

**Platform business models: Incumbent adaptation perspectives subsequent to  
discontinuous changes**

A research proposal submitted to the Gordon Institute of Business Science, University of  
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Corporate Strategy

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## ABSTRACT

This thesis explored the impact of platforms on South African Banking, Telecom and Media industries, studying how the industry competes or collaborates with the phenomenon. Thus far, research focuses on non-existential threats, which allowed for long-term adaptation and scant evidence about incumbent adaptation under discontinuous changes. This research looked at two key questions: (a) how discontinuous changes impact incumbents; and (b) how incumbents adapt their exploration and exploitation balance subsequent to discontinuous changes.

A qualitative methodology was applied to answer these research questions. Semi-structured interviews were conducted with leaders and senior management involved in the organisational sense-making process to understand the phenomenon. Interview findings were analysed using thematic analysis to generate insights and meanings from the adaptation experiences.

This study contributes to the literature by combining incumbent adaptation, discontinuous changes, and organisational design aspects based on in-depth interviews. There are four main findings: one, platforms were perceived as a threat, affirming past research; two, leadership assumes 3–5 years for full-scale adaptation before entirely disrupted, supporting past research in the domain; three, contrary to the literature, which expects increased exploration during discontinuous changes, Incumbents balancing their exploration and exploitation initiatives is a significant revelation; four, the transformation journey was mostly led by Top Management Teams (TMT), who preferred to run these initiatives as a separate organisation. However, these Incumbents are yet to achieve the much-talked-about network effects and the scale compared to digital-first ventures; whether their approach yields result or not, no Oracle can tell.

## KEYWORDS

Platform business models; explore; exploit; qualitative; discontinuous changes; organizational design.

## DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Chandra SS Nanduri

Date: 29th Jan 2021

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## Platform business models: Incumbent adaptation perspectives subsequent to discontinuous changes

### 1. INTRODUCTION TO RESEARCH PROBLEM

This chapter establishes the research territory, key developments in business, objectives, scope, and outcomes for the proposed qualitative research. Furthermore, the research gap and the proposed research's significance is highlighted in this chapter. This study intends to explore incumbent adaptation perspectives subsequent to discontinuous changes, especially platforms. The implications of platform business models on incumbents, the incumbent's perception of the impact based on their adaptation level, and possible adaptation methods such as exploration and exploitation are central to the study. Furthermore, how they execute exploration and exploitation choices would help to understand how they achieve desired results.

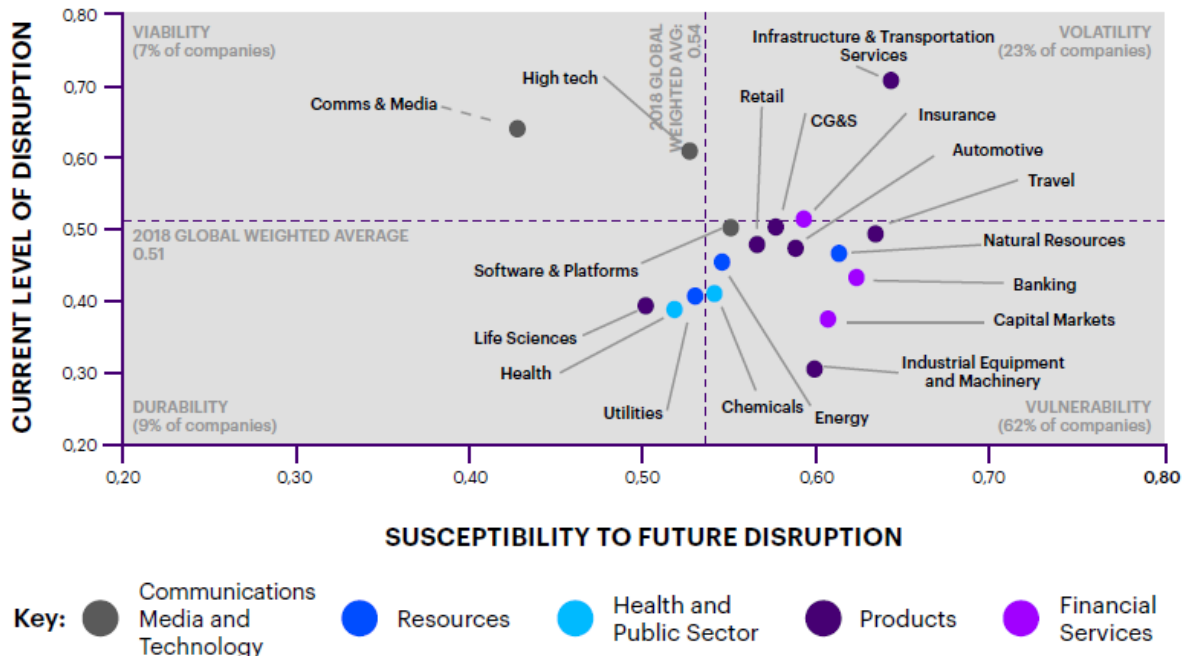
#### 1.1. Background: Imperatives to the incumbent adaption

The economic impact created between June 2017 and May 2018 by Airbnb in South Africa through host and guest activities was approximately \$678 million USD (Airbnb, 2018). Uber services over one million active riders in South Africa (Walker, 2019), and the e-Commerce industry expected to grow by 15% in 2020, which was approximately \$3 million in 2019 (Fourie, 2019). In the words of researcher Parker, Van Alstyne, & Choudary, (2016), this is the impact of the "Platform Revolution." These platforms provide the same services that traditional businesses (incumbents) used to control through production, distribution, and sales to a customer in a linear fashion (Van Alstyne, Parker, & Choudary, 2016), often called "pipeline businesses" (Van Alstyne et al., 2016, p.56). Platforms businesses use technology and open business models contrary to pipeline businesses (Cusumano, Gawer, & Yoffie, 2019; Parker et al., 2016; Van Alstyne et al., 2016).

As per Moore and Seedat (2020), 85% of incumbent South African companies are highly vulnerable to future disruption, including the impact of discontinuous changes introduced by their disruptors—platforms. Evaluation of incumbents using the "Accenture disruptability framework" (Moore & Seedat, 2020 p.4) arrived at South African industry exposure to disruption (Figure 1). Key findings suggest that communication and media, High tech, and infrastructure and transportation industries are already significantly disrupted (Moore & Seedat, 2020). Further, the report mentions that the "South African executives are aware of

the threat and are not adequately prepared” (Moore & Seedat, 2020 p. 4). Accordingly, it is imperative for incumbents to adapt these findings, and valuable for understanding how they prepare to compete and survive the platform disruption.

**Figure 1 - Accenture Research Disruptability Index 2.0, South Africa 2020**



### 1.1.1. Platforms impact on incumbents:

Platforms such as Airbnb are in their era of ferment, falling under the discontinuous change category of disruption in today’s business world (Weber, Lehmann, Graf-Vlachy, & König, 2019). Examples of technological discontinuities include digital photography replacing film, mobile phones replacing the standalone camera, cloud infrastructure in place of on-premises infrastructure, the Internet, and movie streaming (Cozzolino & Rothaermel, 2018). According to Patel & Husairi (2018, p. 30), “[the] era of ferment is a period of extreme technological and market uncertainty that results from the emergence of a radical innovation.” Ferment, take off, maturity, and discontinuity, are four stages of an “innovation S curve” (Galmorde, 2015, paragraph. 3).

Scant evidence is available on platform business performance. However, the two decades of data compiled on 46 platform companies from the Forbes 200 list shows compelling results (Cusumano et al., 2019). The findings suggest that platform businesses have 50% fewer

employees, earn higher operating profits, and gain higher market values. These are encouraging data facts; however, 90% of these platforms had digital first foundations in platforms with notable exceptions, including IBM, Apple, who transformed themselves into the platforms. In the same research conducted by Cusumano et al. (2019), they observed that 209 platforms failed to perform due to reasons such as weak technology, inability to create network effects, failure to attract enough users, significant investment needs, late entry into the platform market, pricing issues, and lack of user trust. For this reason, we may infer platforms are disrupting the pipeline business norms and rules, pushing the incumbents (incumbents are those who run established business and perform business owning assets, convert raw material to finished goods) to either adapt or deal with the wrath of the platform revolution (Van Alstyne et al., 2016).

Inferring from the above, platforms may become the most preferred business model of the future (Cusumano et al., 2020). According to Cozzolino and Rothaermel (2018, p. 3056), “incumbents frequently lose their advantage after discontinuous technological changes.” Given that, the incumbents’ balancing between exploration and exploitation strategies to compete may not be sufficient in winning the fight against the competition (Eggers & Park, 2018). Conversely, they should start diverting their focus to exploring the platform business model; thus, it becomes a necessity due to the context of discontinuous change (Cusumano et al., 2020; Luger, Raisch, & Schimmer 2018). As a result, incumbent organizations are required to revisit their explore and exploit strategies of organizational learning to survive and run a thriving business (Birkinshaw, Zimmermann, & Raisch, 2016; Luger et al., 2018; March, 1991). The next part of this introduction will cover aspects of the incumbent adaptation, available choices, further explained below.

#### 1.1.2. Incumbent adaptation perspectives:

Seeing that there are multiple options for incumbents’ responses during discontinuous innovation’s “era of ferment” (Patel & Husairi, 2018; Weber et al., 2019), such as disapproval, seeking regulator support, and emphasising efficiency, not all the platforms are profitable and successful (Cusumano et al., 2020). Besides, Incumbents may not significantly benefit from the fast responses to discontinuous change (Tushman & O’Reilly, 1996), as the business model may not always have passed two critical tests, namely the narrative and numbers test (Magretta, 2014). For this reason, the incumbent faces friction between exploit and explore choices in the organization, and it is essential to understand the incumbent’s perspectives during the adaptation process (Cozzolino, Verona, & Rothaermel, 2018).

Incumbents and platforms alike use a combination of a business model and competition strategies to survive in the market (Zhu & Iansiti, 2019). Owing to external market forces, they continuously update their strategies and business models, also known as incumbent adaptation (March, 1991). The adaptive process incumbents follow under “search, variation, risk taking, experimentation, play, flexibility, discovery, innovation”, are categorized under exploration, whereas “refinement, choice, production, efficiency, selection, implementation, execution” are categorized under exploitation (March, 1991, p. 71). March (1991) argues that excessively engaging in exploitation over exploration may, in the long term, lead to a firm’s extinction. Further, March (1991) concluded that balancing between exploration and exploitation is the most crucial factor in incumbent growth and survival. Extensive research on this notion was conducted by numerous researchers using various research methods (O’Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008). Incumbents may use three modes of adaptation: structural, contextual, and behavioural, to execute the search and seize choices (Birkinshaw et al., 2016; Cozzolino et al., 2018; Day & Schoemaker, 2016; Eggers & Park, 2018). Much evidence is found as incumbents diversify into new markets, introduce new products, and acquire new companies; backward and forward integration occurs as a result of adaptation (Birkinshaw et al., 2016; Day & Schoemaker, 2016; Luger et al., 2018).

On the whole, the balancing act of exploration versus exploitation for incumbent adaptation, importance, advantages, and disadvantages in platform business model, and finally, the adaptation options for those willing to engage in platform business was elaborated on above (Birkinshaw et al., 2016; Luger et al., 2018; Parker et al., 2016; Van Alstyne et al., 2016). As a result, this study focused on understanding the incumbent perspectives following discontinuous changes, adaptation, mode of adaptation (Birkinshaw et al., 2016; Luger et al., 2018). The above topic is further elaborated in the following sections, detailing the research purpose, objectives, and scope.

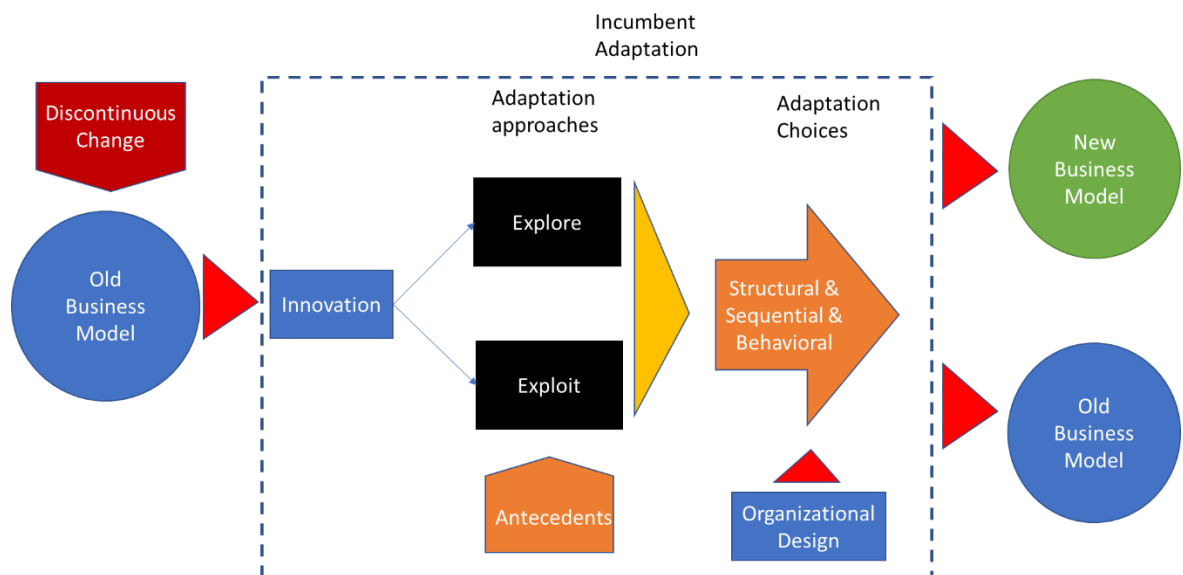
## 1.2. Research problem

This empirical study aims to expand on the incumbent adaptation perspectives from discontinuous changes, such as platforms. Incumbents and platforms alike continuously adapt to the environmental changes using exploration and exploitation approaches (Birkinshaw et al., 2016; Eggers & Park, 2018; O’Reilly & Tushman, 2013; Van Alstyne et al., 2016; Weber et al., 2019). However, not enough understanding exists about how firms adapt to discontinuous changes, why some incumbents do well, and others struggle, adapting to fast-changing markets and technologies (Birkinshaw et al., 2016; Day & Schoemaker, 2016; Luger

et al., 2018; Van Alstyne et al., 2016). Platforms business models are different from incumbents', and they use multi-sided markets, ecosystems, advanced technology to disrupt (Cusumano et al., 2020; Parker et al., 2016; Van Alstyne et al., 2016; Zhao, von Delft, Morgan-Thomas, & Buck, 2019) and displace incumbents if they do not adapt (Van Alstyne et al., 2016). Most of the existing research focuses on firms that are not under existential threat (Birkinshaw et al., 2016; Day & Schoemaker, 2016) and lack understanding about adapting to the discontinuous changes introduced by technology (Eklund & Kapoor, 2019; Eggers & Francis Park, 2018; Kammerlander, König, & Richards, 2018; Cozzolino et al., 2018).

This study focuses on understanding two fundamental questions to address this research gap: firstly, how discontinuous changes are impacting incumbents (Birkinshaw et al., 2016), and second, how incumbents are balancing their exploration and exploitation subsequent to discontinuous changes (Eggers & Park, 2018). Figure 2 provides a conceptual view, mapping the focus areas and the steps followed to solve the research problem. Organizational theories provide the framework to explore the incumbent's perspectives.

**Figure 2 – Conceptual view of *Research focus***



### 1.3. Research question

This research's critical questions are about how discontinuous changes impact incumbents and how incumbents adapt their exploration and exploitation balances subsequent to



discontinuous changes, including those triggered by platforms (Birkinshaw et al., 2016; Eggers & Francis Park, 2018; Luger et al., 2018).

#### 1.4. Research aim

The purpose of this empirical study was to explore and generate the incumbents' adaptation process, choices and designs subsequent to discontinuous changes for managers, leaders from select industries including telecommunications, media, and banking impacted by disruption (Johnson, Bester, Janse Van Vuuren, & Dunn, 2020; Moore & Seedat, 2020).

#### 1.5. Research contribution

##### **Academic Objective:**

The study aimed to build empirical evidence on incumbent adaptation perspectives, including preferred adaptation modes, subsequent to discontinuous changes, such as those facilitated by platforms (Birkinshaw et al., 2016; Carney, Van Essen, Estrin, & Shapiro, 2018; Cozzolino et al., 2018; Day & Schoemaker, 2016; Eggers & Francis Park, 2018; Eklund & Kapoor, 2019; Luger et al., 2018; March, 1991; McMillan & Overall, 2017; O'Reilly & Tushman, 2013; Ossenbrink, Hoppmann, & Hoffmann, 2019; Tushman & O'Reilly, 1996). This research agenda aims to build on the gaps, which are identified as "how a company chooses among these three modes of adaptation" (Birkinshaw et al., 2016, p. 56) and "how firms adapt their exploration–exploitation balance subsequent to environmental change and how such changes influence performance" (Luger et al., 2018, p. 467). Similarly, Eggers and Francis Park (2018) contend that "incumbent adaptation to technological change is worth pursuing" (p.383), and questions, "why certain firms are successful in this adaptation and some struggle?" (p. 357), and lastly, a fundamental question, such as any incidence of "refining exploitation more rapidly than exploration" by incumbents (March, 1991, p. 71).

##### **Practical Objective:**

The study helps managers to understand observed environmental discontinuities concerning platform business models, how the innovation process is managed, including organizational learning processes, modes of adaptation, strategic choices, and support decision making in their organizational context. The study expands on various perspectives in response to discontinuous changes and how incumbents manage adaptation. This study helps strategic business leaders calibrate their strategies for incumbent adaptation, exploration and exploitation choices, implementation, and barriers if they arise.

## 1.6. Research scope

This study explores South African incumbent organizations' perspectives on their exploration and exploitation choices subsequent to discontinuous changes. How they are balancing adaptation and how they execute those adaptation choices becomes the study's focus. The strategies to secure a competitive position, digital readiness, and incumbent adaptation perspectives may help developing the incumbent adaptation framework for the future.

## 1.7. Conclusion

The following chapter reviews the recent academic literature that forms this study's and considers platforms' impact on incumbents, incumbent adaption concepts and choices. Extant literature, including theories, frameworks, and research gaps that influenced the research questions, are presented in order.

## 2. LITERATURE REVIEW

### 2.1. Introduction

Many distinguished research scholars' contributions illuminate the concepts of platforms, incumbent organizations (incumbents are those with established businesses in a market, industry, or geography), business model adaptation and challenges they face while managing technological or business model disruptions. In this chapter, the existing literature on incumbent adaptation approaches is discussed using thematic analysis. Organizational theories are linked to explore and exploit incumbent adaptation choices as a basis for this study, including organization designs.

Most organizations use strategies such as explore and exploit, to survive and withstand competition. The study's focus is to understand how incumbents adapt their exploration and exploitation balance subsequent to discontinuous changes.

The literature review organized as per Table 1, further discussed in the following sections:

**Table 1 - Literature Review Scope**

| 2.1 Introduction | 2.2 Platform Business           | 2.3 Incumbent Adaptation            | 2.4 Conclusion |
|------------------|---------------------------------|-------------------------------------|----------------|
|                  | 2.2.1. Definitions              | 2.3.1 Definitions                   |                |
|                  | 2.2.2. Platform business models | 2.3.2 Balancing explore and exploit |                |
|                  | 2.2.3. Impact on incumbents     | 2.3.3 Adaptation choices            |                |

### 2.2. Platform Business

#### 2.2.1. General Definitions

Even after 20 years of the platform phenomenon, there lacks a standard view on definitions, concepts and typologies, including isolated views (Constantinides, Henfridsson, & Parker, 2018; Gerwe & Silva, 2020; McIntyre & Srinivasan, 2017) on the topic of strategy, industrial economics, and information systems. Researchers such as McIntyre and Srinivasan (2017) and Constantinides et al. (2018) attempted to address this gap by providing consolidated views to the extent possible; however, due to the exhaustive amount of research published on the subject with no agreed common taxonomy, the gap appears to grow further. We may concede with Gerwe and Silva (2020) that using so many terms reflect early phases of a conceptual formation, and some confusion prevails about the phenomenon, features, and

terms. Detail below is general definitions for the terms relevant to platforms from the extant literature.

Platform:

Labels such as “digital platforms”, “multi-sided platforms”, and “online platforms” are widely used to denote “platforms”. A basic definition based on Parker et al., 2016 "A platform is a business based on enabling value-creating interactions between external producers and consumers" (p. 5). On the other hand, Constantinides et al. (2018), define digital platforms as “a set of digital resources-including services and content—that enable value-creating interactions between external producers and consumers" (p. 381). McIntyre and Srinivasan (2017) say that "platforms can be conceptualized as interfaces—often embodied in products, services, or technologies—that can serve to mediate transactions between two or more sides, such as networks of buyers and sellers or complementors and users” (p.143). Cusumano et al., (2019) said [platforms] “bring together individuals and organizations so they can innovate or interact in ways not otherwise possible, with the potential for nonlinear increase in utility and value”(p. 13).

Based on Hurley and Watson’s (2018) technique of "genus and difference" (p.113), one can generate a stipulative; lexical; precisising; theoretical or persuasive type of definition. Genus and difference techniques have three elements: species, difference, and genus. Where in genus denotes relatively larger class, species means a smaller subclass of the genus and difference denotes various species within a genus. Applying this technique, we can check if these definitions are good enough to define the phenomena. The genus of these definitions is “business,” which is the larger class species is “platforms,” which is a smaller sub-class, and the difference is represented by adding any one difference such as 1) bringing together producers and consumers; 2) digital resources; 3) match between external producers and consumers; 3) digital interfaces represented in products, services, and technologies; and 4) mediating between two or more sides. The combined definition may look like - platforms are those who match between external producers and consumers of a business. Gerwe and Silva (2020) followed a similar approach and defined the sharing economy and proposed a taxonomy for sharing economy.

Contrastingly, incumbents "create value by controlling a linear series of activities" (Van Alstyne et al., 2016, p. 56). This means that suppliers’ raw material inputs are processed through a series of steps to obtain a finished product, which is distributed to customers (Van Alstyne et

al., 2016). Therefore, we can use any of the definitions mentioned above paragraph to define the concept of “platforms”.

#### Sharing economy:

Labels such as “sharing economy, collaborative consumption, collaborative economy, access economy, peer-to-peer economy, platform economy, gig economy, crowd-based capitalism, and on-demand economy” describe the phenomenon (Gerwe & Silva, 2020, p. 71). The sharing economy can be defined as a "socioeconomic system that allows peers to grant temporary access to their underutilized physical and human assets through online platforms" (Gerwe & Silva, 2020, p. 71). These definitions do follow the "genus and difference" approach and differentiate from incumbents who own assets and manage supply. However, this fundamental separation of platforms into separate segments, such as the sharing economy, may further add to the phenomena’s inability to be defined and insinuate incoherence between various research forms (Constantinides et al., 2018; McIntyre & Srinivasan, 2017).

Both the above definitions imply that platforms engage in services, products, or technologies, and, thus, introduces the need to understand more and be discussed further.

#### Platform categories:

Cusumano et al. (2019) proposed transaction, hybrid and innovation platform categories based on the nature of value exchanged on the platforms, while Gerwe and Silva’s (2020) typology of capital and labour platforms are based on access to physical or human assets, considering the type of transactions and type of assets shared on the platforms. Unless we have a sense of reference, these platform classifications cannot be understood in isolation. Many platforms, including banking, payment, blockchain, Internet of Things (IoT), and streaming, do not follow similar typologies; instead, broad categories are generated by a combination of activity, industry, or technology.

#### Digital infrastructure:

Digital platforms are managed on top of digital infrastructures. Digital infrastructure is a combination of software, computing, networks, and devices that enable interactions between multiple actors. Examples include the Internet, data centres, mobile devices, and access technologies such as Bluetooth and Wi-Fi. (Constantinides et al., 2018). Conversely, incumbents in some sectors such as manufacturing (Zhao et al., 2019) do have manufacturing

platforms or product platforms; however, they use closed-business model networks with suppliers, and customers are not part of the network. Thus, digital infrastructure is a core asset for platforms that fulfil the intermediary role between users.

Network effects:

Network effects are “the demand side of economies of scale” (Van Alstyne et al., 2016, p 56). In practical terms, firms that achieve higher volume of transactions offer higher average value than competition, that attracts more users results (larger network) into more successful matches between supply and demand (Van Alstyne et al., 2016). For example, Facebook is a multi-sided platform that has at least four sides: users, advertisers, developers, and platform partners (Cusumano et al., 2019). Network effects resulted Facebook to reach from 2 users to billion users in just few years (Cusumano et al., 2019). The more users there are from each side, the more the platform's value, and each side attracts the others to join the platforms.

Complementors:

Complementors provide value-enhancing products or services to mutual customers (McIntyre & Srinivasan, 2017) or "supply complementary products and services" (Ozalp, Cennamo, & Gawer, 2018, p.1203). Instead, Constantinides et al.(2018) descriptions offer a more detailed description such as third-party developers who work across various platforms can be termed as complementors who play a crucial role in enhancing platform value and are governed by platform owners,.

Some of the above definitions may not fit into either theoretical definition, intentional, or extensional (attributes or class), as they do not strictly follow the definition technique suggested by Hurley and Watson (2018, p.106); however, they do provide some sense of reference (Gerwe & Silva, 2020).

### 2.2.2. Platform and Pipeline Business Model

Platforms fundamentally changed two aspects of incumbent businesses: first, technological aspects, and second, the business model. Technology aspect alone is sufficient for incumbents to lose ground and disappear, this was exemplified by Polaroid, Nokia, Kodak, Blockbuster, Motorola (Birkinshaw et al., 2016; O'Reilly & Tushman, 2013) brands disruption and subsequent disappearance. However, platforms redefined both aspects at once and

therefore may pose a challenge to some Incumbents. A closer look at the business model components (Teece, 2018) helps to understand the task at hand and the impact on incumbents' business.

Value proposition:

Consists of products and services, customer needs, and geography. Incumbents' operations depend on inputs from suppliers and processes to convert them and linearly delivered to the customer (Parker et al., 2016; Van Alstyne et al., 2016), Whereas platforms are enablers, connecting external producers and customers, create a right match for the two parties (McIntyre & Srinivasan, 2017).

Cusumano et al. (2019) propose that having the right platform is more vital than the right product. Through efficient digital infrastructure usage, customer experience has taken a formative role, instead of incumbents' products and service design being left to satisfy customer needs. Having seen that rich customer experience, it is unimaginable to remove experience factors such as seamless payments, predictable service delivery, real time track and trace, ease of use, one click order provided by Platforms such as Uber, Airbnb, Amazon, and Flipkart. Platforms conquered geographical barriers by creating networks beyond borders; the network value created by Airbnb and Facebook is almost impossible to achieve for incumbents who use supply chain networks for expansion and a logistics approach for delivery (Zhu & Iansiti, 2019).

Revenue Model:

Pricing models may include free, fee-based covering costs or income generation for participants (Gerwe & Silva, 2020), charging providers or users (Cusumano et al., 2019). Alternatively, charging a transaction fee, free primary access and charging for advanced access, charging complementors, or charging a subscription fee (Parker et al., 2016) are the types of revenue models that are deployed as pricing strategies by platforms, also known as monetization. Unlike platforms, incumbents' revenue models are either fixed or variable, and mostly a one-size-fits-all approach. Cozzolino et al. (2018) said, "Jeff Bezos, the Chairman, and CEO of Amazon and owner of Washington Post... said they do not make a lot of money from few readers instead, little money from a lot of readers" (p.1165), suggesting the shift in revenue models for publishing companies driven by digital heavy business models.

## Cost Model:

Significant costs to incumbents include labour, inventory, and distribution. Expansions and growth require considerable investments to acquire physical assets and increase the workforce. Platforms do not own assets, and instead, use underutilized assets, people's free time, external sourcing, and curation, and have fewer employees to run the same or more revenues than incumbents (Cusumano et al., 2019; Gerwe & Silva, 2020; Parker et al., 2016; Zhao et al., 2019). In the words of Parker et al., (2017, p.11), "platforms invert firms inside out."

It may be noted that the metrics, governance, policies, and competition strategies used by platforms are vastly different from those of incumbents, and it is a giant leap for those whose core knowledge is drastically impacted by business model innovation of platforms (Eggers & Francis Park, 2018; Parker et al., 2016). Given that facets of business models are different for platforms and incumbents, researcher may conclude that firms that cannot adapt and master platform strategies may struggle to withstand competition (Van Alstyne et al., 2016). Accordingly, researcher can see a considerable impact on incumbents from platform disruptions, further summarized below.

### 2.2.3. Platforms impact on incumbents: opportunity or threat

Cusumano et al. (2019); Cusumano, Yoffie, & Gawer, (2020) states that there are many misconceptions about platforms' path to success and asserts that with an average life of 4–7 years, many platforms are not sustainable—to some extent, this may appease incumbents, further raises interest to assess platforms' potential impact on incumbents.

**Table 2 - Platforms Opportunity or Threat**

| Concept                                  | Opportunity | Threat | Neutral | Source   |
|--|-------------|--------|---------|--|
|  |             |        |         |  |
| Complex innovation<br>Nascent technology |             |        | x       | Eggers & Francis Park, 2018<br>Zhao et al., 2019 |
| Resource-aggregation                     |             | x      |         | Parker et al., 2016<br>Zhao et al., 2019         |



|   |   |   |   |   |
|---|---|---|---|---|
| Asset light or no asset ownership               |   | x |   | Parker et al., 2016<br>Zhao et al., 2019<br>Thomas, Autio, & Gann, (2011)<br>Kohler, 2017 |
| Mistrust  | x |   |   | Parker et al., 2016   |
| Business model                                  |   | x |   | Zhao et al., 2019<br>Kohler, 2017   |
| Supply side economies of scale                  |   | x |   | Kohler, 2017  |
| Demand side economies of scale                  |   | x |   | Parker et al., 2016<br>Van Alstyne et al., 2016   |
| Complementary services                          |   | x |   | Thomas et al., 2011   |
| New consumer behaviour                          |   | x |   | Parker et al., 2016   |
| Disintermediation                               |   | x |   | Zhu & Iansiti, 2019   |
| Multi-sided supply                              |   | x |   | Parker et al., 2016   |
| Mediating role instead of control               |   | x |   | Parker et al., 2016   |
| Financial viability                             | x |   |   | Parker et al., 2016;<br>Cusumano et al., 2020   |
| High cost of failure                            |   | x |   | Parker et al., 2016   |
| Fragmented network clusters                     | x |   |   | Zhu & Iansiti, 2019   |
| Scalable and no geographic barriers             |   | x |   | Parker et al., 2016   |
| Strength of Network effects                     | x |   |   | Zhu & Iansiti, 2019<br>Boudreau & Jeppesen, 2014<br>Kohler, 2017                          |
| Mispricing                                      | x |   |   | Zhao et al., 2019   |
| Highly regulated markets.<br>Institutional void |   |   | x | Eggers & Francis Park, 2018;<br>Carney et al., 2018                                       |
| Value proposition                               |   | x |   | Kohler, 2017<br>Zhao et al., 2019   |
| Community and crowd-based workers               |   | x |   | McIntyre & Srinivasan, 2017;<br>Parker et al., 2016;<br>Kohler, 2017                      |
| Technology maturity                             |   |   | x | Eggers & Francis Park, 2018   |
| Mistiming                                       | x |   |   | Parker et al., 2016   |
| Multi-sided competition                         |   | x |   | Parker et al., 2016   |
| Vulnerability to multi-homing                   |   |   | x | Zhu & Iansiti, 2019   |

Table 2 shown above provides a mixed direction for incumbents and may not attract the immediate need for adaptation; often, discontinuous changes take time to impact directly. Given that, there are multiple factors such as technology maturation and the impact on external actors, complementary assets, and core knowledge (Eggers & Francis Park, 2018), requiring consideration prior to executing explore and exploit choices induced by discontinuous change. For this reason, our first research question attempts to understand how these opportunities and threats to inform incumbents' adaptation perspectives. How incumbents balance their choices to withstand the discontinuous changes are further elaborated in the next section.

## 2.3. Incumbent adaptation

### 2.3.1. General Definitions

Van Alstyne et al. (2016, p. 62) say that "for pipeline firms [incumbents], the writing is on the wall: learn the new rules of strategy for a platform world or begin planning your exit." This statement may sound as a bullish expression about platforms' power. The threat is not a new phenomenon as per Parker et al. (2016), who attests that pipelines were eating traditional business early on, and now, platforms are eating pipelines.

Most incumbents have an established business model that enables them to compete in the market. Contrary to the platform business model, incumbents' business models rely on five elements: the customer, value propositions, product and services offerings, value creation, and the value appropriation mechanism (Fjeldstad & Snow, 2018) in a linear fashion contrary to the platform business model. Incumbents use various strategies to fight competitive forces; however, Van Alstyne et al. (2016) posits that competitive forces are different for platforms.

#### Organizational Learning:

In his seminal contributions, March (1991, p. 71) considered the "relation between exploration of new opportunities and the exploitation of old certainties" as the fundamental was for incumbents to survive and compete. Organizational learning was central to his research, and he postulated two key aspects: firstly, mutual learning (consisting of organization and individual) in developing knowledge; and secondly, presence of competitive firms and the relative performance of the firm. In order to build invincible organizations, he theorized that "learning, analysis, imitation, [and] regeneration" (March, 1991, p. 85) are major components of focus, and rapid exploitation without exploration might lead to devastating results in the long run.

Organization learning is specifically suggested to overcome the traps of learning and to deal with the constraints of learning to intelligence: "temporal, spatial, failure" myopias, which complicate equilibrium between exploitation and exploration (Levinthal & March, 1993, p. 110). Besides innovation, the role of top management, making most with resources on hand, ways in which the managers convince leadership for adaptation (An, Zhao, Cao, Zhang, & Liu, 2017; Arena, Michelon, & Trojanowski, 2017; Kannan-Narasimhan & Lawrence, 2018; Raffaelli, Glynn, & Tushman, 2019; Roy & Sarkar, 2015; Svahn, Mathiassen, & Lindgren, 2017), and

how firms adapt to discontinuous innovations have a significant place in incumbents' adaptation to the effects of discontinuous changes.

March (1991) contributed exhaustive empirical research kept researchers engaged for more than three decades in. Evidence from research on thriving organizations includes Novartis, Dupont, Microsoft, Apple, IBM, HP, Nestle, GSK, BMW, GEDI. (Birkinshaw et al., 2016; Cozzolino et al., 2018; Day & Schoemaker, 2016; Parker et al., 2016; Tushman & O'Reilly, 1996; Van Alstyne et al., 2016), who, thus far, balanced their exploration and exploitation choices.

Terms such as "search, variation, risk-taking, experimentation, play, flexibility, discovery, innovation" (March, 1991, p.71) manifest exploration and exploitation aspects that cover "refinement, choice, production, efficiency, selection, implementation, execution." (March, 1991, p.71). According to March (1991), those "who engage in an excessive exploration do end up with the cost of experimentation....[maintain] an appropriate balance between exploration and exploitation" (p.71), chart the best course for survival and prosperity. Organizational ambidexterity (Birkinshaw et al., 2016; O'Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008) is defined as the organization's ability to pursue both exploration and exploitation of business models as a response for safeguarding their competitive position (Ossenbrink et al., 2019).

Tushman & O'Reilly (1996) posited that "managers and organizations must be ambidextrous—able to implement both incremental and revolutionary change" (p. 8). This notion was further matured by Raisch and Birkinshaw (2008) and the original researchers (O'Reilly & Tushman, 2013), who performed seminal research on the past, present, and future of the concept. In contrast, Birkinshaw et al. (2016) felt missing analytical precision with (O'Reilly & Tushman, 2008) claims of ambidexterity as a dynamic capability, instead, viewed ambidexterity and dynamic capability as complementary. As emphasized by Tushman & O'Reilly (1996), it appears that researchers focused more on incumbent adaption in the context of discontinuous change instead of evolutionary change. Further, research from eminent researchers such as Birkinshaw et al. (2016); Day and Schoemaker, (2016); Eggers and Francis Park (2018); Luger et al. (2018); and Kammerlander et al. (2018) focussed on discontinuous changes; while on the other hand, barriers for adaptation (Carney et al., 2018; McMillan & Overall, 2017), impact on firm valuation (Eklund & Kapoor, 2019) and dynamic or hybrid balancing (Luger et al., 2018; Ossenbrink et al., 2019) were examples of continuing research on the adaptation.

Despite the extensive research conducted over the last three decades, academic and research gaps still exist in understanding leadership's role (O'Reilly & Tushman, 2013). Further, Luger et al. (2018, p. 451) posits that the research thus far had "a static perspective" and concedes on the existing research gap prevailing on the concept. Accordingly, this strengthens the importance and relevance of the theoretical foundation researcher selected to explore the research questions about how incumbents adapt their exploration and exploitation balance subsequent to discontinuous changes. This comes as a response to the callout made in Luger et al.'s (2018) empirical research. In the following sections, researcher advances on the foundational topic further to expand on our research question.

### 2.3.2. Balancing explore and exploit subsequent to discontinuous changes

Platforms such as Airbnb, Google Lunar, Upwork, and Uber may be classified as discontinuous or environmental change, rather than incremental change that incumbents may have to adapt to for survival (Birkinshaw et al., 2016; Weber et al., 2019). There are two preliminary steps towards balancing the explore and exploit choices for incumbent adaptation; first, understanding discontinuous change's "era of ferment" (Eggers & Francis Park, 2018); and second, assessing the incumbent's level of adaptability (Carney et al., 2018; McMillan & Overall, 2017).

#### Antecedents:

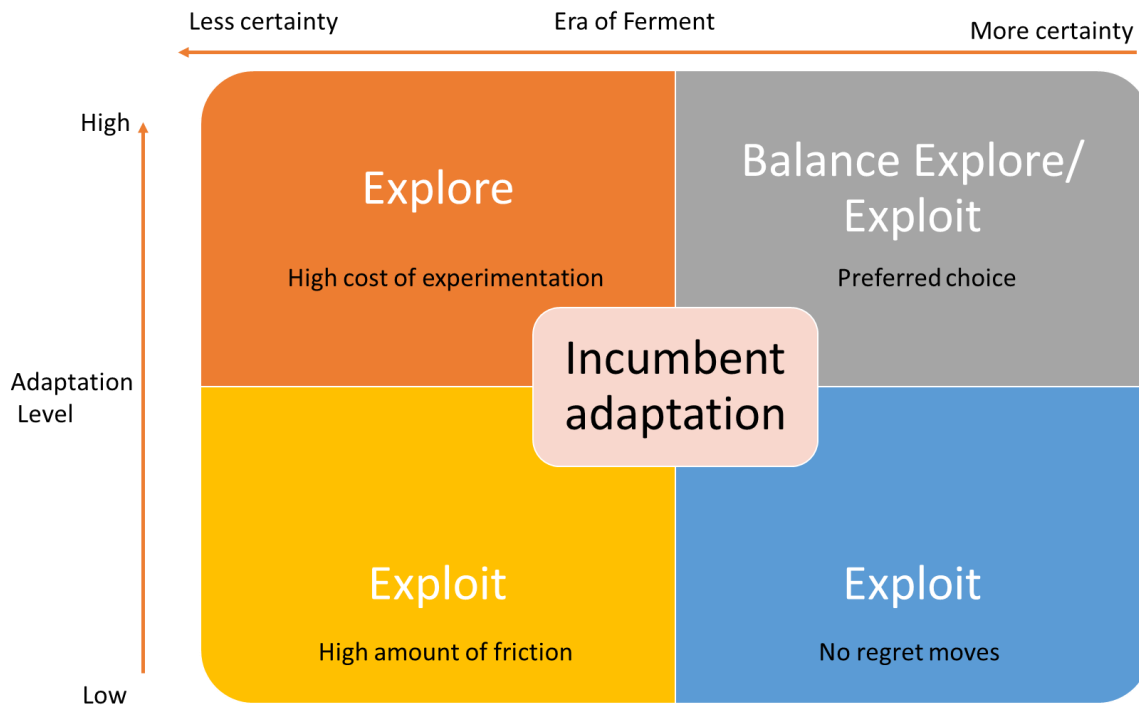
Antecedents to incumbent adaptation (Day & Schoemaker, 2016; Eggers & Park, 2018; Gerwe & Silva, 2020; Kammerlander et al., 2018; Raisch & Birkinshaw, 2008; Weber et al., 2019) was investigated from various perspectives by researchers. Simultaneously, interdependencies between antecedents and changes were investigated by Eggers and Francis Park (2018, p. 363). They reviewed numerous antecedents that may affect adaptation, namely "firm size, firm experience, complementary assets, commitments and cannibalization, cognition and identity, top management characteristics, organizational structure, stakeholders, ecosystem and environment, mobility," and theorized three barriers to incumbent adaptation namely "external barriers hinder acquisition of new knowledge, internal barriers that prevent assimilation and finally internal barriers preventing reconfiguration and integration" (Eggers & Francis Park, 2018, p. 362). However, behests aspiring researchers to explore the effects of the new antecedents in the context of existing antecedents. Nevertheless, as each researcher added their perspectives to adaptation, whether it is a discontinuous change or incremental change, there was no uniform view on the subject.

Adaptation perspectives:

Incumbents also consider environmental aspects such as institutional voids and regulation during the sensing process (Day & Schoemaker, 2016) in sectors such as mining, medical, and banking, which have either resource intensive or high rates of failure (Parker et al., 2016). Thus, it may take long enough for the platform to scale-up and reach a winner-take-all situation. The usage of dynamic capabilities' sensing, seizing, and reconfiguration terminology (Teece, 2018) is deliberate. There is absolute merit in the postulation of Birkinshaw et al. (2016) conceptualizing the integration of dynamic capabilities and ambidexterity perspectives supported by Day & Schoemaker (2016) case study on Dupont and Novartis, which helps to navigate exploration and exploitation's balancing process.

As advised by Tushman & O'Reilly. (1996, p. 28), "managers should be ready to cannibalize their own business at times of industry transition," however, with caution. It is improbable whether there will be enough time and space for exploitation and exploration balance when incumbents hit the revolutionary change; instead, the tendency is to adapt at the earliest. However, we need to understand this better as there is no way we understand how incumbents make their choices subsequent to environmental changes, which may or may not impact performance. By combining the four aspects of technological changes (Eggers & Francis Park, 2018; Eklund & Kapoor, 2019) and Carney et al.'s (2018) outcome matrix, Researcher came up with a framework embedded below (Figure 3) that may help understand incumbents' balancing explore and exploit choices.

**Figure 3 - Incumbent adaptation perspectives**



By imagining the incumbents evaluating exploration and exploitation options, four scenarios can be generated from the above framework.

Lower Quadrant:

Scenario 1:

If the incumbents' adaptation level is low and the "era of ferment" is more certain, then it may lead to a weak sensemaking process resulting in friction about adaptation and settling for exploitation (Carney et al., 2018). The impact of discontinuous change may be immediately disruptive.

Scenario 2:

If the incumbents' adaptation level is low and the "era of ferment" is less certain, it may lead to exploitation, as the discontinuous change may not be immediately disruptive.

Upper Quadrant:

### Scenario 3:

If the incumbents' adaptation level is high, and the "era of ferment" is more certain, then the possibility of exploration will also be high. Nevertheless, the result might be the high cost of experimentation. As per research, early respondents to discontinuous innovation did not yield results from the innovator's innovation, for example, the user interface by Xerox or the telephone by Western Union (Tushman & O'Reilly, 1996).

### Scenario 4:

If the incumbents' adaption is high and the "era of ferment" is less certain, distribution of time, space, and resources would be the best possible outcome as the incumbent will have the necessary knowledge to explore and exploit concomitantly.

The above classification forms part of the thematic analysis, which is used during the data collection process. There are three potential non-exclusive choices for the incumbent has to choose from and act upon for adaptation: structural separation, sequential alternation, and behavioural integration (Birkinshaw et al., 2016; O'Reilly & Tushman, 2013). We will discuss these choices further in the following section.

#### 2.3.3. How adaptation achieved

The process of adaption may appear overwhelming and complicated, with too many choices, but it is not. According to March (1991), exploration and exploitation are both critical for organizations. However, the limited resources (e.g., commitments, assets, knowledge, financial) and carefully channelled based on relative outcomes and investment needs. Firms' valuation is impacted if their assets are closer to the existing model, and in such situations, forming alliances or collaborating with External ventures may yields results (Eklund & Kapoor, 2019). For some reason, that option is not prominent in the research. The three modes of adaptation mentioned in the previous section, what they mean, when it works, where it works, and antecedents, are further elaborated on below, based on the study carried out by various researchers over two decades (O'Reilly & Tushman, 2013).

##### a. Sequential alternation:

At a high-level, this means firms shift structures between exploitative and exploratory modes based on changed environmental conditions (O'Reilly &

Tushman, 2013). It implies that firms change their culture or orientation in a time-based or event-based discontinuities, sequentially. March's (1991) original notion is to balance exploration and exploitation and not to shift either choice. BMW uses this mode (Birkinshaw et al., 2016) of adaptation; furthermore, continuous adaptation, long-term orientation, culture and leadership were some critical terms used in the BMW case study by Birkinshaw et al. (2016), and it is essential to note that the adaptation happened over 10–15 years period. Ideally, the firm should not be under "existential threat" to use this mode of adaptation (Birkinshaw et al., 2016). Tushman & O'Reilly (1996) criticized this mode of adaptation, who proposed that structural separation may be more suitable for slow-moving environments (O'Reilly & Tushman, 2013). Therefore, given platforms' technological and business model disruption, this sequential alternation mode of adaptation may only be suitable for industries that are highly regulated (banks), resource-intensive (mining), or absorb high costs for failure (medical).

b. Structural separation:

Creating separate structures or organizations for exploration and continuing exploitation in the existing or new structure is all about structural separation. Christensen, Bartman, & Van Bever, (2016) suggests "avoid[ing] temptations forcing new business find a new home in existing business" and further suggests mergers and acquisition divisions drive disruptions and renewal, implying exploration and exploitation. In Birkinshaw et al.'s (2016) study on three companies, Nestle relied on structural separation for their nutrient business (exploration) and food business (exploitation). One of the researchers' observations is that this mode of adaptation is linked to the business's performance. However, the results are inconsistent across studies (O'Reilly & Tushman, 2013). Running organizations simultaneously requires vast resources, and its size is vital for this mode of adaptation. As per Day & Schoemaker (2016), physical and structural separation may be necessary for entirely new and disruptive technologies. Further to that, Dupont utilized three joint-ventures for its biofuel exploration projects, backed by numerous patents for more than a decade, creating an alternative business for growth. Thus, structural separation is more appropriate when the adaptation level is high, and the incumbent may need to build on externalized knowledge.

c. Behavioural integration (Contextual)



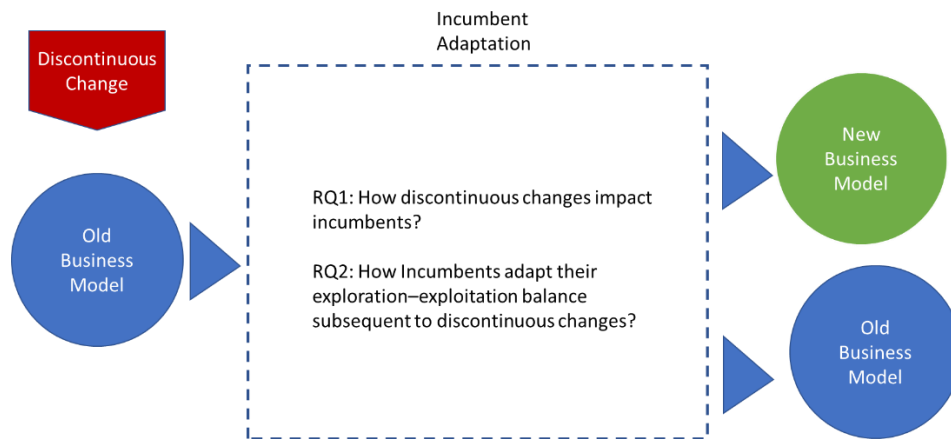
Both sequential alternation and structural separation addresses balancing exploration and exploitation using structure. Designing the organizational culture to allow individuals to decide how they manage their time in exploration and exploitation is the concept of behavioural integration, or contextual ambidexterity (O'Reilly & Tushman, 2013). There are diverse views about this mode as well, and the notion here is that individuals are capable and competent at balancing essential exploration and exploitation. Pharmaceutical company GSK successfully navigated this approach in its Research and Development (R&D) activities (Birkinshaw et al., 2016). Similarly, Novartis transformed their sales process across 80 countries, and more than 25,000 sales forces are using big data and smart devices combined with digital strategies for their exploitation program (Day & Schoemaker, 2016). As per Ossenbrink et al. (2019), very few studies were carried out why firms choose structural versus contextual modes, lacking evidence. Further, a study on four German electric utility companies revealed how they combined structural and contextual approaches, leading to a notion of hybrid ambidexterity (Ossenbrink et al., 2019). This mode appears suitable for medium-size firms, technology-oriented firms, and the organizational environment is vital and needs a culture of experimentation (Aversa, Haefliger, & Reza, 2017).

There is scant evidence about different modes of adaption and extraordinarily little guidance about what worked and what does not work, how to select each mode, and how organizations manage these transitions. Understanding adaptation mode would help literature and managers hence not casting a wide net across all aspects of organization design (along the lines of "Star model" (Galbraith, 2009). It can be seen from the above that understanding how incumbents navigate these adaptations would immensely help and contribute to literature and practice.

#### 2.4. Conclusion

In conclusion, understanding the incumbent adaptation perspectives emphasized on platform business models was addressed through two research questions, and the central idea was broadly discussed in this chapter. The following picture (Figure 4) represents the research scope and the research questions, discussed in the next chapter.

**Figure 4 - Research Questions**



### 3. RESEARCH QUESTIONS

The literature on incumbent adaption using organizational ambidexterity theory with dominant design on exploration, platform business model adaption, and necessary organizational designs were reviewed in the previous chapter. While many concepts and theories were discussed, only those that dominate incumbent adaptation influenced by external factors were explored in this study.

Accordingly, the central question related to how Incumbent organizations adapt their explore and exploit choices subsequent to discontinuous changes and their perspectives on the following two research questions follow. Platforms disrupt incumbents with technology and their new business models, and a response to those discontinuities cannot be met with the incumbent's internal knowledge alone.

3.1. How do discontinuous changes impact incumbents?

3.2. How do incumbents adapt their exploration-exploitation balance subsequent to discontinuous changes?

## 4. RESEARCH METHODOLOGY

### 4.1. Introduction

This chapter details the study's approaches and designs applied to answer the research questions. The qualitative approach uses open-ended questions and responses instead of (Creswell & Creswell, 2018), and will be used to explore incumbent adaptation perspectives from three distinct South African industries. Data was collected in the participant's setting and through semi-structured interviews with top management teams or key resource people with strategic knowledge. As per Creswell & Creswell (2018), qualitative research is inductive, implying that the researcher should generate meaning from the collected data. Based on this, the data will be analysed and categorized according to the major themes identified in Chapter 2.

### 4.2. Choice of Research Methodology and Design

Given the intricacies involved, the constructivist worldview combined with interpretivism was followed, which is an acceptable approach in qualitative research, where the goal is to rely on the participants' views, and carefully listen to the responses to the open-ended questions. (Creswell & Creswell, 2018). Based on Creswell and Creswell, (2018), one of the qualitative approaches, constructivist world view or social constructivism, is established by the researcher from the participant's views about a phenomenon; this is often combined with interpretivism. As per Bell, Bryman, & Harley, (2019), interpretivism is "concerned with [the] 'how' and 'why' of a social action, including the process whereby things happen" (p.31). Further, this subject matter is studying the social world or social sciences, hence the choice of constructivism and interpretivism (Bell et al., 2019). Our research questions are about gaining insights into incumbent adaptation due to discontinuous changes, and neither about insight into a unique case(s), nor life experience of individuals in the community, therefore, selecting the grounded theory method is most suitable (Creswell et al., 2007). The analysis proved that there is no sufficient information to create comparative case analysis, hence, a multiple case design approach was not considered based on the collected data aligning to the emergent research process of qualitative research (Creswell & Creswell, 2018).

This research aims to contribute to incumbent adaptation theories using a natural setting, researchers as a vital instrument for gathering information through interviews, documents and observations, and following inductive and deductive data analysis to find out participant meanings (Creswell & Creswell, 2018). It is well understood that the emergent design

process's nature expects a change in everything, including questions, individuals studied and data forms, and is not a tightly prescribed approach (Creswell & Creswell, 2018, p. 182). The central idea was to learn about incumbents' challenges from participants, obtained through research. Thus, this research aligns with Saunders and Lewis's (2018) approach of exploratory study generating new insights, questions and evaluating topics through a South African lens (Crane, Henriques, Husted, & Matten, (2016).

Creswell and Creswell (2018) suppose that qualitative, quantitative and mixed methods research are not discrete and should not be viewed as siloed approaches. The critical distinction between qualitative and quantitative is often the difference between open-ended questions versus closed questions. Qualitative research involves an understudied sample and is best suited when the researcher does not know which variables to examine or the topic is new; (Creswell & Creswell, 2018). The study is flexible and adaptable to change (Saunders & Lewis, 2018). Likewise, based on the five features of Yin's (2016, p. 7) qualitative research: gathering insights on the real-world; represent participants' views and perspectives; the contextual conditions of their lives; contributing insights into existing or emerging concepts and lastly using multiple data sources for evidence; Hence, the qualitative research methodology was appropriate for this study as participants background of the industry context satisfies the five features mentioned above..

Based on the literature review, organizations, business models, and people form part of the social construct. This qualitative research developed new concepts, antecedents, and moderators specific for industry or country, people, and the interpretations of findings, resulted into challenging generalizations or stereotypes (Yin, 2016). This notion ensured that processes, beliefs and approaches around incumbent adaptations are understood to the extent possible.

Further, the literature review in Chapter2 highlighted that there was exhaustive knowledge, theories, framework, propositions, methodologies and assumptions around incumbent adaptation and organizational ambidexterity (Cozzolino et al., 2018; Eggers & Park, 2018; O'Reilly & Tushman, 2013; Raisch & Birkinshaw, 2008). However, there was little empirical research exploring the relationship between incumbents' adaptation, platform business models, and adaptation mode due to the business environment's dynamic nature. In conclusion, the possibility of gaining more significant insights through comparing and contrasting participants' knowledge by streamlining the data collection process of an exploratory approach (Yin, 2016), appeared appropriate and compatible with the research's objectives.

### 4.3. Population

Bryman and Bell (2011) define population as “the universe of units from which the sample is to be selected” (p.176). A sample that accurately manifests a population’s demographics is known as a representative sample (Bryman & Bell, 2011). The proposed population for this study will be knowledgeable and experienced individuals who are directly and indirectly involved in defining and executing many strategies. The population comprises senior leadership and top management from South African telecommunications, media, and banking industries. This population was selected based on the disruption index report from Moore and Seedat (2020), who studied disrupted South African companies. Combining industries in the business research report (Moore & Seedat, 2020) with the researcher’s knowledge of the three disrupted industries were selected for study, and consideration was given based on availability (Cunliffe & Alcadipani, 2016) to individuals from these industries.

### 4.4. Unit of Analysis

The unit of analysis for the proposed study is people and structure-focused, such as individuals from incumbent telecommunications, media and banking organizations who were facing disruptions (Moore & Seedat, 2020) at the industrial and organizational levels.

### 4.5. Sampling Method and Size

Careful consideration was given to sampling, as the exact population size of strategy leaders from technology and business, strategists, top management teams within the Top 100 Johannesburg Stock Exchange (JSE) listing is unknown. Choosing samples deliberately is purposive sampling (Patton, 2002; Yin, 2016), which achieves the most relevant and abundant data on the study’s focus. This method was most suitable as it allowed the researchers to use “[their] own judgement to actively choose who [is] best able to answer and meet the objectives of research” (Saunders & Lewis, 2018, p.145). As per Yin (2016), purposive sampling is different from convenience sampling (readily available samples), snowball sampling (adding participants based on the reference of primary participant), and random sampling (statistically defined sample).

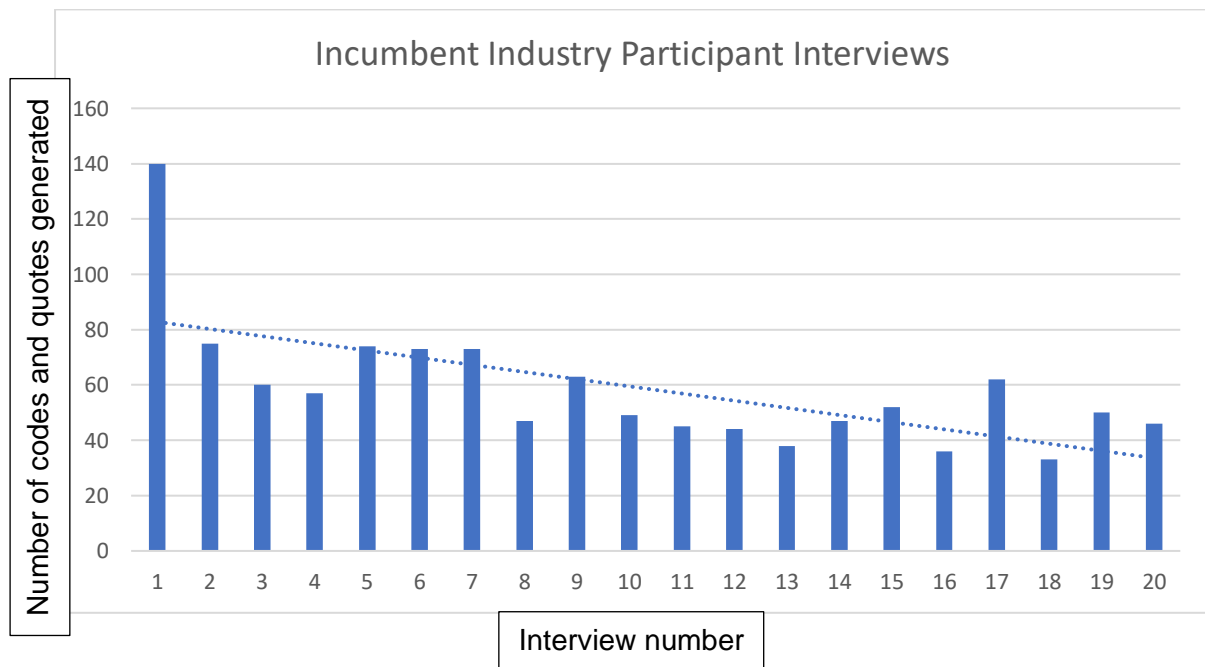
The proposed sampling criteria of the participants follow:

- a. Strategy leaders in a senior management position who were involved in defining organizational strategies with technology and business orientation;

- b. risk managers in a senior management position who support or enable business leaders in defining adaptation strategies;
- c. top management teams whose vision drives the organization based on inputs from the above three individuals/groups.

A sample size of 20 was targeted (nine to 10 organizations and a minimum of two individuals from each) using a balanced representative sample from each industry or entity. Managers and leaders (McMillan & Overall, 2017; Weber et al., 2019) are the channels through which environmental discontinuities are absorbed, who understand the organization’s “routines [and] signature practices” (Birkinshaw et al., 2016), and are likely to attend, interpret and respond to discontinuities (Kammerlander et al., 2018). Therefore, any adaptation ought to be manifested by this participant sample and the basis of sample selection. The particular study first followed a deductive approach followed by an inductive approach, and a back-and-forth recursive approach generated the final themes. The following chart (Figure 5) illustrates the overall themes identified from the inductive analysis approach.

**Figure 5 - Data Saturation**



#### 4.6. Measurement Instrument and Data Collection Tool

As per Yin (2016), there are four types of data collection activities: "interviewing, observing, collecting, and examining and feeling" (p. 130). In line with the study's qualitative nature, a semi-structured interview format was the primary data collection method allowing the participant to provide views and experiences. In a semi-structured interview, the interviewer asked a set of pre-determined questions in no specific order, linked to key themes, omitted, and added questions as necessary for understanding (Saunders & Lewis, 2018); this is contrary to the unstructured interview where the process less formal, and no list of questions exist. Qualitative, semi-structured interviews were selected for data collection because of the possibility for open dialogue (Zikmund, Babin, C, & Griffin, 2013), obtaining information from behaviour, attitude, beliefs, and values (Bryman & Bell, 2011), and the diversity amongst interviews. Researchers or the interviewer's background, known as reflexivity, also shaped the interpretation or meaning that the participants have about the problem, and thus, the interviewer becomes a research instrument in the process (Creswell & Creswell, 2018). The topic of study being strategic all the experience details of the Participants' details, names, and organization-specific information was anonymized, allowing participants to share their views unrestricted.

The interview questions mapped to the research questions, and interview guide (Annexure 2) providing a brief introduction to the concepts were shared with incumbents electronically prior to the interview.

#### 4.7. Data Gathering Process and Collection Method

The researcher engaged with the participants on a pre-determined schedule for in-person interviews through the computer-assisted personal interviewing (CAPI) program, which can facilitate the proceedings' recording (Bell et al., 2019). Due to the ongoing COVID-19 pandemic, face-to-face interviews were not feasible, and hence the use of CAPI. The researcher verified the participants' background details ensuring there was no bias in the participant sample. Potential participants who agreed to interviews were sent a high-level introductory brief of the research electronically. The research brief would help the participant become familiarized with the process, context, objectives, and research construct and focus and their relevance to the subject.

The researcher conducted interviews in-person, and the discussions were kept under 60 minutes with a potential for a break, if necessary. The time required, recording requirements,



confidentiality documents, informed consent forms (Appendix 1), and transcriber's role was shared in advance, ensuring the completed consent forms and confirmation for recording prior to the interview. All of the consent forms except for one or two, were signed electronically, saving time and effort.

The interviews started with a brief introduction from both sides confirming their willingness to record the interview and that all documentation was in order, followed by context setting. The interview consisted of a maximum of ten open-ended, leading questions. The interview guide consisted of probing questions around the business model, external environment, and adaptation concepts, and the interview process provided meaningful interaction to the researcher and generated insights from the interactions. The researchers' background helped reorder and introduce new probing questions based on the participant's industry and context.

Multiple forms of data were supposed to be collected by way of documents such as annual reports, press releases, excerpts such as weblogs, interviews, or public domain proceeding, all of which can help to improve the quality of the data than relying on a single source (Creswell & Creswell, 2018). Limited secondary data was collected about platform app names, publications if any, from the participants as the information collection during interviews was sufficient enough. However, an arrangement was made with the participant for any follow-up meeting or clarification needed to ensure there are no open items on the data collection. All interview recordings were transcribed using software applications and manually by the researcher to ensure data accuracy. Before data collection, a thematic analysis (Appendix-6) approach was initially considered, however, the actual thematic analysis emerged quite differently with seven themes instead of initial three themes and the new thematic analysis-based codes and categories are available in Appendix-6.

#### 4.8. Data Analysis Approach

Yin (2016) suggests five-phased cycles for data analysis, namely "1) Compiling 2) Disassembling, 3) Reassembling, 4) Interpreting and 5) Concluding" (p. 177). Creswell and Creswell (2018) suggest that research treats data analysis as sequential and simultaneous. Based on the model suggested by Creswell and Creswell (2018) and combined with Yin, (2016), data analysis was conducted, and a high-level illustration is provided below.

- i. Data preparation: involved organizing the data for analysis by transcribing interviews, analyzing documents, filtering interview notes, and cataloguing data based on the study's areas. Usage of any software for sorting, storing, and

contextual analysis were done to save time and obtain faster results (Creswell & Creswell, 2018).

- ii. Scan the data: involved reading all of the data would help make sense of what the participants said, their ideas, credibility, and direction of discussion. We may use text visualization software to analyse which keywords were used and how frequently (Creswell & Creswell, 2018).
- iii. Coding the data: involved segmenting sentences, data and critically categorizing and labelling them using the participant's language (Creswell & Creswell, 2018).
- iv. Represent the description and themes: using visual representations, the chronology of events, incidents, quotes, and individual perspectives to exemplify their experiences (Creswell & Creswell, 2018).
- v. Represent the description and themes: Uses visual representation, the chronology of events, incidents, quotes, and individual perspectives to exemplify the experiences (Creswell & Creswell, 2018).

The above process was completed to interpret the findings with reference and in comparison, to the theoretical underpinnings discussed in Chapter 2, and considering Yin's (2016) suggestions about interpretations as descriptions combined with action and explanation. Lastly, concluding involves the next line of action or theoretical provocation beyond merely writing the summary (Yin, 2016). As per Bell et al. (2019), when no new data emerges and thematic categories well developed, including relationships, this denotes achieving theoretical saturation, which was appended in Section 4.5. Proposed thematic analysis in Section 4.7 initially helped guide us through the content analysis process, but Researcher discarded the approach and moved into more inductive approach as the data found in interviews was more elaborate when compared to initial themes. Therefore, created a new set of codes, categories and themes based on the inductive approach.

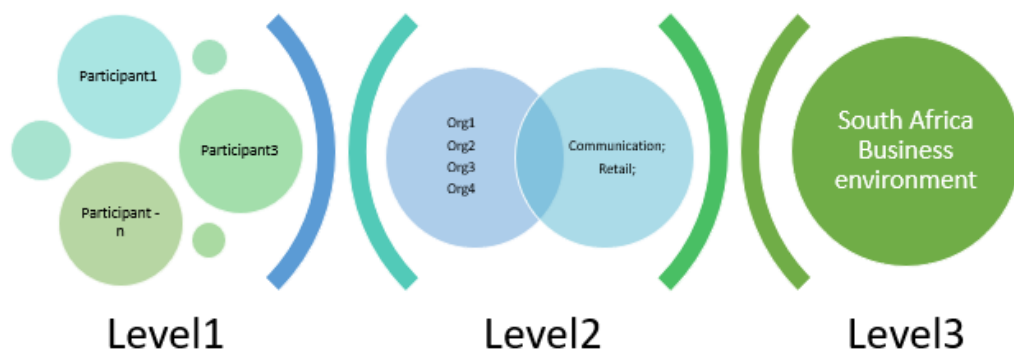
#### 4.9. Reporting

The framework in Figure 3 was used as a typology, and the incumbent participants' explore and exploit action-based analysis were plotted accordingly within the quadrants. Additional data analysis and insights were added wherever the information provided additional insights.

#### 4.10. Strategies to ensure the quality of data

As per Yin (2016), triangulation is about "collecting converging evidence from different sources" (p. 79). Patton (2002) discussed four types of triangulation methods involving data, researchers, theory, and methods to a single problem or program, and cautioning that based on time and budget considerations, the process is reasonable and practical. In this study, triangulation is achieved by combining findings at the individual, organization, industry and cross-industry levels as the business environment is a unifying factor for all the participants, as shown below in Figure 6.

**Figure 6 - Triangulation**



#### 4.11. Research Ethics

The researcher obtained the necessary ethical clearance from the Gordon Institute of Business Sciences ethics committee before approaching any field activity, including approaching potential participants. Informed consent forms were collected in advance, strict confidentiality and anonymity were followed throughout the report, and pseudonyms were used instead of participants' names.

#### 4.12. Research Limitations

##### 4.12.1. Researcher Bias

Potential risks of qualitative research are researchers' beliefs, experiences, assumptions, the interpretation that may impact results (Creswell & Creswell, 2018). If the researcher is also a practitioner, then their implementation approaches are biased; to address this limitation, the researcher initiated the study exploring incumbent adaption theories, explaining the response or non-response to business model adaptation and avoided bias of using researcher knowledge of incumbent directions to guide the research process. The limitations of this study

include institutional void restricting responses of participants, industry selection limited to three (Banking, Telecommunication and Media), and participants profile (Top or Senior Management). The study could not focus elaborately on the antecedents for adaptation, organizational design approaches, and identity, reasons behind strategic choices.

#### 4.12.2. Time Horizon

This is a cross-sectional study, conducted at a single point in time and consisting of more than one case, instead of a panel study or longitudinal study due to time constraints; however, no inferences were be made to future periods using temporal behaviours (Bryman & Bell, 2011; Zikmund et al., 2013). Most studies used longitudinal studies covering a multi-year time horizon (Birkinshaw et al., 2016; Cozzolino et al., 2018; Day & Schoemaker, 2016) for adaptation. However, since this study focuses on adaptation balances and modes subsequent to discontinuous changes (Weber et al., 2019), the findings are not limited to platforms when the cross-section is followed as the focus is on a theoretical foundation. This choice aligns with Zikmund et al.'s (2013) criteria for cross-sectional study suitability for survey research, no response biases, non-existing intervening events, and theoretical foundation.

Careful attention was made to cultural and language differences while creating the instruments, diverse industries were be used, and other general biases such gender, were avoided in the planning process.

The next chapter presents the research plan from data collection to reporting.

## 5. PRESENTATION OF RESULTS / FINDINGS

### 5.1. Introduction

Chapter 5 presents the results from the interviews based on the research questions outlined in Chapter 3. Interviews were conducted with 20 participants representing three different industries: telecommunication, media, and banking.

This section begins with details about the approach to data analysis and participant backgrounds and provides information from the interviews' discussions, based on the semi-structured questions posed throughout. This is followed by a qualitative analysis of each research question's results where emergent key themes were identified and supported by insightful quotations.

### 5.2. Data Analysis Approach

This sub-section gives detailed accounts of how the research applied the methodology mentioned in Chapter 4, Section 4.6, 4.7 and 4.8.

#### 5.2.1. Data collection

Based on purposive sampling (Ref 4.5) and combining limited snowball sampling of strategy leaders, executives with knowledge of the strategy through definition or execution were approached for their willingness to participate in Interviews. Approximately 36 potential participants were approached in a 60-day period, and 21 respondents accepted the invitation to participate. However, one participant not comfortable with the recording process and dropped out on the day of the interview. Thus, the final participant sample size was 20. Due to COVID-19, most participants working from home not having access to printers and physical signatures, so the researcher collected the signature for informed consent forms using "DocuSign (<https://app.docusign.com>)," a secure online digital signature system. All 20 participants' consent was collected prior to the interview and ensured no personal information was stored on the "DocuSign" system.

#### 5.2.2. Data preparation

All of the interviews were conducted online, either using Zoom or Microsoft Teams, and the audio was recorded. The 20 participants representing nine entities and three industries produced about 1,112 minutes (19 hours) worth of audio files; 350 pages of transcripts

comprising 141,554 words, and 4,229 paragraphs worth of data was generated. The researcher transcribed all of the audio files to text files using electronic file conversion (a third-party tool Otter.ai; all of the data was deleted after conversion) and validated the text with the corresponding audio files. This process helped the researcher to internalize the data, which greatly supported the analysis. The generated transcript files were imported into AtlasTI, and document categories were created corresponding with the industry entity. Vast data was generated from the interviews, however Researcher had to exclude data related to a few topics, as the information generated was outside of the scope of research.

### 5.2.3. Data analysis

To the extent possible, the basic principles of grounded theory data analysis (Creswell & Poth, 2018) guided this study. Based on the key theories used for formulating the question (Birkinshaw et al., 2016; Eggers & Francis Park, 2018; Luger et al., 2018) used to inform initial codes deductively, content analysis was used for all of the interviews to ensure that no important ideas or constructs (Hsieh & Shannon, 2005) were overlooked during the coding process. Subsequently, every transcript was analysed for applying codes using various coding schemes, proposed by Saldaña (2015) including those relevant for grounded theory. Codes such as attribute coding; magnitude coding; sub-coding; simultaneous coding from grammatical methods were applied in first cycle coding to generate data driven insights from the participant discussions. Furthermore, applied In Vivo coding; Process coding; Initial Coding (Open) in first cycle coding. In the second cycle coding, Focussed Coding, Axial Coding, Theoretical coding was performed. A summary of the description of the data analysis provided in Table 3 below (table format inspired from Singh, Corner, & Pavlovich, 2015).

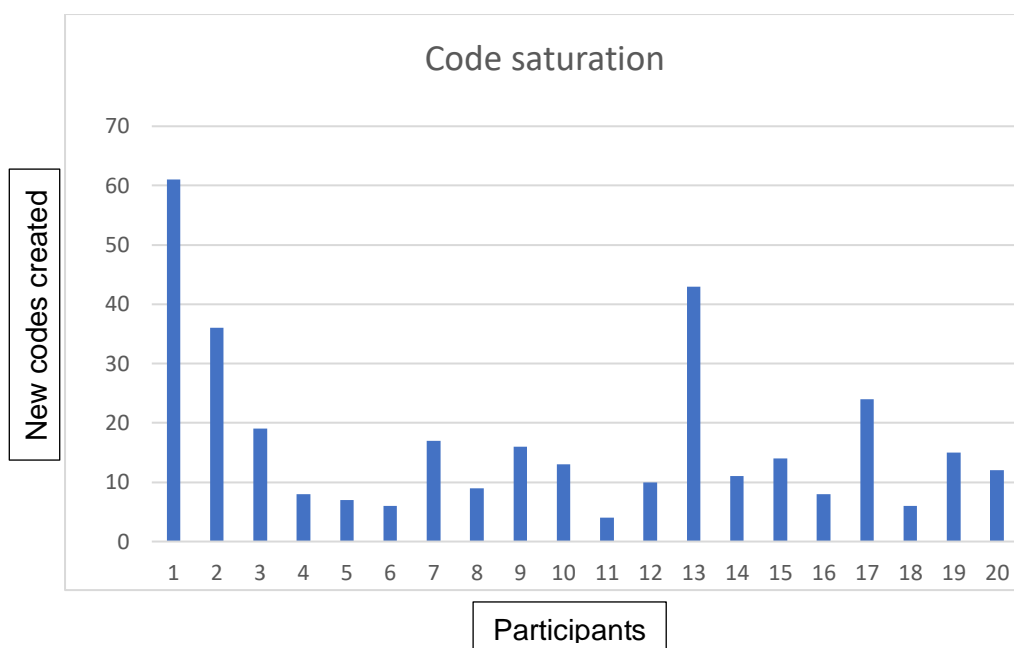
**Table 3 - Data analysis approach**

| Approach        | Description from literature   | Our results evolved from   | Examples from this research   |
|-----------------|---|--|---|
| Initial coding  | Also known as open coding, read entire transcripts, less descriptive coding, Use In-vivo coding, grammatical methods; lumped instead of splitting; Not all data may get coded (Creswell & Poth, 2018; Saldaña, 2015)              | Research topic and questions; Base theory and ideas about what researcher would find; notes from interviews and listening to recordings and reading of the individual transcripts (data) | First cycle codes: Platforms implications.<br>Africa market view;<br>Adaptation perspectives                            |
| Eclectic coding | Reviewing and re-reviewing the data to expand Initial codes with elemental methods into richer, more elaborated codes. Combination of first cycle codes and second cycles of recoding (Creswell & Creswell, 2018; Saldaña, 2015). | Combined Initial codes with elemental methods and analytical memos (decision about what to code and how to code)   | Expanded codes from platform implications: opportunity or Threat.<br>Timing of adaptation: Years:<br>Adaptation Process |
| Theme-ing       | Outcomes of Initial coding, In Vivo; Process and applying Focussed; Axial and Theoretical coding to generate core category, its properties (Creswell & Creswell, 2018; Saldaña, 2015).  | Reviewing codes and finding pattern, splitting codes, merging.<br>Categorize based on theoretical concepts   | Themes: Business Models;<br>Platforms; Antecedents;<br>Organization learning process;<br>Balancing Explore/Exploit      |
| Theorizing      | Compare, Contrast the codes and develop a sense of collective meaning linked to conceptual or theoretical organizing data (Creswell & Creswell, 2018; Saldaña, 2015)  | Based on themes, linked to theory<br>Key ideas from theory linked to themes.   | Support theory, add to literature;<br>findings contradict literature or future research required;                       |

#### 5.2.4. Data Saturation

As per Bell et al. (2019), when no new data emerged and thematic categories, including relationships, were well developed, this denoted the achievement of theoretical saturation. In total, Researcher generated approximately 348 codes including code splits/merging, which were organized into 29 categories. The following chart in Figure 7 confirms data saturation based on the new codes generated per interview, where data corpus beyond study's scope was also generated coding was performed but not added in to the discussion. More than 300 codes and more than 25 code group consisting of 179 codes were organized into eight themes.

**Figure 7 - Code saturation chart**



#### 5.2.5. Data verification

The research question and research method matching, appropriate sample, concurrent data collection and analysis, thinking theoretically, and theory development are all verified strategies used in the data analysis process to build reliability and validity ensuring rigour.

#### 5.2.6. Threats to reliability and validity

Threats to reliability and validity were achieved by comparing the findings from participants within the same entity (organization), entity to industry, and industry to industry resulting to



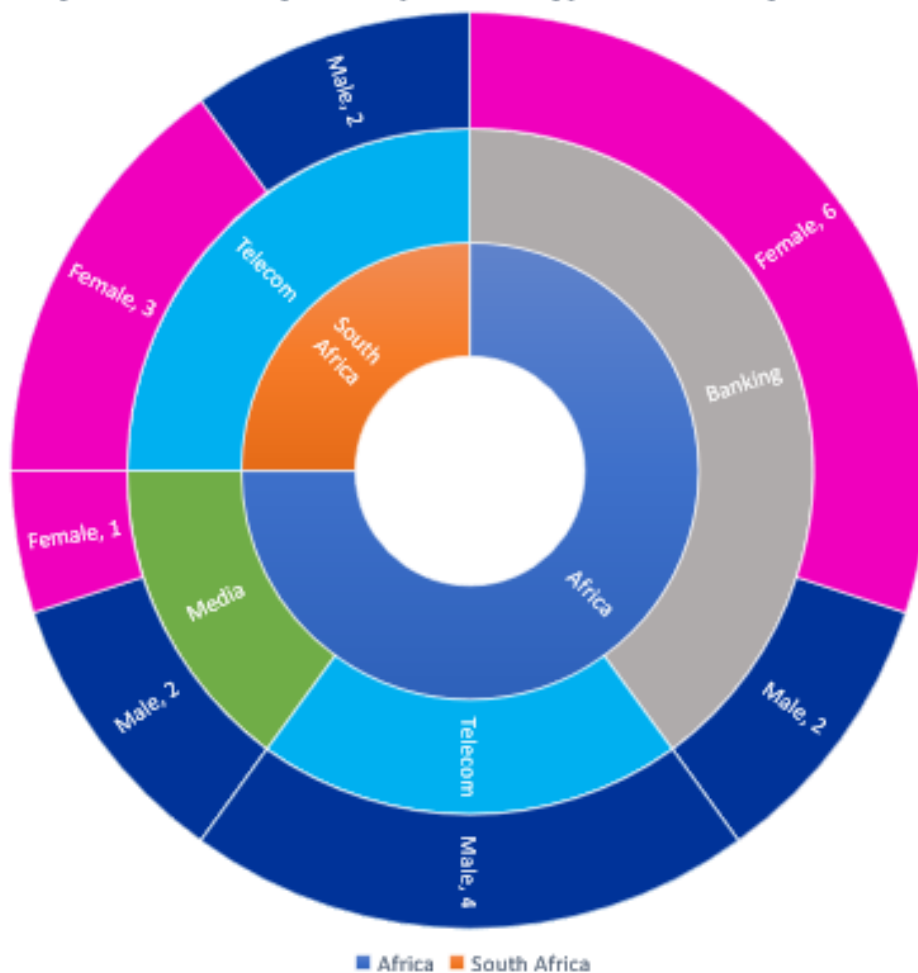
reliable findings and valid contributions to the research question. The process is depicted in Section 4.10 (Figure 5).

### 5.3. Interview Participants and Context

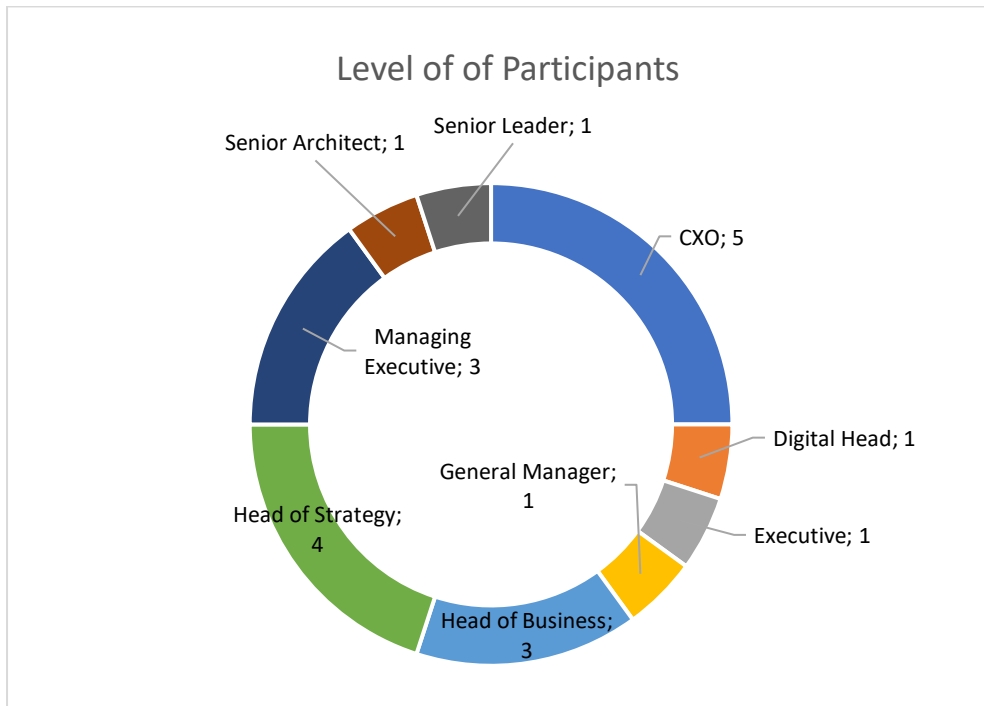
As promised during the interview introduction, participants and company names were changed to pseudonyms (Table 4) to protect their identities. The participants are responsible for either defining or implementing strategies for incumbent adaptation. All of the interviews were conducted online (Zoom/Microsoft Teams). The following charts (Figure 8, 9) depict the industry focus and industry and participant gender representation.

**Figure 8 - Participant industry representation**

#### Participant Industry focus, Industry, Gender representation



**Figure 9 - Represented participant authority level**



Participants included Senior executives, Strategists and Senior Leadership who provided valuable insights and perspectives.

**Table 4 - Participant details**

| Participant Code | Code Name | Gender | Industry | Entity Code | Industry Geography Focus | Additional Information |
|------------------|-----------|--------|----------|-------------|--------------------------|------------------------|
| d1               | Kasen     | M      | Banking  | E7          | Pan Africa               | Head of Strategy       |
| d20              | Radha     | F      | Banking  | E1          | Pan Africa               | Head of Strategy       |
| d4               | Josh      | M      | Media    | E2          | Pan Africa               | CXO                    |
| d13              | Nisha     | F      | Media    | E2          | Pan Africa               | General Manager        |
| d14              | Farah     | F      | Media    | E2          | Pan Africa               | CXO                    |
| d2               | Sunny     | M      | Telecom  | E3          | South Africa             | CXO                    |
| d10              | Sumo      | M      | Telecom  | E3          | South Africa             | CXO                    |
| d3               | Godfrey   | M      | Telecom  | E3          | South Africa             | Senior Leader          |
| d7               | Kwik      | M      | Telecom  | E6          | Pan Africa               | Managing Executive     |

|     |           |   |         |    |              |                    |
|-----|-----------|---|---------|----|--------------|--------------------|
| d6  | Gump      | M | Telecom | E6 | Pan Africa   | Managing Executive |
| d8  | Yasmin    | F | Telecom | E4 | South Africa | Executive          |
| d12 | Mandy     | F | Telecom | E4 | South Africa | Head of Business   |
| d5  | Rane      | F | Banking | E5 | Africa       | CXO                |
| d9  | Robert    | M | Banking | E5 | Africa       | Head of Strategy   |
| d17 | Payton    | M | Telecom | E6 | Africa       | Head of Strategy   |
| d19 | Jason     | M | Banking | E7 | Pan Africa   | Managing Executive |
| d11 | Clark     | M | Banking | E7 | Pan Africa   | Head of Business   |
| d15 | Churchill | M | Telecom | E8 | Pan Africa   | Head of Business   |
| d16 | Tango     | M | Banking | E9 | Pan Africa   | Senior Architect   |
| d18 | Charlie   | M | Banking | E9 | Pan Africa   | Digital Head       |

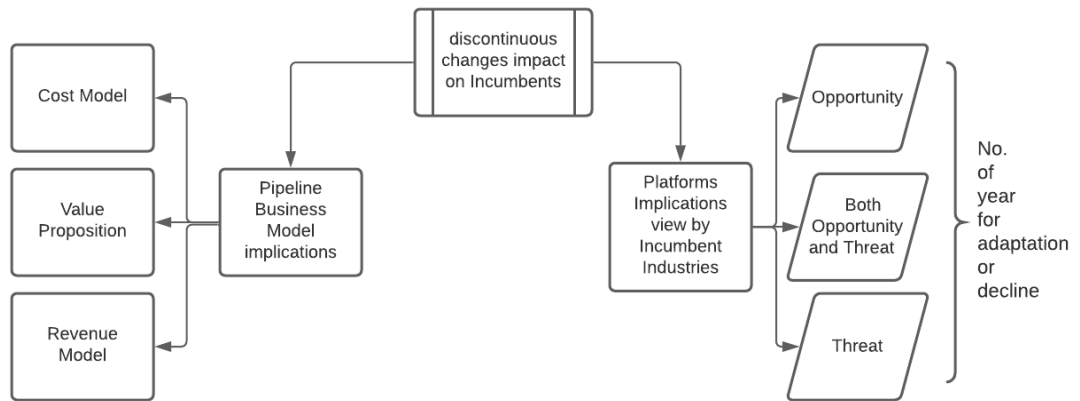
#### 5.4. Results: Research Question 1

Research question 1:  
How does discontinuous changes impact incumbents?

The aim of the research question was to identify how the discontinuous changes such as platform businesses, its business models and technologies are impacting the incumbent business. Key objectives of the discussion were whether the incumbents are experiencing any platforms or business models as a threat to their business, and how do they see the future of their existing business models.

Incumbent industries need to adapt constantly based on the changes occurring in the industry, geography, and regulations, among other factors. For this reason, the first research question aims to understand whether Incumbents from telecommunications, media and banking perceive any threat to business, what will happen to their existing business models if they adapt or do not adapt, and how much time they have before their bottom line is threatened. Two major themes are key for this research question are shown in Figure 10 and detailed further.

**Figure 10 - Discontinuous changes impact**



#### 5.4.1. Pipeline Business Model implications due to Platforms

##### 5.4.1.1. Value Proposition

Almost all of the participants stated that they are creating new products and services to compete or match with the customer experience and offerings provided by platforms. Evidence can be seen from the participants' statements in Table 5 below:

**Table 5 - Selected quotes on value proposition**

| Industry | selected Quotes   |
|----------|---|
| Banking  | <ul style="list-style-type: none"> <li>• “Platform-type environment is bringing in different partners and a different role players on to a platform that becomes a one-stop shop into this platform, where we would be able to assist you” (d1).</li> <li>• “What it does what it is, is that you just a simple thing that allows school kids, particularly in primary school, to be able to bring in the cake sale money into the school without anybody having to handle cash” (d5).</li> </ul> |
| Telco    | <ul style="list-style-type: none"> <li>• “The idea is through that trifecta offering, we should be able to offer customer, almost anything that they require from connectivity, either connectivity to the cloud connectivity through the cloud connectivity from cloud to cloud, or whichever hyper scalar, the customer wants” (d15).</li> </ul>  |

|       |   |
|-------|---|
|       | <ul style="list-style-type: none"> <li>• “So you can come to us and shop whether it's AWS, GCP, or Azure, you can come to us whether you want Google workplace or office 365. And from a cybersecurity, you can also come to us for a best of breed cybersecurity offering” (d15).</li> </ul> |
| Media | <ul style="list-style-type: none"> <li>• “if you saw lately, we launched &lt;xyz&gt; mobile goes at about 49 rand a month. So that what \$3 a month, we've got our \$10 option. And we've now got an \$18 option in &lt;My&gt; Pro, which has some sports content” (d4).</li> </ul>           |

Further, during the discussions with various participants, it was evident that they are constantly looking for scouting for partners, start-ups, global ideas, internal and external channels to create a value proposition that customers are looking forward to.

#### 5.4.1.2. Revenue Model

Incumbents were trying new revenue lines compared to revenue models, unlike platforms that offer free access to basic users (freemium), paid access for advanced users (premium) options. Table 6 below provides few selected quotes from each industry participant perspective on awareness of Revenue models and ongoing initiatives around revenue model innovation as move to counter digital platforms and competition.

**Table 6 - Selected Quotes on Revenue model**

| Industry | Selected quote  |
|----------|---|
| Banking  | <ul style="list-style-type: none"> <li>• “We were using it [platform] for all manner of things within that bracket of essential services and as the lockdown restrictions reduced it has been be useful anything so you can order book, you can order Fridge or have anything from Avo and it works exactly like Amazon or a Take-a-lot” (d5).</li> <li>• “Telcos are becoming more and more banks, and we are finding banks becoming more and more, you know banks [becoming like Retailers]” (d1).</li> </ul> |
| Telco    | <ul style="list-style-type: none"> <li>• “Where we also heading from a telco perspective to say, if you want data, unlimited data for a month, your quality of service will be “x”. If you want great customer experience in terms of thing makes throughput on a service guarantee, then your price is going to be “y” (d2).</li> </ul>  |

|       |  |
|-------|--|
|       | <ul style="list-style-type: none"> <li>• “What are those services that you provide over your network as a telco, so you don't sell megs and minutes anymore to customers, you rather sell the service” (d2).</li> <li>• “It forces the telcos to move up the value chain, and start to create, let's call it more complimentary services around telecommunication, right” (d7).</li> </ul> |
| Media | <ul style="list-style-type: none"> <li>• “OTT brand we're trying to position as another low cost alternative” (d14).</li> <li>• “You want to give them the opportunity to watch their favorite. So be at a really low cost while they're sitting in Taxi. So that's part of the target market?” (d4).</li> </ul>   |

The traditional contract-based model (telecommunications) whereas offerings based existing customer relationships (banks) are still prevalent in the discussions. Media, industry was moving from traditional models to low cost digital subscriptions to gain required volumes.

#### 5.4.1.3. Cost Models

While the platforms' cost models are asset-light, the incumbents had to go a long way to become asset-light, due to existing large capital investments; this is evidenced in the quotes summarized in Table 7 below. The level innovation was limited on cost models and could not find enough evidence to bring out each industry perspective on cost models. Thus, the quotes shown may represent only the limitation of the incumbents cost models or the driver behind their cost models.

**Table 7 - Selected quotes on Cost models**

| Industry       | Selected quote   |
|----------------|--|
| All industries | <ul style="list-style-type: none"> <li>• “...because to build and sustain network costs money, it's a capex intensive exercise. Building towers is not cheap” (d6).</li> <li>• “In the past, you could put a billion Rand in the network, and you would get really, really good return. But now we're at the point of diminishing returns within our core business” (d17).</li> <li>• “Given the capital constraint that will all these spaces need to be you can't be everything to everybody, you have to selectively deploy your capital” (d20).</li> </ul> |

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• “We buy a spectrum or buy a bandwidth from another provider where we have access to their technology at a cost but we focus on the products and services” (d3).</li> </ul> |
|--|---|

Conflicting views can found in same industry; while one participant (d5) saying “platforms are not a replacement for banking and the concept that platforms will replace banking in my many years a bit unfounded” another participant (d19) stated that the “platform business model... and the technologies... around connectivity, data, and automation, those four things together... definitely present a great opportunity with the banking world“ conflicts with the industry views. There was a participant (d6) who vehemently felt that “...adopting this platform business model is best for Telco’s going forward,” further, a participant (d4) from the media industry feels that they “... don't think our kind of business model will ever will ever die off.”

#### 5.4.2. Platforms impact on Incumbents

##### 5.4.2.1. Incumbents perception: Opportunity or Threat

The researchers performed “magnitude coding” using the key word responses, and analysed the responses without interpreting their meaning, and classified participant views about the platforms’ impact on the incumbent businesses and the responses shown in (Table 8). Abstract quotes and key responses are provided in Appendix 3. Thirteen participants felt Platforms as threat where in four participants felt it as a new opportunity for incumbents.

**Table 8 - Incumbents perspective on Platforms - opportunity or Threat**

| Industry | Opportunity | Threat | Both | No response | Total |
|----------|-------------|--------|------|-------------|-------|
| Banking  | 2           | 5      | 1    | 0           | 8     |
| Telco    | 2           | 5      | 1    | 1           | 9     |
| Media    | 0           | 3      |      |             | 3     |
| Total    | 4           | 13     | 2    |             | 20    |

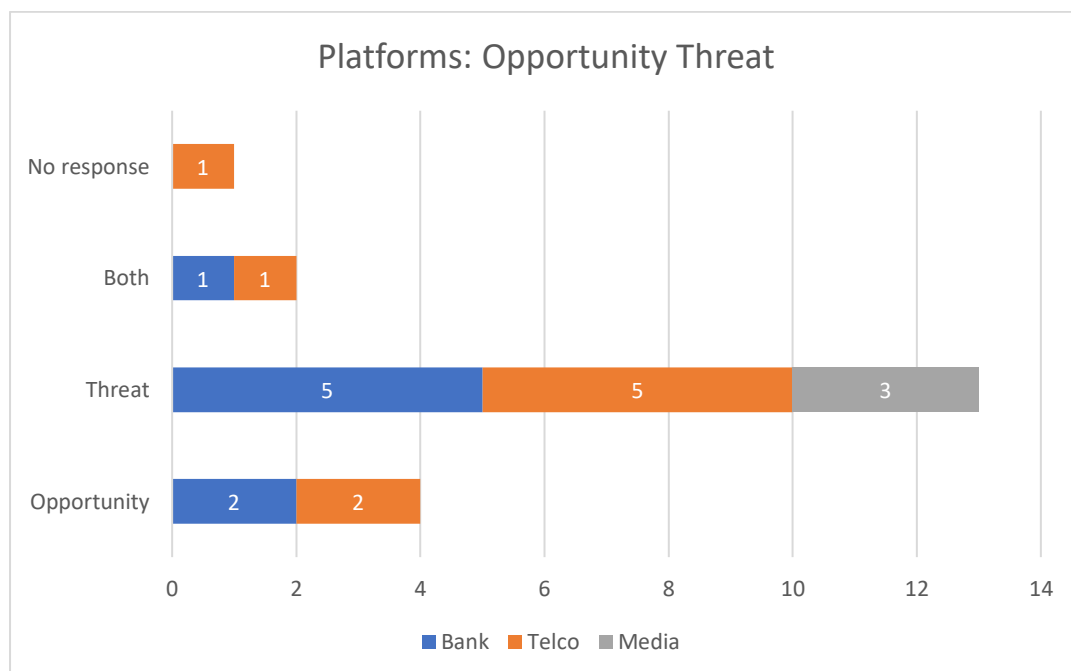
The purpose of the analysis is not to draw statistical conclusions of any nature. Instead, it is to understand the perspective from which industry is driving or going to drive the adaptation.

Based on incumbents’ market sensing capabilities, participants mentioned various platform concepts in an “opportunity or threat context,” captured as in vivo codes verbatim from

participants. It is interesting to see common concepts emerging from multiple participants, demonstrating incumbents' awareness about platform and other discontinuous changes.

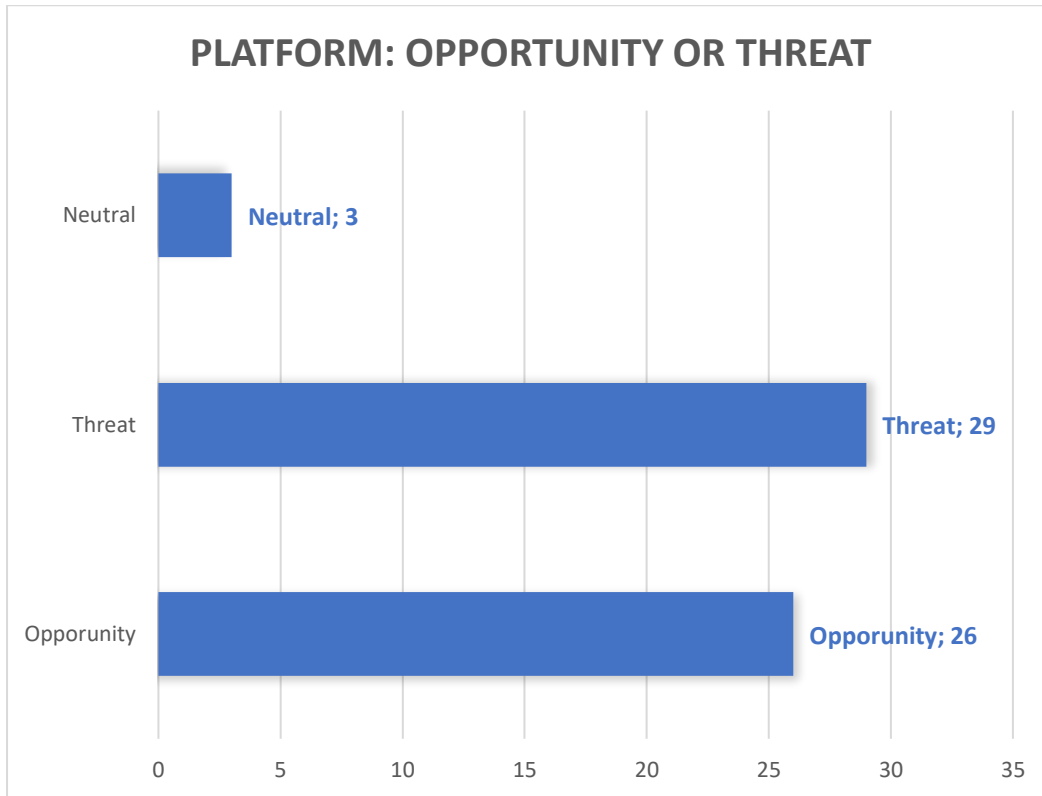
Interestingly, researcher observed that between participant statements about opportunity or threat (Table 8), represented in Chart A, versus multiple platform concepts used by participants throughout the conversations (Table 9) in a threat or opportunity context represented in Chart B where in Participants explicitly stated that platforms are a threat. However, the concepts they discussed appeared that they perceived platforms as neither an opportunity nor threat (e.g., 45% versus 50%). It must be that the conceptual clarity might not be strong enough, and instead, platforms phenomenon clarity persists.

**Chart A – participant verbatim responses**





**Chart B** – participant concept-based discussion summary based on frequency



**Table 9** - Platform concepts: Opportunity or Threat

| Concept                     | Opportunity | Threat | Neutral | Participant Code |
|-----------------------------|-------------|--------|---------|------------------|
| Adapting tech               |             | x      |         | d13              |
| Aggregator of everything    | X           |        |         | d8, d10          |
| Asset heavy                 |             | x      |         | d3               |
| Blurred industry boundaries | X           |        |         | d7,d16,d18       |
| Brand trust                 | X           |        |         | d17,d18          |
| Business model              |             | x      |         | d1               |
| Customer base               | X           |        |         | d18,d17          |
| Commoditization             |             | x      |         | d15,d20          |
| Complementary services      | X           |        |         | d7               |
| Convergence of technologies | X           |        |         | d5               |
| Cost to acquire customer    | X           |        |         | d4               |
| Customer experience         |             | x      |         | d1,d14,d16       |
| Customer experience         | X           |        |         | d8               |

|   |   |   |   |            |
|---|---|---|---|------------|
| Declining margins                                       |   | x |   | d4         |
| Disintermediation                                       |   | x |   | d4, d9,d11 |
| Ecosystem play  | X |   |   | d5, d12    |
| Emerging ecosystems                                     |   | x |   | d4         |
| Global connectivity infrastructure                      |   | x |   | d7         |
| Industry convergence                                    | X |   |   | d3         |
| industry trend  |   | x |   | d2         |
| Investments   |   | x |   | d17,d4     |
| Legacy  |   | x |   | d18, d20   |
| Local and sports content                                |   |   | x | d4         |
| Low disposable income                                   | X |   |   | d4         |
| Market experience [fragmented]                          | X |   |   | d18        |
| Mass commoditization                                    |   |   | x | d7         |
| Negative net cash positions                             |   | x |   | d6         |
| Network effects; volume vs value                        |   | x |   | d2, d18    |
| No incentive  |   |   | x | d7         |
| Price point fight                                       |   | x |   | d14        |
| Regulatory frameworks                                   | X | x |   | d7, d16    |
| Sell the service/ service Orientation/<br>service realm | X |   |   | d2,d3,d7   |
| Skills  |   | x |   | d15        |
| Technology  |   | x |   | d3,d9      |
| Timing  | X |   |   | d20        |
| Competition   |   | x |   | d1         |

#### 5.4.2.2. How many years does incumbents have to adapt or decline

When participants were probed about how many years, they anticipate their business will survive if they successfully adapt or alternatively their existing model to weakens significantly, only 13 participants responded (represented in Table 10), while seven abstained direct responses. Based on their awareness of platforms as discontinuous change, it was evident that almost every industry was busy pursuing explore/exploit strategies for at least a year, in preparation to defend or collaborate with platform-induced market forces, business models, or technologies. It was interesting to see that sense when the researcher synthesized the

participants views on the implications of platform with the number of years for adaptation or decline as illustrated below:

**Table 10 - Gestation period for incumbent adaptation**

| Industry/<br>Impact view | 0-2 Years | 3-5 Years | Above 7<br>Years | Grand Total |
|--------------------------|-----------|-----------|------------------|-------------|
| Bank                     | 1         | 4         | 1                | 6           |
| Both                     |           | 1         |                  | 1           |
| Opportunity              |           | 1         | 1                | 2           |
| Threat                   | 1         | 2         |                  | 3           |
| Media                    | 1         | 1         |                  | 2           |
| Threat                   | 1         | 1         |                  | 2           |
| Telecommunications       |           | 4         | 1                | 5           |
| No response              |           | 1         |                  | 1           |
| Opportunity              |           | 1         |                  | 1           |
| Threat                   |           | 2         | 1                | 3           |
| <b>Total</b>             | <b>2</b>  | <b>9</b>  | <b>2</b>         | <b>13</b>   |

Although there were different views from participants in the telecommunication industry about platforms' implications, there was consensus about the available adaptation time period (3–5). Contrastingly, participants in the media industry also perceive platforms as a threat, but they maintain differing views on the adaptation time period. Lastly, participants from the banking industry feel that they have a 3–5 year window for adaptation, which may be due to the industry's regulatory nature. Platforms can only provide complementary, not core, services, which might be a reason for the larger timeframe, considering the banking and telecommunications industries' highly regulatory nature.

An alternative view might be a pure coincidence, as telecommunications were already losing revenues, big time to platforms as per participant views given below:

“Voice and data...has been on the decline over the last couple of years, and that's just a function of where industries are heading... it's not so much a result of the platforms that's forcing that to happen.” (d2)

“Voice revenue [is] gone, data revenue [is] under pressure, right, which [are] basically commodity services.” (d7)

“Voice revenues are declining twofold...double whammy for that with connectivity. Connectivity is still ramping up, but the price is coming down.” (d15)

Since the objective of this question is not to find out why the telecommunications participants feel long-term time horizon for adaptation, researchers assumes that it may be their readiness to defend their turf.

#### 5.4.3. Summary of the findings of Research Question 1:

The findings from the first research question appear to indicate the following:

##### Business models:

The majority of participants alluded to value proposition related changes they are making due to platforms. However, not much surfaced in the discussions about cost and revenue models. Instead, a pronounced a sense of pipeline thinking in these areas, except for the media industry, which showed promising new revenue models to compete with global streaming platforms and local Over the Top (OTT) players.

##### Platform implications:

Of the total participants, 45% of participants viewed platforms as a “threat,” and participants possess exhaustive, profound, and impartial understanding about their facilitating discontinuous changes. However, the same threat did not emerge in their views about having 3–5 years for adaptation. Therefore, platforms might be construed as non-existential threat to incumbent industry. Nevertheless, 35% of the participants who did not have a clear position on the adaptation perspectives cannot be ignored, thus, researcher cannot make any final conclusion.

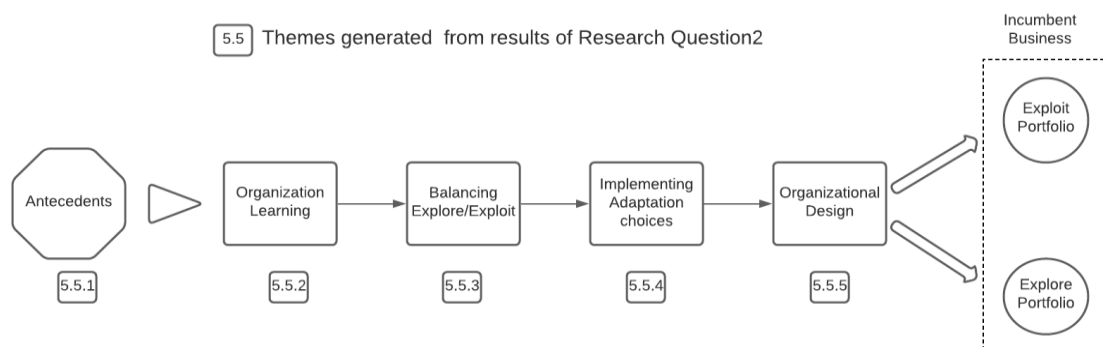
## 5.5. Results: Research Question 2

Research Question 2:

How do incumbents adapt their exploration-exploitation balance subsequent to discontinuous changes?

Incumbent Industry participants have significant knowledge about the internal and external, as researchers discussed in Section 5.3. However, on its own, market knowledge is not a differentiator; rather, the organization's strength depends on how they adjust their strategies and adapt; because of this reason, Research Question 2 attempts to understand how incumbent organizations successfully adapt subsequent to discontinuous changes. Answers to this question are the core of this study, and an in-depth analysis of the responses was carried out. The following five key themes (Figure 11) were revealed during the interview process, driving incumbents' adaptation process.

**Figure 11** – overview of results generated from Research question2



These findings were compared and contrasted to the literature in Chapter 6—the remainder of the section each theme and categories' findings.

The results will be presented (Table – 11) in the following order of themes and their categories.

**Table 11** - Findings as per Themes and categories

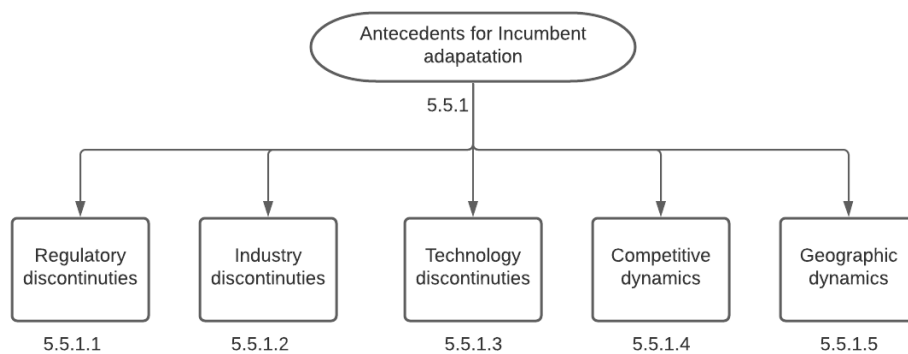
| #     | Theme       | Categories   |
|-------|-------------|--|
| 5.5.1 | Antecedents | 5.5.1.1 Antecedents: Regulatory discontinuities<br>5.5.1.2 Antecedents: Industry discontinuities<br>5.5.1.3 Antecedents: Technological discontinuities |

|       |  |   |
|-------|--|---|
|       |  | 5.5.1.4 Antecedents: Competitive Dynamics<br>5.5.1.5 Antecedents: Geographic discontinuities  |
| 5.5.2 | Organization Learning                  | 5.5.2.1 Incumbent Adaptation: Open vs Closed Innovation<br>5.5.2.2 Incumbent: Organization Learning   |
| 5.5.3 | Balancing Explore and Exploit          | 5.5.3.1 Explore actions: Evaluation<br>5.5.3.2 Incumbent adaptation: Explore Actions<br>5.5.3.3 Incumbent adaptation: Exploit Actions<br>5.5.3.4 Incumbent adaptation: 2XP Continuum<br>5.5.3.5 Explore Actions: Implementation |
| 5.5.4 | Strategic choices – Build vs Buy       | 5.5.4.1 Incumbents Platform Entry: Strategic Choices  |
| 5.5.5 | Organizational Design- Adaptation mode | 5.5.5.1 Organizational Design: Structure<br>5.5.5.2 Incumbent Adaptation: Leadership Support<br>5.5.5.3 Incumbent adaptation: Barriers<br>5.5.5.4 Incumbent adaptation: Enablers  |

#### 5.5.1. Antecedents for Incumbent adaptation

Five antecedents (Figure 12) were found during the discussions with participants which are either accelerating or impeding the adaptation process. Each Antecedent further discussed further below.

**Figure 12 - Antecedents for Incumbent adaptation**



#### 5.5.1.1. Regulatory discontinuities

Regulatory discontinuities in the banking and telecommunications industries were revealed as one of the antecedents that protect and deter incumbent adaptation. Overall, it did not reveal that the incumbents intend to use their industry's regulatory regime as a shield, rather, they feel constrained at times to act decisively, and to an extent, obtain some protection from digital first ventures that provide full-scale services like the incumbent industries.

##### Telecommunications:

With a sense of anxiety in their tone, one participant (d6) mentioned, "as soon as a technology and the regulatory environment will allow Microsoft, Apple, and the likes to take full control by the eSIM of the end-to-end customer relationship. The telco is out. Okay, so I've witnessed that now for a couple of years. And that will happen". This implies that regulations is the only protection incumbents have against the digital bigwigs. Another participant express regulatory fears, saying, "because it's a regulated industry and so it's let's not get fined by the regulator, let's not do this" (d15). In another interview, the participant was hopeful, saying that the "business model will significantly change given the regulation issues that we currently have in the country, where the regulators [are] obviously pushing for us to continuously drop our prices over time" (d17).

##### Banking:

Due to the regulatory regime, agility appeared to be a challenge for incumbents. One banking professional stated, "within the current incumbent rules, policy regulation doesn't work for particularly the pace at which the partners that you want to work with, who are some of them FinTech, small organization, they move quite quickly" (d1). Technology companies operating as complementors is also evident, with one participant saying "if you don't have a banking license, it means then your regulatory requirements are not as stringent as when you have a license, but it also limits the type of services and products that you can put" (d16); and about the adaption process, another says, "we still encounter regulatory hurdles" (d20).

##### Media:

There were no mentions of regulatory constraints by the media industry participants; this may not imply that they are regulatory free.

#### 5.5.1.2. Industry discontinuities

Overall, all three industries are under tremendous stress coming from internal and external discontinuities and not just from platforms thus driving incumbent adaptation.

Telecommunications:

Telco industry participants felt that it is not platforms competition that was driving them rather the industry is heading towards that direction based on the participant responses provided below:

“That's just a function of where industries are heading, so it's not so much as a result of the platforms that's forcing that to happen” (d2).

Antecedents to adaptation is “the reason why Telco's are slow to move into the digital era is because there was just no incentive” (d7).

Telecommunications industry stress was acknowledged from the time that “we knew that our core business isn't bringing back the returns that it used to, let's say, 10 years ago” (d17).

Banks:

On the other hand, Banking industry was experiencing industry convergence and competition from both incumbents like Telco and digital first ventures with low cost of operations. Key participants response provided below convey the same understanding.

“Telco's are becoming more and more banks, and we are finding banks becoming more and more, you know <Retailers or something>” (d1).

“the more sophisticated societies, the bigger the relationship with a bank ” (d5).

“Banks with cost to income ratios around 50-odd percent will cease to exist. And so you have to adapt and change or become irrelevant” (d9).



Media:

Media industry with growing smart phone adoption, studio's launching own platforms, the industry discontinuities were driving their adaptation. Participants from media industry felt their customer base is changing, service delivery model impacted with high digital content consumption happening on internet. Participant response given below indicate the industry pressure.

"TV as a as a whole as an industry is being disrupted at this time " (d14).

"more and more what you see now is they carve the digital rights out because they want to keep it for themselves, and they want to get into these territories" (d4).

"TV is starting to get impacted, or it has started already, we have to fight harder for our share of spend" (d14).

#### 5.5.1.3. Technological discontinuities

Technological discontinuities too, impose on incumbents to adapt, and there appears to be varying degrees of technological influence on the three industries. Telecommunications are the most impacted, followed by banking and finally, media.

Telecommunications:

When participants from Telco industry asked about the discontinuities their industry was experiencing, participants responded with Network technology trends as one of the factors of adaptation instead of digital technologies. Key participant responses embedded below

"what kind of platform plays are there, and I think there's going to be other platforms. I mean, today, we're moving into the world fast moving into the world of edge. So in the era, that's just going by now, it's kind of in the middle of it" (d7):

"From a technology perspective, I think things like Wi Fi is probably one of the bigger, bigger, bigger ones that can potentially impact our revenues" (d2)

“Creating incentives for operators to roll out the radio access network to roll out more 3G, more 4G, etcetera, and the other side of the deal is I'm giving cheaper backhaul. International capacity on my on my submarine cable and flags” (d6)

Banks:

Unlike Telco industry participants, banking industry participants responded with IT infrastructure trends shaping their industry. The participant responses was as under:

“Like the mother-ship with the API's around it, to deliver the right type of services, because as we see, like corporates will continue to use banks, but it's about the banking industry being a lot more in tune with those industry changes” (d9).

“Large technology is enabling the business to achieve what's inspiring, the organization has to evolve, or we run the risk of becoming irrelevant and the technology fraternity is playing the part so beautiful story” (d9).

“Technology adaptation need not be platform thinking alone” (d11).

#### 5.5.1.4. Competitive Dynamics

Global competition was already using incumbent assets to deliver services while also building assets to displace the incumbents from their dependent and trusted positions. It is a growing concern for incumbents and a driver for adaptation. Also, the local competition is blurring the lines between banks, telecommunications, and media.

Telecommunications:

Competitive dynamics are well understood by the participants, as evidenced by one who said, “70% of the world's ten largest public companies are digital platforms. And I'm referring to Apple, Microsoft, Amazon, Alphabet, Alibaba, Facebook, Tencent” (d9). Someone else added, “SpaceX, your Facebook's your Google's were all looking into the connectivity layer, and then providing that at pretty much low cost or almost zero (d17)” as existential threat to the telecommunications industry. This participant also mentioned, “when you look at technologies like Google loon, Facebook's undersea cables, as well as some Satellite technologies that we've seen that SpaceX has also is also trying to implement, we see those as massive potential disruptors in our core business, on the connectivity layer (d17).” Additionally, there is new competition from hyperscalers, the participant observes, “the massive build-outs from

the cloud hyperscalers, who, by the way, are not just providing, you know, let's call it software applications as a service. They're also providing compute storage, and network as a service, right?" (d7).

Banks:

In this industry, competition was seen more on the payments front; "competition is definitely getting into a space where people will be able, and are getting more and more able to do payments... definitely competition from that perspective and more especially in our retail type aspect, the bank" [d1]. Further, market expansion is also driven by competition. One participant said that "the competition is constantly increasing and there's a lot of saturation in the market. So, you almost have to expand into those new markets" [d16].

Media:

Media industry not feeling threat from Telco's who are launching streaming video platforms, it was the Big studios like Disney, HBO that they are worried about, as told by participant (d4). Further evidence can be seen in participant (d4) quotes "Netflix, obviously, I think we're going to see more and more of this direct to consumer stuff from the likes of Disney, who and the like"; "we have a big partnership with Amazon" (d4); also added, "telcos [which is why] I never stress with any of them launch a new offering" (d4) .

#### 5.5.1.5. Geographic discontinuities

Geographic discontinuities are also contributing to the adaptation/non-adaptation by incumbents. Proclaiming connectivity as human need and regulators pushing down the rates of data, complex cross-border regulations, and diverse technological adaptation across the continent leaving incumbents unable to consolidate their huge customer base across Africa. What works in one region does not work in another region, for example, including mobile payments penetration in Kenya versus South Africa. Furthermore, for the participants with whom researcher spoke there was extraordinarily little mention about the grand Africa strategy, instead, most strategies are South Africa focused.

Telecommunications:

Regulator in South Africa were giving direction to reduce internet data rates and applying stringent terms to Telco in South Africa, and the adoption of smart phones was still on rise and still there is substantial market which need to be addressed by Telcos. This may imply that

Telcos might prefer exploitation over exploration given their existing investments supported participant responses given below:

“Nobody foresaw that telecoms would be a political tool (referring to South Africa)” (d7)

“West Africa for a while, and people who carry three or four phones per person” (d7)

“there are a lot of markets with, with significant parts of the population, which is not using digital services” (d6)

Banks:

Participants were asked about region specific discontinuities that they were observing and influences their strategy. They still see market opportunity which the incumbents only can capture based on the complexity of the African market.

“here's{Africa} about 200 large companies across the continent...providing the right type of services that's going to grow the continent” (d20)

“opportunity for incumbents is that they've established themselves over many, many years in some very complex markets on the continent” (d19)

“look at the economies in Africa, why people are taking long time to build personal wealth is because they don't have strong enough banks” (d5)

Media:

Media industry participants believe they are well positioned to safeguard their leadership position through far reaching solutions and low cost solutions which may be deterrent for new entrants given the geographic complexities. The confidence expressed was evidenced below:

“for most of Africa, that's if you look at people's disposable income, that's a great option (mentioning \$2 subscription)” (d4)

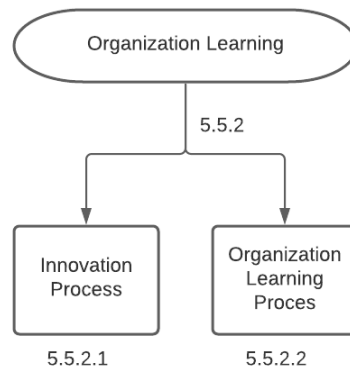
“African experience is, is most people spend hours in the morning, in a taxi getting to work in the evening on a taxi, getting back home” (d4)

“our content proposition is we are Africa's best love storyteller” (d14)

### 5.5.2. Organizational Learning

This theme emerged from the thematic analysis as an important aspect of Incumbent adaptation. Organizations can learn and change organizational routines, acquire skills, and innovate to adapt through either for exploration or exploitation. It appears that unless incumbents can change their course of action and pivot towards the uncharted, knowing what is happening in the market is insufficient.

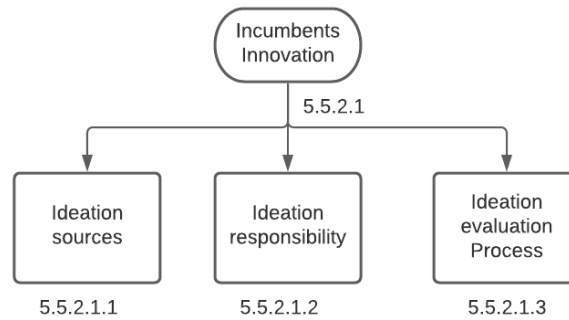
**Figure 13** - *Incumbent organization learning process*



#### 5.5.2.1. Incumbent Adaptation: Innovation Process

Numerous codes were generated on this theme and critical participant conversations are discussed in three sub-themes. The importance of innovation is observed in one participant who said, “we don't do innovation theater, we actually you do innovation practice” (d7). A contradiction was also found in participant feeling that “there is no value creation happening inside our organization” (d6). Whoever generates ideas, it had to be owned by one and all, as someone else was quoted as saying, “I would say it's definitely top driver...however, it's important to get the buy-in from the bottom” (d14).

**Figure 14 - Incumbent innovation process**



#### 5.5.2.1.1. Ideation sources

Participants said that their ideas develop from attending conferences, talking to peers and industry veterans, attending premier educational institutes, and consultants. However, it appears to be mostly closed-group innovation compared to the open-group innovation mentioned by a participant, “one, its internally-sourced initiatives and ideas” (d1). Another participant describes when merger and subsidiary companies are used as innovation agents; “we have entire lines of business who have stopped using their brain and their own ability to innovate for anything because they outsourced their brain to the subsidiaries (d6).” It was also observed that executive management was a key source of ideation, as evidenced by participants who said, “[the idea] was something that effectively the CEO wanted us to” (d4; d17). Additional responses from participants from each industry provided below:

Telecommunications:

“The second way we [innovate] really is by engaging customers” (d15).

“Serious participation in the conferences, or the forums kind of engagement to understand how people are doing or innovating things and changing the landscape of IT” (d3).

Banks:

“From the marketing side, we attract quite a number of feedbacks from clients” (d5).

“Somebody came up with the idea to say, you know, I'm tired of this thing. I have like three little kids in primary school and I'm doing this on a weekly basis. And then you look at it, evaluate it, and then you adopt it” (d5).

“These are initiatives that are largely generated from internal teams and internal colleagues. Part of what we've learned is kind of like seen is that it's probably a bit unfair to try to 10 bankers into into entrepreneurs” (d1).

Media:

“We look to the likes of Sky Media, we look to the likes of Liberty... businesses in like Procebes, in Germany, where they've actually done some interesting things around automation” (d14)

“A lot of it comes out that a lot of it[innovation ideas] also comes from execs and our chairman” (d4).

“which means that we are almost going to speak to 80–90 people in that one or maybe in that four-to-six week period” (d13).

#### 5.5.2.1.2. Ideation responsibility

According to our participants, it appears there was no single owner driving ideation. One participant said, “innovation cannot be a single own, or KPI or responsibility for one job function” (d10). Few incumbents have labs “so, on the other side from just a R&D or innovation lab that we are running” (d5). Some are dependent on individuals such as this: “we have our Chief Digital Officer... He's in the mold of Zuckerberg” (d10). A few have separate functions set up: “we have set up at a bank-level innovation, an innovation team, we now a head of innovation assets on the group expert, who has a team and budget allocated to drive innovation” (d11). Others have forums “we actually call it Forums that record, we have these specific forums?” (d20) and “way our innovation teams. Previous biggest role, in my view, is to actually be on the lookout and see what you believe is going to be the next trend, or the

next wave on which we must ride on and then create local relevance, rather than actually trying to start and create our own wave” (d10).

#### 5.5.2.1.3. Ideation evaluation process

Observed that the evaluation process was not a well-defined process, incumbents follow some process for evaluating ideas generated for adaptation. However, whether the process was efficient was not ascertained from the discussion as it was not the scope of the research question. Participants provided their process description when they were asked to explain how they evaluate the explore/exploit initiatives, listed below are the quotes:

“Stage Gate Process, where internally, ideas are coming from different business units and two we have what we call a digital team that helps to facilitate a conversation through a process that is a I think it's a process that's been used in Silicon Valley around think wrong. And that helps to generate a number of possible opportunities within sectors or within areas in the different business units” (d1)

“the major innovation thoughts are something which gets me converts into a business case and further into an implementation typically happens in the product, consumer group, technology and systems department” (d13)

“we take it to the next level of creating a kind of categories like what are the different areas that we can actually go ahead and start exploring” (d13)

“because you don't know, if you're looking at 10 things, how many out of the 10, how many will be successful. So you almost like you have to have a very high affinity for failure in that in that space. Because not every exploration will lead to, you know, like a successful business venture. Part of that unit responsibility was also to partner with, with FinTech's, as well to good leverage” (d16)

“we would then make a decision to say whether we would want to incubate that particular product in house and then build it with them or if it's something that we would like to invest at arm's length and then allow them to flourish, so to speak” (d17)

“We've got a process that we've that we adopt, but it's an industry standard process. It's not one that we've just made up, right. We've consulted heavily with MIT. And you know,



such organizations who have helped us define a process that's designed to fail quickly, cheaply, all of those things.” (d19)

“I wouldn't say it's a formalized process. It's more as opportunities are being identified, they then go through quite a rigorous review, be there compliance, legal, etc. and is it public?” (d20)

“We are very bad at exploration there is no formalized and standardized exploration process” (d6)

#### 5.5.2.2. Organization Learning process

Learning from peers, safe environments, fail fasts, evaluating ideas without using Net Present Value (NPV) or Internal Rate of Return (IRR), and getting the proper skills are key aspects observed in learning and thinking. Participants spoke openly about what had worked and not worked, and there is vast awareness about the changes required and no denial about the need for adaptation. It is understood that leaders were acquired from failed initiatives, experiments they were running, or challenges they were facing in adaptation. It is noteworthy that no participant was against or afraid of the learning experience, and they all seemed to look forward to it and the participants responses provided below.

“The way you assess this initiative has to be different to the way you've assessed the business so far” (d1).

“Part of the learning is the fact that you do have to try and be clear around not making these new thinking initiatives to compete with existing and scarce resources” (d1).

“We're trying to instill that culture of people to say, but speak up we can if you make a mistake, speak up, if you have an opinion speak up so we can evaluate these opinions and we can address it on merit and make the best decision ultimately” (d2).

“Create that culture. And like I say, it's a softer component. It's not a hard and fast strategy, this makes these decisions used this business case use this thing produce this process. It's more about how do you get people to contribute and collaborate?” (d2).

“We ended up overspending massively and tying ourselves into content deals for three years, because we wanted to speed to market. So I mean, that that's, that's a big lesson” (d4)

“Transforming the culture, transforming the legacy way of doing things and legacy thinking, the legacy way of innovating into the new, I think, is that biggest challenge for any Telco” (d7).

“It's good to have that balance of new and old” (d12).

“We go to NBC Universal, because we've got a channel relationship with them and say to them, okay, well, when you see growth from advertising, where have you seen it come from? And they might say the number one thing is digital video” (d14).

“The market is in its infancy and it's kind of at a land-grab stage. So if we make a good move now and get in, then we've got a good opportunity to own those customers for a really really long time.” (d15).

“So there is much more of a difficulty in getting the right skills to build the new” [d16].

“You need new skills and you need a different mindset. But you don't need new human beings.” (d19).

“Think it's a slightly different approach. That's not about a mindset change, and, you know... that you have to balance upskilling your existing staff with bringing in the experts” (d19).

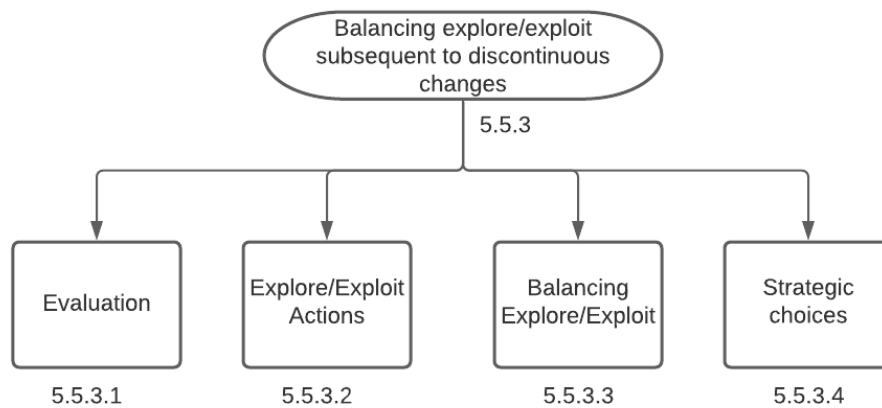
“The assets are to the people who've been doing what they've been doing for many years, if those people are given the ability to think differently,...we need more people in the bank to get that light bulb moment if you can couple that, with the knowledge of both after the many, many years of processing Fx payments, or structuring derivative products (d19).

### 5.5.3. Balancing Explore and Exploit subsequent to discontinuous changes

This is the third aspect of incumbent adaptation. Based on the sensing process and followed by incumbents' innovation, it was evident from the interviews that they follow a series of steps

to balancing explore and exploit actions. This section will detail the steps identified in the discussions with incumbents as shown in Figure 15.

**Figure 15 - Balancing explore and exploit initiatives**



#### 5.5.3.1. Evaluation Criteria

Incumbents managing Exploration of platform business models without conflicts and not competed against exploitation initiatives, and the same views can be found in participants quotes provided below:

“where initiatives up to at least 10 million Rands and below; those initiatives, this group of executives have got, you know, kind of the budget to approve your initiation, your incubation and proof of concept type initiative outside of the existing business unit areas because these new initiatives will die a slow death if they have to compete with resources within.” (d1)

Furthermore, traditional metrics such as balance sheet, profit and loss are not applied to platform business adaptation; “it's about what's the market opportunity, versus what what's the Earnings before Interest, Taxes, Dividend and Amortization (EBITDA)” (d7).

Further, while evaluating exploration ideas (platform-centric), a few participants wanted to keep the exploration around their existing customer journey. Generating new data is more important than generating new revenue; however, some follow purely financial metrics. A common perspective from most participants appears to be customer-centricity as opposed to a fascination for technological innovation, recognizing the need for exploration, and pivoting to the new. None of the participants mentioned skills availability or adaptation complexity (levels such as simple, medium, complex) as the evaluation criteria for adaptation. Instead,

they prefer working with start-ups or partners to jump-start initiatives which can be seen the participant responses provided below:

“Working with FinTech, these people basically start ideas from the little lab test ideas. So when they bring them to you, you are able to start this process of testing rather than the way technology was done in the past where you had the lab”. (d5)

“Interestingly, the board is also looking forward to exploration, thus, driving incumbents towards adaptation. One participant detailed, “shareholders are not going to continue to invest in linear business models, you know, because their returns in platform business models far outweigh” (d19).

“How do we believe we can play a role in solving for that particular client need?” (d1)

“When you do that, you're looking at it from a perspective of making the client's life better. Why because your focus is a deepening your client proposition, but secondly, also looking at your own economics.” (d5)

“We would prioritize our investments, according to NPV. And so ordinarily, if a project is NPV positive... would pursue it” (d7).

“We would like to own and keep our traditional customers, right. So we would like the journey to always start on one of our platforms in our environment for those customers” (d12).

“If we are able to create some kind of stickiness, for the customer, right? If we can prove that we can, we can grow it substantially in terms of volumes without necessarily it being profitable, and giving the right return” (d17).

“The first question is impact on the client. It could be that there is no benefit to us financially. But I say huge benefit in terms of client satisfaction, experience, engaging with our product” (d18).

“Sometimes getting more data on an existing customer is more valuable than revenue. So we look at the data play around a particular solution opportunity” (d19).

#### 5.5.3.1.1. Evaluation Process

The discussions with participants revealed that no formal, large-scale training was imparted to employees on how to present new ideas for business models, pitch-deck creation, business plans or other essential skills, thereby leaving employees to develop their own approaches. Some organizations expect “two simple page summary of what the initiative is about what the client problem that we are really solving for” (d1).

It is left to the individual employees to sell the explore idea to top management teams, as seen in the following responses of the participant:

“If I have an idea, so I prepare a what do you call a proposition document? that proposal document is presented to senior managers that we call it as let's say Gate One, and if it is compelling idea in the first presentation Within a short span of time, if everybody would get excited, it should go through to the next one” (d3)

“If that person is passionate, you will be able to figure out this because You will interrogate the strategic and remember if the project is not financially beneficial, it is a much bigger hard sell” (d5)

“as these opportunities are thrown at you, you validate them against your vision, or your strategic objectives” (d10)

“new ventures and looking at new innovations, and specifically platform top of models where, you know, revenues don't always appear in the first instance. But you need to build the business for some time, you need to get interactions taking place” (d11)

The mindset required in these platform exploration investments was clearly understand as it can be seen in one of the participants quoting:

“It's a commercial discussion and decision and do we have the appetite to throw large amounts of money at a problem for four years, five years and then not only reap the benefits?” (d12)

Other participants gave their criteria for evaluation process simple yet powerful as quoted below:

“how we go about it in the management, committee sessions, or on the boards, there's three questions that we normally get asked, or there are some. Okay, how does this relate to the client? The first question, how does this influence the revenue line? And will this significant significantly reduce the cost line?” [d18]

The evaluation process appears to be evolving as told by one of the participants said, “to me... it's quite a learning journey” [d20].

#### 5.5.3.2. Incumbent Adaptation: Explore/Exploit Actions

Two participants explained the exploration journey's potential as when, “... at any point in time, you have a lot of ideas that are just ideas, those that are in evaluation stage, those which are in testing stage and those which are in the implementation stage” (d5); and, “that ideation phase gets into what we call incubation, or couple of ideas are incubated as proof of concept for those that look like the something that could be done” (d1). Further added,

around screening in ideation, “you know, three, four weeks, that process less than 2 million rands type needs to be there, another coupler, four weeks, five weeks around, you know, proof of concept to so at least now we do have this innovation lifecycle that has, ideally how much time we should spend in each of the phase so that we're able to quickly get on to the scaling” (d1).

Another participant was disappointed with the amount and results of initiatives they had, suggesting to focus instead on a portfolio approach because,

“I think in terms of looking at the opportunities, we spread our wings too quick, right. And then we found ourselves in a situation where the penetration is like a mile wide and an inch deep, right? Whereas we're going into all the different platforms, but not getting that network effect” (d17).

Another participant advocated for partnership: “partner with smaller ISVs and start up-type entities and try and nurture them” (d15) through growth.

Failed explore opportunities were also openly discussed by one of the participants, thus, implying the incumbents knew when to retire a failed initiative. “We only realized what was wrong with it by the way or what was made available to the customers” (d3). Another participant called this recalibration a “strategic process,” saying “we've sort of realized, well,

actually, no, it's just another platform we use to sell our core content. That's another channel. and actually, it's probably a bit of a complimentary service to these two things” (d4).

Some participants shifted gears to change operating models, saying, “we want to transition into a platform business operating model” (d8).

The choice of explore actions is not based on elaborate evaluation processes, rather, it was someone’s bold decision. one participant is quoted saying, “if you don’t do this and start cannibalizing yourself, this is your new revenue stream. You’ve got to start eating up [product] if you’re going to survive in the long term, we’re going to do this and he forced [decision to execute exploration]it out” (d4).

At least three participants’ organizations invested in platforms as part of their exploration; “these are subsidiaries so there's no defined corporate venture capital fund” (d6), and “we partnered with a FinTech where we took a private equity position in them” (d9), and “it's all about leveraging the technology that announced us it's intricately involved in our authentication processes” (d8)

Exploit actions were largely involved with acquiring, partnering, and improving channels through digitization. As the focus is on incumbent adaptation subsequent to discontinuous changes expecting them to explore, exploit findings are not on elaborated here.

### 5.5.3.3. Balancing Explore/Exploit

Excessive exploration or exploitation is not advised, and the same was evident from the participants inputs represented in Table 12. The data was anonymized to maintain confidentiality. The percentage is justification that no incumbent was doing excessive exploration or exploitation—there was a balance of both.

**Table 12 - Resource allocation for explore vs exploit actions**

|                | Incumbent Entity Code |    |    |    |    |    |    |    |    |
|----------------|-----------------------|----|----|----|----|----|----|----|----|
| Resource split | E1                    | E2 | E3 | E4 | E5 | E6 | E7 | E8 | E9 |
|                |                       |    |    |    |    |    |    |    |    |
| Explore %      | 30                    | 50 | 20 | 20 | 20 | 30 | 10 | 10 | 60 |
| Exploit %      | 70                    | 50 | 80 | 80 | 80 | 70 | 90 | 90 | 40 |

Most of the participants have the opinion that the balance of explore/exploit percentage will change over time, emphasized by (d2,d7,d8,d12) furthermore, adding “and that's the creative tension .... So it's a very, very established process on how we do that. And, and it's transparent its spades fair, right” (d7). Except for one or two participants who felt that they were spending a lot on exploration, the rest were in a range of 10-20% and there was no excessive exploration.

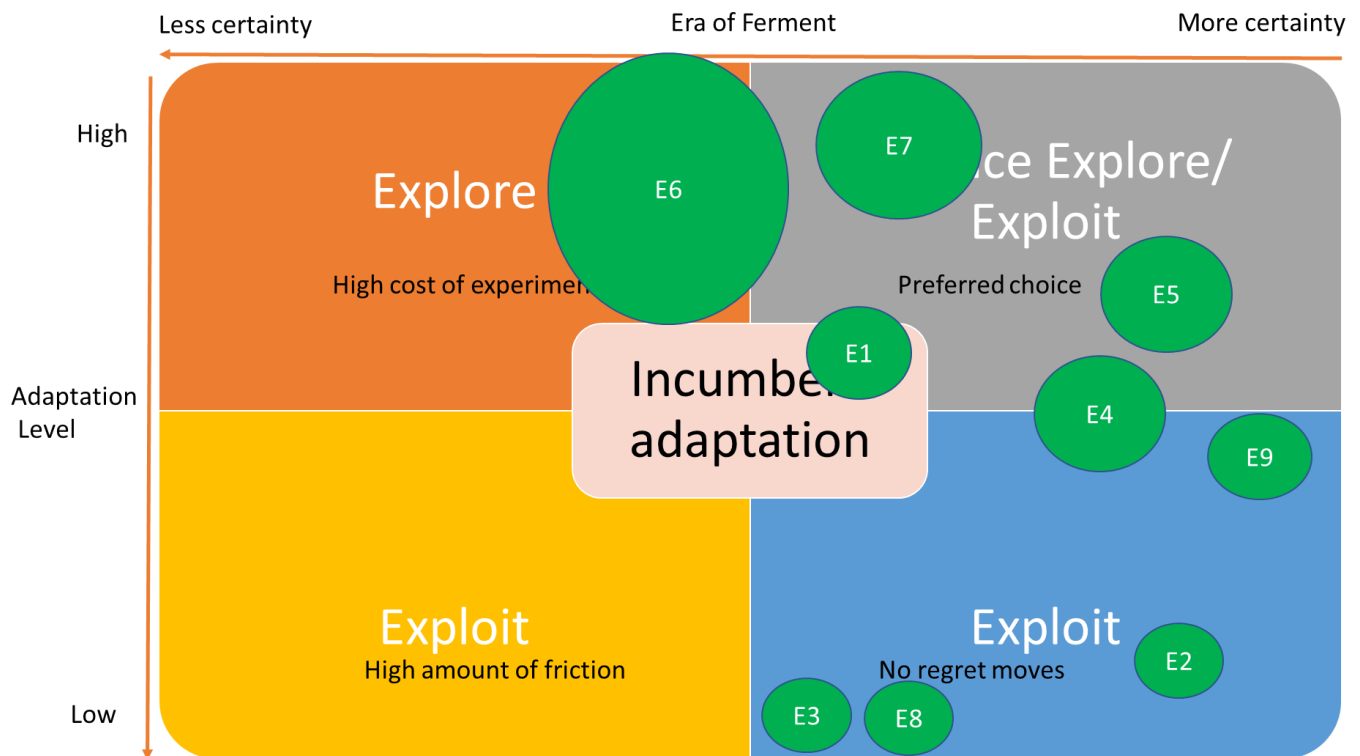
#### 5.5.3.4. Incumbent adaptation perspectives subsequent to discontinuous changes

A detailed list of steps followed to map the incumbents is described below (Figure 16) as per the quadrants.

1. Based on each participant interview, platform initiatives that were launched or going to be launched were listed.
2. Platform initiatives based on secondary sources, if any.
3. Incumbents' acquisitions and investments in platform spaces or non-platform spaces added.
4. Incumbents retired and explored initiatives were also considered if it fell into platform space/complementary space.
5. Digital initiatives construed by incumbents as platforms were classified into exploit spaces, and initiatives in non-core spaces were categorized as explore/exploit.
6. Numerous initiatives were linked to the level of adaptation.
7. Industries with highly regulated, high cost of entry, non-niche technologies were classified as “era of ferment less certain.”
8. Areas such as transactional platforms, innovation platform initiatives and initiatives in non-core space were mapped as “era of ferment more certain.”
9. The circle size represents the number of initiatives and amount of activity; larger sizes represent heavy investments.
10. Initiative details and their classification evaluation approaches are provided in the Appendix 4 (Table 21)



**Figure 16 - Incumbent Adaptation perspectives based on explore/exploit continuum**



Lower Quadrant:

Scenario 1: high amount of friction

Based on the discussions and awareness they possess on platform implications, none of the incumbents were facing friction for adaptation. In addition, leadership’s awareness and open mindset also deterred them from falling into this trap.

Scenario 2: no regret moves

Five out of nine incumbents were classified into this here; two of the incumbents (E2, E8) were involved in the “high cost of exploration,” and decided to stop the exploration. Incidentally, the exploration idea was common for both. Ideally, they should be falling into the upper quadrant, however, since they ceased exploration operations, they were not classified in upper quadrant. The participants felt that exploitation was mostly due to positioning, differentiation and high cost of platforms “why are we doing it? How are we differentiating ourselves? So there were questions asked like that, but it was never asked

at the right forums because people were too afraid there was a culture in the organization” (d2) and, according to a secondary source, the other incumbent (E8) left with \$130 MN debt, proving to be an expensive exploration. Incumbents (E3) also run similar platforms but successful, now moved from exploration to exploit mode, thus, falling into this zone even though it was not an easy decision for them. On the transition, a participant says, “back then was a massive loss-making business because you go inside content deals with all kinds of content houses with zero revenue...really a future-proofing decision” (d4). Another incumbent (E9) who was driven by their group company was involved in exploration at a group-level but mostly focused on their core business. Another incumbent (E4) assumed they obtained a platform; however, it was a digital channel centred around their core offering to small business; further, two more initiatives were outside of their core thus, falling between the lower and upper quadrant.

#### Upper Quadrant:

##### Scenario 3: high cost of experimentation

Only one Incumbent (E6) falls into this zone, where their heavy investments in lifestyle, e-commerce, acquisitions including mobile payments, Internet of Things (IoT), and others, secured them a place here. A participant from this organization said, “we’re going into all the different platforms, but not getting that network effect” (d17). The fact that they retained their huge customer base was not helping them standup a Unicorn (Platform companies with 1 Billion USD Valuation) yet, as expressed through “you have 100 million customers, that 20 million will take it up. Many, many of our platforms have proven not to be the case” (d17).

##### Scenario4: Balancing Explore/Exploit

Based on the type of initiatives and the structure with which they are taking up explore/exploit initiatives, three incumbents (E1, E7, E5) are in this zone. One of the participants involved in their organization’s revealed that exploration happened by chance, “there wasn’t a dedicated sponsor or champion” (d20). Incumbent organization E7 is bigger than the rest, the leadership commitment and the direct focus oriented the operation; one participant stated “our group CEO spoke...[about] how the bank and the organization is actually embarking on changing the business model into creating a platform business”(d1). Next is incumbent organization E5 who had managed the skills, culture and required environment to become successful in exploration; a participant remarked, “it is now more

around that the agile methodologies, their new ways of work is the approach of doing it rather than the amount of money that you spent” (d5).

#### 5.5.4. Incumbent Adaptation: Strategic choices

One of the critical aspects in incumbent adaptation is choosing between time taken to build a platform versus buying a platform versus participating in a platform. While we did not find any incumbent that was obsessed with building their own platform, participating in other platforms was not found either. Investing in start-ups, partnering with technology players, and buying platforms was more prominent thinking across incumbents, as communicated by the participant who said, “we want to try partner to reuse, then look at buying before we build” (d11), and “yeah, for me, it's more shifted to partnering versus build and run” (d2). Furthermore, we find that that the incumbents wanted to own the business rather than owning the platform. Participants echoed this notion, saying, “we want to create this businesses where we own the platform” (d1). Similarly, someone else offered that, “we want to own the platform, which, again, if you go back, think about our conditional access” (d4). One participant felt as a organization they just consume and don’t build tech as expressed in own words as “We consume technology. We don't build technology” (d13). Some incumbents had investments in startups to get a technology leverage and platform entry; a participant said, “we partnered with a FinTech where we took a private equity position in them and it's all about leveraging the technology that announced us it's intricately involved in our authentication processes” (d9). Strategic choices and participants responses shown in Table 13 below.

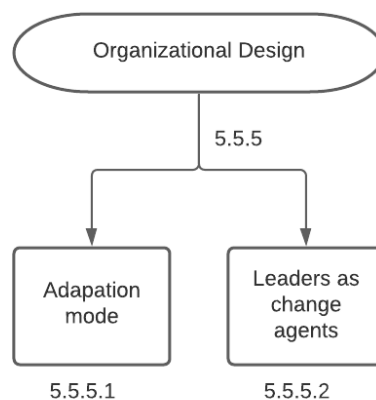
**Table 13 - Selected quotes on strategic choices**

| Choices | participant view  |
|---------|---|
| Build   | <p>“What we found is that typically, not going to put this historically, there was this concept of what is core to our business, and that you want to build and run yourself because then you reduce the dependency on an external party” (d2).</p> <p>“We thought it made a lot more sense to build this thing ourselves and [if] the numbers pan out, it'll pay itself off in however many years” (d4).</p> |
| Buy     | <p>“If there are already platforms that we could buy-into to shorten the time, definitely be able to” (d1).</p> <p>“I think that you can buy and bolt on, and it makes your life a lot easier” (d9).</p>  |

|        |   |
|--------|---|
|        | “We also wanted to own a platform...we bought a platform out of the Middle East” (d4).  |
| Belong | “We are looking obviously trying to embrace our partnerships, trying to build networks with people that have skills that potentially we don't” (d11).<br>“Our shift is more towards partnering and running... a revenue share model” (d2).<br>“If you bring your platform and we work together, this is potentially what we can bring in from a connection on your platform and in revenue share and all of that” (d2). |

### 5.5.5. Organizational Design

Organizational designs consist of aspects related to structure for adaptation and other strategic aspects. Researcher expected that this was quite intricate and the most important aspect of the adaptation. However, the findings proved that the incumbents were not overly sensitive about this aspect. It appeared that they were not fixated on one choice, rather, they were using one model first and then moving into another. In summary, it was found that the preferred mode of adaptation was structural separation, and the least preferred was sequential alternation. Beyond the organization design—structure, researcher found an important element of the adaptation: leadership support, which is crucial for successful incumbent adaptations. Because of this research’s scope, researcher did not delve into all five aspects of Galbrath’s organizational design.



#### 5.5.5.1. Incumbent Adaptation mode

- a) Sequential alternation

Using a model similar to sequential alternation, one of the participants said (d2), ,  
“let's run it as a project, a project base implementation. And the way we've done that  
also is. We said, what are the capabilities that we have within the organization?” and  
“what capabilities we mapped on a capability roadmap to say today based on our  
current technology?” (d2)

Although the participant was not explicit on their mode of adaptation stated,  
“you[organization] want the transformation to take place within your own organization,  
because you want to ready your people to enter the New World quite confidently”  
(d14).

#### b) Structural separation

A participant who is responsible for running a separate strategic exploration unit  
believes in structural separation, saying that they “think a separate organization works  
best... then it doesn't have to operate within the paradigm of a telco” (d15). However,  
this incumbent does not operate as a completely separate entity, rather, it runs under  
an umbrella with a small team.

There was more acceptance to this mode of adaptation; “more and more separate type  
projects outside current businesses seem to be, I think, the future” (d1). Another  
participant says that the rationale behind this thinking is backed by the perception that  
“there seems to be a high chance of success, the more they are stand-alone so that  
we also can be able to, they can be able to work with them even competition” (d1).

Some participants interpreted the structural separation as “spin[ning] them off in  
separate departments, it doesn't necessarily have to be spin-off in terms of a separate  
company?” (d17). However, they had significant success adopting structural  
separation, evidenced by the participant who said, “I mean, it's a very massive  
business, now a financial services business, it was basically carved out as a separate  
entity” (d17)

Structural separation proposed by one participant (d3) stating “I would still  
recommend my company to create synergy and efficiency, spin off a new company,  
[that] will take care of the brand new thinking and brand new modeling, and then

execute... a more agile approach to a new concept, not... a run-of-the-mill old fashioned way of doing". (d3)

This coincides with his colleagues idea that, "the bigger the business may be, it makes a lot more sense to carve these things out and run it as an innovation hub, where you actually drive focus and key objectives there as opposed to run it within you your core business, but on a smaller size business, If that may not be necessary. (d10)

A participant who had a failed experience in structural separation still personally believes in this mode of adaptation, saying, "the only way this can be successful is if it run separately from the main organization" (d20). The rationale behind this thinking was emanating from "the classic creative destruction in which the one consumes the other" (d20).

Another participant believes in this mode of adaptation for building a portfolio of ideas and investments, stating, "you should actually deploy corporate venture capital as a means to invest in external, smaller R&D driven technology start-ups in our space" (d6). There was a reason behind this, again linked to incumbent inefficiencies such as "... burdening them with a bureaucracy and the reporting requirements and the politicized environment and the incompetence of corporate" (d6)

Another participant who was bold in their platform adaptation gave an approach much closer to structural separation but with strategic links; they said, "we try to do it inside totally within the business units of the organization... but almost separate business units that are doing this" (d11).

Two participants with failed structural separation experiences did not advise it anymore, saying that a "new business unit to focus on something that if you don't get buying from your stakeholders... it's not going to be successful" (d2); and it was run separately in a totally different location; everybody even knew where they were, what they were doing. But its aim was to destroy the old so that we can move into the new, and that did not have much success. (d20)

Another participant added, " you cannot go and create a different business outside of the main organization because you're adding to the complexity of what you need to solve for" (d5).

One of the participants were happy running a unit using structural separation. They said, "what worked for us is always giving big projects priority So, they say it needs its own executive, (companyZ) in the beginning, own executive reporting to the CEO. It's got visibility at the board. It's got funding. So, if the CEO fails, we replace him and get someone else". (d4)

However, the incumbent had one single Executive that manages both structures of exploitation and exploration.

Another participant's organization leverages structural separation, and it took an equity position in the start-up to get the technology know-how and capability for exploitation and exploration; "we continue to leverage the functionality as a standalone business, we pay a click charge. And that's the nature of the relationship" (d9).

One of the participants believes some of the exploration needs cooption with their competition. To encourage collaboration, he subscribes to this mode of adaptation, saying, some ideas will probably work better outside the bank. And some ideas need the ability for you to combine competitor capability with yours. And those ideas, we need to have a mechanism to spin those things out of the bank, the bank must have a shareholding in it, but it must be far enough away for the bank that it's not seen as (ABC) Bank, where it doesn't make sense. (d19)

c) Behavioural integration (contextual)

One of the participants tried to experiment with this option. Happy with the results, they said, [this] is kind of a hybrid model? So the expertise that we have in it? Yeah, it really is competency-based because it helps us to do that cross skilling? We don't, you'll be surprised to know that a lot of our existing members who have been in the world of linear have switched beautifully into the world of digital. (d13)

A participant who runs a lean organization was using this mode of adaptation said, "the people work on one legacy, and then they've got a part of their time to work on the new, for argument's sake" (d18).

Another participant expressed similar views but did not use the same terms, attesting that it is not a separate entity that we engage with. it's someone who's sitting next to you. And they've got that focus of, 'okay, how can we disrupt this and engaging with the guys for that,' embed, that thinking and those solutions and skills much more quicker, rather than if you, you're throwing it over the fence and saying" (d16)

Further views:

One of the participants felt that it is impossible to stick to a single model. He responded to the interviewer by saying, "your question is binary, and I'm trying to say to you, it's actually not, it shouldn't be binary, it should be kind of take the best of both worlds and try to find a mix in between where you are providing oversight, but you're not being too draconian". (d7)

Similarly, another participant said, "you are able to do that if you're running it outside our organization. So some of these initiatives will possibly be run within" (d1) Further, the same participant had reservations about incumbent routines beyond structures; he said, so whether [we execute] in a project type setting, whether it's[we execute] in a separate type environment. However, I must be quick to say, most of our traditional incumbent ways of doing, unfortunately, a number of them don't lend themselves in to that type of a user experience (d1).

A participant who had a devastating experience with structural separation now follows a modified approach: introduc[ing] new services, new products, and that's coordinated simply through the 'ABCD' (function name anonymized) specifically to avoid that lack of buy in lack of support because you can't, in my experience, have it all sit in technology and think technology will be the era in the end, you need to have commercial, you need to have finance, you need to have legal everybody needs to work towards the same goal versus trying to bring in something fresh to disrupt the market, but you can't execute on it. (d2)

The incumbents appear baffled with their employee structures. One participant said , so you need to find a mechanism of being able to share and introduce all this matrix systems where, you know, I can relate to you as my first line of authority from a project perspective, even though you don't sign off my leave form (d5)



While digital platform companies had gone crowd sourced, co-sourced, contract based, demand based employment styles The same participant mentioned their fulfilment model as “So, you have things which are project driven or product driven. And then you have those who are more on the front end in terms of the servicing” (d5).

A summary of the participants’ views on adaptation mode is provided below in Table 14. It is interesting to note that one of the participant’s say that a business’s size determines the mode of adaptation (d10).

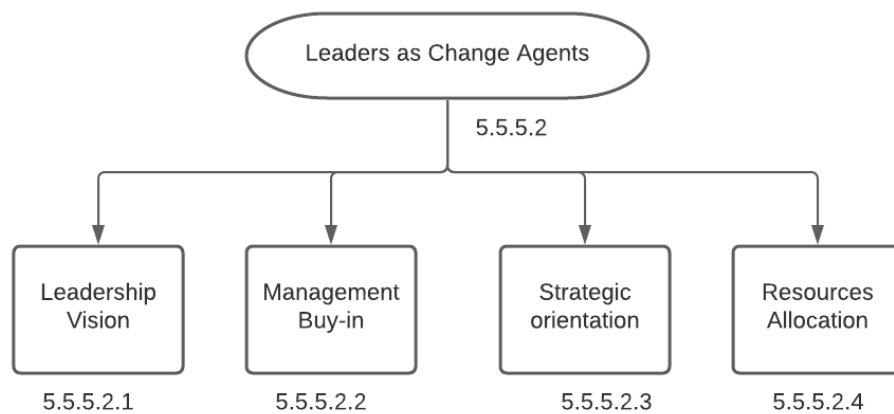
**Table 14 - Incumbent choices of adaptation mode**

| Entity Code | Participant Code | Sequential alternation | Structural separation | Contextual/B ehavioural Integration | Hybrid (Invest/Acquisition/M&A) | Key comments  |
|-------------|------------------|------------------------|-----------------------|-------------------------------------|---------------------------------|---|
| E1          | d20              |                        | X                     |                                     |                                 | Had failed experience with Structural separation                |
| E2          | d13              |                        |                       | X                                   |                                 |   |
| E2          | d14              | X                      |                       |                                     |                                 | thinks the development to happen in existing organization       |
| E2          | d4               |                        | X                     |                                     |                                 | moves between Structural separation and sequential alternation  |
| E3          | d10              |                        | X                     |                                     |                                 | size of the business determines                                 |
| E3          | d2               | X                      |                       |                                     |                                 |   |
| E3          | d3               |                        | X                     |                                     |                                 |   |
| E4          | d12              |                        |                       |                                     |                                 |   |
| E4          | d8               |                        |                       |                                     |                                 |   |
| E5          | d5               |                        |                       |                                     |                                 | does not subscribe to structural separation due to complexities |
| E5          | d9               |                        | X                     |                                     | X                               |   |
| E6          | d17              |                        | X                     |                                     | X                               |   |
| E6          | d6               |                        | X                     |                                     |                                 |   |
| E6          | d7               |                        |                       |                                     | X                               | belives one model does not work                                 |
| E7          | d1               |                        | X                     |                                     |                                 |   |
| E7          | d11              |                        | X                     |                                     |                                 |   |
| E7          | d19              |                        | X                     |                                     |                                 |   |
| E8          | d15              |                        | X                     |                                     |                                 |   |
| E9          | d16              |                        |                       | X                                   |                                 |   |
| E9          | d18              |                        |                       | X                                   |                                 |   |

### 5.5.5.2. Incumbent Adaptation: Leadership acting as ‘change agents’

This theme emerged as an important element in the incumbent adaptation, and accordingly, Researcher had to update the literature to align with this theme’s emergence. Incumbent adaptations would become smooth, frictionless, positive, and well managed creative tensions, objective enough to make it meaningful. Many participants gave insights into how their leadership drives adaptation, awareness, market trends, market guidance, allocating the required resources, and running multiple initiatives instead of a single idea. Following section discuss the findings across four major categories, shown below in Figure 17:

**Figure 17 - Leaders as change agents**



#### 5.5.5.2.1. Leadership Vision

Participants on numerous occasions mentioned board and executive leadership, especially CEOs, role and decisions, and there are a few notable aspects of the leadership vision and decision in the incumbent adaptation that leads to successfully explore/exploit. Without this vision, it might be a challenging for the mid- and senior-level management to convince the organization’s top leadership. Some of the incumbents had well defined vision from CEO or Board for exploration/adaptation of platform business models. One participant said, “our group CEO spoke about last week as early as last week how the bank and the organization in is actually embarking on changing the business model into creating a platform business “(d1); and his colleague affirms that their “CEO has come out and said we’re going to become a services organization on the continent, not a financial services. (d19)

Similarly, a key exploration decision was suppressed by one of the incumbent's key executives; the participant said, "[Director] came back and said to us, listen, he[!] doesn't care. We are doing, go and figure out the launch plan. And the money's available. We will launch a (XYZ) business" (d4). The same participant also remembered of a time when he was instructed as,

"if you don't do this and start cannibalizing yourself, this is your new revenue stream. You've got to start eating up (XYZ business) if you're going to survive in the long term, we're going to do this and he forced it out". (d4)

When the Board/Chairman's vision is so clear that it is just a matter of execution, the team understands they can be creative, risk-averse, and outcome driven. There was another example from a participant about leadership vision and the exploration mandate coming from the CEO; they said,

"what's interesting is that on e-commerce, this was something that effectively the CEO wanted us to, to look into... it then went through to the Board of Directors where because we required quite substantial investment to get into this particular space, we put a solution forward, and then they will sign off at a board level to say we should go ahead and implement" (d17).

Another participant was confident about the positivity his board and executives received on their adaptation, stating, "we have a board and a group execo, who is very receptive to and you will see it how we articulate our vision and act" (d9). Similarly, another participant perceives leadership's eagerness, saying, "I think there is an urgency from our leadership, I think they understand that the world has moved and continues to move" (d12)

CEO/Boards key role was further highlighted by a participant who said "there is/was quite significant support from the top and we've just worked [with] our CEO" (d20).

More than six incumbents spoke about having a direct mandate from their firm's CEO, chairman or board, these incumbents are significant players capable of making making investments significant enough to that shape the entire market dynamics. This is certainly a great direction in incumbent adaptation for platform business models or technological adaptation.

However, it is not just a top down approach; one participant mused; “you need a top down vision and target-setting and aspirations to make sure that you built in a complete amount of stretch. And then you need the subject matter experts from the bottom up that bold you know, what, what we know our clients are looking for from us”. (d9)

This thinking coincides with another participant who said, “you can't have only the ideas coming from the top you need, you need other people to say we are part of it, you know, so you, you want to create the culture of ownership and belonging” (d14).

One of the participants who leads the adaption had ambition laid out as “has to get there at the vision, that's the group executive of planning, is that in five years' time, we should be referred to the same way Ping An is referred to in China” (d19).

#### 5.5.5.2.2. Management buy-in

There appears to be a dedicated ownership whose role it is to explore. One person offered, “hence the establishment of the separate senior executives who have the ability to say even though we didn't have the budget, this looks good.”(d1)

When the right people are involved in decision making, and with the right attention, a participant say, “if something is gonna take up significant amount of resources, then we make sure that that buy-in is received at Exco level so it becomes a priority” (d2)

One of the participants had lot of new leadership, but they made sure the objective where made aware to them so that there was no friction; “everybody on that team has bought into where we are and where we need to go. So no, there is definitely buy-in from an expert level” (d2).

Absolute alignment at the leadership level was one thing the participants emphasized; “the drive or the push it gets from your Exco, from your CEO, from your Chairman from your from the board. And so, the visibility, the transparency and the level of support it gets” (d4).

Another participant went above board and sought shareholder-level alignment, and said, “shareholders are not going to continue to invest in linear business models, you know, because their returns in platform business models far outweigh” (d19).

A participant who was a CXO felt strongly about ownership, saying, “I think the transformation needs to be owned by the leadership of the existing business” (d14).

According to another participant, flexibility is necessary for balancing opportunities; they said, “as we go to amend our strategies, and test them and pivot as required” (d9)

It appears that the industry was looking for examples beyond GAFA (Google, Amazon, Facebook, Apple) who did it on the African continent with incumbent backgrounds; “if you think about any of these traditional industries. There's a lot of people who've given intention, but none of them have yet really proven that this model at scale works”(d11)

Employee engagement, Risk tolerance, and market orientation aspects get resolved faster when there was management buy-in. And in that context, one of the CXOs who acts as a change leader says, “I have to constantly mention it in forums, in staff meetings, in leadership sessions, in strategy discussions, it has to be the first point on the agenda to say, how are we doing against transforming our business where do we need to think about next?”(d14)

#### 5.5.5.2.3. Strategic orientation/guidance

When the leadership clearly understands explore versus exploitation and how platforms should cannibalize the existing business, it makes the entire organization to be bold, innovative and risk tolerant. A similar thought was expressed by a participant who said, “then ultimately, the kind of cannibalizing a loan book of the traditional bank by generating revenue from being a platform and provide” (d1).

One of the participants, who was also CFO, mentioned a strategic investment they made in taking an equity position “if you take something like the security feature the Unstructured supplementary service data (USSD), most banks are now using it. It is something that was discovered by (xyz) bank from some FinTech” (d5). Such moves would orient the entire organization towards searching for innovative opportunities that align to organizations strategy.

A participant built a platform that serves both their client and non-client base, thus, orienting their thinking and strategically positioning their platforms; “it's an offering to our client base to

give them solutions that we believe are new age and relevance”(d9). Furthermore, it cannot be owned by one person, rather it requires holistic buy-in process as per another participant who said, “if your people understand the values, vision, and objectives of the business, then they can be able to identify opportunities to innovate in order to help the business achieve its goals” (d10).

#### 5.5.5.2.4. Resource allocation

There appears to be a clear allocation of funds for exploration. As explained by a participant, “the budget really sits outside the normal day to day so that these initiatives are given an opportunity” (d1).

Often exploration is pitted against exploitation, and leadership has to choose between them. However, one of the incumbents was able to create a culture where the leadership supported exploration, and found the necessary funds. The participant said, “these re ias able to then say, even though there was no budget... we can be able to find resources outside their current day-to-day operations so that we find this particular idea” (d1).

Incumbents appear to understand the difference between the platform versus pipeline business evaluation approach. This was demonstrated by a participant who said that “it might not be as tangible as it would in a traditional business case, but it's worth investing” (d1).

An incumbent who was pursuing an explore opportunity spoke about how their initiative was funded;

it's really managed from the view that it's a softer management limited that way, it's not hard metrics. So the board, etcetera, have taken the view that we are going to go at this for X amount of period and put in the requisite cash. (d15)

Though the organization was not trained in evaluating these platform opportunities, the classical friction statements were not to be seen in participants statement, rather, the discussions found balanced.

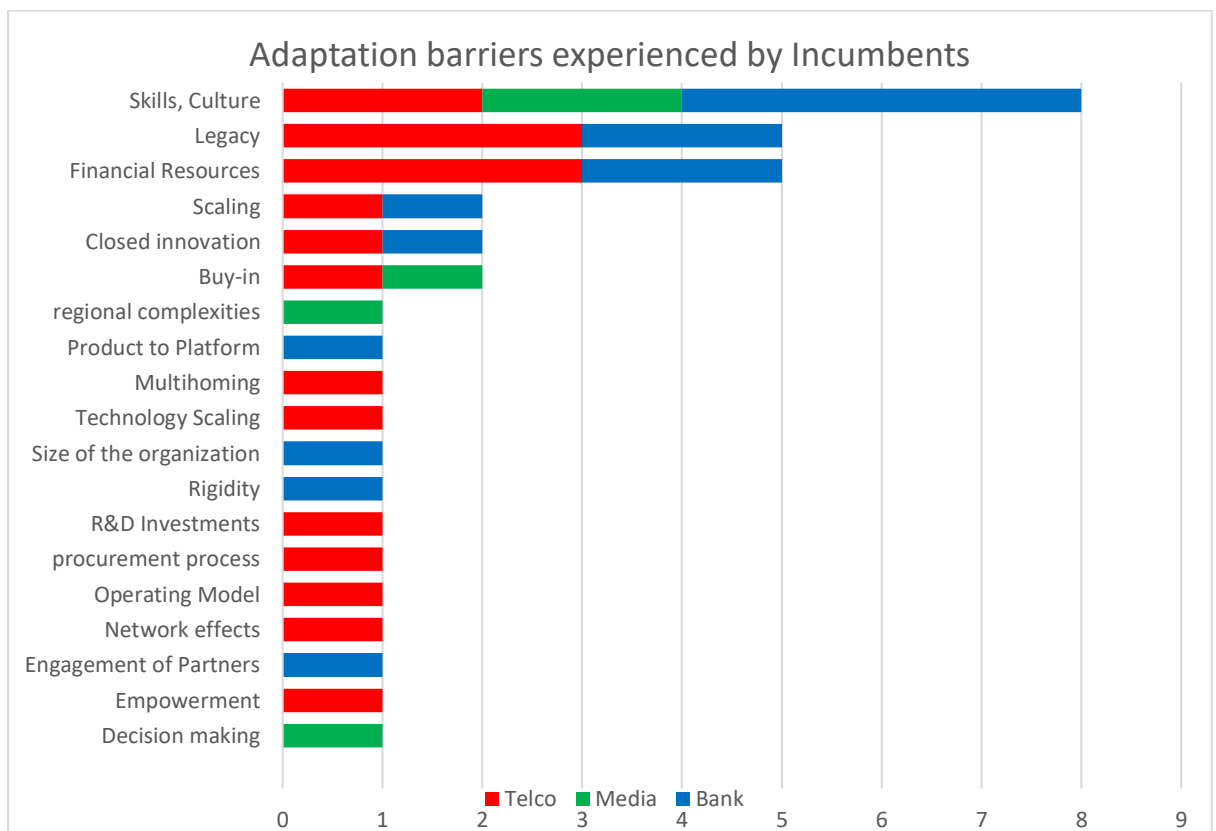
### 5.5.6. Incumbent adaptation: Barriers and Enablers

It was challenging for incumbents to maintain their business priorities while managing their ambitions for exploration. This was not the research’s explicit scope, but since almost all of the participants were busy with one or more platforms in ideation or scaling, this researcher happened to find many insights into their challenges during platform exploration. The challenges were expressed during the participant interviews, and a summary of those discussions are captured below.

#### 5.5.6.1. Barriers

All of the quotes were analysed for barriers perceived by incumbents. The incumbents mentioned multiple blockers, and the table below offers a summary of the findings. The barriers mentioned only one by incumbent may be specific to the organization, while there are approximately six blockers expressed by incumbents across industries. Each of the blocking aspects that were mentioned more than once are discussed further below. It can be observed from the chart (Figure 18) that the barriers to adaptation are almost unique to the respective industries except skills and culture, where all the incumbent industries face the challenge.

**Figure 18 – Industry wise incumbent barriers to adaptation**





**Table 15 - Barriers to Incumbent adaptation**

|   |                          | Telco             |    |     |     |    |    | Media |     |     | Banking |    |    |     |     |     |     |     |    |    |       |   |
|---|--------------------------|-------------------|----|-----|-----|----|----|-------|-----|-----|---------|----|----|-----|-----|-----|-----|-----|----|----|-------|---|
|   |                          | Entity Codes      |    |     |     |    |    |       |     |     |         |    |    |     |     |     |     |     |    |    |       |   |
|   |                          | E3                | E3 | E3  | E4  | E6 | E4 | E8    | E6  | E2  | E2      | E2 | E5 | E9  | E7  | E9  | E7  | E1  | E7 | E5 |       |   |
|   |                          | Participant codes |    |     |     |    |    |       |     |     |         |    |    |     |     |     |     |     |    |    |       |   |
| # | Barriers                 | p2                | p3 | p10 | p12 | p6 | p8 | p15   | p17 | p13 | p14     | p4 | p9 | p16 | p11 | p18 | p19 | p20 | p1 | p5 | Total |   |
| a | Decision making          |                   |    |     |     |    |    |       |     |     |         | 1  |    |     |     |     |     |     |    |    | 1     |   |
| b | Empowerment              |                   |    |     |     | 1  |    |       |     |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| c | Engagement of Partners   |                   |    |     |     |    |    |       |     |     |         |    |    |     |     | 1   |     |     |    |    | 1     |   |
| d | Network effects          |                   |    |     |     |    |    |       | 1   |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| e | Operating Model          |                   |    |     |     |    | 1  |       |     |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| f | procurement process      |                   |    |     |     |    | 1  |       |     |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| g | R&D Investments          |                   |    |     |     | 1  |    |       |     |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| h | Rigidity                 |                   |    |     |     |    |    |       |     |     |         |    |    |     |     |     |     |     | 1  |    | 1     |   |
| i | Size of the organization |                   |    |     |     |    |    |       |     |     |         |    |    |     |     |     | 1   |     |    |    | 1     |   |
| j | Technology Scaling       |                   |    |     |     |    |    |       | 1   |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| m | Multihoming              |                   |    | 1   |     |    |    |       |     |     |         |    |    |     |     |     |     |     |    |    | 1     |   |
| n | Product to Platform      |                   |    |     |     |    |    |       |     |     |         |    |    |     | 1   |     |     |     |    |    | 1     |   |
| o | regional complexities    |                   |    |     |     |    |    |       |     |     |         | 1  |    |     |     |     |     |     |    |    | 1     |   |
| k | Buy-in                   | 1                 |    |     |     |    |    |       |     |     | 1       |    |    |     |     |     |     |     |    |    | 2     |   |
| l | Closed innovation        |                   |    |     |     | 1  |    |       |     |     |         |    |    |     |     |     |     |     |    | 1  | 2     |   |
| p | Scaling                  |                   |    |     |     |    | 1  |       |     |     |         |    |    |     | 1   |     |     |     |    |    | 2     |   |
| q | Financial Resources      | 1                 | 1  |     |     |    |    |       | 1   |     |         |    |    | 1   |     |     |     |     | 1  |    | 5     |   |
| r | Legacy                   |                   |    |     | 1   | 1  |    |       | 1   |     |         |    |    | 1   |     |     |     |     |    | 1  | 5     |   |
| s | Skills, Culture          |                   |    |     | 1   |    |    | 1     |     | 1   | 1       |    | 1  |     |     |     |     |     | 1  | 1  | 1     | 8 |
|   | Grand Total              | 2                 | 1  | 1   | 2   | 4  | 3  | 1     | 4   | 1   | 2       | 2  | 1  | 2   | 2   | 1   | 1   | 2   | 4  | 1  | 37    |   |

**Buy-in:**

Despite the evidence researcher saw in the leadership vision, a few of the incumbents faced challenges obtaining buy-in from their teams. A participant said, “the biggest challenge, then, is to motivate to the broader business to say, help me invest in resources that can take it forward” (d14). Similarly, someone else offered:

my biggest challenge is again, it's on the softer side of it is to get the, the buy in from the human side of it is to say this is where we are because you've got people that spent time in Telco for the last 20–30 years. And that's what they've been doing, and they are stuck on it. (d2)

**Closed innovation:**

Innovation at scale, transformation using legacy knowledge, and failing to have a catalyst appears to be a challenge too; “these are initiatives that are largely generated from internal teams and internal colleagues. Part of what we've learned [is kind of like seen] is that it's probably a bit unfair to try to ten bankers into entrepreneur” and “we have entire lines of

business who have stopped using their brain and their own ability to innovate for anything because they outsourced their brain to the subsidiaries” (d6).

#### Scaling:

Understating how to scale or how to achieve real network effects, was expressed by one participant who said, “how will success look like so say, or our market base, for instance, it would be the number of SMEs and customers in the platform, the market share; share of wallet, the digital growth, new revenue stream contribution” (d8). Similarly, someone else expressed that by “building scale, going to be about building on both sides of the market, making sure we have enough solutions that have value and to build in and that of our customers who see value in the marketplace” (d11).

#### Financials Resources:

At least five participants had concerns around managing resources, be at finances or people, were expressed as a barrier for the incumbents for a smooth adaptation. Some are under extreme pressure; one participant said, “we are able to come out of our liable liability position. Effectively speaking, so it's like a bottleneck” (d3). Another participant expressed that the problem was about confidence in where to invest; they queried, “how do you balance creating this thing against some of the other initiatives in the bank? Because to build this thing out, you won't see the financial rewards immediately” (d16). Launching a portfolio of services seems difficult: “when you get into too much, too many new lines of businesses, especially with lifestyle services, and those kind of things, a lot of them if you want to compete, you will need an inordinate amount of Capex” (d17). It was the risk-averse culture that was impacting innovation process negatively for some incumbents which was expressed below,

“it's just purely capital, and at the end of the day the bank needs to deliver returnable cost of equity, across the double-digit cost of equities, it's not easy to achieve and with that driver in mind, a conservative approach plays to it better” (d20).

Lastly, the investment capability against the peers also downplayed; “we don't have the ability to invest as much as the likes of the bigger players” (d2), the impact of which compounded onto external partners, who choose bigger, instead of smaller players for partnerships and joint ventures.

## Legacy:

“today's platform is tomorrow's legacy” [d16] was appropriate thinking, due to the fact that neither the incumbents or platforms cannot get away from legacy, be it a code base, services, or integrations. However, that is not the issue other participants perceive. Someone else offered that “it might be legacy thinking or having a thinking about this businesses and purely the way we've thought about businesses in the past” (d1). This coincides with another participant who said, “we do understand that there is inertia within the company... and there's a lot of legacy mindsets, never mind legacy issues or legacy technology, it's really sometimes about legacy mindsets” (d17). Furthermore, incumbents' investments (legacy assets) definitely have a bearing on legacy thinking as expressed by another incumbent, who said “you have national, regional, telcos, those that have invested heavily in infrastructure, and they keep having to do so. And they have negative net cash positions” (d6).

Not having the right knowledge about legacy appears to be a problem for another participant, whose view is that “if you haven't got the skills and the knowledge base anymore in your organization to be able to interpret that legacy to the new” (d12). In conclusion, one participant believed that you cannot exorcise the legacy saying, “it's not like you can just get rid of that system and create your own” (d16).

## Skills and Culture:

This was the most talked-about element in the interviews, and the only one that at least two participants from each industry expressed a serious concern about. One participant felt that people were not driven enough to make the adaptation their own because their remunerations are not linked to adaptation. The participant said, “I think people, individuals are the biggest barriers. I think people prioritize themselves and their bonuses ahead of something bigger like that” (d20). All the incumbents have big employee head counts, and upskilling is a magnanimous task; someone else offered, “you get stuck with the older ways of doing things that get people to change so that they can relearn and do things differently” (d5). Similarly, for another participant, unlearning as the bigger challenge; they say that a “big challenge that Telco's face [is] you've got people who have learned a certain way of thinking, and for them to unlearn that is a big, big challenge” (d15). While some incumbents think about upskilling and reskilling, another incumbent perceives shortage of requisite skills and wants to protect legacy skills too, which is a unique to Africa/South Africa. The participant said, “definitely... you have a shortage of skills... you will also try to protect people from keeping their jobs” [d14].

Another participant pointed to culture as the barrier, saying that “the biggest challenge would be a culture shift [of] the organization” (d1). While the incumbents may be stressed, platform business too, sit with similar challenges, however, the trick lies in how quickly the incumbents start to get into solutions and start thinking about new operating models that platforms use. A missing key player was mentioned by a participant, who said, “but the traditional HR function needs to evolve at a tremendously rapid rate to keep up with where technology is going” (d9).

#### 5.5.6.2. Enablers

While incumbents face enormous barriers to adaptation, there were glimpses of victory and few enabling behaviours found in the discussions. For example, one person said, “we're fortunate in that we can make these decisions because we have a very strong balance sheet” (d4). Regarding overcoming limitations, someone else offered, “we have to do differently than what the bigger players are doing” (d2). Another participant told us that they make sure the adaptation ideas supported: “[the] steering committee is really trying to make sure that we don't assess/ use traditional assessment” (d1). Relentless and resilient behaviour enables incumbents, despite their failed adaption efforts. This is evidenced by a participant who said, “ [the] next time when we do it... we do it better” (d2). Right market orientation was also expressed by another participant, who said that “creating [a] specific focus and [putting] specific attention on areas that have the mandate and opportunity to think beyond today” (d11).

#### 5.5.7. Summary of findings of Research Question 2

The second research question's findings provide detailed insights into how the incumbents manage their adaptation subsequent to discontinuous changes. The findings summarized (Table 16) below provides preferences of incumbents along each aspect of the adaptation.

**Table 16 - Summary findings Research question2**

| #     | Theme                         | Key findings  |
|-------|-------------------------------|---|
| 5.4.1 | Antecedents                   | <p>The telecommunications and banking industries' adaptations depend on regulations such as reporting, rules, and constraints about how they launch products and services. Alternately, in media, participants did not convey much to that effect. A huge convergence play is already in motion, blurring the boundaries between banks, telecommunications, media and retail. Competition from global and local platforms and incumbents is also driving adaptation. Unfortunately, none of the incumbents have clear plans to overcome geographic boundaries, however, it is not easy for the planforms to overcome this either.</p> |
| 5.4.2 | Organization Learning         | <p>Managing innovation at scale was understood well, but not effectively, by all of the incumbents. Further, the adaptation level was high at telecommunications compared to banks. However, some early wins can be seen for banks. The media industry is mitigating competition through local content, and it interesting to note that all the telecommunications were fascinated with streaming services; some entered and exited, and others are proceeding with their market position.</p>  |
| 5.4.3 | Balancing Explore and Exploit | <p>When compared with media, banks and telecommunications are running maximum explorative initiatives. Based on the resource allocation done by the incumbents, there is no evidence of excessive exploration. One incumbent, who had maximum initiatives based its variety of areas, investments, and acquisitions, were classified under "high cost of exploring." Banking Incumbents had balanced explore/exploit initiatives, which is the "preferred choice for adaptation," while the rest of the incumbents were largely engaged in exploiting due to failed exploration or planning their moves to explore.</p>               |

|       |  |  |
|-------|--|--|
| 5.4.4 | Implement Adaptation<br>Strategic choices – Build vs Buy | There is no indication that incumbents are keen to build platforms, rather, the ambition is to own the customer close to their core so it might become a weakness later. All incumbents were exploring partnerships, strategic investments, and incubation as choices for implementation.  |
| 5.4.5 | Organizational Design-<br>Adaptation mode                | Structural separation is the most preferred choice, although none of the incumbents had actively run it, except for two who had experience running separate entities for exploration. Further, incumbents would like to grow the organization inside rather than outside, and some believe that this cannot be a binary choice. Instead, the adaptation mode will keep changing based on the initiative's life cycle.  |
| 5.4.6 | Barriers/Enablers  | Employee engagement, an innovation mindset, scaling of adopted platforms, securing resources such as skills and financial, managing legacy systems, legacy thinking, acquiring new and managing old skills, and nurturing an innovative culture appears to be the barriers for incumbent adaptation. However, leadership vision, strategic direction, necessary attention, resilience, risk tolerance, and dedicated resources support incumbent adaptation subsequent to discontinuous changes introduced by platforms. |

## 5.6. Conclusion

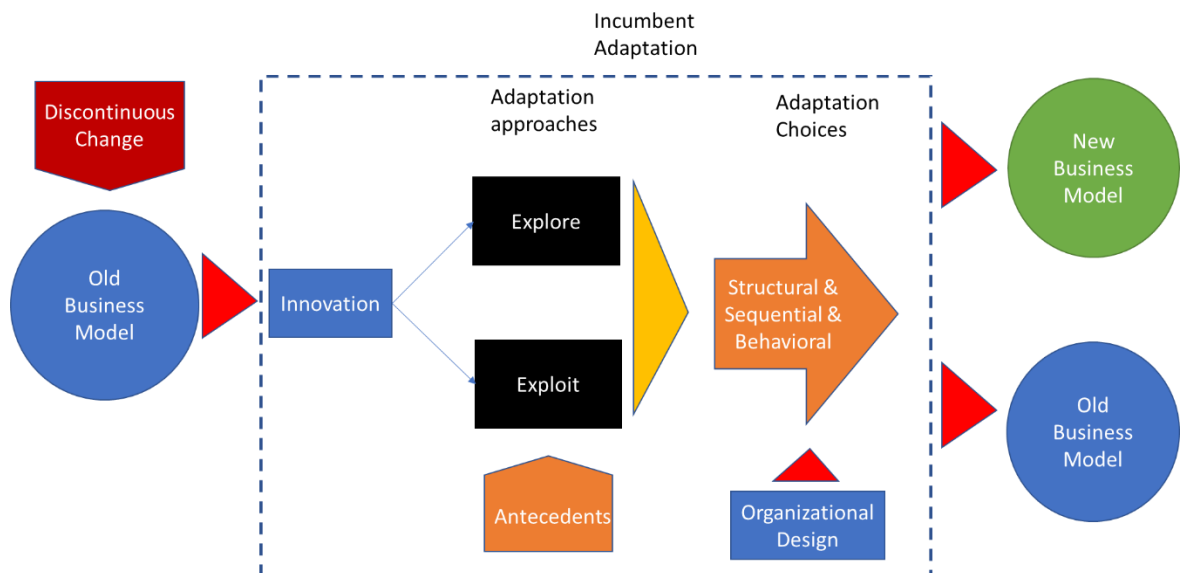
In this chapter, the research findings from the two research questions posted in Chapter 3. The findings suggest that the incumbent's adaptation is not only dependent on discontinuous changes, rather, it is the antecedents and organizational learning that drives innovation. Interestingly, most of the participants were already in some form of the platform business and had been for two to three years prior to our study. Leadership was managing the friction well, there was board support for the exploration, and no one was exploring

excessively, instead, the interviews determined that there were balanced explore and exploit efforts. However, there were barriers to adaptation, missing portfolio thinking, innovation was not to scale, and no attachment to the core business, any of which may complicate incumbents' adaption success.

The first question's results provided insight into incumbents' sense-making process of discontinuous changes and how they perceive the platform businesses' implications. Then, the second questions' findings revealed how they manage the adaptation process subsequent to discontinuous changes. The most important finding is that the incumbents try to balance both business models—pipeline and platform—until the platform business models mature in their respective industries. Numerous findings will help managers plan their adaptation using concepts and learnings from this collective intelligence consisting of frameworks, metrics, and models.

The following chapter provides a discussion of the two findings with references to the theory. The research scope was updated with the elements based on the research findings.

**Figure 19 - Research scope based on findings**



## 6. DISCUSSION OF RESULTS/FINDINGS

### 6.1. Introduction

Here, data analysis findings are summarized in “Appendix 5” as themes. According to the sequence of the research questions posed, the discussion ensues and collectively provides insights into incumbent adaptation subsequent to discontinuous changes.

Results are interpreted, compared, and contrasted to the existing literature to expand the body of knowledge on incumbent adaptation subsequent to discontinuous changes, including adaptation approaches, choices, organization design aspects.

### 6.2. Discussion: Research Question 1

Research Question 1 :  
How does discontinuous changes impact incumbents?

The first research question explored incumbents’ perceptions about the implications of pipeline business models subsequent to discontinuous changes, such as those facilitated by platform business models. According to the extant literature, exploration and exploitation approaches (Birkinshaw et al., 2016; Eggers & Park, 2018; O’Reilly & Tushman, 2013) are exercised by the incumbents to adapt, including platforms (Gerwe & Silva, 2020; Van Alstyne et al., 2016). Based on the researchers’ call to understand how firms adapt to discontinuous changes and why some incumbents do well and others struggle, there is a greater need to understand incumbent adaptation (Birkinshaw et al., 2016; Day & Schoemaker, 2016; Eggers & Francis Park, 2018; Luger et al., 2018; Van Alstyne et al., 2016), including the rationale for different adaptation modes, and decision-making regarding how to execute initiatives across explore and exploit continuum.

This question’s discussion commences with details about how the incumbents measure the business model implications subsequent to discontinuous change, incumbents’ perception of platforms as a threat versus opportunity, and the gestation period incumbents considered for staying operational or get decimated. Incumbent adaptation theories provide the framework and theoretical lens through which this research study was conducted.



### 6.2.1. Platform and Pipeline Business Model

Platforms are enablers; at a value proposition level, including superior user experience factored in service design, and they establish the connection between supplier and consumer, and ecosystem-based supply chains (McIntyre & Srinivasan, 2017). Furthermore, platforms innovated pricing models to an extreme extent, examples of which include free, freemium, access levels, and fixed subscription fees (Cusumano et al., 2019; Parker et al., 2016; Zhao et al., 2019). Consequently, platforms' cost models debunked owning assets, maintaining a large employee base and sharing assets (Cusumano et al., 2019; Gerwe & Silva, 2020; Parker et al., 2016; Zhao et al., 2019).

Value proposition: Participants who were consulted in the research confirmed that they were working on value proposition outside of their core business example, including telecommunications providing cloud transformation services, online listings, streaming services, banking, e-commerce, and mobile connections, among others. It implies that these offerings are either inspired by, or copied from success platforms business models. Likewise, it was observed that user experience was taking centre stage, even amongst existing products and services, due to experiences introduced by Uber, Airbnb, Apple and other leaders in the field. Thus, we may infer that the incumbents have taken the giant leap towards adaptation and may not disappear as silently as Polaroid, Nokia, Kodak, Blockbuster (Birkinshaw et al., 2016; O'Reilly & Tushman, 2013).

Revenue model: Participants were still baffled with the freemium, trial, one sided pricing aspects that platforms introduced. Very few participants had mobile apps that offer a free-to-use model, furthermore telecommunication that toy with subscription models for streaming services, when the global competitors such as Netflix, offers huge content differentiator for the same price. "Monetization" was not used by even one participant, rather, someone said that that they had more than 100 million subscribers but failed to get network effects, concluding that Incumbents had a long way to go with regards to revenue models. Exceptions include mobile app from a bank and an online listing site from a telecommunications firm.

Cost models: the majority of the telecommunications incumbents expressed that their pipeline business was not generating revenues comparable to five years prior, before (Pre-WhatsApp, Facebook, Airbnb era). Incumbents from the banking industry felt their retail business is impacted, but not corporate, and lastly, the media industry incumbents believe that content playback is a high cost investment oriented however came up with low cost offering. According to the participants, the key differences between incumbent and platform business

characteristics is that platforms do not own any assets; there is not much evidence of external sourcing, and finally, operating with few employees while incumbents expressed they had thousands of employees and did not express an intent to go lean. In summary, pipelines are yet to learn how to invert incumbent firms inside out inspired from the quote "platforms invert firms inside out." of Parker et al.,(2017,p. 11).

#### 6.2.2. Platforms impact on Incumbents: opportunity or threat

Approximately 65% of the participants alluded that platforms are a threat to incumbents due to the fact that their assets were producing fewer returns, geographic boundaries are fading, incumbents' failed platform attempts and no signs of network effects on the platform initiatives. These findings largely coincide with the notion of core knowledge being impacted and incumbents struggling to withstand competition from platforms (Eggers & Francis Park, 2018; Parker et al., 2016; Van Alstyne et al., 2016).

There was a notion that incumbents misconceive platforms (Cusumano et al., 2019; Cusumano et al., 2020), however, incumbents understood platforms well, including the fact that their survival is linked with digital platforms itself. Moreover, it takes many years to obtain network effects and monetize platforms, and they were experiencing this first-hand implementation as they understood new metrics needed to find their platform maturity from implementing their own platforms.

#### Opportunity or Threat

A framework was created in the literature review (Chapter 2, Table 2) on the scholarly view of the platform's implications. Interestingly, the participants used phrases and words to describe many of the concepts used regarding to platforms, or their own perspective of platforms. Researcher created the concepts that incumbents alluded to in the framework originally created and mapped to the literature. There might be differences between the Table 2 in Chapter 2 and the table below, however, effort were made to integrate them as much as possible.

The following process was adhered to for comparing findings to the literature:

- i. Performed searches for each concept word or similar, in "Academic Search Premier" and "Business Source Complete" database; this is reflected in the Table below (Table 17).

- ii. Any relevant literature matching the concept was added to the compilation beyond what was discussed in Chapter 2.
- iii. The framework in Chapter 2 was updated with the additional literature found to maintain consistency.
- iv. Some key concepts were found in journals that were not top-rated or published in a non-strategy category of journals, and hence, not added to the literature list.
- v. Separated the concepts depending on their academic literature evidence (A) represented in Table 17, or if the concepts do not have literature evidence (B) represented in Table 18.
- vi. A few concepts appeared totally relevant only to the incumbent industry (example: declining margins, no incentive for adaptation, skills, industry trend), no sources were found in the literature. This is a potential research contribution about how incumbents perceived their position vis à vis platform implications.
- vii. Potential reasons behind differences in concept classifications between Chapter 5 findings (List A) and the literature review might be due to incumbents' perceptions that different to that of scholars and the researcher.

A) Discussion of Incumbent perception of platforms as Threat or Opportunity

**Table 17 - Incumbent perceptions of Platform implications**

| Findings/Results of Chapter5 (Incumbent perspective) |                |        |         | comparison to Chapter2                |                |        |         |                             |   |             |
|--|----------------|--------|---------|---------------------------------------|----------------|--------|---------|-----------------------------|---|-------------|
| participant perspective                              | Classification |        |         | Literature concept                    | Classification |        |         | Literature Review Source    | Additional sources                                  | differences |
|  | Opportunity    | Threat | Neutral |                                       | Opportunity    | Threat | Neutral |                             |   |             |
| adapting tech  |                | x      |         | complex innovation nascent technology |                |        | x       | Eggers & Francis Park, 2018 | Zhao et al., 2019                                   | *           |
| aggregator of everything                             | x              |        |         | Resource-aggregation                  |                | x      |         | Parker et al., 2016         | Zhao et al., 2019                                   | *           |
| asset heavy  |                | x      |         | Asset light                           |                | x      |         | Parker et al., 2016         | Zhao et al., 2019; Thomas et al., 2011 Kohler, 2017 |             |
| brand trust  | x              |        |         | Mistrust                              | x              |        |         | Parker et al., 2016         |   |             |
| business model                                       |                | x      |         | business model                        |                | x      |         |                             | Zhao et al., 2019 Kohler, 2017                      |             |
| incumbent customer base                              | x              |        |         | supply side economies of scale        |                | x      |         |                             | Kohler, 2017  | *           |

|                                  |   |   |  |                                     |   |   |  |   |   |   |
|----------------------------------|---|---|--|-------------------------------------|---|---|--|---|---|---|
| commoditization                  |   | x |  | demand side economies of scale      |   | x |  | Parker et al., 2016<br>Van Alstyne et al., 2016 |   |   |
| complementary services           | x |   |  | complementary services              |   | x |  |   | Thomas et al., 2011                       | * |
| customer experience              | x | x |  | New consumer behaviour              |   | x |  | Parker et al., 2016                             |   |   |
| disintermediation                |   | x |  | Disintermediation                   |   | x |  | Zhu & lansiti, 2019                             |   |   |
| ecosystem play                   | x |   |  | multi-sided supply                  |   | x |  | Parker et al., 2016                             |   | * |
| emerging ecosystems              |   | x |  | mediating role instead of control   |   | x |  | Parker et al., 2016                             |   |   |
| investments                      |   | x |  | Financial viability                 | x |   |  | Cusumano et al., 2020; Parker et al., 2016      |   | * |
| legacy                           |   | x |  | high cost of failure                |   | x |  | Parker et al., 2016                             |   |   |
| market experience [fragmented]   | x |   |  | Fragmented network clusters         | x |   |  | Zhu & lansiti, 2019                             |   |   |
| mass commoditization             |   | x |  | scalable and no geographic barriers |   | x |  | Parker et al., 2016                             |   | * |
| network effects; volume vs value |   | x |  | Strength of Network effects         | x |   |  | Zhu & lansiti, 2019                             | Boudreau & Jeppesen, 2014<br>Kohler, 2017 | * |
| price point fight                |   | x |  | mispricing                          | x |   |  |   | Zhao et al., 2019                         | * |

|  |   |   |  |   |   |  |   |   |                                   |   |
|--|---|---|--|---|---|--|---|---|-----------------------------------|---|
| regulatory frameworks                              | x | x |  | Highly regulated markets;<br>Institutional void |   |  | x | Eggers & Francis Park, 2018;<br>Carney et al., 2018 |                                   | * |
| sell the service/service orientation/service realm | x |   |  | value proposition                               |   |  | x |   | Kohler, 2017<br>Zhao et al., 2019 | * |
| skills   |   | x |  | community and crowd-based workers               |   |  | x | McIntyre & Srinivasan, 2017;<br>Parker et al., 2016 | Kohler, 2017                      |   |
| Technology   |   | x |  | Technology maturity                             |   |  | x | Eggers & Francis Park, 2018                         |                                   |   |
| Timing   | x |   |  | Mistiming                                       | x |  |   | Parker et al., 2016                                 |                                   |   |
| Competition  |   | x |  | Multi-sided competition                         |   |  | x | Parker et al., 2016                                 |                                   |   |
| too many platforms                                 |   | x |  | Vulnerability to multi-homing                   |   |  | x | Zhu & lansiti, 2019                                 |                                   |   |

**B) Concepts only found from incumbent discussions with no platform literature evidence**

**Table 18** - *Concepts from Incumbent discussions unable to map*

| participant implication<br>Concept    | Classification |        |         |
|---------------------------------------|----------------|--------|---------|
|                                       | Opportunity    | Threat | Neutral |
| blurred industry boundaries           | x              |        |         |
| convergence of technologies           | x              |        |         |
| cost to acquire customer              | x              |        |         |
| declining margins                     |                | x      |         |
| global connectivity<br>infrastructure |                | x      |         |
| industry trend                        |                | x      |         |
| local and sports content              | x              |        |         |
| low disposable income                 | x              |        |         |
| negative net cash positions           |                | x      |         |
| no incentive for adaptation           |                |        | x       |

The length of time incumbents had to adapt to a platform business model or before platforms displace them totally was evident from participant discussions. Incidentally, their estimate of 3–5 Years strangely coincides with platforms' 4–7 year lifespan (Cusumano et al., 2019; Cusumano et al., 2020). Incumbents believe that they do not have too many years to adapt, inferring that the incumbents had overcome the misleading signals discontinuous changes generated (Eggers & Francis Park, 2018). Unlike non-existential threats, discontinuous change does not offer much time for adaptation. The findings do not suggest incumbent inertia and engagement in institutional work (Weber et al., 2019), thus, there is no evidence indicating marginalization of new entrants by the incumbent managers.

### 6.2.3. Summary of the Discussion of Research Questions1

Except for the value proposition-related innovation and high noise, incumbents' business model perspective appeared to have extremely limited innovation. Having the exploration too

close to the core competence or focus on their existing customer or resources is a narrow perspective. Generally, it might be more difficult to gain acceptance for revenue and cost model innovation within the organization, therefore, research may conclude that there is little or no evidence on the readiness to open business models.

Given that the platforms were perceived as threat, good understanding of the implications may infer that the incumbents might overcome the weakness of their business model innovation. Unlike evolutionary changes that offer more years for adaptation, discontinuous changes do not give incumbents the expected 3–5 years unless the regulators work in incumbents' favour. As a result, incumbents might lose more ground before they really adapt to the complex platform business models. As indicated by incumbents, perceived opportunities (Table B) actually may work against their platform adaptations as well. Accordingly, the incumbents need to recalibrate their perspectives to build invincible companies.



### 6.3. Discussion: Research Question2:

Research Question 2:

How do incumbents adapt their exploration-exploitation balance subsequent to discontinuous changes?

March (1991) and Levinthal and March (1993) expressed the need for balancing exploration, exploitation, and the social context, such as simplification and specialization, of the organizational learning process. Various researchers have made extensive contributions to this topic (Birkinshaw et al., 2016; Carney et al., 2018; Day and Schoemaker, 2016; Eggers and Francis Park, 2018; Kammerlander et al., 2018; Luger et al., 2018; McMillan & Overall, 2017) and still analysed from strategy, technology, entrepreneurship. There are gaps in understanding how incumbents adapt to discontinuous changes (Birkinshaw et al., 2016; Eggers & Francis Park, 2018; Luger et al., 2018). The second research question centres around these research needs and aims to contribute to the literature on how incumbents adapt subsequent to discontinuous changes from platforms.

This research's findings revealed six key themes central to the incumbent adaptation process: antecedents, organization learning, balancing of explore and exploit pursuits, strategic adaptation choices, adaptation mode, and barriers to adaptation. The discussions on organizational learning, adaptation modes, adaptation strategic modes and choices extended beyond what this researcher expected, and uncovered a lot on the five antecedents, provided insights on innovation, organization learning, real examples of adaptation, and leadership's role in adaptation, including barriers and future plans. This chapter proceeds with a discussion on these platform adaptation perspectives, with specific references to relevant academic literature.

#### 6.3.1. Antecedents for Incumbent adaptation

Eminent researchers (Day & Schoemaker, 2016; Eggers & Park, 2018; Gerwe & Silva, 2020; Patel & Husairi, 2018; Raisch & Birkinshaw, 2008;) investigated antecedents for incumbent adaptation to barriers, moderator or mediation, discontinuous change perspective. Our objective was not to find antecedents to incumbent adaptation, however, during the

discussions, participants spoke about various factors that were either accelerating or decelerating the pace at which they can adapt or how they perceive market forces.

This Researcher identified as regulations, industry, technology, competition, and geography as antecedents, which contrasts the antecedents investigated by Eggers and Park (2018) and are different from Raisch and Birkinshaw (2008), who saw the antecedents as structure, context and leadership. Unlike the reliance on regulatory and domain offence discussed by Weber et al. (2019), this Researcher did not find the incumbents engaging heavily in these responses. However, there is an exception to be made based on some incumbents' focus on exploration closer to their core competency, defending their core similar to continuous product improvement, and profitable segment (domain offence) responses (Weber et al., 2019). Which was observed from hotel industry incumbents in response to Airbnb.

Each of the antecedents this researcher found are discussed in reference to the differences and similarities to the literature.

#### 6.3.1.1. Regulatory discontinuities

To some extent, regulatory discontinuities appear to be protecting the incumbents from global giants from complete disruption. Similar antecedents were found by Weber et al. (2019) from the hotel industry, which is different to the industries that our participants represent. In that study, incumbents expressed confusion, neglect and varying beliefs that guide actions (Weber et al., 2019), were absolutely not found with incumbents from the banking and telecommunications industry. None of the participants from the media industry mentioned this antecedent. Banking industry participants perceived their regulatory hurdles to be a barrier to the industry's agility.

On the contrary, the regulatory aspect is doing more harm than protection and accelerating adaptation because regulations were offensive to the telecommunications industry. More Compared more platform activity was found in telecommunications and media than banks, where complementors' role was substantive.

#### 6.3.1.2. Industry discontinuities

Telecommunications participants discussed their industry's decline as it matures, regulator-induced pressures on data prices, and the effects from committed investments in 4G and

expected investments in 5G on incumbents' toward maintained similarities to commitments and cannibalization (Eggers & Park, 2018). Further, incumbents pattern of interpreting discontinuities demonstrated similarities with Weber et al., (2019) discussions on cost disadvantages and difficulty understanding the attractiveness of discontinuous changes amongst his study's incumbents.

The telecommunication's operations in the banking (payments), streaming media spaces, and banks in retail spaces are interesting phenomena, and this lateral integration accelerated incumbents' adaptation. Researcher was unable to find any similarities with this antecedent in the extant literature. Similarly, this adaptation was observed in the digital platforms (Zhao et al., 2019) that design business models based on simple imitation or simple innovation.

#### 6.3.1.3. Technology discontinuities

Platforms businesses support telecommunications by investing and rolling out more infrastructure to help telecommunications grow their user base was observed; platforms are not fighting with telecommunications, for example, Google Loon was launched with a telecommunications firm in Africa. Many telecommunications firms do not have insights about what their customers do on the network, and they do not have cross-geographical use cases for exploration... To some extent, telecommunications and banks' preadaptation (Patel & Husairi, 2018) of technology such as cloud networks, digital and microservices helped them adapt. Incumbent responses to discontinuity appear to be more of a domain offence (Eggers & Park, 2018; Weber et al., 2019), such as commitments and cannibalization, engaging in continuous product improvement (e.g., adaptation close to their core, increased advertising and selling efforts, and focus on profitable areas), data for telecommunications and for banks, a focus on corporate and investment solutions. Further, Eggers and Francis Park (2018) posited that no single technological change guarantees successful adaptation. This is evidenced by the technological discontinuities driving adaptation in telecommunications and banks, which remain unfazed by Facebook(Libra -digital currency)'s innovations, mobile money or cryptocurrencies, since their era of ferment is less uncertain (Eggers & Francis Park, 2018).

#### 6.3.1.4. Competitive dynamics

Telecommunications realized that it only a matter of regulatory and investment decision that would displace them with platforms, like the fact that big technology companies such as SpaceX, Facebook and Google were investing in undersea cables, and the platform

companies' are endeavouring to remove telecommunications' connectivity control from their digital customers. Partnership and ecosystem are the buzzword (Adner, 2016; Eggers & Francis Park, 2018) mentioned by most participants, and a move towards ecosystem strategy was found as a response to competitive dynamics. Researcher was unable to find the view expressed by Day and Schoemaker (2016) regarding people's tendencies to ignore warning signals, rather, the incumbents realized and voiced the competitive dynamics that are accelerating the adaptation.

Media increased their local content and differentiation investments to compete at the global scale, and local adaptation by telecommunications cannot be considered product improvement or focussing on profitable segments (Weber et al., 2019). One senior executive clearly mentioned cannibalizing their traditional business with complementary platforms, resembling commitments and cannibalization (Eggers & Francis Park, 2018) antecedent.

In summary, the Researcher may infer that telecommunications are leading the pack, followed by media and banks, which are last in responding to this competitive dynamic. Furthermore, this antecedent was similar to the environmental factors antecedent proposed by Raisch and Birkinshaw (2008) as one of the moderators for incumbent adaptation. Our research findings had similarities to that notion too.

#### 6.3.1.5. Geographic discontinuities

Regulatory pressure on telecommunications, regulatory differences and low technology penetration across Africa define this antecedent. Geographic discontinuities moderates and mediates incumbent adaptation because this it decelerates and accelerates the incumbents' adaptation based on their past experience in Africa or the amount of competitive activity the incumbents encounter in Africa. Researcher unable to find similar antecedents in the previous researchers' work, such as Eggers and Francis Park (2018), Raisch & Birkinshaw (2008), and Weber et al. (2019). There were more than 300 platforms (Johnson et al., 2020) working in Africa, but presence of only one or two Tech Unicorns clarifies how difficult it is to get the network effects and monetize, which was well understood by the incumbents.

#### 6.3.2. Organizational Learning

According to March (1991), and Levinthal and March (1993), Organizational learning is a key factor that drives adaptation and balancing explore and exploitation efforts within the firm.

Most of the incumbents revealed the innovation process was ad hoc in their firms and unstructured; the learning process and does appears to have overcome the learning myopia posited by Levinthal and March (1993).

#### 6.3.2.1. Innovation Process

In this theme, Researcher found three sub-themes firstly, ideation sources; secondly, ideation responsibility; and third, the ideation evaluation process. Incumbents were receptive to various internal and external ideas, including industry forums, peers, and consultants. This is similar to Roy and Sarkar's (2015) proposition that both inhouse upstream knowledge and downstream market linkages help during adaptation. The CEO and board or top management's hubris is leading the organizations towards adaptation, which is similar to Arena et al. (2017) and Raffaelli et al.'s (2019) findings. The innovation responsibility is sitting with functions such as digital, R&D, and others, not the lower-levels gaining approval of top management (Kannan-Narasimhan & Lawrence, 2018). To some extent, the bricolage positively influenced opportunity identification and driving entrepreneurship (An et al., 2017).

Innovation evaluation process appeared to be more adhoc and neither approach of Volvo which focusses on capability, focus, collaboration and governance (Svahn et al., 2017) nor framework-based resourcing and framing steps of Bower-Burgelman (Kannan-Narasimhan & Lawrence, 2018). The approach to portfolio-based adaptation or innovation at-scale was not happening, as Researcher could only see an average of three opportunities per entity, which is too small for success based on venture success ratio being less than 2% (Osterwalder et al., 2020, p. 54).

#### 6.3.2.2. Learning Process

Organizational learning and myopia of learning are significant contributions of March (1991), Levinthal & March (1993). The participants Researcher discussed gave insight into their learning process; discussion points included understanding the difference between exploration and exploitation subsequent to discontinuous changes. Though it was not within our research scope to find detailed processes about the learning process, researcher found good examples, such as one executive who mentioned the mistakes they made and how they corrected them. Another two mentioned their failed exploration initiatives that coincide with experiential learning aspects of Levinthal and March (1993), and why they closed down. Furthermore, Researcher found decent examples of organizational and individual learning

(mutual learning) processes and the firms ambitions (March, 1991; Levinthal & March, 1993) driving the adaptation successfully.

The incumbents were not left fearful from their failed exploration experiences, and seemed to have overcome the myopia of learning proposed by Levinthal and March (1993). Two participants spoke about the need for culture change. Most importantly Some participants told how they work with elite colleges such as MIT, Thinkers of Top50 etc. to frame their thoughts by clearly managing competing concerns internal vs external aspect (Svahn et al. (2017). In summary, the Researcher found that competing concerns such as capability, focus, collaboration and governance proposed by Svahn et al. (2017) were well understood and managed by incumbents.

### 6.3.3. Balancing explore and exploit initiatives subsequent to discontinuous changes

#### 6.3.3.1. Evaluating criteria and process of explore and exploitation initiatives

Participants from incumbent industries gave insights about how the exploration or exploitation opportunities were assessed, although the focus was on the exploration as given the scope of our research. Various approaches were pursued by incumbents, such as defined monetary threshold for approving exploration ideas and another participant said that they do not look into profit and loss, while another shared that they are interested in market opportunities. Four participants were evaluating opportunities against their core competency; however the thinking was not exactly along the lines of Christensen, Bartman, et al., (2016), who suggested to run the opportunity with the existing businesses if it is closer to the core competency, or else, run it outside as a separate strategic unit. From the discussions it appeared to defend incumbents' core business instead of evaluating fit between an opportunity versus existing business. This might also be "spatial myopia," which implies learning is supposed to favour effects that occur closer to the learner (Levinthal & March, 1993).

Opportunities evaluated based on Client needs; to keep their traditional customers; keep some stickiness with Customer; impact on the client also mentioned by a participant as part of the evaluation criteria which appeared similar to customer's jobs to be done (Christensen, Hall, Dillon, & Duncan, 2016).

While the necessary support is available from top management, it is up to the individual to sell the idea. Managers are expected to prepare proposals and present to senior managers; person must be passionate were some of the verbose used by the participants when talking

about the evaluation process. Similarities are found in Kannan-Narasimhan and Lawrence's (2018) ideas about how the lower levels of an organizations gain approval for their innovations.

#### 6.3.3.2. Explore / Exploit Actions (journey potential steps):

Evaluation, testing and implementation stages were mentioned by one incumbent, while another incumbent told the stages as incubation, proof of concept and scaling. Further, the participant mentioned the innovation life cycle and how much time they should spend in each of the phases before scaling. The Researcher was unable to find any incidences of collective engagement or interactions (Harvey & Kou, 2013), and neither did open strategizing, an organizational sense of community (Hutter, Nketia, & Füller, 2017), or the creative mode of interaction (Harvey & Kou, 2013). Thus, the process appears more ad hoc than structured or needing more thorough investigation.

One partner discussed moving from exploration to exploitation when their streaming platform as a sales channel only and not a platform anymore. This thinking was quite mature and matches Osterwalder et al., (2020) notion of moving exploration initiatives into exploitation portfolio for scaling and sustaining, also known as a "pivot" action.

Exploitation actions such as acquire, partner, divest and merge (Osterwalder, et al., 2020) were also used in exploration by the incumbents. This is over and above ideate, invest, and explore actions the incumbents were performing, and very few reached the preserve and pivot action stage (Osterwalder, et al., 2020 p.23 and p.32).

#### 6.3.3.3. Balancing Explore / Exploit and Incumbent adaptation perspectives:

Resourcing:

Based on unique participant inputs representing incumbent industries, the researcher understands that they believe they were allocating about an average of 20% of their resources to exploration. The Researcher was unable to find any recommendations from the extant literature about the benchmark percentage. One approach (Osterwalder et al., 2020, p. 54, p. 105) called metered funding, which means allocating fixed resources into a predetermined number of projects, was found but researcher could not establish its legitimacy or success. Another match was found, nevertheless, it was not an academic literature article hence did

not consider the journal article for the discussion. The research focus is not on finding a mathematical answer, rather, it aims to understand the incumbents' balancing adaptation process.

#### Adaptation Perspectives:

Individual participants gave an account of various in-progress or in-discussion exploration and exploitation initiatives. One incumbent was incurring high cost of experimentation with maximum initiatives, who had a strong balance sheet and their existing core business line impacted. Ironically, their approach was not aligned to any of successful explore or exploitation approaches from organizations such as Bosch, Sony Start-up, Logitech, Amazon, or Ping An, who pumped 7 Billion USD into technology (Osterwalder, et al., 2020).

Two incumbents who had failed experiences and weak balance sheets were focussed on exploitation, which coincides with "failure myopia" (Levinthal & March, 1993) or the inability to capture results from bricolage within the organization (An et al., 2017).

Another incumbent was exploiting using innovation and actioned a new venture to sustain core business of the organization. There were geographic antecedents, which they perceived to protect them from discontinuities. This is similar to Weber et al.'s (2019) findings, where the researcher observed incumbents questioning legitimacy of the new ventures and engaging in domain offence.

Another bank and telecommunications firm was placed into exploit (no regret moves) based on the initiatives such as efficiency, refinement and choice (March, 1991) related to their core business..

Three entities, all from the same industry, were found to be balancing explore/exploit (preferred choice). One incumbent was busy reorganizing and compared to their peers, appears to be trapped under "failure myopia" (Levinthal & March, 1993) based on past failed ventures, or, the industry was not under threat from platforms (Osterwalder et al., 2020; Parker et al., 2016). An incumbent who called Ping An as their role model, engaged in structured thinking processes and decisions to adapt to a platform business model and their CEO announced the vision and structure. CEO hubris might work for them (Arena et al., 2017), however, despite their focus, their legacy ecosystems (Wessel, Levin, & Siegel, 2016) and size risks hindering their adaptation.



In summary, there were no scientific approaches to confirm that these approaches were right, however, according to Teece (2018) “strong dynamic capabilities would enable creation and implementation of effective business models”(p. 28).

#### 6.3.4. Strategic choices

Cusumano et al. (2019) discussed potential strategic choices for platform businesses adaptation, and suggested building, buying, or belonging as options. Accordingly, the participants from incumbent industries offered their preferences for how they would execute strategic choices. One participant mentioned the procurement process of RFP, while others were open to buying and belonging. Incumbents were evaluating the skills they have and need to make these decisions, such as alliances, acquisitions, per Grigoriou and Rothaermel (2016). Researcher did find some incumbents preadapted (Roy & Sarkar, 2015) because of the substantial technology already operating in their existing business. Multiple examples were quoted by incumbents opting for internal development combined with external sourcing, however, Researchers was unable to gauge the actual level of internal knowledge generation (Grigoriou & Rothaermel, 2016) to make any concrete observations. Based on the type of exploration initiatives they chose (e.g., simple imitation vs complex imitation, simple innovation over complex innovation), it appeared that some incumbents had more marketing knowledge than technological knowledge (Roy & Sarkar, 2015; Zhao et al., 2019).

#### 6.3.5. Organizational design

##### 6.3.5.1. Incumbent adaptation mode

Of the 20 participants from nine entities, 11 participants (which is more than 50%) preferred structural separation over other forms of adaptation modes for balancing explore and exploit. O'Reilly and Tushman (2013) advocated for this structural separation and supported by their extensive research beginning in 1996 when they originally proposed this approach. A difference in thinking must be highlighted here; some participants with different departments within the same organization, routines, and norms, felt they were following structural separation. However, it may not be called structurally separated, as the original thought included “not only separate structural units...but also different competencies, systems, incentives, processes, and cultures each internally aligned” (O'Reilly & Tushman, 2013, p. 328).

The Researcher did find similarities with “force[ing] new business finding new homes existing business” (Christensen, Bartman, et al., 2016, p. 39) when one incumbent told us that they

keep switching between the structural separation and behavioural integration exploration initiatives they established to cannibalize existing business (Tushman & O'Reilly, 1996). Furthermore, Christensen, Bartman, et al., (2016) suggestion to use mergers and acquisitions to drive disruption was echoed by another incumbent from the telecommunications industry. This incumbent does heavy exploration combined with structural separation and acquisitions, where the adaptation level is high and externalized knowledge was heavily needed (Day & Schoemaker, 2016).

Three incumbents stated their preferred behavioural integration (Birkinshaw et al., 2016; Day & Schoemaker, 2016; O'Reilly & Tushman, 2013). This finding was expected, as the incumbent organizations with "culture" barrier (discussed in the next section) cannot manage behavioural integration because the culture of experimentation (Aversa et al., 2017) is expected for behavioural integration. Furthermore, this model is suitable for medium-sized and technologically oriented firms, making it suitable for the incumbent organizations that chose behavioural integration (Aversa et al., 2017).

Hybrid ambidexterity (Ossenbrink et al., 2019) combines structural and contextual approaches that are not noticeably clear. Three participants expressed the hybrid model as a structural choice, although, the researcher was unable to establish whether these concepts are the same and participants were sceptical to choose one model over the other.

#### 6.3.5.2. Leaders as change agents

The role of leadership in adaptation (O'Reilly & Tushman, 2013) was not fully understood, however, top management team (TMT)'s frame flexibility enabled mental models for transformational efforts (Raffaelli et al., 2019). It was incidental that our research could provide some good evidence from the incumbents about how their CXO, board, and senior leadership were supporting adaptation besides supporting Raffaelli et al.'s (2019) findings, one CXO participant mentioned that they ask the team in every meeting about their adaption plans. In such case, the necessity of structural separation (O'Reilly & Tushman, 2013) may not be essential, as structural separation is construed as an answer to leadership issues.

It does not matter that leaderships' vision was actively involved in sensing and seizing the mode of adaptation, which was observed in Birkinshaw et al.'s (2016) research with BMW, Nestle, and GSK. Participants gave numerous examples of how the decisions for adaptation were driven by a chain, CEO, board or an executive, which bared a huge resemblance to the

finding that reconfiguration capability (one of the dynamic capabilities of Teece, 2018) was held by top-level executives (Birkinshaw et al., 2016).

Leadership buy-in helps incumbents positively and collectively find the solutions for funding innovations, even when there were no resources available; this seems to be contrary to Kannan-Narasimhan & Lawrence's (2018) findings, who determined that organizations' lower-levels had to gain approval from decision makers. As per Raffaelli et al. (2019), said "during technological change, a concrete definition of firm's innovation boundaries and identity hold a firm hostage to its past." (p. 1013) This was not true for the participants and incumbents researcher spoke to, since two participants mentioned that they were ready to drop their core identity—the entity name—to enable adaptation. At least, leaderships' support avoided the catastrophic failures proposed by McMillan & Overall (2017), who said that organization failure occurs due to endogenous factors such as leadership skills, perverse incentives, and cognitive mechanism. The management buy-in, strategic orientation and resource endowment might support adaptation.

#### 6.3.6. Barriers and Enablers

Although the antecedents might work as barriers or moderators for adaptation, the participants gave solid accounts of various impediments they were facing in adaptation.

In some incumbent entities', participants mentioned buy-in from large organizations or employees, implying that the broken mutual learning process (Levinthal & March, 1993) may also be due to slow learning processes discussed by March (1991). According to McMillan & Overall (2017), organizational failure due to non-adaptation happens during the learning and planning processes. Capacity for agility and missing buy-in might be linked to the learning process.

Closed innovation or knowledge-sourcing use excessive internal sources (Grigoriou & Rothaermel, 2016; March, 1991). The fact that external knowledge sourcing depends on internal knowledge production (Grigoriou & Rothaermel, 2016) and this close innovation might really become a barrier. Sensing and seizing may not be owned just by top leadership (Birkinshaw et al., 2016).

Scaling, monetizing, and strength of network effects appears to be a big problem for the incumbents, charging which side of the platform i.e. consumer, developer or supplier etc. Similar issues were identified by Cusumano et al. (2019), Parker et al., (2016), Zhao et al.

(2019), and Zhu & Iansiti (2019) as problems incumbents, or platforms for that matter might face en route to success. Thus, it might become a level playing field for everyone when platforms business models are adapted be it in a start-up or incumbent.

#### Financial capability:

Incumbents did raise concerns about the huge investments in their legacy, cost of exploration, and viability, as barriers to adaptation. Firm size does matter in the adaptation (Eggers & Francis Park, 2018), and competing resources for specialization versus simplification (Levinthal & March, 1993) is the whole crux of the adaptation; finding the right balance is key, whether it is with dynamic capabilities (Teece, 2018), or exploration and exploitation (Birkinshaw et al., 2016; Raisch & Birkinshaw, 2008; Weber et al., 2019). Incumbents compete and survive “doing with whatever at hand by reuse and recombination,” (An et al., 2017, p. 49) also known as bricolage, does influence opportunity identification (An et al., 2017), and this does seem to be the approach incumbents considered to overcome their financial barriers. Some incumbents embrace collaboration, partnering, and ecosystems, similar to Eklund and Kapoor’s (2019) notion of strategies incumbents adapt towards discontinuous changes.

#### Legacy:

One participant said, “today’s platform is tomorrow’s legacy” (d16) in conversations about legacies, and some incumbents felt their legacy system, routines, and norms, might pose problems for adaptation. For others, legacy thinking and investments in legacy assets (commitments to technology) were mentioned as a barrier to adaptation. None of these aspects were new for researchers such as Eggers and Francis Park (2018), and McMillan and Overall, (2017). Rezazade Mehrizi, Rodon Modol, & Zafar Nezhad, (2019); Wessel, et al., (2016) and Weill & Woerner,(2018) discussed overcoming some legacy barriers, specifically, silos and complexity were major challenges Weill and Woerner (2018) identified in their research.

#### Skill and Culture:

This was the biggest challenge to adaptation reported by the incumbent participants. Organizations’ role and domain identity are represented in culture and mutual learning processes (Kammerlander et al., 2018; Levinthal & March, 1993; March, 1991). Volvo’s capability acquisition (Svahn et al., 2017) is similar to the notion of skills and culture, and the

negative effects of normalcy culture (McMillan & Overall, 2017) coincide with the barrier discussed by the participants.

#### 6.3.7. Summary of the Discussion of Research Question 2

Regulatory, industry, technology, competitive and geographic discontinuities are antecedents identified in the incumbents' discussion. While some antecedents were acting as accelerators for adaptation, some were moderating the adaptation subsequent to discontinuous changes. This Researcher infers that the sensing process for incumbent adaptation was robust enough. The most important aspect in balancing exploration and exploitation was organizations' seeing that incumbent entities were talking to external sources for innovating, and top management team and CEOs were driving innovation, and the evaluation process was flexible enough to consider non-financial indicators to pursue exploration. There were no signs of slack in learning or action based on the fact that none of the incumbents were initiating the adaptation now, rather, there were failed exploration and platforms in production or in incubation. However, few defences for protecting the core were observed using regulatory or geographic antecedents from two discussions.

No signs of excessive exploration were found, instead, explore/exploit were balanced, and no regret moves were evidenced in discussion with the incumbent participants. A detailed account of ongoing adaptation initiatives established a simpler imitation instead of simple innovation (Zhao et al., 2019). Given that no incumbent was keen to build a platform on their own, and were more willing to buy or partner, implies that they were making right strategic choices.

Finally, in terms of the organizational design, a preference for structural separation was expressed, however, the same was not found in execution. Interestingly, some were leaning towards hybrid ambidexterity, defying the three modes of adaptation. CEO, board, and executives were driving the adaptation from the top, and the lower-level management had to improve technical bricolage over managerial bricolage. Furthermore, the fact that these incumbents were ready to forgo their role and domain identities to favour adaptation, is an exceptional driver in adaptation.

#### 6.4. Conclusion

This chapter presented a detailed discussion on the research study's findings. The implications of discontinuous changes from platforms and their business models were

discussed and observed and attention is given to the business model's value proposition aspect. Platforms are perceived as a threat to incumbent business models. These results support the literature on platform concepts proposed by Boudreau and Jeppesen (2014), Carney et al. (2018), Cusumano et al. (2020), Eggers and Francis Park (2018), Kohler (2017), McIntyre and Srinivasan (2017) Parker et al. (2016), Thomas et al. (2011), Van Alstyne et al. (2016), Zhao et al. (2019), and Zhu and Iansiti (2019). This research expanded on additional concepts based on the incumbents' discussion presumed to be envisaged by incumbents as additional threats or opportunities from platforms. Therefore, the first research question was answered, and the results indicate that incumbents do not fully understand platform business models, establishing platforms as a threat to incumbents' business.

Antecedents to incumbent adaptation were identified, partially supporting the antecedents proposed by researchers (Eggers & Park, 2018; Gerwe & Silva, 2020; Kammerlander et al., 2018; Weber et al., 2019). Antecedents such as firm size, firm experience, complementary assets, and top management characteristics appeared more implicit, nonetheless, commitments and cannibalization, cognition and identity, stakeholders, ecosystem and environment, were more explicit. Besides mobility, organizational structure did not find a place in the discussions as antecedents. The antecedents proposed by Raisch and Birkinshaw (2008), structure, context and leadership also were not explicit, however, there were similarities with the environmental factors and other moderators of this framework. Interestingly, not all antecedents construed barriers, instead, some were moderators or mediators.

Regarding organizational learning, the findings established no incidence of "myopia of learning" posited by Levinthal and March (1993). Sensing, seizing, and reconfiguring (Birkinshaw et al., 2016; Day & Schoemaker, 2016) were largely driven by top management teams, which supported the findings from Raffaelli et al. (2019) on their role in adaptation. There was absolute balance and no incidence of excessive exploration over exploitation as recommended by March (1991), and incumbents targeted an average 3–5 years window before surrendering to platform implications. Due to preadaptation, technology challenges were not sighted as a major impediment in adaptation. It is interesting to see that the challenges faced by platforms (Zhu & Iansiti, 2019) were also faced by incumbents too during platform adaptation whether it is simple imitation or innovation.

Structural separation was the preferred mode for incumbents' adaptation answering the second and central research question, emanating from previous researchers (Birkinshaw et al., 2016; Eggers & Francis Park, 2018; Luger et al., 2018, March, 1991). Furthermore, a set

of barriers for adaptation were identified, confirming, and defining multiple researchers past findings, such as those from Birkinshaw et al. (2016), Cusumano et al., (2019), Grigoriou & Rothaermel (2016), McMillan & Overall (2017), Parker et al. (2016), Weber et al. (2019), Zhao et al. (2019), Zhu and Iansiti (2019).

## 7. CONCLUSION AND RECOMMENDATIONS

### 7.1. Introduction

According to the industry research conducted by Moore and Seedat (2020), 70% of South African communication and media industries were disrupted, while that figure was around 50% for banking. Their report further mentioned that the “Executives in South Africa are aware of the threat and are not adequately prepared” (Moore & Seedat, 2020, p. 5) our research focussed on determining how they plan their adaptations subsequent to discontinuous changes mentioned by Cusumano et al. (2019), Parker et al. (2016), Teece (2018), Zhao et al. (2019), Zhu and Iansiti (2019). Despite the extensive research conducted on incremental changes, how incumbents adapt to revolutionary changes subsequent to technology and business model discontinuities was identified as a research gap (Birkinshaw et al., 2016; Eggers & Francis Park, 2018; Luger et al., 2018).

This study explored the incumbent’s perspective on platform implications, opportunity, or threat. As presented in Chapter 1, incumbents lose their advantage after discontinuous changes (Cozzolino & Rothaermel, 2018), including those facilitated by platforms (Weber et al., 2019). Platforms fewer employees than incumbents, higher profits, high market values, and by any measure (Cusumano et al., 2019), should be appealing to incumbents even due to their declining revenues and unstable market positions. Not all platforms are successful (Cusumano et al., 2020). Based on our research findings, this appears true even for incumbent owned or run platforms. Balancing explore and exploitation and right organizational designs for executing simplification or specialization is recommended by March (1991) and Levinthal and March (1993). However, not enough is understood about how firms adapt to discontinuous changes, why some incumbents do well, adapting to fast-changing markets and technologies, while others struggle (Birkinshaw et al., 2016; Day & Schoemaker, 2016; Luger et al., 2018; Van Alstyne et al., 2016). Thus, incumbents’ perspectives are central to our research.

This chapter presents the research findings, discusses their implications for theory and business, proposes an incumbent adaptation framework for platform business, draws attention to this study’s limitations, and suggests key areas for future research.



## 7.2. Research Findings

Platforms invert firms (Parker et al., 2016) and operate on the fence of regulations; they claim to be technology companies that provide transactional or innovative solutions to wide markets across multiple geographies (Cusumano et al., 2019; Weber et al., 2019; Zhao et al., 2019), encroaching on incumbents' space. There was a better understanding of incumbent adaptation to long-term and non-existential threats than existential threats (Birkinshaw et al., 2016; Carney et al., 2018; Day and Schoemaker, 2016; Eggers and Francis Park, 2018; Kammerlander et al., 2018; Luger et al., 2018; McMillan & Overall, 2017; Raisch & Birkinshaw, 2008). This whole construct formed the basis of our research and the central question presented in Chapter 1: "how incumbents adapt their exploration and exploitation balances subsequent to discontinuous changes, including platforms."

This qualitative research study answered the overall research questions through two sub-questions, and the findings are presented below and summarized in Appendix 6.

### 7.2.1. Business models, Platforms Opportunity, or Threat: (Research Question 1)

The phenomenon and driving force for incumbents, largely due to platforms' business models, are digital-first approaches. This study identified four aspects around platforms and business models. First, incumbents focused on the value proposition aspect of business model innovation; second, the business of platforms were perceived as a threat to incumbent business; third, incumbents still perceive some advantage when they adapt the platform business model in comparison to start-ups, however, they faced the same challenges to start-ups; and fourth, more than 50% of the incumbents presume that they have 3–5 years before being decimated by platforms.

Business model innovation: Incumbents engaged in value proposition (Teece, 2018) related to platform business models, however, little-to-no innovation was found on cost and revenue models (Gerwe & Silva, 2020; Zhao et al., 2019). Nevertheless, researcher cannot confirm the reasons behind the partial innovation (Cozzolino et al., 2018; Fjeldstad & Snow, 2018; Massa, Tucci, & Afuah, 2017; Zhao et al., 2019), whether it is due to lack of understanding or inertia, as it was beyond of scope of study to further explore on business model innovation.

Platforms opportunity or threat: Researchers established platforms as a threat (Cusumano et al., 2019; McIntyre & Srinivasan, 2017; Parker et al., 2016; Van Alstyne et al., 2016), and this study supported that notion. Although there were no definite temporal guidelines for

discontinuous changes to mature, a target of 3–5 years for adaptation made sense (Osterwalder et al., 2020).

The discussion with incumbents established a fair understanding of the platform concepts (Table 10 in 6.2.2) (Boudreau & Jeppesen, 2014; Carney et al., 2018; Cusumano et al., 2020; Eggers & Francis Park, 2018; Kohler, 2017; McIntyre & Srinivasan, 2017; Parker et al., 2016; Thomas et al., 2011; Van Alstyne et al., 2016; Zhao et al., 2019; Zhu & Iansiti, 2019) supported by extant literature. New concepts are also identified, however, literature reference for these concepts could not be established and may appear as a contribution of this research at this point of time.

#### 7.2.2. Incumbent adaptation subsequent to discontinuous changes (Research Question 2)

Platforms, their business model, concepts, and implications for incumbent's adaptations were established in Research Question 1's findings and discussed in the previous section. How the incumbents were managing the explore and exploit balance and mode of adaptation were answered by incumbents in Research Question 2, through six key themes: antecedents, organization learning, balancing explore and exploit, the adaptation of strategic choices and preferred adaptation mode and barriers to adaptation. These six themes were discussed in detail in Chapter 6, and a summary is provided below.

##### A. Antecedents for incumbent adaptation

Beyond our scope of research, our research revealed a set of five antecedents: regulatory, industry, technology, competitive, and geographic. These findings contrast with Raisch & Birkinshaw (2008) proposed antecedents. Furthermore, regulatory antecedents supported Weber et al. (2019); while no incumbent industry was involved in institutional activity, incumbent's top management team (TMT) pushed for accelerated adaptation.

Geographic antecedents were not found in the extant literature. This might be an additional research contribution.

## B. Organizational Learning

Findings on the learning process supported seminal research from March (1991). There was no learning myopia in incumbents (Levinthal & March, 1993). Our findings supporting Roy & Sarkar (2015) proposition of inhouse upstream knowledge and downstream market knowledge. Research findings also confirm that Incumbents were able to manage the competing concerns posited by Svahn et al. (2017), however, the portfolio-based approach proposed by Osterwalder et al. (2020) could not be found in any discussion.

## C. Balancing explore and exploit initiatives

There were no uniform adaptation trends found in the incumbents engaged in active exploration and exploitation. incumbents' approach on exploration efforts largely differs from the literature, including Luger et al. (2018), whose research proposed accelerated exploration to address existential threats, and Osterwalder et al., (2020) proposed metered funding model. The initiatives currently pursued by incumbents were too few to take them to the targeted state of Scaling from incubation (Osterwalder et al., 2020).

## D. Strategic choices

Incumbent participants revealed no overwhelming interest in building platforms. Instead, they were willing to buy or partner, which supports Cusumano et al., (2019).

## E. Organizational design

Most incumbents subscribed to structural separation, supported O'Reilly & Tushman (2013) recommendation, however the practical examples differ from the definition he had for structural separation. Participants discussions supported hybrid ambidexterity (Ossenbrink et al., 2019), although the research scope limits our understanding of this concept. Leadership or TMT supporting adaption in turn supported Birkinshaw et al., (2016), based on their findings, when there is leadership support, the mode of adaptation does not matter.

## F. Barriers and Enablers

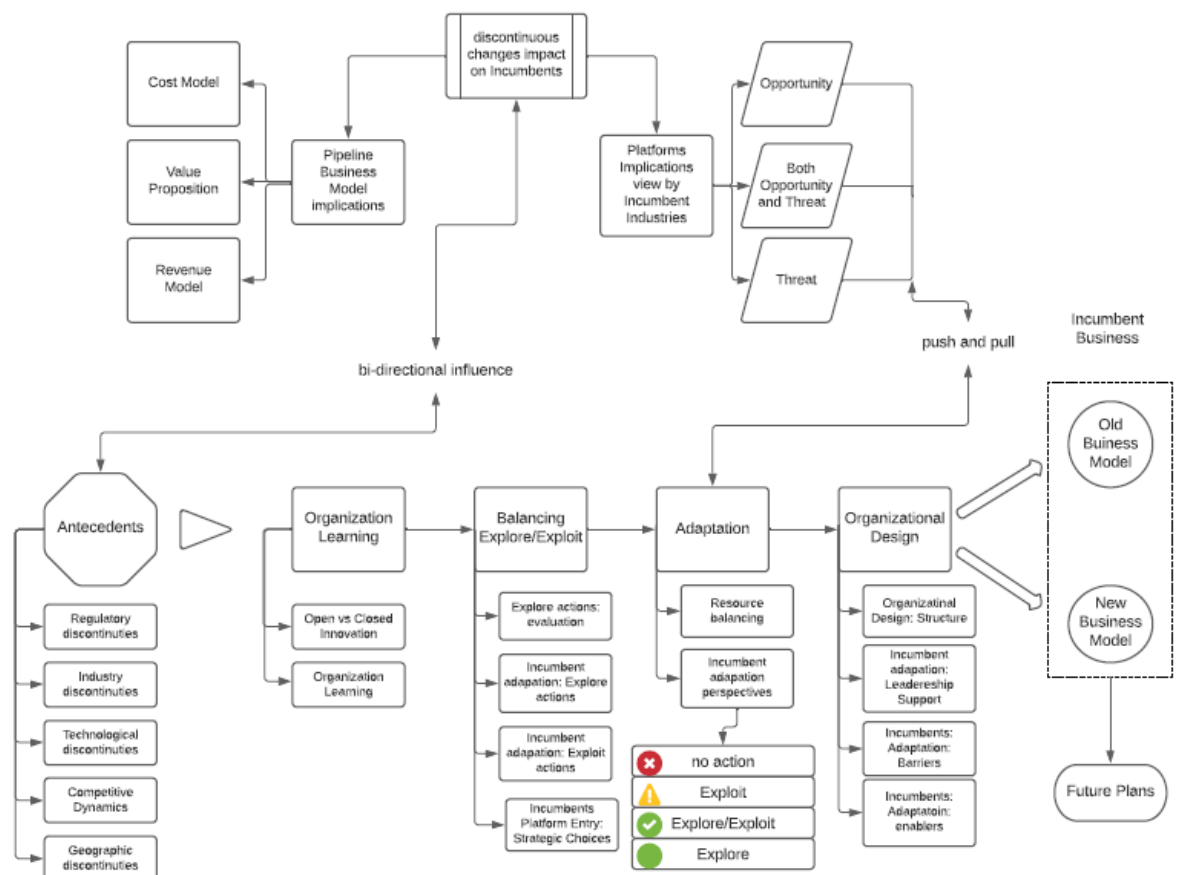
Six common blockers across industries were revealed supporting past research. These are: buy-in (March, 1991); Levinthal & March, 1993; McMillan & Overall, 2017), closed innovation (Birkinshaw et al., 2016; Grigoriou & Rothaermel, 2016), scaling (Cusumano et al., 2019; Parker et al., 2016; Zhao et al., 2019; Zhu & Iansiti 2019), financial resources (An et al., 2017; Eggers & Francis Park, 2018; Eklund & Kapoor, 2019), legacy (McMillan & Overall, 2017; Eggers & Francis Park, 2018), and skills and culture (Kammerlander et al., 2018; Levinthal & March, 1993, March, 1991, McMillan & Overall, 2017, Svahn et al., 2017), all these topics were discussed in Chapter 6.

### 7.2.3. Conclusion and Conceptual Framework

This research was successful in achieving its objectives. The findings have demonstrated that the existing body of knowledge can be applied to incumbent adaptation, it is less applicable in the context of discontinuous changes, the reasons for some incumbents' failure or success, how firms adapt to discontinuous change, and what modes of adaptation they choose, and why. Our findings provided answers to the incumbent's perception of platforms and their readiness to adapt to platform business models.

Moreover, a detailed account of incumbent adaption across each phase was established based on discussions with top and senior management teams. Various elements of the emergent themes and conceptual frameworks developed throughout the study are combined and represented below.

The framework highlights the incumbent adaptation perspective subsequent to discontinuous changes, including the factors explored through the research.



### 7.3. Implication for Business

The results from the study offered some suggestions for incumbent industries to consider in their adaptation strategies. From an interpretivist stance, additional insights were drawn from the online conversations and immersion into their context. The possibility of researcher bias is acknowledged, but care was taken to note observations accurately and objectively. Recommendations from the business model, platforms, and incumbent adaptation perspectives:

#### 7.3.1. Business Models and Platforms

Business model Innovation:

Value proposition:

Value proposition for platforms are based on “jobs to be done” (Christensen, Hall, et al., 2016, p. 1) instead of “what we can offer to our existing customers?” Most platforms know their customers inside-and-out and then propose a value-based interaction. Incumbents must know more and more about their customers to come up with thousands of ideas for exploration. Services/Products to be done should appeal to audiences beyond geographic boundaries instead of specific customer populations.

Cost models:

boot-strapping, constraints-based thinking, and technical bricolage may generate better results compared to capacity-driven investments. Incumbents had to increase innovation on cost models and find practical ways to adapt to platform-centric cost models (e.g., no assets, enablement, external sourcing, and lean operations).

Revenue models:

Generating network effects is more central to platforms than generating revenue, made possible with free, freemium, service level models. No contracts, zero documentation, and shared resources need to be considered.

## Business of Platforms:

### Capability:

Organization-wide capability building should occur, taking the business model, value proposition, and hypothesis testing processes covering all functions, including supports such as HR and finance.

### Innovation framework:

Incumbents who successfully adapted have well-defined frameworks, processes, and common knowledge across the organization's business units—regardless of whether the platforms impact them. The number of patents applied by an organization is an indicator of robust innovation measure.

### Explore Portfolio:

To build a successful platform business, incumbent's need to run large scale innovations and take them through the innovation funnel in 100 or 1000s daily. Most platforms are unable to achieve network effects in their first year.

### 7.3.2. Explore and Exploit balance subsequent to discontinuous changes:

#### General:

Incumbents require cross-functional, cross-geographic teams to plan their adaptation. Having a presence across Africa is advantageous; silos must be broken, and cohorts should be considered to overcome challenges faced during adaptation. Incumbents might require change agents to drive the message and shake the entire organization towards adaptation.

#### Organizational learning:

While top management teams were driving sensing, seizing and reconfiguring, lower-level organization were involved in explore and exploit through capability building exercises or continuous learning. Joint partnerships with educational institutions

combined with design thinking might help to accelerate the incumbents learning process.

Explore Focus:

Highly regulated or high cost of failure industries (e.g., hospitals, mining) might have more time before disruption, however, most other industries were already disrupted, which demands a higher explore focus than a balanced explore versus exploit, due to less lead time availability before getting displaced. Technological bricolage over managerial bricolage needs to be targeted by incumbents.

Scale of adaptation:

Only Ten out of 700 ideas were successful for Sony, more than 103 teams for Gore worked on innovation, and Bosch started with 200 teams with number of ideas, finally ended with only 15 teams. More number of innovate ideas, timeboxing, and metered funding might be a solution to build Unicorns by each Incumbent.

Rewards:

Compensation policies, promotions, recognition, and new roles must emerge to make exploration attractive to all across the organization.

Organizational Designs:

Start-ups often consists of not more than 6–8 people, with no fixed code or routines, but with limited funds until they are successful. Structural separation facilitates the execution pace, manages leadership challenges, and allows incumbents to apply a lens to the organizational designs that best works for them or suit the pursuit.

#### 7.4. Limitations to the Research Study

As an exploratory, qualitative research study, there were limitations to the results' generalisability. Additional limitations to this research study due to its design and scope provided below.



Researcher bias:

The researcher works in the consulting field and knows the participants and industry conditions, leading to conclusions based on stated and unstated information. Further, the researchers own beliefs about how adaptation should be achieved might influence the outlook and findings.

Time horizon:

Due to time constraints, this was a cross-sectional research study was performed. Since the interviews were mostly conducted online, credibility could not be established through prolonged engagement, persistent observation, and triangulation (Bell et al., 2019).

Participant bias:

There may also be a chance of self-selection bias, where the participants who were chosen to be part of the study may have done so because of their strong experience in their respective fields and known conditions, hence, this may also mean that findings may not be generalisable.

Location bias:

Despite maximum variation purposive sampling technique employed, all the participants were based in urban Johannesburg. This may affect the transferability of the study's findings to contexts beyond South Africa.

#### 7.5. Suggestions for Future Research

Based on this study's findings, numerous areas require further research, as described below (refer to Appendix 5 for a detailed list).

Based on the research findings, a follow-up cross-industry, longitudinal case studies covering the participants' adaptation journey can establish how the proposed assumptions about concepts and frameworks, supporting successful incumbent adaptation journeys. There were limited successful incumbent explore/exploit case studies subsequent to discontinuous changes available in the extant literature (e.g., approximately nine. incumbents: Bosch,

Nestle, Gore, Ping An, Sony, Microsoft, Unilever, Logitech, Fujifilm) adaptation studies were discussed by Osterwalder et al. (2020)

The study briefly touches the innovation and evaluation processes and funding models, which was a valuable insight. Prior literature did not establish an in-depth understanding of scaled innovation's role subsequent to discontinuous changes, with exceptions (Harvey & Kou, 2013; Hutter et al., 2017; Roy & Sarkar, 2015).

Furthermore, this research focussed incumbent adaptation perspectives from top management rather than lower-level management. Thus, the concepts developed through this research could be explored via quantitative testing across all key aspects of the identified framework.

#### 7.6. Conclusion

This research created insights into the incumbent adaptation perspectives subsequent to discontinuous changes. Semi-structured interviews with 20 senior leaders from three different industries were conducted. The findings were then analysed, compared, and contrasted to elevate differences or nuances. Three findings in platforms business models and six contributions in incumbent adaptation perspectives emerged from the conversations' data analysis. These findings were compared with organization learning theories, organization design theories, incumbent adaptation theories, and finally, an incumbent adaptation framework was arrived at. This framework might help aspiring incumbents in the pursuit of adaptation. Finally, this study also contributes to platform literature, organization learning, and incumbent adaptation with valuable guiding principles.

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APPENDIX-1

Informed Consent Form

I am Chandra SS Nanduri, Research student conducting research on “Incumbent adaptation perspectives subsequent to discontinuous changes” to understand how organizations strategize to external/internal changes. I would like to ask you few open-ended questions and have a dialogue with you to understand your views and experiences. If you agree, I will lead this interview based on the questions I have prepared. You do not have to answer all the questions, but it would be appreciated if you can, since it would lead to better results for the study. Your participation is voluntary, and you can withdraw at any time without penalty.

Your answers would be treated confidential and you will not be asked for any information that will identify yourself. The interview will last for about an hour min depending on how fast we go through the discussion. In order to analyse your answers later, will you allow me to record our conversation (Yes/No). All data will be stored and reported without identifiers. If you have any concerns, please contact my supervisor or me. Our details are provided below.

*Researcher Name: Chandra SS Nanduri*  
*Email:*  
*Contact:*

*Supervisor: Suzanne Myburgh*  
*Email:*  
*Contact:*

*Signature of participant:* \_\_\_\_\_

Date: \_\_\_\_\_

Signature of researcher:

Date: 01 Sep 2020



## APPENDIX-2

### Interview guide:

1. Can you explain your strategic role in the organization's success?
2. Are you observing any technologies or business models as a threat to your business?
3. How do you see the future of your organization's business model?
4. Do you have any plans to adapt to the platforms business model?
5. How does your organization search for new opportunities and technologies to adapt?
6. How are the opportunities assessed between new and existing product improvements?
7. How do you implement new opportunities for adaptation?
8. Do you think a separate organization, project-based, or competency-based organization helps in driving a new business model to success?
9. Did you implement a new business model in the last three years, and what are the findings?
10. What do you think is your biggest challenge in achieving the transformation?

APPENDIX-3

**Table 19 - Opportunity or Threat classification related participant quotes**

| #  | Abstract quote  | Industry | Impact      |
|----|---|----------|-------------|
| 1  | definitely something that is impacting and influencing incumbent organizations like ourselves             | Bank     | Threat      |
| 2  | No response   | Telco    | No response |
| 3  | technology is not I don't want to call it as it is actually a threat...                                   | Telco    | Threat      |
| 4  | That becomes a real threat...dumping a whole lot of stuff into your platform                              | Media    | Threat      |
| 5  | MTN has played a much more prominent...that is said they really are threat.                               | Bank     | Threat      |
| 6  | is a very big threat for the current crop of national telcos or, or re...                                 | Telco    | Threat      |
| 7  | Telco's would become dinosaurs, they would become obsolete, right? in the traditional sense...            | Telco    | Threat      |
| 8  | digital platform model is a great opportunity for Telcom and ...  | Telco    | Opportunity |
| 9  | our orientation orchestration from day one around the threat of FinTech...                                | Bank     | Threat      |
| 10 | It always depends on the perspective, you look at it, whether you see it as a threat or an opportunity... | Telco    | Both        |
| 11 | the platform's business is a threat to the incumbent business, in your...                                 | Bank     | Threat      |
| 12 | They're going to have to adopt, a platform or die So for me, I think that opportunity...                  | Telco    | Opportunity |
| 13 | Okay. So there is a bit of threat not in terms of the tech but...   | Media    | Threat      |
| 14 | But yes... we are feeling the impact of digital eating into televisions spend...                          | Media    | Threat      |
| 15 | final threat, I would say is telcos operate in a heavily regulated environment...                         | Telco    | Threat      |
| 16 | we do that there is like to use your term existential threat. Because...                                  | Bank     | Threat      |
| 17 | So that is one of the biggest threats that we're seeing   | Telco    | Threat      |

|    |   |      |             |
|----|---|------|-------------|
| 18 | think it's an opportunity. And it's a big one. And I'm looking at this...                       | Bank | Opportunity |
| 19 | platform business model, and, and the technologies ... great opportunity with the banking world | Bank | Opportunity |
| 20 | as you rightly point out a threat and an opportunity.   | Bank | Both        |

APPENDIX-4

Table 20 - Explore/Exploitation of Incumbents and classification

| Entity Code | Short description  | Core | Non-Core | Type of Initiative | Initiative Stage | Lower Quadrant       |                 |                  |                | Upper Quadrant            |                             |                  |                |
|-------------|--|------|----------|--------------------|------------------|----------------------|-----------------|------------------|----------------|---------------------------|-----------------------------|------------------|----------------|
|             |  |      |          |                    |                  | Adaptation level low |                 | Era of Ferment   |                | Adaptation level high     |                             | Era of Ferment   |                |
|             |  |      |          |                    |                  | Exploit              | Exploit         | Less certainty   | More Certainty | Explore                   | Balancing Explore / Exploit | Less certainty   | More Certainty |
|             |  |      |          |                    |                  |                      |                 |                  |                |                           |                             |                  |                |
|             |  |      |          |                    |                  | High Friction        | No regret moves | Unproven Tech/BM | Proven Tech/BM | high cost of experimenets | Preferred Chioce            | Unproven Tech/BM | Proven Tech/BM |
| E1          | access to unsecured loans  | X    |          | Financial services | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E1          | segmented financial services   | X    |          | Financial services | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E2          | Video on demand-intended to cannibalize existing prodcut line                              | X    |          |                    | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E3          | Streaming video platform   |      | X        | Entertainment      | Retired          |                      | +               |                  | +              |                           |                             |                  |                |
| E4          | ecommerce platform targeted at Small and Medium businesses                                 | X    |          | ecommerce platform | In production    |                      | +               |                  | +              |                           |                             |                  |                |
| E4          | Professional services listing platform   |      | X        | onlinestore        | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E4          | passive income for adreview/survyes  |      | X        | onlinestore        | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E5          | online shopping groceries  |      | X        | ecommerce platform | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E5          | youth banking, career, gig works   |      | X        | marketplace        | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E5          | school kids payments app   |      | X        | mobileapp          | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E6          | advetising platform  |      | X        | online platform    | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | Streaming video platform   |      | X        | mobileapp          | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | financials services  |      | X        | mobileapp          | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E6          | online store   | X    |          | ecommerce platform | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | Investments in five subsidiaries-2 focussed on platforms and other complementatry services | X    | X        | Investments        | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | insurance produccs   |      | X        | Financial services | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | virtual doctor consultations   |      | X        | Heathcare          | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E6          | electronics marketplace  | X    |          | ecommerce          | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E7          | Trade management platform  |      | X        | B2B Platform       | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E7          | trade finance platform conencting banks in world   | X    |          | Financial services | In production    |                      |                 |                  |                |                           | +                           |                  | +              |
| E7          | platforms in agriculture sector  |      | X        | Agriculture        | In production    |                      |                 |                  |                | +                         |                             | +                | +              |
| E7          | mobile virtual network operator  |      | X        | Teclo              | In production    |                      |                 |                  |                | +                         |                             | +                |                |
| E7          | four undisclosed initiatives   | X    |          | Platforms          | Ideation         |                      |                 |                  |                |                           | +                           |                  | +              |
| E8          | Streaming video platform   |      | X        | Entertainment      | Retired          |                      | +               |                  | +              |                           |                             |                  |                |
| E9          | mobile virtual network operator  |      | X        | Teclo              | In production    |                      | +               |                  | +              |                           |                             |                  |                |
| E9          | partnerships with marketplace providers  | X    |          | Financial services | In production    |                      | +               |                  | +              |                           |                             |                  |                |
| E9          | stock tradingplat form   | X    |          | Financial services | In production    |                      | +               |                  | +              |                           |                             |                  |                |

APPENDIX-6

Table 21 - SUMMARY OF RESEARCH FINDINGS COMPARED TO THE LITERATURE

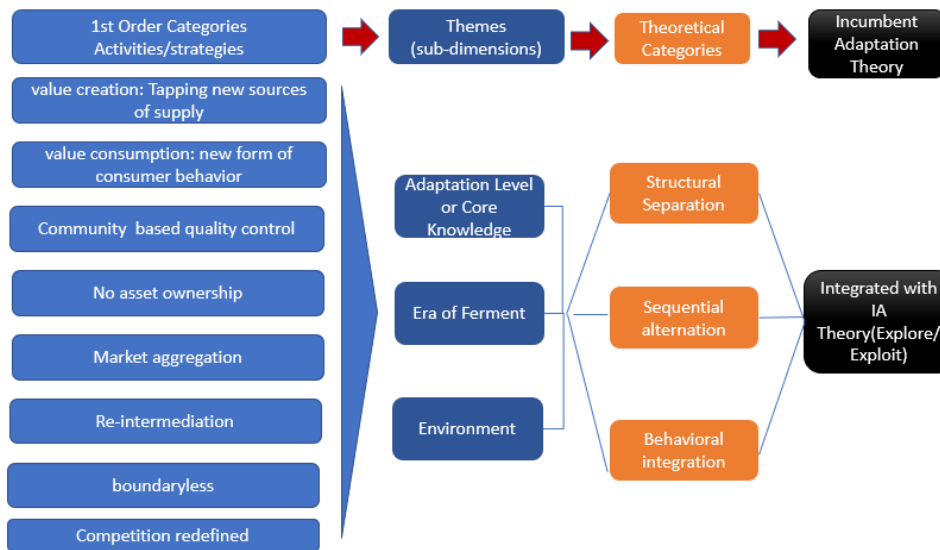
| SUPPORT LITERATURE  | ADD TO LITERATURE   | CONTRADICT LITERATURE   | BEYOND SCOPE OF STUDY/FUTURE RESEARCH REQUIRED  |
|---|---|---|---|
| Research Question 1: How does discontinuous changes impact incumbents   |   |   |   |
| <p>Business Models and Platforms:</p> <ul style="list-style-type: none"> <li>• Platforms business model different to Pipelines</li> <li>• Platforms are a threat to the pipeline business models</li> </ul> | <ul style="list-style-type: none"> <li>• Incumbents presume they possess advantages in platform business adaptation.</li> <li>• Incumbents consider about 3–5 years towards adaptation of new business model or they are completely displaced.</li> <li>• Value proposition angle was heavy engaged compared to cost and revenue models in business model innovation</li> </ul> |   |   |
|   |   | <p>Some platforms concepts from literature incumbents' views differ:</p> <p>key examples below:</p> <ul style="list-style-type: none"> <li>• Platform concept considered as threat in literature viewed as opportunity by incumbent participants: concepts include: aggregator of everything; incumbent customer base; complementary services; ecosystem play;</li> <li>• platform concept opportunity in literature considered as threat by incumbent: concepts investments; network effects; price points; service orientation</li> </ul> | <p>Whether identified differences are impact adaptation perspectives can be ascertained.</p>  |
|   | <ul style="list-style-type: none"> <li>• Incumbents operated platforms also go through same challenges that were faced by start-ups</li> <li>• Network effects, monetization, pricing challenges were also common for incumbents</li> </ul>   |   |   |
|   | <ul style="list-style-type: none"> <li>•</li> </ul>   |   | <ul style="list-style-type: none"> <li>• Platforms are not going to replace full scale Banks Future of banking and how platforms revolutionize would be a matter of interest</li> </ul> |
|   | <ul style="list-style-type: none"> <li>• Incumbents have a very good sense about platforms and its implications; their</li> </ul>   |   |   |

| SUPPORT LITERATURE   | ADD TO LITERATURE   | CONTRADICT LITERATURE  | BEYOND SCOPE OF STUDY/FUTURE RESEARCH REQUIRED   |
|--|---|--|--|
|  | investment capacity cannot be underestimated  |  |  |
|  | <ul style="list-style-type: none"> <li>New concepts such as blurred industry boundaries; convergence of technologies; cost to acquire customer; declining margins; global connectivity infrastructure; industry trend; local and sports content; low disposable income; negative net cash positions; no incentive for adaptation—revealed by incumbents about their perspective on platforms</li> </ul> |  |  |
| Research question2: How Incumbents adapt their exploration-exploitation balance subsequent to discontinuous changes?     |   |  |  |
| Explore and exploitation balance, organizational learning, mode of adaptation were central focus to incumbent adaptation |   |  |  |
|  | Six key constructs navigate the incumbents through the adaptation process:<br>“antecedents, organization learning, balancing explore and exploit initiatives, adaptation of strategic choices and preferred adaptation mode and barriers to adaptation”   |  |  |
|  |   | Industry antecedents considered as accelerator for incumbent adaptation  | Antecedents to incumbent adaptation subsequent to discontinuous changes may help better understand challenges  |
| Regulatory antecedents as barrier to incumbent adaptation  |   |  |  |
|  |   | Technological antecedents drive adaptation   |  |
|  | Geographic antecedents acting as barrier, moderator and mediator  |  |  |
|  |   | Incumbents ignoring warning signals provided to be incorrect rather competitive dynamics accelerating adaptation |  |
| No incidence of “myopia of learning” found   |   |  |  |
| Top management teams channelling market-based knowledge downstream and driving adaptation;                               |   |  | Role of Top Management Teams in accelerating incumbent adaptation may help to broaden the understanding  |
|  |   |  | Innovation process effectiveness and efficiency subsequent to discontinuous changes may help emphasizing the need for robust innovation and ideation process |

| SUPPORT LITERATURE  | ADD TO LITERATURE  | CONTRADICT LITERATURE   | BEYOND SCOPE OF STUDY/FUTURE RESEARCH REQUIRED   |
|---|--|---|--|
|   |  | Subsequent to discontinuous changes expected increased exploration instead we found a balance of exploration and exploitation | Reasons behind the balance and low level of explore/exploit actions was not investigated   |
|   | On average 20% of the resources allocated towards explore and remaining exploitation   |   | Longitudinal case study (5 years) on these incumbents as a follow-up whether their adaptation strategies produced results or not |
|   | No incumbents expressed obsession to build the platforms rather prefer to partner or buy or participate                                  |   |  |
|   | Structural separation was preferred mode of adaptation for the incumbent participants  |   |  |
| Top management teams including board, chairman, CEOs driving adaptation supports the thinking that mode of adaptation does not matter |  |   |  |
|   | Six prominent barriers to adaptation identified as “buy-in; closed innovation; scaling; financial resources; legacy; skills and culture” |   | The impact of barrier to adaptation and how the incumbents overcome these challenges may be followed up.                         |
|   |  |   |  |

## APPENDIX-5

Initial thematic analysis envisaged before data collection and interpretation:





FINAL THEMATIC MAP

**Table 22 - Thematic analysis map**

| RQ  | Codes per group | Code Groups/Categories                       | Themes                        |
|-----|-----------------|--|-------------------------------|
| RQ0 | 2               | Participant Profile                          |                               |
| RQ1 | 7               | BM: Revenue Models                           | Platform and Pipeline BMs     |
| RQ1 | 12              | BM: Value proposition                        |                               |
| RQ1 | 4               | BM: Cost models                              |                               |
| RQ1 | 9               | Platform Impact                              | Platform Impact on Incumbents |
| RQ1 | 3               | Platform Reverberation Index                 |                               |
| RQ1 | 6               | Incumbent Adaptation: Gestation              |                               |
| RQ2 | 2               | Antecedents: Regulatory discontinuities      | Antecedents                   |
| RQ2 | 10              | Antecedents: Industry Discontinuities        |                               |
| RQ2 | 6               | Antecedents: Technological discontinuities   |                               |
| RQ2 | 4               | Antecedents: Competitive Dynamics            |                               |
| RQ2 | 3               | Antecedents: Geographic discontinuities      | Organization Learning         |
| RQ2 | 19              | Incumbent Adaptation: Op vs CI Innovation    |                               |
| RQ2 | 3               | Incumbent: Organization Learning             | Balancing                     |
| RQ2 | 8               | Explore actions: Evaluation                  |                               |
| RQ2 | 10              | Incumbent adaptation: Explore Actions        |                               |
| RQ2 | 5               | Incumbent adaptation: Exploit Actions        |                               |
| RQ2 | 6               | Incumbent adaptation: 2XP Continuum          |                               |
| RQ2 | 2               | Explore Actions: Implementation              | Adapatation                   |
| RQ2 | 22              | Incumbent Adaptation: Platform thinking      |                               |
| RQ2 | 17              | Incumbent adaptation: Strategies             |                               |
| RQ2 | 7               | Incumbent: Platform Portfolios Explored      |                               |
| RQ2 | 4               | Incumbent: Platform Portfolios Exploring     |                               |
| RQ2 | 11              | Incumbents Platform Entry: Strategic Choices | Organizational Design         |
| RQ2 | 14              | Organizational Design: Structure             |                               |
| RQ2 | 10              | Incumbent Adaptation: Leadership Support     | Roadmap                       |
| RQ2 | 13              | Incumbent adaptation: Barriers               |                               |
| RQ2 | 5               | Incumbent adaptation: Enablers               |                               |

**Table 23 - Consistency Matrix**

| Research Questions   | Literature Review  | Data Collection Tools  | Analytics Technique                     |
|--|--|--|---|
| 1. How discontinuous changes impact incumbents   | Sections: 2.2 & 2.2.3<br><u><b>Key sources:</b></u><br>Van Alstyne et al., 2016;<br>Parker et al., 2016;<br>McIntyre & Srinivasan, 2017;<br>Carney et al., 2018;<br>Constantinides et al., 2018;<br>Eggers & Francis Park, 2018;<br>Cusumano et al., 2019;<br>Zhao et al., 2019;<br>Zhu & Iansiti, 2019;<br>Gerwe & Silva, 2020.   | <ul style="list-style-type: none"> <li>• Question: 2</li> <li>• Annual Reports</li> <li>• Media News</li> </ul>                    | Thematic Content Analysis (Section 4.7) |
| 2. How Incumbents adapt their exploration-exploitation balance subsequent to discontinuous changes | Sections: 2.3<br><u><b>Key sources:</b></u><br>March, 1991;<br>Tushman & O'Reilly, 1996;<br>Raisch & Birkinshaw, 2008;<br>O'Reilly & Tushman, 2013;<br>Birkinshaw et al., 2016;<br>Day & Schoemaker, 2016;<br>Saebi et al., 2017;<br>McMillan & Overall, 2017;<br>Carney et al., 2018;<br>Cozzolino et al., 2018;<br>Eggers & Francis Park, 2018;<br>Kammerlander et al., 2018;<br>Luger et al., 2018;<br>Eklund & Kapoor, 2019;<br>Ossenbrink et al., 2019. | <ul style="list-style-type: none"> <li>• Questions: 3, 4, 5, 6, 7, 8, 9</li> <li>• Annual Reports</li> <li>• Media News</li> </ul> | Thematic Content Analysis (Section 4.7) |

