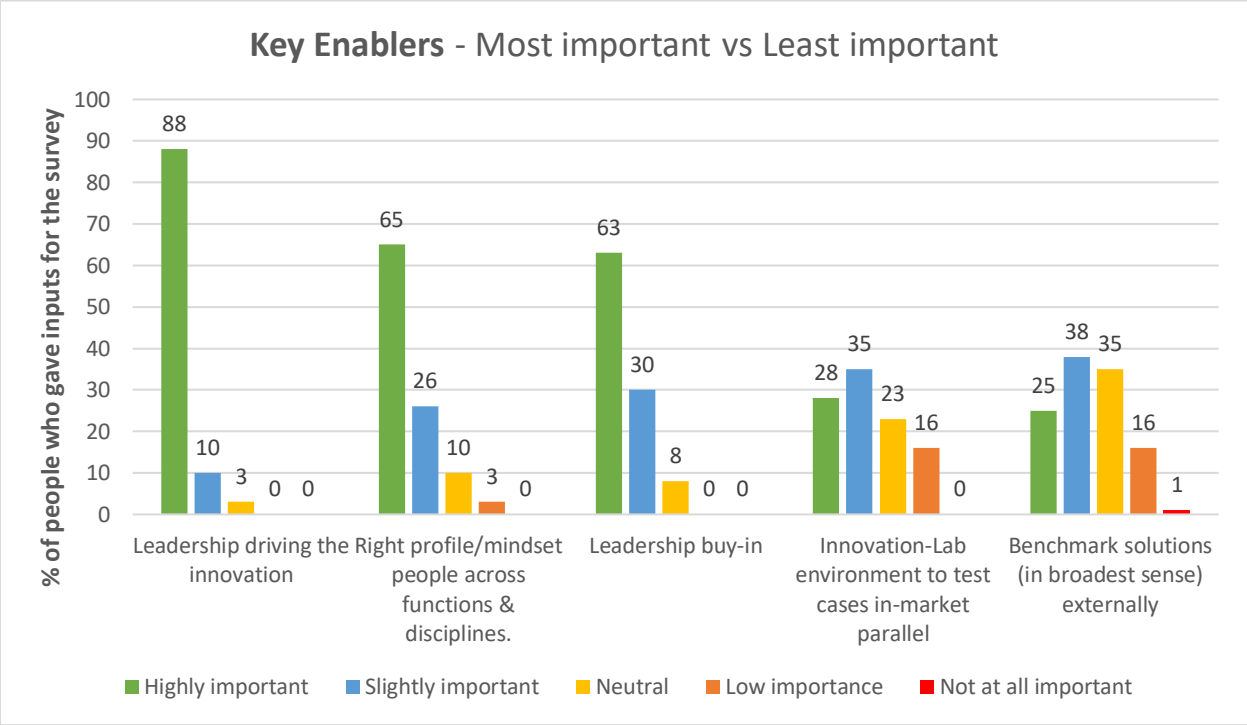



*Figure 15. Ranking of top 3 and bottom 2 enablers.*

The next important enabler is ***Right profile or mindset of people across functions and disciplines***, this is highly important because with the right mindset or right teams members their strengths can be blended to foster creativity and learning. With right mindset comes collaboration and this promotes enthusiasm for learning that is usually lacking while working in solitary conditions. Tackling obstacles and producing tangible results by working with the right team members promotes a sense of ownership. The next important enabler is ***Leadership buy-in,*** a leadership buy-in indicates that leaders are driving performance of the program according to the priorities of their business strategy (Aceves-Bueno et al., 2015). Buy-in authenticates that the leader is in par with the idea and is willing to take accountability and support the team in whatsoever way possible. A complete buy-in ensures that appropriate resources are allocated with respect to time, staff and financial investment for executing tasks. In other words, the approach has to be top-down buy-in. The next enabler which is not so important is ***Innovation lab environment to test cases in parallel market***, this is not important because the intention of this enabler is to seek early market feedback to lower risks. An external feedback is worthwhile only when a small-scale pilot has clear grounds and an established business case. Hence it would be ideal first to test cases in an environment within the firm by

running pilots and then seek for market feedback to grow. This promotes the process of gathering evidence around ideas through experimentation to make fast, informed decisions with low risks before stepping into testing in markets. The next enabler which is not so important is ***Benchmark solutions (in broadest sense externally)***, this is not so important enabler because it would be tough for external experts to validate solutions when people within the firm have difficulties to validate solutions themselves. Given the newness of Business Model Innovation within companies in addition to the vastness of different business groups and business units within the firm, knowing all the solutions from an outside perspective would neglect the intricacies and details that would have been evident if solutions are benchmarked within the companies first. Building central capabilities with regard to people, processes, tools and structure would be the first step in this direction.

## 4.4 Conclusion

To conclude on the empirical results, a solid foundation was laid by gaining an in-depth information from literature, the desk research, interviews and the survey. A thorough understanding of data led to identification of drivers, barriers and enablers. Further, deciphering survey lead to ranking of the drivers, barriers and enablers. The recommendations as provided by participants was incorporated as much as possible.

# 5

# Conceptual framework of the Process

In this section, the four phases of innovation processes at a Business Model level within the company are elaborated. These stages include Aware, Create, Incubate and Scale, which are well-recognized high-level representation of the process of Business Model Innovation (Philips, 2018b). In Appendix D a small elaboration on the 4I process framework is seen. The 4I framework in addition to the stages are adopted as the basis for developing the framework. The exact meaning of the phases in the context of Business Model is elaborated here below:

## 5.1 Aware

In this stage, the main question that we are asking should be *"is there a need to change the Business Model"*. The underlying intention is to brainstorm on a high-level about ideas and arrive at a preliminary assessment, refer *Figure 16* for a graphical representation. This assessment includes addressing three key tasks which are:

***Generating new ideas:*** This includes overcoming the dominant logic (definition - elaborated in section 3.3.2) which starts with confronting the usual beliefs and norms of the organization. These established beliefs within the companies unconsciously constrain creative thinking that can deep-rooted at different levels. Overcoming such logics is a first step towards generating new ideas. The next step is to challenge the status quo to bring about innovative ideas at a Business Model level up for discussion. This is necessary to identify new ways of doing things, it invites all perspectives even from a fresh point-of-view, which ensures that a culture is committed towards building a positive change. This in entirety sparks creativity.

It is often difficult to think in terms of Business Models because employees in conventional companies usually think of new product developments or optimizing current products when trying to solve problems (Frankenberger et al., 2013). The attitude of Business Model thinking is missing and needs to be imbibed in the thought process, this helps to establish building blocks to guide brainstorming in a structured way.

***Past learnings:*** It helps to gather insights about pitfalls that were experienced in other projects and recognizing them centrally will help in comprehending information which should be avoided at a high level. Besides, the experiences from previous projects that have undergone Business Model changes, needs to be highlighted and learnings beneficial for the current scenario be adopted. This helps to build a shared vision and a collective sense of responsibility as to where the direction of the organization should be heading and how to achieve that goal.

Most of the Business Model Innovations are a result of adapting Business Models from different industries and altering to the present case, the 55 Business Model patterns (Gassmann, Frankenberger, & Csik, 2013) are explored along with the mapping of the business ecosystem. This reduces the possibilities of risks showing up in the later stages.

***Stakeholders:*** Understanding the surrounding ecosystem, which includes stakeholders like customers, suppliers, competitors along with governmental institutions among others. As highlighted by Frankenberger et al. (2013), understanding the needs and interests of the players in the ecosystem is the key issue which is often overlooked when engaging in Business Model Innovation. The needs of these players most of the time sets as the starting point for changes in the context of Business Model. Therefore, a clear stakeholder mapping helps to avoid problems associated with stakeholders. Furthermore, a market scan comprehending the market conditions as well as the moves by competitors in terms of pricing or with new offerings usually helps in moving towards change for innovation.

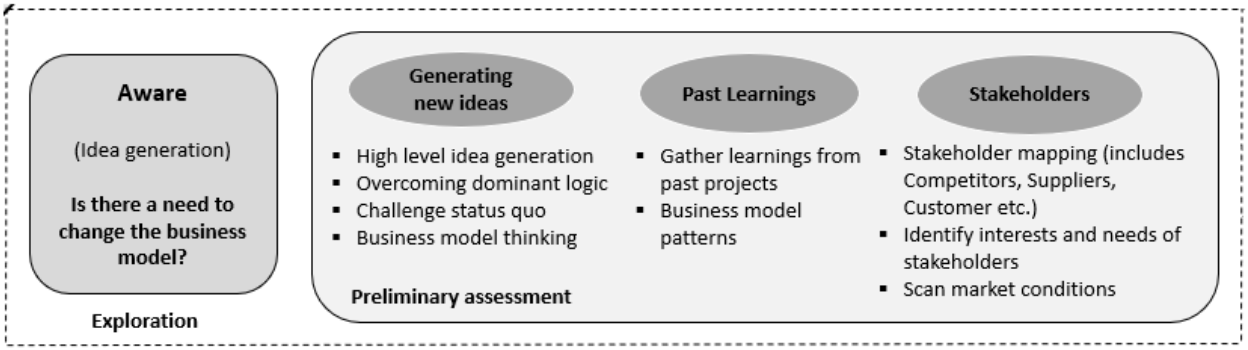



*Figure 16. Aware stage of the BMI process.*

At the end of this stage, ideation at an exploration level will have led to a Business idea, which is further carried to next stages for realization.

## 5.2 Create

In this stage, the prime focus is laid on ***managing the new idea creation*** that is capitalizing on the opportunities identified in the aware stage and converting them into concrete ideas for new Business Models. From the 55 Business Model patterns, the Business Model ideal for present condition has to be selected after several recombination and reconfigurations; this furthermore promotes thinking in terms of Business Models. After selecting the suitable Business Model, the core assumptions should also be defined, this is useful in planning the operating model.

As mentioned in section 3.1.3, *Figure 9* represents the three aspects that defines a Business Model, which are to create value, to deliver value and to capture value. These aspects encompass four basic dimensions of the who, the what, the how and the why (Frankenberger et al., 2013) which need to be viewed from a Business Model lens. The dimensions help in diffusing the idea in a detailed manner. These dimensions are explained here below:

***The who:*** has to mainly do with the customer segment that is being targeted with the Business Model, is it the same target group as previous or are there additions? a clear idea of target or market group has to be outlined; any wrongful identification of the target or market group will lead the Business Model to failure.

***The what:*** describes the customer needs or the services being offered to the customer (value proposition) with the new Business Model. Is it the same offering with a modification? Or is the offering changed entirely? If so, then how is it different and what is added value? Such questions need to be brainstormed for a clear picture of the operating model.

***The how:*** Processes and structure needs to be in place to deliver the value proposition. These require resources and capabilities to be achieved in reality. Besides, there needs to be coordination in the internal value chain to devise successfully a finished product that suits the customer requirements.

***The why:*** The dimension explains the viability of the new Business Model. It relates to the revenue model and pricing portfolio that is placed to capture value for the firm itself. Is it value driven or cost driven?

After analyzing the dimensions with the case, since there are several components interrelated to each other, the changing of components of the business affects the value chain in the sense that alignment of various other components becomes tough to adjust to the changes. This aspect is hardly considered in business plans while innovating Business Models. Lack of focus on integration leads to failure of implementation. And since there are changing stakeholders involved, it is crucial that the partners and all of the stakeholders are managed ensuring their complete buy-in into the process. Refer *Figure 17* for a visual representation.

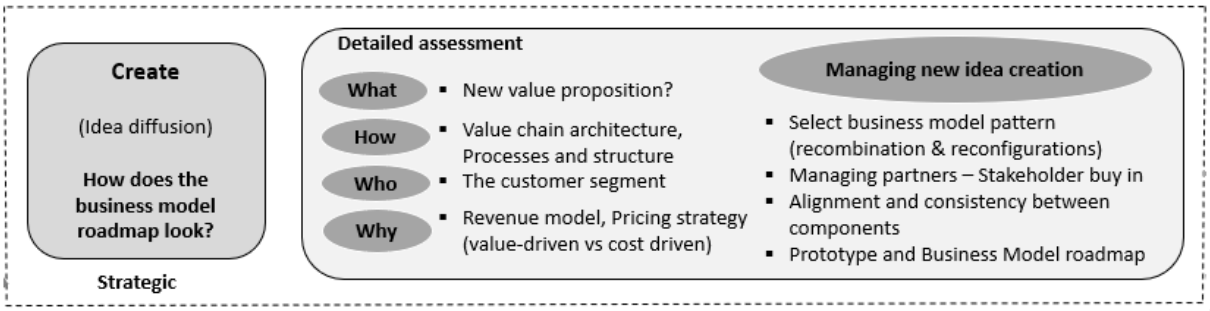



**Figure 17. Create stage of BMI process.**

At the end of this stage, the question that we are trying to answer is "How does the Business Model Roadmap look like"? Here, a strategic outline of the value proposition and a clear distinction between Business Model ideas and a concrete value network will be established. A prototype is created with a that is validated in the upcoming stages.

## 5.3 Validate

The main intention of this stage is to check if the prototype works? The underlying intention is to confirm about the working of the Business Model on a detailed-level before a scaling is undertaken. A proof of concept is instituted at the end of this stage. Refer *Figure 18* for a pictorial presentation of the tasks. The two key tasks to be addressed in this stage are as follows:

***Evaluation***: Pilot experimentations are carried out on small-scales in order to evaluate feasibility in terms of time, prices, performance or any other metric that defines the functionality of the products or services. This minimizes the intensity of downside risks. Similarly, assumptions are tested and improvements for the study are carried out frequently to improve the design prior to establishing a full-scale research project. Testing assumptions helps in explaining why somethings are working well and some aren't, it also aids in not drawing false conclusions from the analysis. Furthermore, product recalls in times of failure will not only cost money but will also tarnish brand value, instead can

be done in a controlled manner. Testing assumptions likewise helps to eliminate production costs when Business Model is centered on product innovation. The major struggle moreover lies in the fact that a company's Business Model is often is a complex system full of interdependencies and managing interdependencies is a step towards effectively managing resources and risks. Lastly, achieving the first set of tangible results suddenly brings in a major attitude shift, it improves the productivity of process and personnel, facilitates in planning for economies of scale.

***New learnings:*** Mastering complexity is where quite often firms have a tough time dealing majorly with the uncertainty and lack of control factor amid Business Model complexities. Such a complicatedness usually restricts productivity by creating a work environment that leaves professionals uninterested and demotivated. Hence a deliberation around the complexity has to be taken place. The next step would be to engage in feedback loops internally within the firm as well as externally in the market. By engaging in strategic feedback loops, performance improvement at all levels will be seen post incorporating the changes, it gives a line of sight for things to improve on. It brings in stability by reducing errors, reducing complexity. An external assessment can be undertaken to support the findings from a fresh perspective outside by market consultants. The last step in this stage is to align the learnings from the initiation till the present scenario into adjustments that can be effectively be applied to changes in the Business Model.

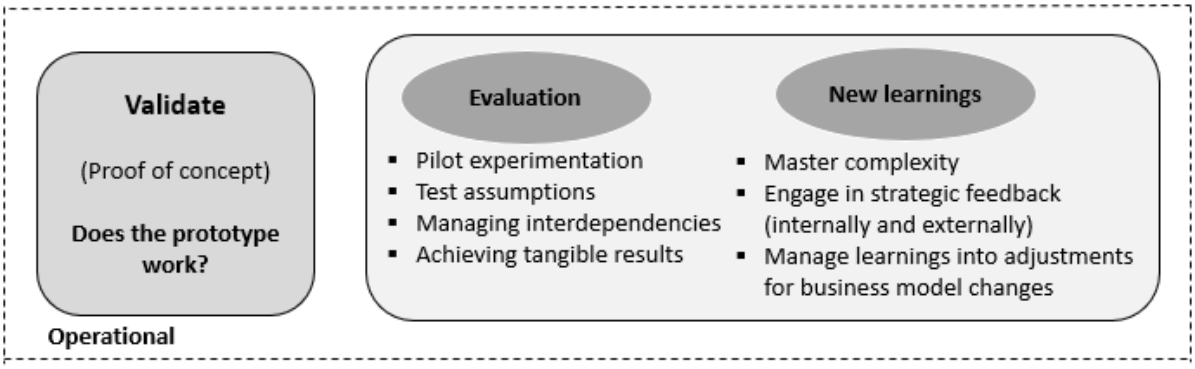



*Figure 18. Validate stage of BMI process.*

At the end of this stage, all the tasks are undertaken or viewed as from an operational perspective, since we are trying to establish a proof of concept.

## 5.4 Scale

The main ideology of this stage is to answer the question of How to grow the business? Capitalizing on the idea and thinking from a tactical point of view is the key to get

through this stage successfully. Refer *Figure 20* for a graphical illustration of the stage. The two key tasks to be addressed in this stage are as follows:

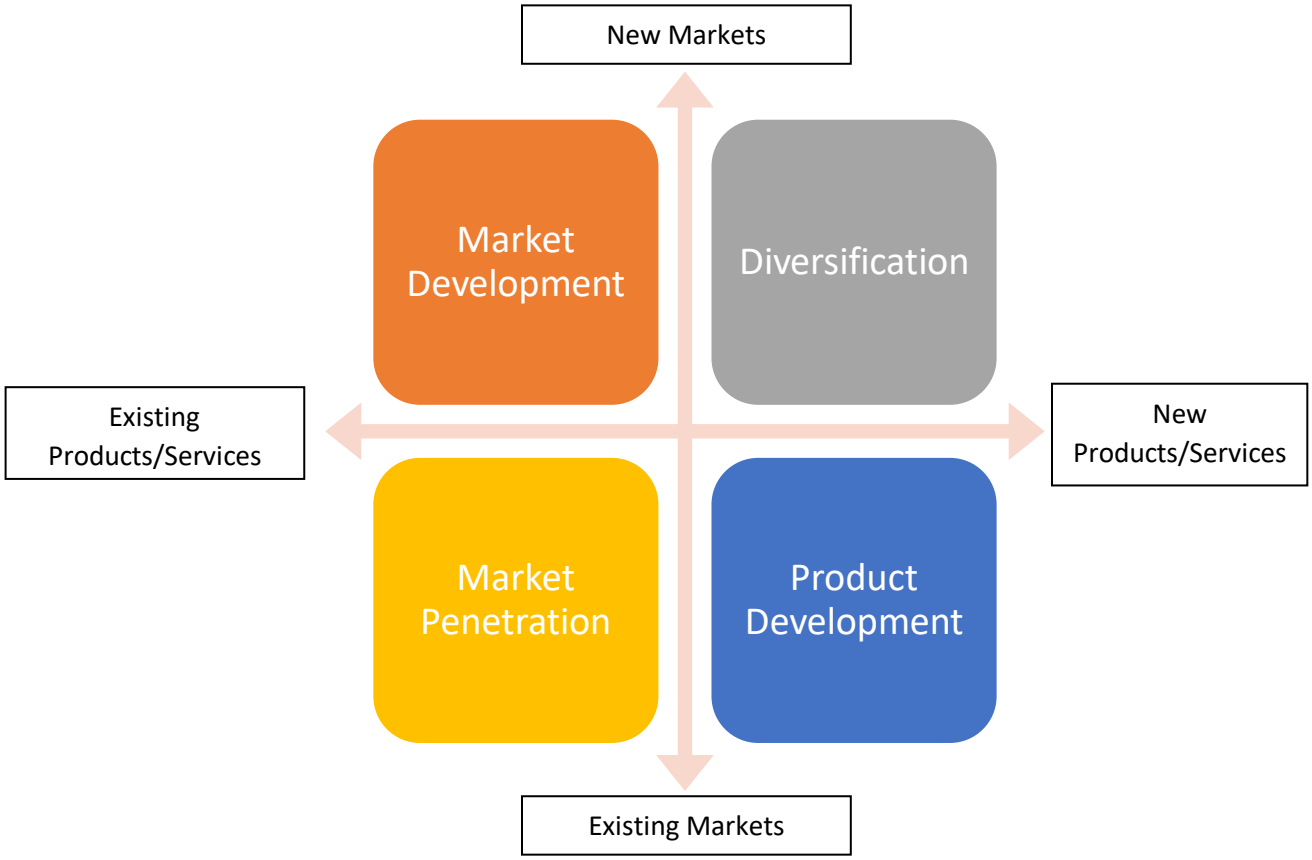
***Market growth***: Ansoff matrix is a strategic planning tool that helps senior management to analyze and plan strategies for future growth (Hussain, Khattak, Rizwan, & Latif, 2013). The matrix concentrates on two main areas of activities that is Products/Services and Markets. Within each of these areas we consider current activities of the business and also potential new markets that could be developed. By considering the ways in which new products/services and markets differ from established activities and the extent to which to which they force us to enter unchartered territories, we can also establish the element of risk, while choosing and planning a coherent strategy for growth. The farther from the current success a new strategy takes us, the higher the associated risks. Refer grid matrix in *Figure 19* below, for an illustration.

The matrix is basically consisting of four sub stages, firms have to align themselves to choose between one among the four options or it could be a combination of several options. The third quadrant in the matrix is Market Penetration strategy, this is the comfort zone of current products/services being supplied in existing markets, potential for growth exists however in consolidating and increasing market share, selling all products to existing markets or finding new customers within these existing markets, such kind of strategies are of relatively low risks, because both products/services are to an extent known quantities. In quadrant four is Product Development, this addresses new products/services selling them for the current market. This strategy requires developing new products/services in the existing market, wherein market share is increased by selling it to the existing customers, new products/services related to already familiar to the market, building on the brand value. In quadrant is two is Market Development, this is new markets for current products/services, in this strategy involves finding new markets for existing products/services. Products can be for instance newly packaged or promoted to appeal to a new group of demographics in the way that marketing and promotional activities such as advertisement and social media are especially valuable here. The last strategy is Diversification placed in quadrant 1, this is new products/services for new markets, it involves identifying new markets in which the current business is not active and developing new products/services to sell into that. This is the most high-risk strategy with the most unknowns and as the name suggest diversifying facilitates business growth.

Recognizing the best suitable strategy, the advantage of undertaking this is to force market planners and management to think about the expected risks while moving in a

certain direction in addition to outlining an assessment of alternatives shows opportunity cost for business growth.

**Figure 19. Ansoff grid matrix. Source: Self illustration.**




***Master intricacies:*** Consists of four key deliverables which are undertaken to support any strategic growth initiatives of the organization. Standardization of processes helps organization for several purposes such as optimization in production and manufacturing costs. A process standardization sets tone for achieving high efficiency likewise facilitates in achieving economies of scale. There will also be simplified purchasing management and improvement in terms of quality, similarly help in gaining competitive advantage. This results in overall customer satisfaction.

The next step is to assess the risk on a regular basis, this can be seen from an internal and external perspective, internally it ensures that hazards at workplace are recognized and controlled in terms of production. Furthermore, helps to make better informed decisions, create risk mitigation scenarios. It creates awareness among your employees and improves teamwork. Accurate planning in this aspect leads to a less likely budget overruns or delays.

The next step is to engage in partnerships and innovation, joining hands with players in the markets or any other domain increases the business opportunities, brings in more skills and expertise, gets access to emerging technologies among others. It helps to build sustainable relationships. Likewise, access to new markets and verticals helps to gain insights needed to accelerate market strategy. Businesses receive a much richer source of capital to support the initiatives of growth strategy.

The last step in this stage is to constantly engage in research and development to develop, design, and enhance the line of products, services, technologies or processes. It encourages collaboration with academia to bridge the gap between theoretical and practical standards in the fast-changing environment. It is also noted that R&D efforts lead to an improved business process, this in turn helps to cut down marginal costs and increase marginal productivity which furthermore helps to outpace competitors. Businesses that have a strong competence in R&D have always lasted the test of time said one of the participants.


***Figure 20. Scale stage of BMI process.***

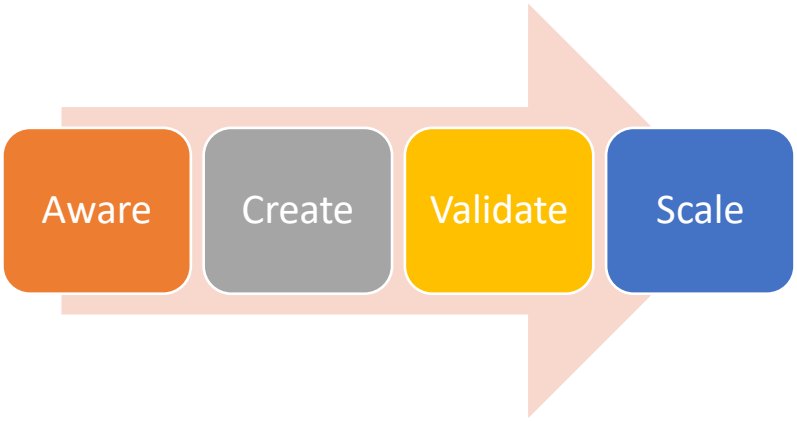
At the end of this stage, as seen in *Figure 20* all the tasks are undertaken or viewed as from a tactical perspective, since we are trying to grow market share or establish global footprints to scale the business.

## 5.5 Integrative framework

In the previous sections, the findings are condensed into an integrative conceptual framework for process of Business Model Innovation. This is based on insights from literature and empirical results from Philips building on the foundations of 4I process framework (Frankenberger et al., 2013). After having established the various drivers,

barriers and enablers for a successful Business Model Innovation, the working aspect is elaborated. The four phases follow a forward sequence as seen in *Figure 21*.

***Figure 21. Sequence of the stages for process of BMI***




The first phase is the '***Aware***' phase that encompasses the idea generation and has interfaces with generating new ideas, stakeholders and past learnings. This defines the 'Exploration' block of the framework, also the various drivers are identified in this phase. The drivers are placed in parallel to this phase.

The second phase is the '***Create***' phase where the idea is converted to a tangible development. This phase concerns the building of a new Business Model. A detailed assessment of the idea by deciphering it into ***the who, the what, the why*** and ***the how*** is carried out. This stage defines the '**Strategic**' block of the framework. After distinguishing a detailed level idea with clear understanding of Business Model roadmap and working of the prototype, the barriers and enablers for a Business Model change are listed in parallel to ***Create*** and ***Validate*** stage.

The third phase is the '***Validate***' phase where the proof of concept leads to confirmation of tangible results. It mainly addresses the validation of new Business Model by dealing with interfaces like Evaluation and New learnings. This defines the **'Operational'** block of the framework.

The fourth phase is the '***Scale***' phase, here the intention is to grow the business and the main interfaces we are dealing with is to achieve a market growth and master intricacies, here we are trying to capitalize on the concept post validation and expand the business from a '**Tactical**' point of view.

The framework shows multiple steps back and forth portraying an iterative process with various components. A framework which can encapsulate completely iterative steps is categorized into a systematic Business Model Innovation process (Frankenberger et al.,

2013). The ***Aware*** and ***Create*** & ***Validate*** phases are iterative in nature to ensure alignment between the design & realization of the innovation process and to successfully implement the Business Model Innovation. As important in any dynamic environment, factors can transform over time and hence it is vital to review the framework frequently.

***Why are the drivers only related to Aware stage?***

The list of drivers is placed in parallel to *Aware* stage because they act as first initiation step for Business Model Innovation changes. Moreover, it is important that a thorough understanding of the various trends and drivers is comprehended as it indicates when it is the right time to do something. It facilitates in making the go-decision for Business Model changes also forms the basis for a strategy. The key drivers often trigger re-thinking of the Business Model. Firms need to identify changes in the environment and be conscious of the drivers in order to be able to respond to those changes with adequate innovations (Frankenberger et al., 2013). Several iterations need to be considered to apprehend firmly the change drivers, this furthermore adds foundation to the process.

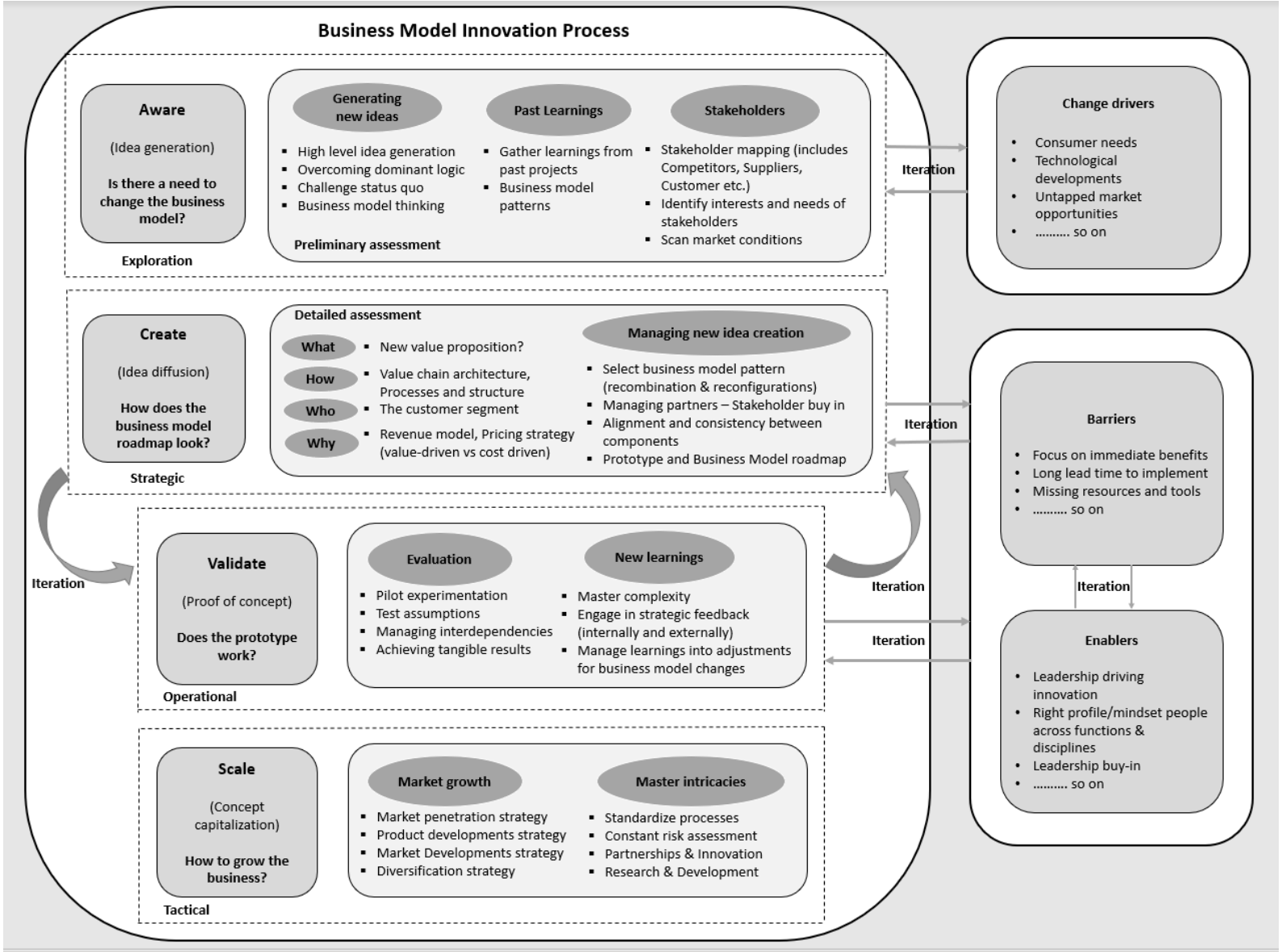
***Why are the barriers and enablers related to only create and validate stage?***

The list of barriers and enablers are placed in parallel because these act as a list of guidelines to focus on elements to increase probability of success. These are important to achieve the implementation of the concept.

Identifying barriers upfront enables to address the problem before it escalates and take corrective measures appropriately. The understanding of barriers assists business teams not only to timely identify trouble spots but also communicate with relevant people on time. The team members have knowledge to deal with risks on a low level. Only those challenges that cannot be addressed at lower levels of management will require senior management attention to deal with other pressing issues.

Enablers help in overcoming these challenges and build on capabilities to address the challenges. They also help in overall planning around the barriers. It is vital that enablers are in place, because when risks fire, there are people, tools, processes or structure that can mitigate the risk or at least face them. Improves efficiency meaning taking less time to reach a given set of outcomes. It also helps in making Informed implementation strategy.

*Figure 22. Business Model Innovation process integrative framework.*



## 5.6 Conclusion

In *Figure 22*, the integrative framework is presented. Although the process might paint a picture of a linear process there exists several iterative loops, this helps to progressively improve on ideas and details. It helps to identify flaws (functional or otherwise) and adapt to changing needs of the customer.

The usefulness of the framework is that it acts as a guideline for professionals to follow a structured process while innovating Business Models. It helps to plan systematically and identify blind spots. A clear process to continually study the change drivers at the pre exploration stage will set the tone for the process. For the post exploration stage, it is helpful to make right use of barriers and enablers to implement changes into the process of innovation Business Models.

# 6

# Discussion, Implications and Recommendations

This chapter sums up the concluding remarks of the research. In section 6.1 the discussion of the research is carried out. In section 6.2 the limitations of the research are discussed. This section provides the recommendations for further research.

## 6.1 Discussion

In this section, the findings from literature and practical insights are scrutinized and limitations of the study are discussed.

### 6.1.1 Research findings

The main research question that this research is aiming to answer is as follows:

***"How can insights about various drivers, barriers and enablers help in the process of a successful Business Model Innovation transforming business within companies?"***

In order to answer this research question, a literature review was conducted. Initially the origins and history along with recent developments of Business Model and Business Model Innovation were studied in detail. This gave a basic foundation to the subject. When it comes to the definition of Business Model and Business Model Innovation the literature is converging in developing the right consensus from different perceptions. The term Business Model is distinct from a business strategy and has its unique place in academics and in practicality. A thorough understanding of the definitions of Business Model and Business Model Innovation was comprehended from academic and practical perspectives. As seen in *Figure 11*, the definition of Business Model Innovation can be classified in terms of scope and novelty. This is important in rightly classifying the typology of definition weather it is Evolutionary BMI, Adaptive BMI, Focused BMI or Complex BMI.

Next, we also saw that four types of approaches are applicable to Business Model Innovation was also discussed in section 3.2.1, which are The Reinventors, The Mavericks, The Adaptors and The Adventurers. Following an approach may be helpful in the context of Business Model Innovation within the company will help in achieving Business Model shift in an efficient manner. Further, A list of various drivers, barriers and enablers for Business Model Innovation were also enumerated from literature as seen in Table 2, Table 3 and Table 4.

In the next phase, interviews were conducted within Philips. The rationale of carrying out interviews is to get insight of the current scenario of Business Model Innovation. A total of 11 participants were interviewed from different departments within the company. This helped in better identifying the practical perspectives of various drivers, barriers and enablers associated to projects as the literature might be idealistic at times. This gave a clear demarcation from academics. Based on the interviews conducted, a survey was conducted. The survey was filled by 32 participants. This was done basically to rank the key drivers, key barriers and key enablers. The data from survey along with that from interviews was furthermore analyzed which gave inputs to the framework. A total of 16 Drivers, 32 Barriers and 22 Enablers are noted in entirety.

Out of the 16 drivers, ***Consumer Need or Consumer Experience, Technological Developments and Untapped Market Opportunities*** as most important drivers. These are seen to drive Business Model Innovation to a high extent, whereas ***Environmental trends*** such as sustainability, circular economy etc. and ***Changing Stakeholders*** are not so important drivers as they are likely to be part of the change and the main reason for Business Model change. Out of the 32 barriers, ***Focusing on immediate benefits, Long lead time to implement, Missing Resources and Tools*** were the most important barriers that restricted the implementation of Business Model Innovation within firms, whereas ***privacy issues with the use of technology*** and ***High pricing in terms of competition*** are not so important barriers as dedicated experts are hired when it comes to privacy and the pricing of products/services in markets is rightly priced for the moment. Out of the 22 enablers ***Leadership driving the innovation, Right profile or mindset of people across functions and disciplines, Leadership buy-in*** are seen as most important enablers to overcome barriers for a Business Model shift, while, ***Innovation lab environment to test cases in parallel market*** and ***Benchmark solutions (in broadest sense externally)*** are not so important enablers small scale pilots within the firm have to be tested first before testing business cases in the market. And for benchmarking solutions, external help although beneficial is better to develop central capabilities within the organizations with collaboration from different business units.

The last stage is to develop the process for a successful Business Model Innovation. This is done by taking the basis of 4I framework as developed by (Frankenberger et al., 2013). Data analysis, inputs from interviews along with literature review went on as additions in making the integrative framework. The four stages of **Aware**, **Create**, **Validate** and **Scale** are the main process stages as seen within Philips and adopted for this research as it covers the entirety of any process framework. The framework has core element of progressively improving on ideas and details because of the presence of several iterative loops. The drivers, barriers and enablers are placed in the right part of *Figure* 22, these basically assist in making the framework complete. The framework is a good representation a process guideline for professionals to follow a structured approach while innovating Business Models. It helps experts to systematically plan and identify challenges.

### 6.1.2 Validation of research

In this section the validity of the research will be elaborated. After conducting interviews with participants, the coding process was carried out as explained in section 4.2.2. After the coding was carried out the list of key drivers, key barriers and key enablers was generated. This list gave inputs to carry out survey questionnaire. Since the survey was floated amongst the interview participants as well as other members who have worked in Business Model Innovation, the participants were asked to validate these coded findings and if any remarks with respect to changes were made evident in remarks section of the questionnaire. Many participants were in line with the coding process and suggested no major changes. This was further confirmed when author gave a final pitch to 14 participants where the author elaborated on the findings and asked for individual feedback with respect to coding process as well as the reasoning behind the questionnaire and no further changes were suggested.

In the final pitch, the integrative framework as seen in section 5.5 was also explained to the team. Members belonging to different functional departments and hierarchical levels in the organization were present to gain broader perspectives. Due to time constraints the integrative framework could not be tested in a project but based on the feedback received from all the participants, some changes were done within the framework. Iterative loops with other components were included. Also, the Ansoff matrix was detailed after incorporating changes from the feedback.

Also, the manager of the team mentioned that the framework could be used in educating higher management staff on concept of Business Model Innovation. Hence, even though not practically applied to a project, it is seen that the proposed integrative framework

along with various drivers, barriers and enablers is a stepping stone towards achieving Business Model Innovation within companies and concurred by experts.

## 6.2 Conclusions

In this section, the conclusions of this research are explained. The answers to the five sub-questions research are discussed. Based on the conclusions of these sub-questions, the main research question is answered. These sub-questions are sequentially answered in order to accomplish the main research question:

**1. What are the most adequate definitions of Business Model & Business Model Innovation by way of conceptualization?**

***Business Model:***

The definition of Business Model as seen by Williams (2018), from the Business Model Company, depicts a comprehensive description of Business Model in the form of a triangle of value. The three key elements (to create value, to deliver value, to capture value) in combination with the other boxes as shown in *Figure 23* are aimed to address the definition of a Business Model, covering a practical and theoretical perspective.

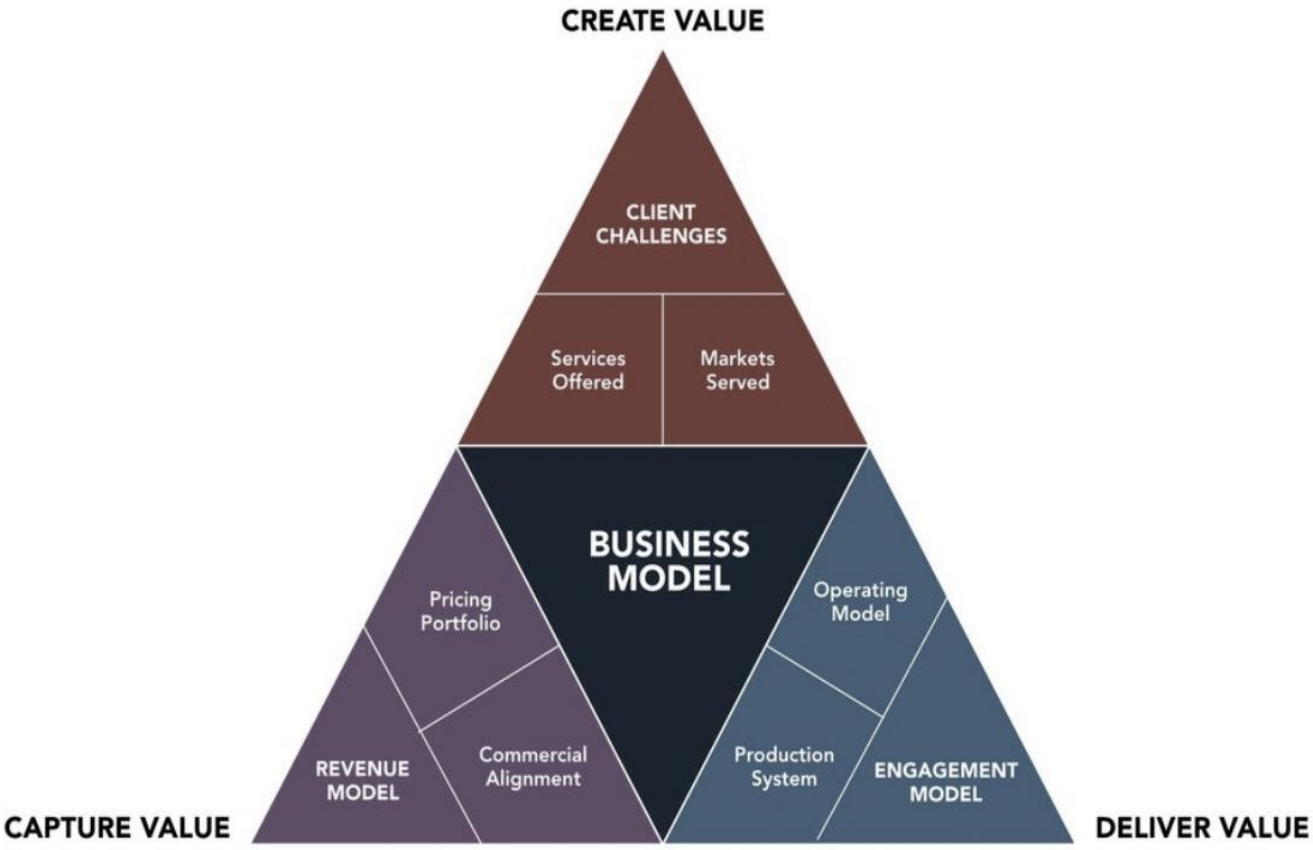



*Figure 23. Triangle of value describing the definition of Business Model (Williams, 2018).*

***Business Model Innovation:***

From a practical perspective the famous consulting company Boston Consulting Group has defined Business Model Innovation as "the art of enhancing advantage and value creation by making simultaneous—and mutually supportive—changes both to an organization's value proposition to customers and to its underlying operating model (Deimler & Kachaner, 2017)". Recognizing this, as it covers the entirety of all the aspects essentially the novelty and scope, in addition to the three elements basic elements of a Business Model which are to create, to capture and to deliver value, hence this definition is the chosen for this research.

**2. What are the key drivers associated to a successful Business Model Innovation?**

From the list of the prime drivers identified ***Consumer Need or Consumer Experience, Technological Developments*** *and* ***Untapped Market Opportunities*** as most important drivers for successful Business Model Innovation. Referring to *Figure 24*, **Environmental trends** and **Changing stakeholders** even though are drivers for a Business Model Innovation, are not so important drivers with respect to the survey participants.

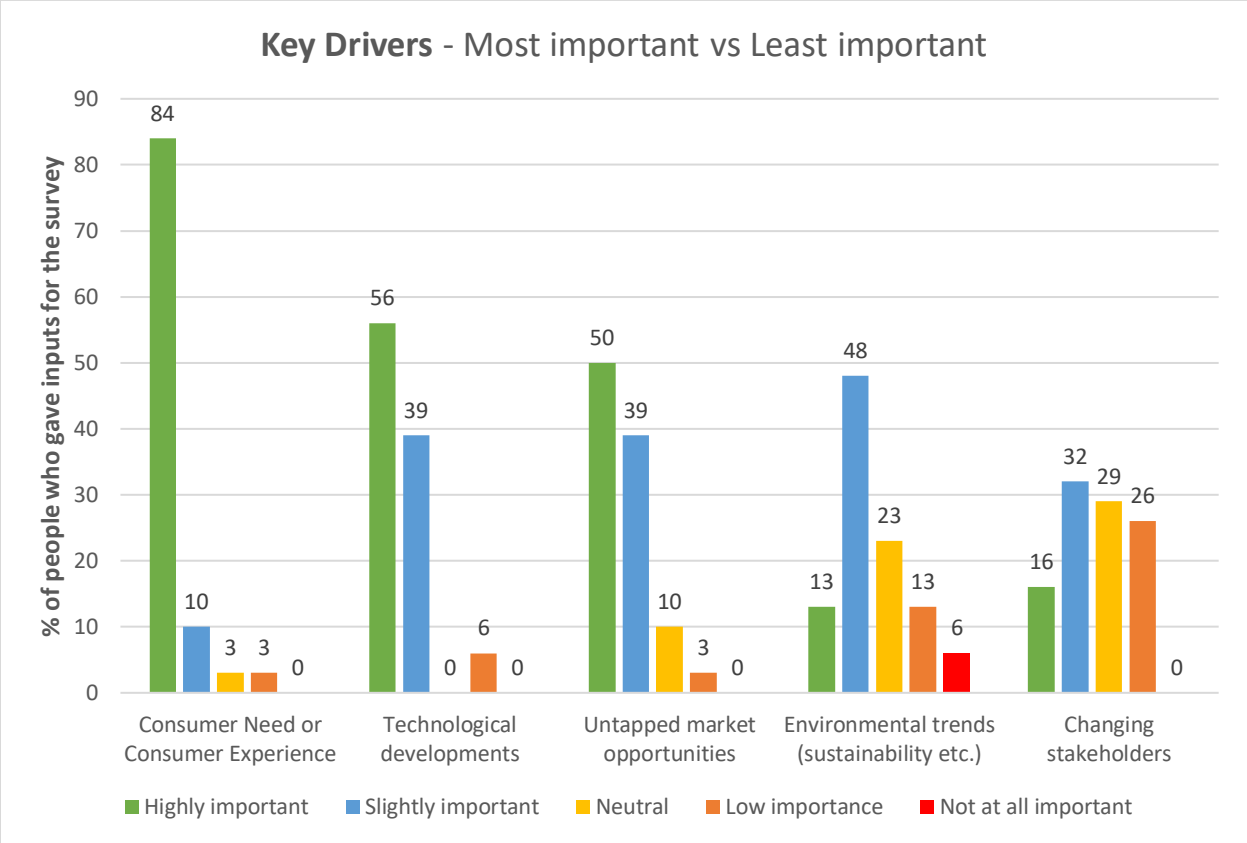



*Figure 24. Ranking of top 3 and bottom 2 drivers*

### 3. What are the key barriers associated to a successful Business Model Innovation?

When it comes to barriers, ***Focusing on immediate benefits, Long lead time to implement, Missing Resources and Tools*** are the most important barriers that have restricted the implementation of Business Model Innovation within firms. Referring to *Figure 25*, even though **Privacy issues with the use of technology** and **High pricing in terms of competition** are seen to be barriers for the process of Business Model Innovation, they are not so important with respect to the survey participants.

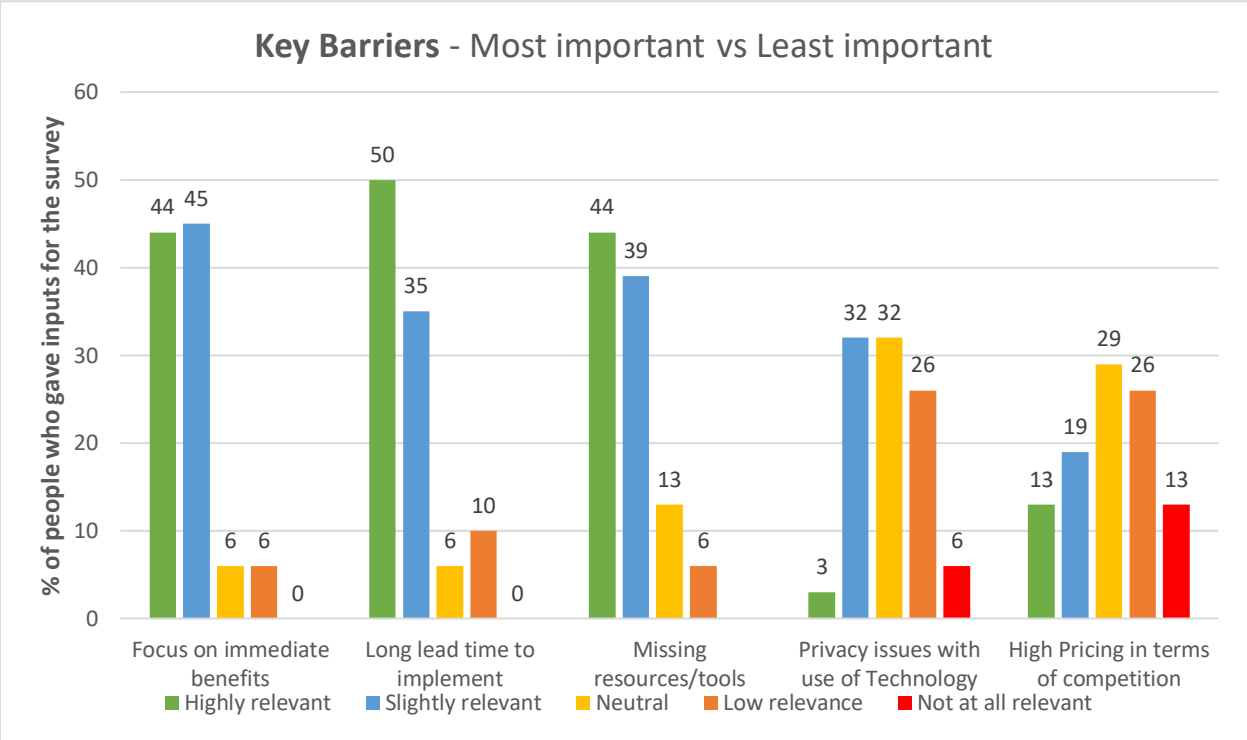



*Figure 25. Ranking of top 3 and bottom 2 Barriers.*

### 4. What are the key enablers or success criteria for a successful Business Model Innovation?

Enablers basically help in overcoming the barriers, out of the list of enablers ***Leadership driving the innovation, Right profile or mindset of people across functions/disciplines*** and ***Leadership buy-in*** are seen as most important enablers. Referring to *Figure 26*, even though **Innovation lab environment to test market cases in parallel** and **Benchmarking solutions (in broadest sense) externally** are seen as enablers, they are not so important with respect to the survey participants.

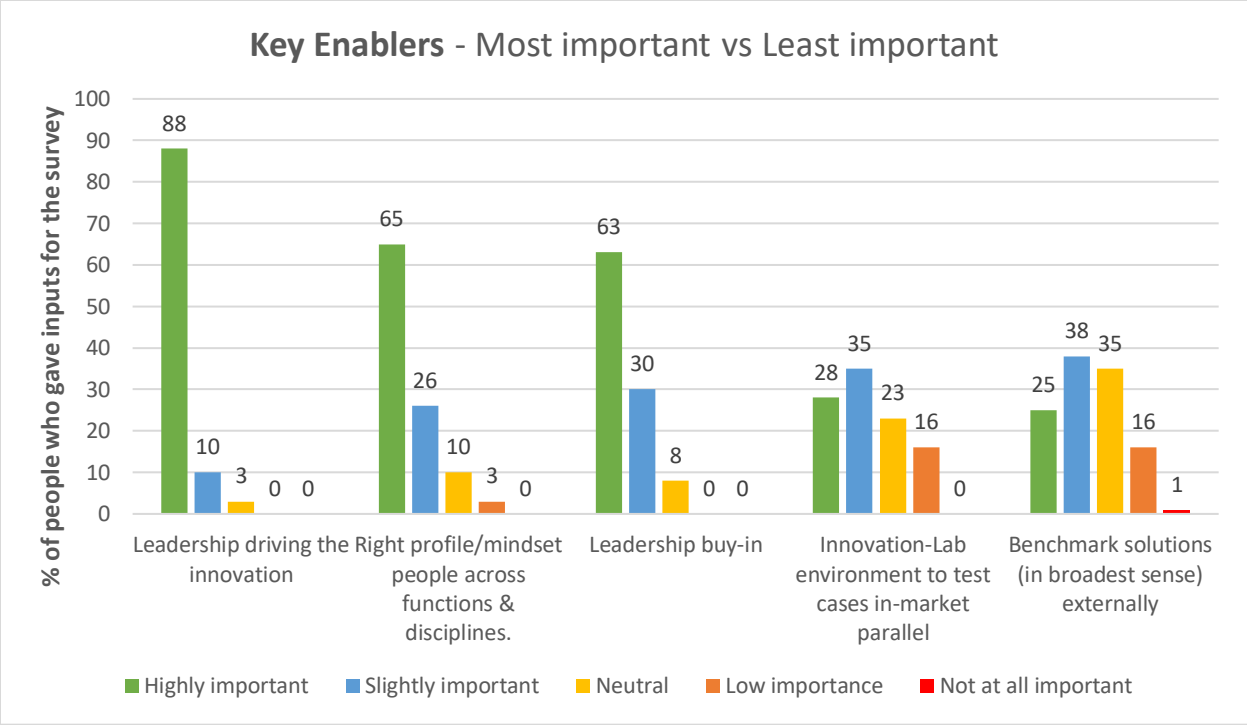
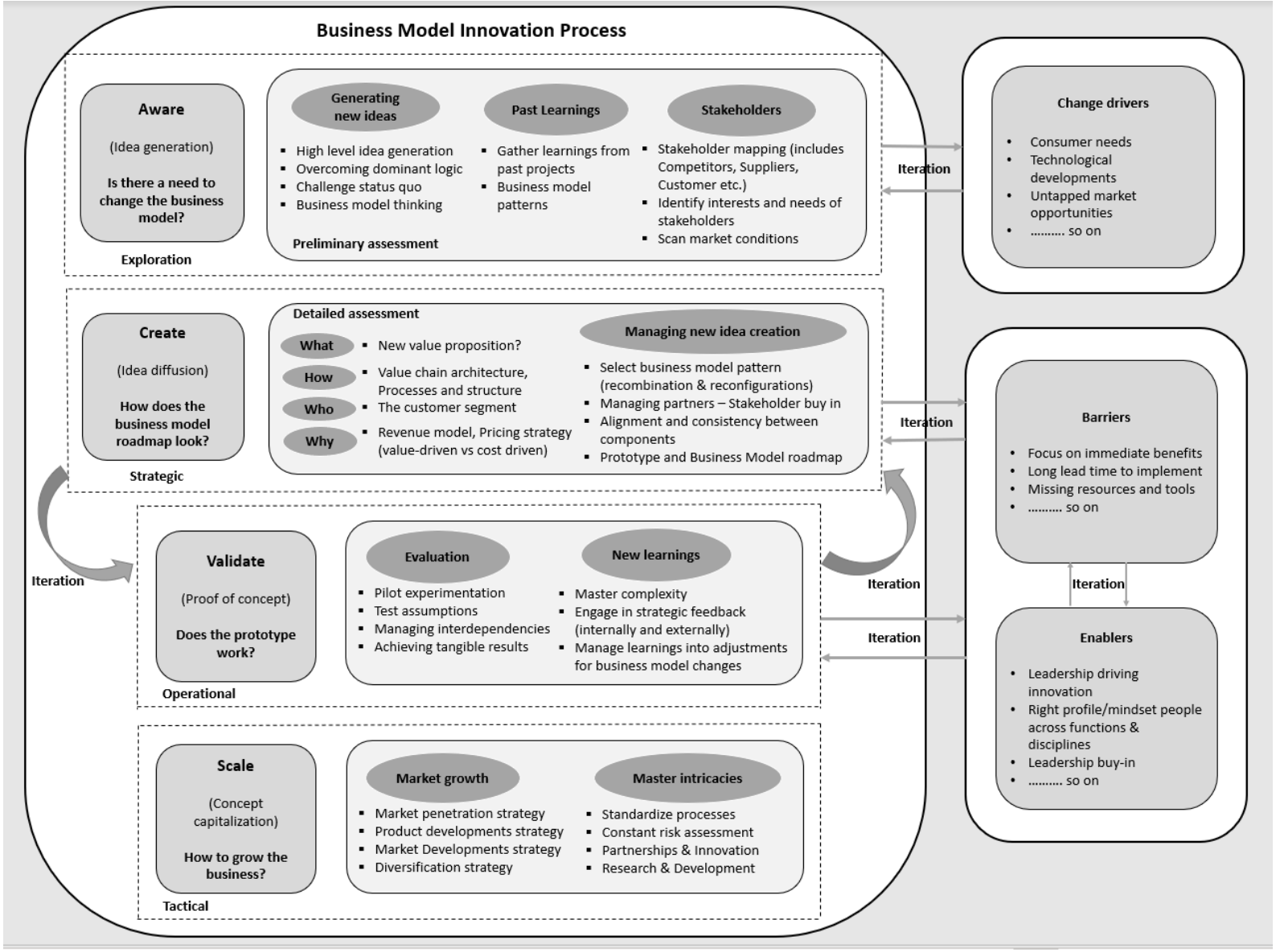



*Figure 26. Ranking of top 3 and bottom 2 enablers.*

**5. What is a suitable approach for the process of achieving a successful Business Model Innovation within firms?**

The integrative framework covers the entirety of the process of Business Model Innovation with four main stages of Aware, Create, Validate and Scale. Each main stage has sub components that have to be addressed in a sequential manner to clearly overcome challenges in every step. Such a systematic framework helps Managers to move close to achieving a successful Business Model Innovation. The framework is as seen here below.

*Figure 27. Business Model Innovation process integrative framework.*



To conclude on the main research question:

***"How can insights about various drivers, barriers and enablers help in the process of a successful Business Model Innovation transforming business within companies?"***

On the basis of the literature review and the interviews conducted within Philips, a procedure was proposed to manage the process of Business Model Innovation. Company professionals vouched for the integrative framework and have stated that insights relating to the various factors along with integrative framework are applicable to be adopted within the firm.

The proposed framework contributes in two ways: First, it lists a comprehensive list of key drivers, key barriers and key enablers which come up during the process of Business Model Innovation. Secondly, a process model of Business Model Innovation with key tasks have been outlined. As literature suggests so far there has been no process model developed for Business Model Innovation. This integrative framework integrates the quite dispersed literature and helps to organize existing contributions and in identify any "blind spots" of Business Model research.

Thus, from the feedback received from company experts, it can be concluded that the research can help in managing and creating process flows for a successful Business Model Innovation. It also serves as basis for further empirical research in the important area of Business Model Innovation.

## 6.3 Implications

The ambition set for this thesis was to explore the structure and the challenges associated with Business Model Innovation. Additionally, build a framework that is useful for company professional when they are innovating their firms' Business Model. The consequential integrative framework is based on a four-phase model of the innovation process. Illustrations from Philips and real-world cases along with insights from literature on innovation management helped to achieve the feat. As such, this could be a useful guideline for managers to implement a structured process and realize the framework to achieve process of Business Model Innovation in organizations.

Based on the interviews conducted in Philips, we can conclude that managers are usually overwhelmed by the task of developing and implementing innovative Business Models. Given the nascent stage of the field of Business Model Innovation, in practicality there are missing structures and proven management knowledge. Combining bits and pieces of the dispersed literature from academics can act as a concrete guidance for practitioners.

A better planning of endeavors is possible only by gathering the most common challenges and structuring them into an integrative process model. This framework acts as a stepping stone to develop insights for practitioners by condensing the critical information required to successfully innovate Business Models.

When it comes to the process, an iterative nature between stages ensures that details and content is improved on from different perspectives. The comprehensive list of major barriers as well as enablers to innovation has not yet focused. Only the importance is highlighted but no practical steps are taken in this aspect. Thus, combining the iterative nature along with tackling the barriers with enablers ensure that knowledge is built on a more practice-oriented research.

From our findings it is evident that Business Model Innovation has to be structured to some extent linearly and to some extent iteratively. However, the actual process that takes place is much more complex and chaotic than the predefined structure. This is validated by identifying the major feedback loop within the process between the Aware, Create and Validate phases. These phases have interface with the Barriers & Enablers to innovation, which were identified and categorized using interviews and survey questionnaire.

From an engineering point of view when it comes to technicality of products or services, the engineers can upfront know about challenges and design-redesign their products or services to overcome the barriers. Incorporating insights with the right enabler will ensure that no time is lost while innovating the products or services.

## 6.4 Limitations and Recommendations

This section discusses the limitations of this research. It is essential to grasp the limitations before addressing and acknowledging the findings for further research. The limitations are as follows:

1. The sample size that was initially planned for interviews was 12 and for the survey a minimum of 30 participants are required for a fairly homogeneous outcome. Owing to the vacation period and unavailability of professionals there were only 11 participants for interviews and 32 stepped up for answering the survey. Even though it was noticed that a reasonable outcome was delivered to address the problem, it is uncertain whether views from more interviewees would have led to different interpretations. Increasing the sample size will thus help to reduce the error and enhance the generalizability of the findings.

2. The research was carried out during a limited duration of time and within Philips only. It doesn't directly imply that the findings are true for all companies dealing with consumer care products and the healthcare industry. A research focused on longitudinal study over a longer duration and encompassing views from several external companies would be beneficial to develop a deeper knowledge on the drivers, barriers and enablers as well as the process of Business Model Innovation. This would be more appropriate to gain rich insights and build on the existing findings.
3. The scope of the research in developing the conceptual framework is at a holistic level, since the key focus of the research was to identify key drivers, key barriers and key enablers that incorporates various perspectives. When Business Model Innovation is being undertaken at a rapid pace within the company it would be interesting to analyze in-depth on the individual elements of the framework. It would also be interesting to develop metrics around the drivers, barriers and enablers which could be adopted within projects of any nature.
4. Even though the methodology and approach used for developing the integrative framework was based on the foundations of the 4I-process framework and inferences from the interviews, there is some sort of overlap seen between components of both the framework. There can be different techniques and approaches which yield better results in terms of building the framework from scratch avoiding overlap of components and incorporate fresh perspectives.
5. Although the framework was not tested in a live project due to time constraints. The proposed solution should be tested in multiple projects within the firm in-order to minimize the risks or any other details which might be missing. Exposure to projects from different business groups will add on to the existing framework.
6. A further recommendation is to carry out research in collaboration with other companies, especially companies dealing in similar industry. Coopetition is the act of collaboration between business competitors, with the hope of mutually benefiting from outcomes. This will boost the knowledge in this nascent topic.

## 6.5 Reflection

In this section, the author reflects upon his thesis research that was conducted at Philips as part of his study program at TU Delft.

The author worked on this research topic starting from February to August 2019. During this time various challenges were encountered. The Healthcare and Consumer care industry which Philips operates was completely new to the author as he had very little

knowledge of the way things operate in this domain. Coming from a civil engineering background, it was really fascinating to see to learn about topics such as Business Model Innovation, Business Transformation among others. In the initial days of the internship a lot of effort was put in understanding the company culture, along with getting acquainted with project knowledge, line of business and other such details, which was quite challenging. Another challenging task for the author was moving from Delft to Eindhoven, which is in the vicinity of the company. The change in accommodation was out of comfort zone as frequent travel to Delft to meet supervisors and other meetings resulted in wastage of time. However, as time passed the calendar was efficiently managed.

Given a chance to do it again, the author would tackle the research keeping in mind the following points:

1. Given the time frame of the research, a mixed methodology was chosen with interviews and survey. A better approach would be to carry out more interviews and exclude survey. Furthermore, a validation workshop of the framework along with Q&A session would produce richer inputs to identifying drivers, barriers and enablers from an even more practical perspective.
2. Due to lack of time, the initially planned Archetype was not included in the research. A detailed assessment of the topic and building metrics for Archetype along with current practices would be the goal.
3. The author was working on other assignments within Philips. Working on relevant projects with team members who were working in Business Model Innovation projects would be helpful to get hands on experience in projects and relating the framework with stages of project.
4. The tools used within Philips are not available open source and hence a lot of time was wasted in building survey and other tasks. Also, at the end of internship, a lot of time was wasted to transfer data.

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# Appendix A

***Figure 28. Definition of Business Model as seen from various authors. Source (Baden-Fuller & Morgan, 2010)***

| Authors | Definition | Focus of analysis includes | Notion of Model | Examples include |
|---|---|---|---|---|
| Teece | *How a firm delivers value to customers and converts payment into profits* | Situates the business model concept. Relates business model innovation to technical innovation. | Kinds and Types; Role Models | Swift meat packers, Sea Land containers, Netflix online DVD rental |
| Zott & Amit | *… a system of interdependent activities that transcends the focal firm and spans its boundaries.* | Emphasizes interdependencies beyond firm boundaries. Good design requires: Content (what), Structure (links) and Governance (who does what). | Kinds and Types | Ebay, Inditex (Zara), First Data corp, FriCSo (start up in lubrication) |
| Williamson | *… cost innovation business model offers advantages in radically new ways meaning more for less.* | How low cost business models from China (and India) work. | Role Models to follow | Shanghai Zhenhua Port Machinery, Haier refrigeration, Nano car- Tata |
| Gambardella & McGahan | *Business model is a mechanism for turning ideas into revenue at reasonable cost* | Business model innovation in high technology sectors that allows small firms to capitalise on their ideas. | Scale Models or short-hand descriptions | Many references including Google, Apple, Ideo, Yogitech + biotech start-ups |
| Itami & Noshino | *… business model is a profit model, a business delivery system and a learning system* | Puts learning centre stage, classification by firm systems | Role Models and Model Organisms | Toyota and Google |
| Yunus, Moingeon & Lehmann-Ortega | *A value system plus a value constellation* | A social business model that lies between for profit and charity | Role Models | Grameen Bank + Telenor, Veoila and Danone collaborations |
| Casadesus & Ricart | *The logic of the firm, the way it operates and how it creates value for its stakeholder* | Interfaces between business model, strategy and tactics | Models capable of manipulation | Ryan Air Telmore/TDC |
| Demil & Lecoq | *The way activities and resources are used to ensure sustainability and growth* | Dynamics of business model change over time | Model Organisms | Arsenal FC |
| Sabatier, Rousselle & Mangematin | *Cross roads of competence and consumer needs* | Portfolios of business models | Recipes | French biotech firms |

***Figure 29. Definitions of Business Model Innovation as seen by a various author. Source (Foss & Saebi, 2017).***

| Authors | Definitions |
|---|---|
| Mitchell and Coles (2004a: 17) | "By business model innovation, we mean business model replacements that provide product or service offerings to customers and end users that were not previously available. We also refer to the process of developing these novel replacements as business model innovation." |
| Markides (2006: 20) | "Business model innovation is the discovery of a fundamentally different business model in an existing business." |
| Santos et al. (2009: 14) | "Business model innovation is a reconfiguration of activities in the existing business model of a firm that is new to the product service market in which the firm competes." |
| Aspara et al. (2010: 47) | "Initiatives to create novel value by challenging existing industry-specific business models, roles and relations in certain geographical market areas." |
| Gambardella and McGahan (2010: 263) | "Business-model innovation occurs when a firm adopts a novel approach to commercializing its underlying assets." |
| Yunus et al. (2010: 312) | "Business model innovation is about generating new sources of profit by finding novel value proposition/value constellation combinations." |
| Sorescu et al. (2011: S7) | "As a change beyond current practice in one or more elements of a retailing business model (i.e., retailing format, activities, and governance) and their interdependencies, thereby modifying the retailer's organizing logic for value creation and appropriation." |
| Amit and Zott (2012) | Innovate business model by redefining (a) content (adding new activities), (b) structure (linking activities differently), and (c) governance (changing parties that do the activities). |
| Bucherer et al. (2012: 184) | "We define business model innovation as a process that deliberately changes the core elements of a firm and its business logic." |
| Abdelkafi et al. (2013: 13) | "A business model innovation happens when the company modifies or improves at least one of the value dimensions." |
| Aspara et al. (2013: 460) | *Corporate business model transformation* is defined as "a change in the perceived logic of how value is created by the corporation, when it comes to the value-creating links among the corporation's portfolio of businesses, from one point of time to another." |
| Berglund and Sandström (2013: 276) | "A BMI can thus be thought of as the introduction of a new business model aimed to create commercial value." |
| Casadesus-Masanell and Zhu (2013: 464) | "At root, business model innovation refers to the search for new logics of the firm and new ways to create and capture value for its stakeholders; it focuses primarily on finding new ways to generate revenues and define value propositions for customers, suppliers, and partners." |
| Khanagha et al. (2014: 324) | "Business model innovation activities can range from incremental changes in individual components of business models, extension of the existing business model, introduction of parallel business models, right through to disruption of the business model, which may potentially entail replacing the existing model with a fundamentally different one." |

# Appendix B

## Interview Questions (Part 1)

***Interview questions for Director Business Model Innovation:*** These questions were asked to get a clarity on definitions and take on Business Model Innovation from a central organization perspective. Hence only the director of Business Model Innovation was interviewed with the below set of questions.

**Introduction (3 mins)**

- What is your current role within Philips?
- What is your background (previous jobs, industries employed in)?
- How many years of experience do you have in this position?
- How is your role related to Business Model Innovation at Philips?

**Business Model Innovation (Business Model Innovation) at Philips:** Improve how we identify, evaluate, develop, and manage Business Models to adapt to changing customer needs: pursue the right Business Model faster

**Business Model Innovation characterization**

1. What led to defining Business Model Innovation? Under what conditions was the term defined?
2. Is there a better definition of Business Model Innovation according to you?
3. When do you say that a Business Model is innovative?
4. Can you explain what it is to pursue the right Business Model faster?
5. How do you know if the Business Model is right? Is it not innovation part of stepping into unknown?
6. With respect to Business Model Canvas (BMC), is there a definition for Business Model Innovation?
7. How many blocks in the BMC have to change in order to call it as a Business Model Innovation?
8. How often do you explore other Business Model types?
9. Do you think Business Model Innovation is a top down or bottom up approach?
10. What are the main several stages/sub-stages involved in the process of Business Model Innovation? E.g. planning, incubation, scaling etc.
11. Any other recommendations?

## Interview Questions (Part 2)

***Interview questions for rest of the participants:*** The set of questions as seen below were asked to build on the various barriers, enablers and drivers. Also, to add inputs to the process of Business Model Innovation.

**Introduction (3 mins)**

- What is your current role within Philips?
- What is your background (previous jobs, industries employed in)?
- How many years of experience do you have in this position?
- How is your role related to Business Model Innovation at Philips?

**Business Model Innovation (Business Model Innovation) at Philips:** Improve how we identify, evaluate, develop, and manage Business Models to adapt to changing customer needs: pursue the right Business Model faster

**Business Model Innovation characterization, Strategy & Business transformation**

1. Are you fully aware of the definition of Business Model Innovation as documented in Philips?

2. Is there a different definition of Business Model Innovation according to you?

3. In accordance to Business Model Canvas, what are the key components of a Business Model for Philips?

4. When do you say that a Business Model is innovative?

5. According to you, how frequently are Business Models revised? a. If quite frequently, what was the reason for this change? b. If not quite frequently, why are there little/no changes in the Business Model?

6. Do you see any major changes that have affected the company's strategy in the past few years?

7. Do you see any relationship between their strategic processes and Business Model changes?

8. If you have to classify Business Models at Philips, what would you say is it value-driven or cost-driven?

**Successful Business Model Innovation**

1. When do you say a successful Business Model Innovation has taken place? Or what are the several criteria that define success?

2. Do you think Business Model Innovation is a top down or a bottom up approach?

3. Which were the tools used in process of Business Model Innovation? And for what purpose?

**Successful Business Model Innovation and correlation to stages - Aware, create, validate, Scale**

1. Which project(s) have you worked in which had major degree of Business Model Innovation?

2. Do you see any other stages/sub-stages in the process of Business Model Innovation that are missing apart from the ones mentioned in the heading?

3. What are the key drivers that lead to Business Model Innovation? Please elaborate.

4. What were the major barriers faced in each of the stages?

5. What are the root causes and consequence for these barriers/challenges?

6. How were these challenges solved?

7. From your experience, to what extent do you think these barriers have relevance to projects in other Business Groups within Philips?

8. Do you see any key enablers at each stage?

**Closing**

Do you have additional suggestions that contribute to my research? For instance, company files to consult or articles to consider.

**Other**

Additional points.

# Appendix C

*Table 13. List of ranking for Drivers.*

| Ranking number | Drivers | Average scores |
|---|---|---|
| 1. | Consumer Need or Consumer Experience | 4.75 |
| 2. | Technological developments | 4.44 |
| 3. | Untapped market opportunities | 4.34 |
| 4. | Competition related | 4.28 |
| 5. | Recognizing a failing Business Model | 4.19 |
| 6. | Internally within the firm to increase Sales | 4.19 |
| 7. | Threat from new entrants | 4.16 |
| 8. | First mover advantage | 4.13 |
| 9. | Increase Market Share | 4.09 |
| 10. | Opportunity to Capitalize on Idea | 4.09 |
| 11. | Changing environment (government, market crisis) | 3.78 |
| 12. | Globalization | 3.55 |
| 13. | Environmental trends (sustainability etc.) | 3.47 |
| 14. | Changing stakeholders | 3.38 |

*Table 14. List of ranking for Barriers.*

| Ranking number | Barriers | Average scores |
|---|---|---|
| 1. | Focus on immediate benefits | 4.25 |
| 2. | Long lead time to implement | 4.25 |
| 3. | Missing resources/infrastructure/tools | 4.19 |
| 4. | Improper resources allocation | 4.19 |
| 5. | Resistance to change the current model (maintain status quo) | 4.19 |
| 6. | Complexity while innovating | 4.19 |
| 7. | Neglecting Long-Term Thinking | 4.06 |
| 8. | High Capital requirements | 3.87 |
| 9. | Low-to-none margins | 3.85 |
| 10. | Dominant logic | 3.85 |
| 11. | Key Performance Indicators (KPIs) | 3.85 |
| 12. | Switching costs | 3.84 |
| 13. | Lack of Experienced people with mindset fail=learn | 3.78 |
| 14. | Absence of change management capabilities | 3.69 |

| | | |
|---|---|---|
| 15. | Managing multiple stakeholder | 3.63 |
| 16. | Missing End to End Processes | 3.63 |
| 17. | Key Performance Indicators (KPIs) that lack innovation parameters | 3.52 |
| 18. | Unavailability of Proper Data | 3.34 |
| 19. | Lack of customer centricity | 3.34 |
| 20. | Missing organizational support by middle layers | 3.31 |
| 21. | Complex Organizational structure | 3.30 |
| 22. | Organizational capabilities | 3.30 |
| 23. | Organizational culture | 3.30 |
| 24. | Method/tools to compare and prioritize variety of BM | 3.29 |
| 25. | Lack of collaboration | 3.27 |
| 26. | Lack of collaboration between internal and external stakeholders | 3.22 |
| 27. | Lack of integration | 3.20 |
| 28. | Recycle vs Refurbish (Reuse) | 3.17 |
| 29. | Setting up a Supplier Base | 3.16 |
| 30. | Privacy issues with use of Technology | 3.00 |
| 31. | High Pricing in terms of competition | 2.94 |

*Table 15. List of ranking for Enablers.*

| Ranking number | Enablers | Average scores |
|---|---|---|
| 1. | Leadership driving the innovation | 4.84 |
| 2. | Right profile/mindset people across functions/ disciplines. | 4.55 |
| 3. | Leadership buy-in | 4.53 |
| 4. | Clear understanding of the value proposition | 4.53 |
| 5. | Enable it from the top. | 4.48 |
| 6. | Open or Long-term mindset overcoming traditional thinking | 4.48 |
| 7. | Select team carefully based on mindset & competence | 4.47 |
| 8. | Proving Customer willingness | 4.41 |
| 9. | Collaboration with all the parties | 4.38 |
| 10. | Supportive Organizational culture | 4.28 |
| 11. | Partnerships with external stakeholders | 4.20 |
| 12. | Focus on repetitive feedback loops | 4.06 |
| 13. | Seek early market feedback to lower risks and convince stakeholders | 4.06 |
| 14. | Adequate resources/infrastructure in place | 4.04 |

| | | |
|---|---|---|
| 15. | Tools: allow non-standard tools to be used (like start-ups do) for speed | 4.02 |
| 16. | Sufficient people across functions / disciplines who have a profile/mindset. Either select, hire or train. | 4.02 |
| 17. | Budget to take on risks | 3.97 |
| 18. | Put team in start-up mind-set | 3.97 |
| 19. | Grow the (access to) IT & data analytics capacity | 3.91 |
| 20. | Use demonstrators (to learn and get stakeholders on board) | 3.81 |
| 21. | Flexibility to test components of Business Model | 3.79 |
| 22. | Use standard approaches/end-to-end processes (allow exceptions for speed) | 3.78 |
| 23. | Innovation-Lab environment to test cases in-market parallel | 3.75 |
| 24. | Benchmark solutions (in broadest sense) externally | 3.68 |

# Appendix D

## The 4I process framework

The inspiration for the final integrative framework is based on 4I process framework (Frankenberger et al., 2013) as seen in ***Figure 30***.

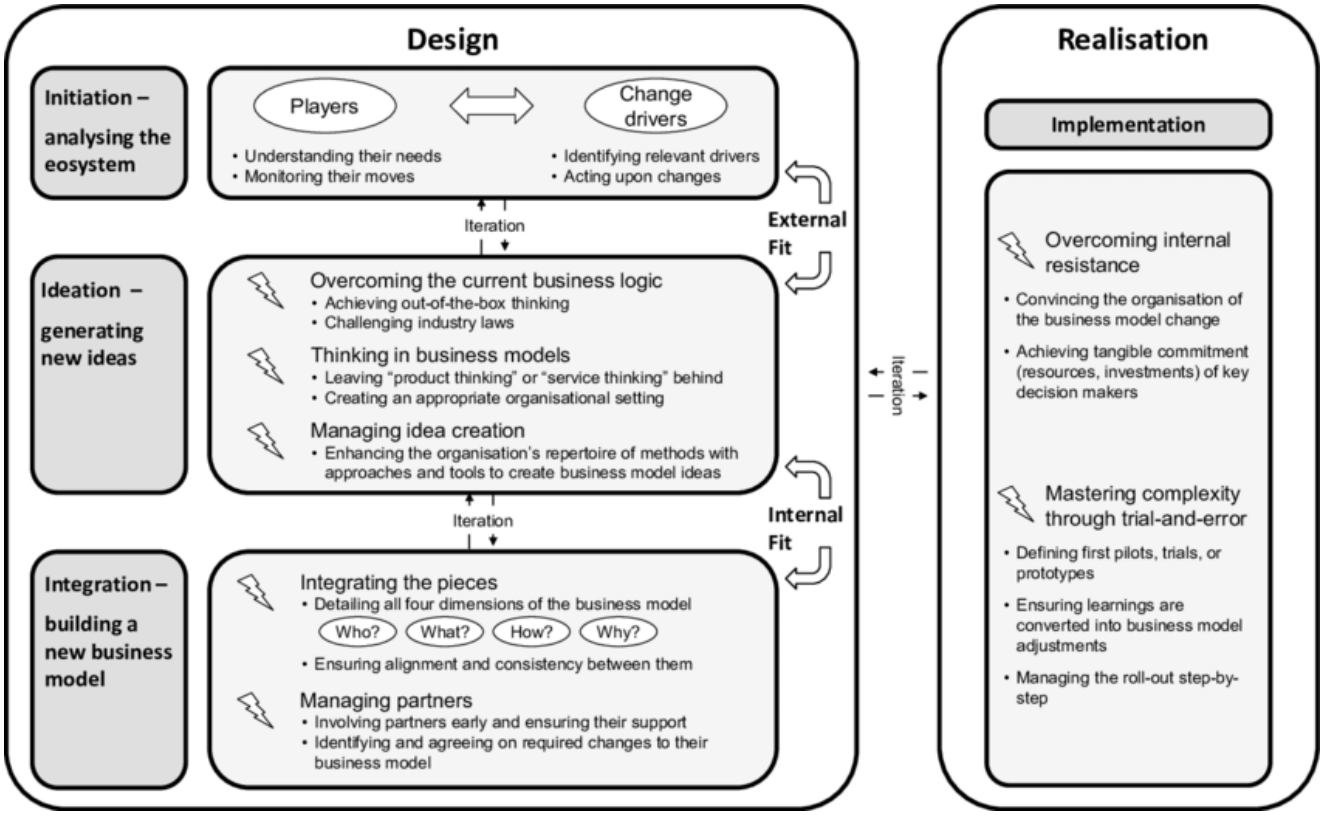


***Figure 30. 4I process framework.***

This framework highlights the challenges that managers face during several phases of implementation of new Business Models. This framework consists of four phases that are ***Initiation, Ideation, Integration*** and ***Implementation***. The framework is designed to bridge the gap between design and implementation of new Business Models.

The components of initiation and Ideation as seen ***Figure 30,*** form part of **Aware** stage, this is because the intention is to answer the question of whether there is a need to change a Business Model? For this basic understanding of reasons for change need to be comprehended. Also, these two phases deal with exploration hence classified under **Aware** stage. Integration and Implementation from the 4I framework talk about creating the new Business Model and asking the basic questions which help to fully comprehend the aim of the new Business Model, since these two phases represent the building of the

business model, hence they are classified from a strategic point of view under **Create** stage. In order for the entire process to be complete, the stages **Validate** and **Scale** are missing in the 4I framework. The **Validate** stage as the name suggests, is essential because a constant engagement in feedback will confirm that the new business model works. The **Scale** stage is also missing since the focus is only till implementation, but it is also necessary to have a look at how to grow the business. These two stages which are missing will help in the entire process and hence included in the Integrative framework.