

STRATEGIC AGILITY-ENABLED BUSINESS MODEL INNOVATION:
A MULTI-METHOD STUDY



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2022

STRATEGIC AGILITY-ENABLED BUSINESS MODEL INNOVATION:

A MULTI-METHOD STUDY

Thesis submitted to

The Institute for Graduate Studies in Social Sciences

In partial fulfilment of the requirements for the degree of

Doctor of Philosophy

in

Management

by

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Bođaziçi University

2022

Strategic Agility-Enabled Business Model Innovation: A Multi-Method Study

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DECLARATION OF ORIGINALITY

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- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
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ABSTRACT

Strategic Agility-Enabled Business Model Innovation: A Multi-Method Study

Strategic agility (SA) enables adaptation in turbulent environments by accelerating business model renewal. However, despite its critical role as a dynamic capability, relatively little is known about the relationship between the set of capabilities underlying SA and business model innovation (BMI) for different BMI initiatives and contextual characteristics.

Against this backdrop, this dissertation investigates 1-the capability combinations that enable business model innovation for different BMI initiatives, and 2-the implications of firm size, environmental turbulence, and structural embeddedness as contextual conditions for the SA-BMI relationship and BMI performance. The study adopts multiple methods to address these issues.

In Study 1, a multiple-case study featuring four companies has been conducted to analyze the role of SA-related capabilities in the BMI process. By reflecting the temporal deployment of the SA-related capabilities along the phases of BMI at the case firms, the study sheds light on how organizations design and implement new business models by leveraging strategic agility. In Study 2, a fuzzy-set qualitative comparative analysis (fsQCA) has been conducted to explore the role of firm size, environmental turbulence, and structural embeddedness as contextual characteristics in the SA-BMI relationship and BMI performance in a sample of service firms.

The contribution of this study is that it provides a comprehensive analysis of the organizational and contextual enablers of the effective pursuit of BMI through a

multi-method study that takes the process dynamics and the alternative paths into consideration.



ÖZET

Stratejik Çevikliğe Dayalı İş Modeli İnovasyonu: Çok Yöntemli Bir Çalışma

Stratejik çeviklik (strategic agility-SA), iş modelinin yenilenmesini hızlandırarak değişen dış koşullara uyumu sağlamaktadır. Bununla birlikte, dinamik bir yetenek olarak kritik rolüne rağmen, SA'yı oluşturan alt yetenek setlerinin çeşitli iş modeli yenileme inisiyatifleri ve bağlamsal koşullar için iş modeli inovasyonu (business model innovation-BMI) ile ilişkisi hakkında nispeten az şey bilinmektedir.

Bu doğrultuda, bu tez 1-farklı BMI girişimleri için iş modeli inovasyonunu mümkün kılan yetenek kombinasyonlarını ve 2-SA-BMI ilişkisi ve BMI performansı için bağlamsal koşullar olarak firma büyüklüğü, çevresel türbülans ve yapısal gömülülüğün etkilerini araştırmaktadır. Çalışma, bu sorunları ele almak için birden fazla yöntem benimser.

Çalışma 1'de, BMI sürecinde SA ile ilgili yeteneklerin rolünü analiz etmek için dört şirketin yer aldığı bir çoklu vaka çalışması yapılmıştır. Çalışma, vaka firmalarında BMI aşamaları boyunca SA ile ilgili yeteneklerin zamana bağlı uygulanmasını yansıtarak, kuruluşların stratejik çeviklikten yararlanarak yeni iş modellerini nasıl tasarladıklarına ve uyguladıklarına ışık tutmaktadır. Çalışma 2'de ise, SA-BMI ilişkisinde ve SA-BMI performansı ilişkisinde bağlamsal özellikler olarak firma büyüklüğü, çevresel türbülans ve yapısal gömülülüğün rolünü araştırmak için bir bulanık küme nitel karşılaştırmalı analiz (fsQCA) yapılmıştır.

Bu çalışmanın katkısı, süreç dinamiklerini ve alternatif yolları dikkate alan çok yöntemli bir araştırma aracılığıyla etkili bir BMI sürecinin arkasında yatan organizasyonel ve bağlamsal faktörlerin kapsamlı bir analizini sağlamasıdır.

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ACKNOWLEDGMENTS

First of all, I am grateful to Professor Özlem Öz, my thesis advisor, for her invaluable guidance throughout my dissertation process. I have developed the skills as an independent researcher thanks to her confidence in my ability to deal with every aspect of scientific research. Without this experience, it would not be possible for me to envision a future research agenda that will require the versatility and imagination of a true scientist to deal with the upcoming research questions.

I would like to express my sincere gratitude to Professor Hayat Kabasakal for her guidance throughout my entire PhD process. She is a role model for us working in the Organization Studies area. She had a vital role in most of the key moments during my PhD and without her support, it would not be possible to get to where I am today as a scholar. “You are very talented; I hope you never give up on your academic career” were the words she told me in an Organizational Behavior session that I found encouragement while forging my own path. I am also very thankful to Assoc. Prof. Deniz Kantur for her insightful suggestions as a thesis committee member.

Boğaziçi University became part of my life literally as a wake-up call. Following a year of confusion and disappointment while starting a business in my hometown; in Fall 2016, I would wake up every Tuesday at 5:30 to catch the inter-city bus to make it to the Organization Theory class in the EMBA building. Professor Güven Alpay would be waiting for me in the room every time I came to the class, although I was never late. The sessions we had were invaluable. Since then, Güven Hoca has contributed to my growth as a scholar beyond what I could comprehend back then. The AD497 lectures, Friday lunches, and other academic activities that I

joined under his supervision have greatly helped me become the scientist I am today. I am grateful to him and share his enthusiasm for being a great scholar. In his team of lecturers, I also would like to thank Assoc. Prof. Pınar Büyükbacı, Dr. Meral Dülger Taşkın, and Zeynep Sadıkoğlu for being great colleagues.

Besides being a PhD candidate, my role as a research and teaching assistant at Boğaziçi University also substantially contributed to my development as a researcher. Our research project on entrepreneurship with Dr. Oğuzhan Aygören helped me better reflect on how firms deal with uncertainty in business model innovation. I would also like to thank Assoc. Prof. Ali Coşkun, Dr. Mustafa Hayri Tongarlak, Prof. Eser Borak, Assoc. Prof. Burcu Rodopman, and the rest of the faculty for my experience as an employee in the Management Department.

I would not have come this far without my family's support. I am grateful for my parents' selfless dedication to me, and I therefore dedicate this dissertation to them. I would like to thank Irmak, my wife and my comrade in this life. She and Boğaziçi became part of my life around the same time, and they helped me bounce back from the earlier setbacks. I am excited to meet the upcoming challenges and confident that we will succeed in life with love, determination, and hard work.

Lastly and least importantly, I would like to thank Cafcaf and Coco, our family dog and cat, for making this life a fun and happy place with their joyful existence. I wish them a long and healthy life.

Alptegin Albayraktaroğlu

May 2022



To my parents
Sevgi & İsmail Albayraktarođlu

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ABBREVIATIONS

BM	Business Model
BMI	Business Model Innovation
BMR	Business Model Renewal
fsQCA	Fuzzy-Set Qualitative Comparative Analysis
HR	Human Resources
SA	Strategic Agility
SME	Small or Medium Enterprise

CHAPTER 1

INTRODUCTION

The increasing pace of technological change, changing customer preferences, and major external shocks such as the recent global pandemic urge firms in many industries to adapt to the shifting context. As these factors change the rules of the game, managers have to rethink even the most fundamental assumptions held about their businesses. This is the main reason why the term business model (BM) gained popularity in the early 21st century and business model innovation (BMI) shortly followed the trend. While business models reflect the architecture of value creation and value capture, innovating the business model means transforming the business by challenging and shifting its foundations, with both structural and cognitive implications.

The role of dynamic capabilities in business model innovation is evident in the literature, as scholars in the field of strategic management point to the need for sensing, seizing, and transforming capabilities in such transformation initiatives (Teece, Peteraf, & Leih, 2016). Conceptualized by Doz and Kosonen (2008), strategic agility (SA) is a specific type of dynamic capability to accelerate business model renewal. The meta-capabilities strategic sensitivity, collective commitment, and resource fluidity underlying strategic agility (Doz, 2020) are found to effect business model change in firms of varying sizes and in different industries in the literature (e.g., Arbussa, Bikfalvi, & Marquès, 2017; Clauss, Abebe, Tangpong, & Hock, 2021).

The purpose of this dissertation is to explore the role of strategic agility (SA) in business model innovation (BMI) through a multi-method study. Although the

literature on strategic agility dates to the late 20th century (Roth, 1996), relatively few studies have adopted Doz and Kosonen (2008)'s more recent conceptualization of SA as a dynamic capability. Furthermore, in the light of the recent findings on how new BMs are conceptualized and subsequently implemented at incumbent firms (Amit & Zott, 2015, 2021), there is scientific value in exploring the role of dynamic capabilities in BMI through qualitative studies. While previous research has explored the SA-BMI relationship to some extent, studies mostly concentrated on large firms from developed economies (Battistella, De Toni, De Zan, & Pessot, 2017; Fourne, Jansen, & Mom, 2014). In line with these considerations, scholars have recently called for qualitative studies on the SA-BMI relationship in SMEs to further explore the phenomenon in an under-researched context (Arbussa et al., 2017).

In order to address the literature gap, this multi-method qualitative study explores 1-the temporal deployment of the meta-capabilities of strategic agility in the BMI process through a multiple-case study, and 2-the role of the contextual characteristics as configurations for the effective pursuit of business model innovation.

Study 1 contributes to the related literature by analyzing the temporal deployment of strategic agility in the development phases of new business models in a multiple-case design. Mapping the close interactions between SA-related capabilities and BM development phases addresses theory development on the sequential application of strategic agility to perform BMI. Furthermore, by providing evidence on the SA-BMI relationship from the Turkish business environment, this study aims to provide an emerging market perspective to the field.

As will be discussed in the upcoming sections, the results of Study 1 clearly demonstrate the inductive and incremental nature of the BMI process, with certain

elements of strategic agility playing a significant role in different phases of business model change. By decomposing BMI into the constituent parts (value creation innovation, value proposition innovation, and value capture innovation) according to the recent literature evidence (Clauss, 2016), the stepwise process of BMI in the cases is demonstrated in detail, with related SA elements in each step. Furthermore, beyond demonstrating the SA-BMI relationship, the results also imply the complementary role of a shift in the firm orientation in line with the BMI initiative. This aspect is also discussed as a possible avenue for future research.

After this comprehensive process study on the role of strategic agility in BMI, Study 2 in turn takes a closer look at the role of certain contextual characteristics (firm size, environmental turbulence, and network embeddedness) in combination with strategic agility in the effective pursuit of BMI. Through a fuzzy-set qualitative comparative analysis (fsQCA) on 77 service firms, alternative paths to business model innovation and BMI performance are explored. This study helps in contextualizing the findings of Study 1 via insights on the relationship between strategic agility and the contextual characteristics, to be discussed in the advancing sections.

The rest of the dissertation is structured as follows. Chapter two presents the literature on strategic agility and business model innovation with an emphasis on the relationship between the two constructs. In chapter three, the research question and the research objectives are discussed in detail. Chapter four follows by presenting the methodology, results, and discussion for Study 1. In a similar structure, chapter five presents Study 2. Finally, chapter six provides a discussion on the combined implications from the two studies and concludes the dissertation with limitations and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

Strategic agility is a meta-capability that is reflected by organizations who survive in dynamic environments. It requires organizations to be flexible and nimble in the face of the shifting business context, while also protecting the efficiency of their established business models. Still in its early stages of development, the construct has attracted both scholarly and practical interest over the last decade. While Teece et al. (2016) argues that it is fostered by dynamic capabilities to address environmental uncertainty; a McKinsey report (2017) shows that organizations from a variety of industries see positive returns from improved agility.

In their seminal work, Doz and Kosonen (2010) argue that organizations respond to changes in their environment through adaptations in their business models. Therefore, the authors conceptualize strategic agility (SA) as the capability to accelerate business model renewal (Doz & Kosonen, 2010). SA postulates that firms with this capability are able to 1-sense the environmental trends and feed them into a participative strategy process (strategic sensitivity); 2-align the personal agendas of its leaders toward bold and fast decision making for renewal (leadership unity); and 3-redeploy processes, structures and people accordingly (resource fluidity) (Doz & Kosonen, 2008).

In this literature review, previous research is presented on strategic agility, business model innovation, and the relationship between the two constructs in each sub-section. A key take-away from this review is that the set of underlying capabilities which enable strategic agility vary based on contextual factors such as firm size, environmental uncertainty, and network embeddedness. Therefore,

different combinations of underlying SA practices are required for each BMR case. Furthermore, our review indicates that the SA construct has to be fully compatible with the iterative, inductive, and experimental nature of business model renewal under elevated uncertainty. In this regard, leadership unity plays a fundamental role in business model renewal by serving as “glue” between strategic sensitivity and resource fluidity. The cases show that divergent personal agendas and cognitive frames among leaders (regarding the renewal process) are usually aligned when the new business model is legitimated through a gradual process of experimentation and validation. In other words, the cases indicate that leaders have to see the “hard proof” that the new model actually works to be fully committed to firm strategy. Therefore, SA should be conceptualized in a way that captures this validation/legitimation process. Moreover, this process may go beyond firm boundaries, requiring new forms of governance for the inter-firm activities introduced by BMR.

The rest of the literature review is organized as follows. First, recent discussions on the concepts of business model and business model innovation are introduced. Second, the concept of strategic agility is discussed along the meta-capabilities and the underlying practices. Third, to present the previous findings between SA and BMI, a review of case studies from the business model literature is presented. Finally, the research gap has been specified.

2.1 Business models and business model innovation

As Teece (2010) suggests, a business model is essentially a conceptual model of a business. It is a holistic representation of the content, structure, and governance of activities that reflect ‘the business logic required to earn a profit’ (Amit & Zott, 2001; Teece, 2010). Given its ontological attributes, the business model construct has

been suggested by Amit and Zott (2001) as a unit of analysis for research on value creation and innovation.

In line with this definition of BMs as activity systems, the three conceptual building blocks of a BM are value creation, value capture, and value proposition activities (Clauss, 2016). Although scholars mostly agree on this definition, the construct may serve different purposes based on the aim of research (Massa, Tucci, & Afuah, 2017). Two distinct perspectives are relevant for this study in this regard. First, most scholars take a process view of BM (e.g. Chesbrough, 2010; Zott & Amit, 2010). Their studies view BM as an empirical phenomenon or attribute of real life firms (Massa et al., 2017). This view helps uncover the embedded structures and activity relationships within and between firms implied by a particular BM, mostly concerning the fields of organization theory and strategic management. Thus, business model is a new unit of analysis that usually go beyond the boundaries of a single firm.

Second, BMs serve as cognitive schemas (Massa et al., 2017) and framing devices (Mason & Spring, 2011), shaping the mental representation of value creation and delivery. This view is concerned with business models as cognitive frames of organizational members on how and why their firm adds value, having implications on behavioral aspects such as commitment, leadership, and resistance to change in the face of a new business opportunity. Therefore, as will be discussed throughout the paper, this view of BM has vital implications for this study.

Business model innovation, on the other hand, deals with changes in one or more business model building blocks for purposes such as the commercialization of new ideas or adaptation to a dynamic environment (Chesbrough, 2010). Business model innovations are a major source of disruptive innovation today, with the

recombination of existing resources, activities, and relationships as a substantial source of new value (Chesbrough, Minin, & Piccaluga, 2013; Christensen, Raynor, & McDonald, 2015). According to Amit and Zott (2021), for a new venture BM to be innovative, it should be novel in its combination of resources, activities, and relationships in its product-market space. On the other hand, for established firms, the novelty of the new BM for the focal firm is a sufficient condition for the classification as BMI (Amit & Zott, 2021). Amit and Zott (2015) argue that while a business model can be novel in its initial conceptualization, it is also possible to modify an existing BM template and add or change certain features to achieve novelty. The authors argue that the templates can be found in own industry, while certain elements can also be taken from BM templates in unrelated industries (Amit & Zott, 2021); such as the application of the elements of online retail in designing disruptive BMs in insurance. However, the authors also suggest that mere replication of a template from own industry will not likely be sufficient for novelty (Amit & Zott, 2015, 2021). Instead, firms should modify the template according to their unique case to differentiate in the market (Amit & Zott, 2021). As will be seen in the upcoming sections, the arguments of the authors regarding BM templates and novelty through template modification are quite significant for this research.

Clauss (2016) introduced a measurement scale for business model innovation with three dimensions and 10 sub-constructs: value creation innovation (new capabilities, new technology/equipment, new partnerships, and new processes), value proposition innovation (new offerings, new customers and markets, new channels, and new customer relationships), and value capture innovation (new revenue models and new cost structures). In the study, in line with the literature evidence, Clauss (2016) argues that the dimensions or sub-constructs would not necessarily change

simultaneously or in the same way during BMI; thus allowing for different configurations in underlying elements and sub-constructs for different cases of BMI (Casadesus-Masanell & Ricart, 2010).

2.2 Strategic agility

Based on the above definitions, strategic agility is argued to accelerate the adoption of new business models (renewal). The name implies the effective management of paradoxes (Lewis, Andriopoulos, & Smith, 2014; Smith, Binns, & Tushman, 2010), being both committed to strategy and adaptive to change, each at varying degrees depending on the level of environmental dynamism. As expected, this meta-capability has to cover various organizational, strategic, and behavioral aspects. Hence, we need both process and cognitive views on business models to explain SA attributes at multiple levels, as also argued by Berends, Smits, Reymen, and Podoyntsyna (2016). We need the process view to address top management decision making for a successful BMR process, concerning aspects such as sensing the environmental trends and planning an agenda for renewal. We need the cognitive view to address the behavioral aspects concerning divergent BM frames and political agendas among organizational members during the BMR process.

A conceptualization of strategic agility that meets these criteria is put forward by Doz and Kosonen (2008). The authors argue that strategic sensitivity, leadership unity and resource fluidity comprise strategic agility (Doz & Kosonen, 2008). In the following subsections, a brief review of each SA dimension is provided.

2.2.1 Strategic sensitivity

Teece (2010) argues that sensing capability is an integral part of agility. According to the author, it represents the top management ability to identify, develop, co-develop, and assess opportunities and threats (Teece et al., 2016). These opportunities and threats may come from both internal (Sambamurthy & Grover., 2003) and external (Hodgkinson & Healey, 2011) sources. Similar to sensing capability, strategic sensitivity represents the top management awareness of environmental trends, combined with a participative strategic planning process (Doz & Kosonen, 2008).

The authors argue that firms achieve strategic sensitivity through practices of anticipating (foreseeing what could gain popularity); experimenting (gaining insight through experimentation and market tests); distancing (gaining perspective through contacts from the far side of own network); abstracting (conceptualizing the business model), and reframing (engaging open dialogue around the business model) (Doz & Kosonen, 2010). As implied by these elements, both process and cognitive views of business models are useful in achieving strategic sensitivity. While anticipating and experimenting are practices related to the process view; distancing, abstracting and reframing practices are related to the cognitive view.

An avenue for further conceptualization of strategic sensitivity would be to explore the relative weight of its underlying practices based on a specific renewal case. Depending on factors such as environmental uncertainty, the need for practices such as anticipation and reframing might vary; which will be further discussed throughout this dissertation.

2.2.2 Collective commitment

The role of leadership in organizational change is undisputed across previous studies (e.g. Carter, Armenakis, Feild, & Mossholder, 2012; Bass, 1999). Within the domains of dynamic capabilities and corporate entrepreneurship, various aspects including emotional commitment (Hodgkinson & Healey, 2011), middle manager cynicism (Barton & Ambrosini, 2013), and procedural rationality (Velu & Stiles, 2013) have been found to play a major role in effecting change.

In order to tackle the political and cognitive barriers to business model renewal, Doz (2020) suggest collective commitment as another meta-capability required for strategic agility. The authors argue that firms achieve collective commitment (named as *leadership unity* in the previous studies of the scholars [Doz & Kosonen, 2010]) through dialoguing (developing a common understanding through shared assumptions), revealing (explicating personal motivations), integrating & aligning (aligning personal agendas and sharing a common meaning), and caring (providing safety nets for creativity) (Doz & Kosonen, 2010).

Based on the above practices, leadership unity requires 1-aligning personal motivations and cognitive frames, and 2-offering incentives and support systems that facilitate alignment. In achieving leadership unity, business models are evaluated primarily as cognitive tools to spot perceived differences and build a common understanding among members of the organization. Furthermore, these practices would be expected to uncover and minimize irrational ideas of members regarding the renewal process, which were found to play a significant role in resistance to change (Bovey & Hede, 2001).

Among the three meta-capabilities, collective commitment is the least developed construct. Although Doz & Kosonen (2008, 2010) provide a recipe for

aligning different perspectives, we need a more granular understanding of leadership unity in the BMI process. Aligning personal agendas may take more effort and a wider variety of managerial instruments than initially expected. Therefore, as in other meta-capabilities, the “how” question of leadership unity remains to be answered, which will be discussed in detail during the upcoming sections.

2.2.3 Resource fluidity

Similar to seizing capability (Teece et al., 2016), resource fluidity represents the built-in modularity, people mobility, and separation of strategy from structure in organizations to be able to transform and exploit resources and assets in the face of business model renewal (Doz & Kosonen, 2008; Teece, Pisano, & Shuen, 1997). It concerns all relevant resources and their complementarities; including people, processes, and assets. Resource fluidity postulates that organizations must build flexibility and adaptability to be able to rapidly reconfigure resources.

In order to address the various aspects of fluidity, Doz & Kosonen (2010) suggest practices of decoupling (organizing by customer), modularizing (developing multipurpose systems and processes), dissociating (separating resource use from resource ownership), switching (managing multiple business models in parallel), and grafting (using acquisitions for renewal). These practices have strong grounds in the fields of organization theory and strategic management, and this meta-capability is embedded in the business model itself as a more tangible characteristic.

While higher levels of resource fluidity are suggested for strategic agility, Teece et al. (2016) argues that strategic agility comes at a cost and should be calibrated to the required level based on environmental characteristics. Accordingly, resource fluidity is a capability that should be improved with caution, as excess slack

built in favor of increased modularity may result in decreased performance. As will be seen during the next sub-section, it may be easier to calibrate resource fluidity when business model renewal is incremental rather than radical.

2.3 Strategic agility and business model innovation

In this sub-section, the capabilities underlying strategic agility are explored along ten BMI case studies from the literature. While some of the studies explicitly use the term “business model renewal” in their analysis (e.g. Sandström & Osborne, 2011), others use “business model innovation” to term the process.

A summary of the cases is given in Appendix A. Among the studies, only Arbussa et al. (2017) explore the relationship between SA and business model innovation. Other studies, while not mentioning strategic agility per se, present evidence on the practice of underlying SA elements (e.g. experimentation, switching) in the BMI process. In addition to the SA practices mentioned by Doz & Kosonen (2010), also the use of other related practices specific to the case context were observed, mentioned in the column ‘additional capabilities’. The contextual diversity among cases provided strong grounds for further theorization. While some SA capabilities (e.g., experimentation) are repeatedly demonstrated by firms, other capabilities (e.g., alliance) surface based on the specific case context.

The findings are presented along the three SA meta-capabilities.

2.3.1 Strategic sensitivity and business model innovation

The role of strategic sensitivity is evident throughout the cases, with varying underlying practices. For instance, as a local HR services SME, Eurofirms demonstrated strategic sensitivity in its BMR process, although it lacked the resources (managerial slack and specialist staff) to enable all of the practices related

to this meta-capability (Arbussa et al., 2017). Despite strategic sensitivity being on the shoulders of the CEO, the firm demonstrated the required capabilities above a threshold to enable renewal (Arbussa et al., 2017). According to the authors, resource constraints only make strategic sensitivity more critical for renewal in SMEs (Arbussa et al., 2017). On the other hand, for Ericsson, a giant in its industry, its established sensing and experimentation practices enabled the successful transition to Cloud business model (Khanagha, Volberda, & Oshri, 2014). Ericsson used the full range of strategic sensitivity capabilities to 1-anticipate the opportunity implied by the Cloud technology by observing a seemingly unrelated industry (also via distancing), 2-reframe its current business model, and 3-experiment with the new model. As a result, strategic sensitivity played a pivotal role in renewal for both cases, albeit via different underlying capabilities in play due to firm size and resource constraints. Therefore:

Proposition #1: The underlying elements of strategic sensitivity vary based on resource availability and firm size, with more diversity in the capabilities available for larger firms.

Besides resource constraints, the nature of strategic sensitivity also seems to vary based on the level of uncertainty around the new business model. In this regard, the Ericsson case (Khanagha et al., 2014) is an ideal representation of Doz and Kosonen (2010)'s conceptualization of strategic sensitivity. The implications of the Cloud technology on Ericsson's business was highly uncertain by the time it emerged, with little clue about its ramifications on the telecom industry. Ericsson managers first sensed the opportunity, and then clarified the new business model through rapid experimentation. The company followed a BMR trajectory that Berends et al. (2016) call drifting. Firms that follow this trajectory start early with

the renewal process by reframing the existing business model, and experiment away from the incumbent model gradually towards the new model (Berends et al., 2016). Likewise, Ericsson managers had to set up an internal team to discover the Cloud technology, and clarified the new business model gradually through experimentation, eventually altering the existing model.

However, not all BMI cases involve extreme uncertainty created by a seemingly obscure technology. For instance, when Hilti introduced a service business model to offer contract-based “drilling services” to construction companies in addition to their traditional B2B equipment sales model, the initial suggestion had come from an existing customer rather than out of anticipation from an unrelated industry (Sauer, 2018). Therefore, compared to Ericsson, the new value proposition did not involve much uncertainty, enabling Hilti to leap to the new value proposition (Berends et al., 2016). In this case, the sensing practice mainly consisted of simply listening to the customer. Hilti did not have to anticipate the need for change and clarify the prescription for renewal by experimenting with a distant technology. As a result, it is possible to postulate that practices such as anticipating, experimenting, and distancing play a significant role especially in the case of extreme uncertainty. On the other hand, although the customer expectations (value proposition) regarding the drilling service were rather obvious to Hilti managers, other components of the new business model (e.g. operating model, key activities, cost structure) were still uncertain, to be discovered via experimentation. All in all, the following is proposed:

Proposition #2: Anticipating, distancing, and experimenting practices of strategic sensitivity are more salient under conditions of elevated uncertainty.

Another factor which accounts for different strategic sensitivity characteristics among cases is the degree of network embeddedness of the business model. While BMI was mainly an internal process in all the three cases mentioned, co-creation with external stakeholders is also a lever for business model renewal (Volberda, van den Bosch, & Heij, 2017). This is evident in several of the cases analyzed, across different levels of environmental uncertainty and firm size (Bojovic, Genet, & Sabatier, 2018; Laudien & Daxböck, 2015; Sandström & Osborne, 2011). In their study of two technology startups, Bojovic et al. (2018) observed that the firms interacted with various external stakeholders (investors, lead users, influencers) while experimenting with their business models. PortLab, a US medical technology startup founded in 2013, had to get the buy-in of its stakeholders (e.g. investors and medical practitioners) to be able to validate its value proposition in the market (Bojovic et al., 2018). On the other hand, in a very different setting, Laudien & Daxböck (2015) observed that German manufacturing SMEs develop a network of partnerships to achieve service transition in their business models. Regarding the role of partnerships in the BMR process of large multinationals; Sandström & Osborne (2011) found that the process is challenging due to interdependencies among interrelated actors, through which the business model operates. Therefore, the authors argue that firms must conceptualize the new business model in a way that aligns the incentives of the network members, with whom value is co-created (Sandström & Osborne, 2011).

Co-creation is a strategic sensitivity issue. A partnership mindset during the sensing stage may broaden the range of opportunities for renewal by enabling access to resources and capabilities beyond control. A focus on partnerships is also suggested by effectuation theory (Sarasvathy, 2001). The theory postulates that inter-

firm alliances are an essential part of the entrepreneurial process to create new markets (Sarasvathy, 2001). This is especially valid in the case of e-business models, where value is often times created through complementary online and offline capabilities (Amit & Zott, 2001). The interlinked activities related to these capabilities are usually governed via partnerships. Governance is a major issue during business model design (Zott & Amit, 2010), since cooperation with partners who possess adequate capabilities is essential when the firm cannot perform all required activities in-house. In other words, the “who will do what?” question is valid when a multitude of firms are concerned in the new BM. Therefore, top management proclivity for co-creation with potential partners is a strategic sensitivity issue that may substantially alter the BMR process.

2.3.2 Collective commitment and business model innovation

Collective commitment is also salient in the cases, again with varying characteristics. It is most visible in the context of large firms (e.g. Sandström & Osborne, 2011; Velu & Stiles, 2013), while its role is sometimes downscaled in the context of smaller firms (Arbussa et al., 2017). This is arguably due to the complexity of organizational structures in large firms; with multiple business units competing for firm resources, and conflicting leader agendas. On the other hand, leadership unity may be of little concern for small firms, especially when the CEO assumes the only leadership role (e.g. Arbussa et al., 2017). However, some small firms may still need to align the agendas of various members, albeit external to the firm, such as key partners and investors (e.g. Bojovic et al., 2018). Therefore, the effect of firm size on the role of leadership unity as an SA dimension is more visible in an internal view of this meta-capability. Therefore:

Proposition #3: Firm size is a decisive factor in the role of internal collective commitment as an SA dimension, with the meta-capability being more visible in the BMR of larger firms.

Besides firm size, uncertainty also alters the nature of collective commitment. Under elevated uncertainty, experimentation is used as a legitimation device for the BMR process since it validates the value creation potential of the new business model. Bojovic et al. (2018) argue that experimentation enables a strategic legitimation process for technology startups, facilitating the buy-in of customers and other stakeholders for the business model. Similarly, Ericsson used experimentation to resolve the ambiguity around the Cloud business model and thereby persuade existing business units for renewal (Khanagha et al., 2014). The persuasive quality of experimentation lies in its ability to enable procedural rationality, ensuring stakeholders that the BMR process reflects the best interests of the firm (Velu & Stiles, 2013). When a major US bank considered introducing an online bond trading platform in addition to its existing offline trading operations, the paradoxes were partly resolved through validation of the new model through experimentation on a small scale (only in the secondary bond trading market) (Velu & Stiles, 2013). When the new model worked, it reduced the tensions related to the cannibalization of the existing model (Velu & Stiles, 2013). Combined with procedural rationality, the bank leadership also aligned the incentives of the existing managers towards the new platform, addressing the political aspect of leadership unity (Velu & Stiles, 2013). Although Doz & Kosonen (2010)'s conceptualization of leadership unity (collective commitment) suggest practices for aligning the leadership agendas, the aforementioned legitimation practices reflect a more intricate understanding of leadership unity. The findings show that leadership unity is best understood via its

interaction with strategic sensitivity. Strategic sensitivity practices which account for a participative strategy process (e.g. experimentation) are more inclusive to the entire organization, and therefore leadership issues come into play. Following the sensing stage, the BMR process begins to unfold, with implications on various participating members. Implementing an emergent strategy (Mintzberg & Waters 1985) through experimentation contributes to collective commitment through legitimation.

As with strategic sensitivity, the degree of network embeddedness of the business model also accounts for differences in the nature of collective commitment among firms. In the cases analyzed, the role of leadership processes beyond firm boundaries is most visible in Bojovic et al. (2018) and Sandström & Osborne (2011). As mentioned, the technology startups analyzed by Bojovic et al. (2018) had to legitimate their business models in their activity system. Similarly, the personal care multinational analyzed by Sandström & Osborne (2011) had to align with external stakeholders such as retirement homes to build a service organization around its new product (diapers) to serve a new customer segment (elderly). However, when all activities required by the new business model can be performed in-house, the leadership unity to be achieved throughout the activity system may not cross the boundaries of the firm. For instance, Ericsson was able to perform all activities required by the Cloud business model in-house (Khanagha et al., 2014).

Although Doz and Kosonen (2010) conceptualize leadership unity as a meta-capability with an internal perspective, the cases indicate that it spans the entire activity system implied by the new BM. Therefore:

Proposition #4: Achieving collective commitment for the entire activity system is required to accelerate business model renewal, regardless of the firm boundaries.

2.3.3 Resource fluidity and business model innovation

This meta-capability is also visible in most cases. Regarding firm size, the role of resource fluidity appears to be more consistent for SA in larger firms. Arbussa et al. (2017) found that the role of this meta-capability is downscaled in achieving strategic agility in small firms, since small firms do not have a rich and complex resource base to begin with. Instead, the authors introduce resourcefulness as another element of strategic agility (Arbussa et al., 2017). In line with the authors, the BMR process of the technology startups in Bojovic et al. (2018) did not indicate any evidence regarding resource fluidity. On the other hand, the German manufacturing SMEs in Laudien & Daxböck (2015)'s study struggle to achieve service transition in their business models, due to path dependencies created by existing resources. In other words, these firms suffer from low resource fluidity, making this meta-capability vital for BMR also in smaller firms.

Larger firms tend to be more resource-rich, and therefore may have more instruments in their toolbox to enable resource fluidity. For instance, at Ericsson, integration capabilities were essential during the adoption of the new business model after a process of BM validation at a separate unit (Khanagha et al., 2014). The authors mention phased separation and phased integration as required capabilities in the process (Khanagha et al., 2014), representing the modularizing and switching activities of resource fluidity. Furthermore, in their case study concerning brick-and-mortar retailers adding an online business model, Kim and Min (2015) present evidence that resembles the demonstration of decoupling, modularizing and switching elements underlying resource fluidity. As seen in these two cases, a wider variety of resource fluidity elements are employed to enable the BMR process in larger firms. Hence:

Proposition #5: The underlying elements of resource fluidity vary based on resource availability and firm size, with more diversity in the capabilities available for larger firms.

Depending on the level of uncertainty, resource fluidity shows different characteristics. As mentioned earlier, strategic agility comes at a cost, and should be calibrated according to firm strategy and environmental dynamism (Teece et al., 2016). It is resource fluidity which represents this cost aspect in strategic agility, since it is characterized by concepts such as modularity, managerial slack, and built-in redundancies (Doz & Kosonen, 2010). The need for calibration according to firm strategy is more visible in cases with lower environmental uncertainty. For instance, Desyllas, Sako, and Tether (2013) suggest building specialized and complementary assets to prevent imitation after business model renewal for Progressive, a US auto insurance company. While an ability to reconfigure these assets over time is also suggested by the authors, idiosyncratic asset building to some degree is also advised to fully take advantage of the new business model (Desyllaset al., 2013). Therefore:

Proposition #6: Resource fluidity should be calibrated according to the level of environmental dynamism and firm strategy.

Finally, resource fluidity should be evaluated vis-à-vis network embeddedness. As mentioned previously, the cases indicate that when firms pursue opportunities beyond resources under control, they co-create value by partnering with firms in their ecosystem. As mentioned by Laudien and Daxböck (2015) and Sandström and Osborne (2011), firms may leverage external resources during the BMR process via partnering with organizations that possess complementary resources and capabilities. This is another aspect that was not accounted for in Doz and Kosonen (2010)'s conceptualization of resource fluidity.

2.4 Discussion and the research gap

This review verifies the nature of strategic sensitivity, collective commitment, and resource fluidity as meta-capabilities. Since their underlying elements vary based on several contextual characteristics, the relevant capabilities underlying each meta-capability should be explored per industry or BMR case. For instance, automotive and chemical industries may require very different underlying strategic sensitivity characteristics. Likewise, banking industry may need different underlying leadership unity capabilities for artificial intelligence and Blockchain technologies. Therefore, clear SA prescriptions for each situation require focused research to clarify specific SA capabilities. Nevertheless, firms could still learn from research on similar BMR contexts, with some level of confidence.

While BMI processes have been extensively studied in the literature for various industries and firm types to date, studies that adopt a process view to explore the SA-BMI relationship are rare. One of these studies that explores the role of SA elements in the BMI process is Arbussa et al. (2017). In their study on an SME in the service sector, the authors explore the role of SA-related practices and their temporal deployment along the milestones achieved in the BMI process. While the study provides ample evidence on the role of SA in the process, the topic needs further exploration for theory development in dynamic capabilities, as called for by the authors (Arbussa et al., 2017). Furthermore, as proposed in the previous sub-sections, the role of contextual characteristics in BMI should be further explored.

The next chapter deals with the research objectives.

CHAPTER 3

RESEARCH OBJECTIVES

The purpose of this dissertation is to 1-explore the capability combinations that enable business model innovation for different BMI initiatives, and 2-the implications of firm size, environmental turbulence, and structural embeddedness as contextual conditions for the SA-BMI relationship and BMI performance.

The main research question is as follows:

How do firms leverage strategic agility for an effective BMI initiative under the contextual characteristics of firm size, environmental turbulence, and network embeddedness?

To address this research question, the following sub-questions need to be answered:

- How do firms deploy their strategic agility-related capabilities and practices during the different phases of the BMI process that concern the different building blocks of their business models? (Study 1)
- How do the contextual characteristics combine with strategic agility to set the configurations for the effective pursuit of business model innovation? (Study 2)

The next chapter covers the Study 1.

CHAPTER 4

THE ROLE OF STRATEGIC AGILITY IN BUSINESS MODEL INNOVATION: A MULTIPLE-CASE STUDY

To address the first sub-question, this part of the dissertation features a multiple-case study, with details provided on the methodology as follows.

4.1 Methodology

4.1.1 Research method

A qualitative multiple-case study methodology was applied in this study to understand the role of strategic agility in the BMI process. As the exploration of complex relational dynamics is possible via case studies (Eisenhardt & Graebner, 2007), it is a common method in studies on strategic agility and business model innovation processes (e.g., Berends et al., 2016; Lewis et al., 2014). Furthermore, as the sequence of events in the BMI process were identified with the related SA practices, a method that allows the observation of the experiences of managers in their real-life context was required (Eisenhardt, 1989). Therefore, case study method best served the purpose of this study.

Since multiple-case studies allow for cross-case comparisons that enable the recognition of emerging patterns (Eisenhardt & Graebner, 2007), four cases were purposely sampled to gain valuable theoretical insights. Following the principles of theoretical sampling (Glaser & Strauss, 2017), case firms were sampled based on the requirement that they have recently undergone a significant configuration in their business models. In order to observe a variety of SA-related capabilities and practices, case firms were selected from among established organizations. The cases

differ in terms of industry and firm size, allowing for more generalizable insights and fruitful cross-case comparisons (Eisenhardt, 1989).

Several data sources were used in the study: qualitative data from primary sources (semi-structured interviews) and secondary sources (press reviews, websites, and official company documents such as internal presentations and consulting reports). Multiple methods of data collection helped enrich the information base and reach diversity to reduce bias (Yin, 2018). In addition to data collection from primary and secondary sources, industry publications such as white papers were reviewed to make better sense of the implications of BMI on the case firms. Primary sources of information were 26 interviews with mid- and senior-level managers at case firms, conducted between September 2020 and June 2021. The unit of analysis was the business model innovation process at case firms. Interview respondents were selected based on their involvement in the process as either decision makers or direct beneficiaries. Gathering interview data on BMI from different perspectives enabled empirical triangulation and reduced bias (Yin, 2018), especially in cases where the firms experienced (and rebounded from) failure during the BMI process. Furthermore, the secondary data collected on the sequence of events helped reduce informant bias.

During the interviews, respondents were first asked to share their personal history with the firm and then instructed to reflect on the BMI process. The first couple of interviews at each firm focused on the strategy of the firm and the business model, with an overview on the BMI and the origins of the new BM concept. As new respondents were selected using the snowball technique, more detailed questions were asked to the respondents regarding the specific phases and enabling (SA-related) organizational practices during BMI. To allow the emergence of relevant and

interesting facets (Eisenhardt, 1989), departures from interview format were permitted when required by the case context. This enabled the clarification of key events with their organizational implications. All interviews were conducted by the author.

In data analysis, the key events in the business model change process of case firms were identified using the BMI dimensions developed and tested by Clauss (2016) involving three constituent elements and ten sub-constructs mentioned in the previous section. In identifying a key event as a value proposition innovation, for instance, the study relied on interview data from multiple informants and evidence from industry white papers for triangulation (Yin, 2018). Using a similar method, the related SA practices were identified from respondents' statements using the set of practices proposed by the relevant literature. In matching a statement by an interview respondent to an SA-related practice, further literature evidence on the definition of that practice was sought when required. For instance, when a case firm hired a CEO from an unrelated industry, the practice was labelled as distancing (strategic sensitivity), in line with the definitions provided by Doz and Kosonen (2010) and Amit and Zott (2020) in the literature. Therefore, internal validity and construct validity were achieved via 1-basing the study on established literature, 2-pattern matching (Eisenhardt, 1989), and 3-theory triangulation (Yin, 2018). On the other hand, reliability was ensured via digital recording of interviews and transcription. All quotes from original data used in the study are illustrated in respective tables for transparency (Siggelkow, 2007). Table 1 describes the key characteristics of the firms studied, with pseudonyms used to protect the anonymity of the firms.

Table 1. Key Characteristics of the Sample Firms

Firm	Insuragent Co.	Tire Co.	Fleet Co.	Tool Co.
<i>Employees</i>	80	250 (Turkey)	65	125 (Turkey)
<i>Main activity</i>	Insurance agency and reinsurance brokerage	Industrial tire manufacturing	Automobile leasing and fleet mgmt.	Industrial equipment manufacturing
<i>Data collection</i>	Semi-structural interviews, internal presentations, consulting reports, company website	Semi-structural interviews, annual reports, company website, press releases	Semi-structural interviews, company website, internal presentations, press coverage	Semi-structural interviews, annual reports, company website, press releases
<i>Interviewee roles</i>	8 – General manager, marketing director, operations director, IT director, operations manager, operations consultant, digital marketing manager, branch manager	6 – Commercial director, marketing manager, business development manager (1), business development manager (2), field service chief, finance manager	7 – Finance director, sales manager, marketing director, marketing manager, call center manager, rental operations manager, IT manager	5 – General manager, sales manager, product manager, business development manager, service sales manager
<i>Business model innovation</i>	<i>The firm, having operated through a network of nation-wide physical branches as distribution partners, introduced an online insurance provision portal</i>	<i>The firm developed a new service concept for its B2B customers with a novel revenue model</i>	<i>Originally a fleet management company for corporate clients, Fleet Co. developed (and then acquired) a car rental business targeted at individuals</i>	<i>The firm has been on a journey from selling industrial equipment to providing a wide range of industrial and digital solutions</i>

4.1.2 Sample

Insuragent Co. is an insurance agency headquartered in Istanbul, Turkey. It operates a network of physical branches and works with distribution partners (such as travel agencies) to sell insurance in a wide range of product categories and from multiple providers (Allianz, Axa, and Groupama to name a few). It has a unique business model with unparalleled size compared to its competitors, which mostly operate in the form of single-branch agencies. The firm started operating more than 40 years

ago as a single-branch agency, much like its competitors. Today, it serves through 20+ branches, distribution partners such as car dealerships, and self-employed agents throughout the country. The firm provides deep expertise in multiple insurance categories through experienced staff and offers competitive prices to its customers thanks to the scale of business conducted on behalf of 20+ providers.

Most of the staff in the Insuragent Co. head office deals with operations, supporting the branches and other distribution partners in tasks such as drafting complex offers, following up on trivial damage claims, and leveraging its scale in price negotiations with providers. Despite its ongoing operational support to the field force, the nature of Insuragent Co.'s relationship with its branches and distribution partners is highly transactional. Employees working at the branches earn a high percentage of their income in the form of sales commissions. In addition to the day-to-day business conducted with its existing distributor base, Insuragent Co. also actively seeks new distribution partners and works on new partnership concepts by leveraging its IT competences. Given its role in value creation for the field force through operational excellence and scale economies, Insuragent Co. is largely a B2B business, and thus its B2C marketing activities are limited in scope. In the words of its general manager, *Insuragent Co. is in the wholesale business of insurance.* Having enjoyed sustainable growth in the industry over the years, the leaders at Insuragent Co. decided to build an online platform for insurance provision targeted at individuals, similar to platforms such as gocompare.com in the UK. The BMI process at Insuragent Co. is reflected along the development of the online platform.

Tire Co. is the industrial (B2B) division of a tire manufacturer headquartered in Europe with global presence as a multinational corporation (MNC) and a long operating history in Turkey. The parent company has a wide variety of products in its

portfolio, including tires for automobiles, motorcycles, trucks, buses, and Formula 1 cars. Representing the B2B side of the business, Tire Co. operates factories in several parts of the world and enjoys high brand awareness among its customers.

Tire Co. has an established presence in Turkey with an operating history of several decades. The company mainly caters to customers such as logistics firms, intercity bus carriers, and construction companies. The firm serves its customers through a dealer network and has an account management team for large customers. Since revenue is almost entirely accounted by sales through dealers, sustaining long-term partnerships with dealers is vital for commercial success.

Given the commoditization trend in tire industry and competitive pressure from low-cost producers in China, Tire Co. is heavily reliant on scale economies. The fluctuations in demand are tolerated mainly by its dealers, thus making sustained relationships with them a vital aspect of the business model. Due to thin operating margins in the industry, Tire Co. management is oriented towards strict cost control and risk-return appraisal in its commercial initiatives. Admitted by the executives interviewed, the firm is characterized by a strong commercial orientation that drives managerial decision making.

Recently, Tire Co. gradually developed a service-oriented business model to serve the high-end of the market, with the novel pay-per-kilometer concept as the value capture innovation and the defining building block of the new BM.

Fleet Co. is an automobile leasing and fleet management company founded in early 2010s. The founders of the company were formerly senior managers at an industry incumbent, having gained extensive experience and an awareness of the promising market niches to be addressed. Given the flexibility of small size and the booming economy, the top management was aggressive in building the company.

Within a couple of years, the company grew to approximately \$1 billion in assets (vehicles) under management.

The fleet management industry is heavily reliant on financing provided by banks and other financial institutions, as owning and operating a large fleet of vehicles makes the industry highly capital intensive. An oversimplified operating model for a fleet management company is as follows: after a deal is made with a customer (e.g., a bank with ~100 executives who need a car) for a service contract covering several years, the fleet management company uses bank credit to purchase the vehicles. Over the course of the contract, maintenance of the vehicles and related services (e.g., repair, replacement) are performed by the fleet management company or its service partners. By the end of the contract period (typically 36 months), the vehicle is either sold at a salvage value or reused to serve another customer. Service fees earned minus operating expenses, decrease in vehicle value, interest expenses from financing, and overhead results in profits generated by the fleet management company.

Fleet Co. enjoyed high profitability during a period of favorable macroeconomic conditions characterized by booming demand and available financing. It seized the market opportunities via quick decision making and action in its early years when its established competitors were slow to act. Fleet Co. also had an appetite for unrelated but complementary business areas, such as insurance, which earned a portion of the profits in the leasing process. However, this study focuses on the business development efforts of Fleet Co. in short-term car rental for individuals. From its early years, Fleet Co. worked on a short-term rental BM, with ups and downs along the way.

Tool Co. is a multinational industrial tools manufacturer based in Europe. It manufactures and sells industrial tools such as torque wrenches used in manufacturing industries such as automotive. Despite its long operating history in Turkey, until recently, the local organization was mainly responsible for importing the goods and selling them through a network of dealers. Therefore, the company did not have dedicated teams for functions such as marketing until recently. Still, the company enjoyed brand awareness due to high-quality products offered in the market for decades.

The industry that *Tool Co.* operates is characterized by the increasing involvement of technology. Leveraging Industry 4.0 technologies such as image processing, artificial intelligence, and machine learning; new digital applications make factories smarter and more efficient. Accordingly, supplier industries that provide equipment to manufacturers are converging, as suppliers increasingly need common norms and protocols in their solutions to serve a manufacturing environment that is interconnected with data flows. The shift from selling products to offering outcome-based solutions (e.g., solutions that enable productivity increase) and increasing convergence of supplier industries characterize the business environment of *Tool Co.*

During the past decade, *Tool Co.* in Turkey has been on a journey from being an equipment reseller to a provider of process solutions. Thus, in the study, the *Tool Co.* story in the Turkish context was depicted. As the global strategy of *Tool Co.* plays a major role in the BM development of the local organization, the global aspects are touched upon when needed using empirical evidence.

4.2 Case study findings

4.2.1 Insuragent Co.

The phases of the BMI process for Insuragent Co. were depicted in Appendix B with developments in the building blocks and related SA practices.

The process was divided into phases based on the major milestones achieved at the beginning of each phase. Phase 0 represents the groundwork before the conception of the new BM, consisting of the initial steps taken for BMI. Phase 1 starts when the initial concept and a prototype were developed for the online platform. Phase 2 represents the development of the BM building blocks based on the initial concept and the ramp-up of the online platform. Finally, Phase 3 represents the planned steps on extending the new BM through new partnerships and service concepts.

The foundation for the new model was laid without the new BM concept in mind, based on the needs of the day-to-day activities in the traditional BM. In generating insurance quotes for its customers, agents at Insuragent Co. used to log into the web platforms of the providers and enter the required details to retrieve the quote, thus suffering from a time-consuming process that offered limited scalability. Therefore, the firm needed a software solution to quickly generate multiple quotes from its providers. As the quotation stage is a vital step in the customer acquisition process of insurance agencies, generating quick and competitive insurance offers from multiple providers is vital for turning prospects into customers. The software was developed by a vendor based on the unique operational needs of Insuragent Co. The solution, named Portal, streamlined the quotation process for Insuragent Co. by integrating with the IT platforms of the providers and thereby automating the manual tasks such as data entry. As it automated a major operational component in the day-

to-day business, “it wasn’t long before we noticed that Portal offers exciting new business opportunities”, as the marketing director states. Streamlining the quotation process implied a multi-purpose capability that could be used in new value propositions and business models.

The development of Portal can be considered as a value creation innovation with the new capabilities and new technology sub-constructs (Clauss, 2016). It also reflects the modularizing practice as part of resource fluidity (Doz & Kosonen, 2010) since Portal became the plug-and-play capability that laid the foundation for new offerings and business models, as will be discussed shortly.

In addition to the above arguments, it could be argued that anticipating was also applied at this point, since the management foresaw the potential use cases of Portal and acted accordingly. Therefore, strategic sensitivity was a meta-capability that played a major role at this point through these practices. On the other hand, the acquisition of the software provider reflects grafting, while keeping the two companies as separate entities was a typical example of dissociating (resource fluidity). By separating resource use from resource ownership, the management sustained the focus of Insuragent Co. on the ongoing initiatives while the other company was responsible for the exploration of new opportunities. The partnership with the software provider reflects another value creation innovation for the firm through the new partnerships sub-construct, while strategic sensitivity and resource fluidity were the related meta-capabilities via the four practices.

The beginning of Phase 1 was marked with the development of the new BM concept. After the partnership agreement, the management of Insuragent Co. developed the idea of an online platform, the likes of which already existed as successful businesses. Aiming to leverage the Portal system and its operational

competences, Insuragent Co. envisioned the new business model and its key building blocks with the board in a participative process. Therefore, the firm applied abstracting and reframing practices at this point. As abstracting is characterized by the conceptual evaluation of the BM dimensions, the management observed the BM template of a competitor in the market and evaluated its own competencies to build on that template. As the marketing director stated: “What the online insurance platforms are missing today is that they don't keep their promise at damage claims after selling the insurance policy ... in this business, your job as an insurance agent starts after you sell the policy.”

The novelty that Insuragent Co. brought to the market was the offline complement to the online service. On the damage claim process, the firm spotted a weakness in the template and planned to address it via its offline network of agents to cater to the needs of its customers. Since approaching the case from multiple perspectives and considering new BM alternatives is vital in reframing, both abstracting and reframing were vital in this process. This is how Insuragent Co. developed its new offering, another sub-construct of value creation innovation.

In the final step during Phase 1, a seasoned executive joined the firm as the new CEO, after having served the firm for several months as an external advisor. The aim of Insuragent Co. in hiring the new CEO was to both improve traditional business processes and further define the new BM concept. Hiring an outsider as the CEO further enhanced the distancing and reframing practices during the BM design. In Phase 2, the core processes were designed and new functions such as digital marketing were introduced. Service blueprints were created for key processes by external consultants, representing the new processes sub-construct in BMI. New functions and units such as digital marketing and call center were introduced by

hiring specialized managers and staff, implying new channels and new capabilities. Furthermore, the activity relationships between Insuragent Co. and its branches were configured to serve the customers via both online and offline channels. As mentioned, this was initially conceived as an aspect that differentiates the new BM from existing templates. This implied new customer relationships as part of value proposition innovation for the firm. All activities were enabled via abstracting; as the processes, personnel, and activity relationships were designed based on the initial concept.

In addition to building the new organization, a crucial step in Phase 2 was the configuration of profit-sharing scheme with the branches. This was challenging for the firm for two reasons. First, since the branch network plays a key role in the novelty of the new BM, arriving at a reasonable profit-sharing scheme was vital to get the buy-in of the branches. Second, as the branch network is a key partner in the traditional business of Insuragent Co., the new BM had to be framed in a way that it is perceived by the branches as a source of new business, rather than one that steals their existing customers. Thus, the BM had become a framing device for understanding the new business. This is where collective commitment becomes a crucial factor for a successful BMI process. As the CEO states, the following practices were performed to get the buy-in of the branches: “I conducted one-on-one meetings with our dealers to understand their concerns and ensure that this will not harm their business ... they all have agent accounts on the platform, where online customers will be assigned to a suitable agent.”

The configuration of this dimension of the new BM falls under the category new revenue models in value capture innovation. The underlying SA practices, on the other hand, were dialoguing, revealing, integrating, and aligning to ensure

collective commitment. The CEO aimed at surfacing the assumptions of the stakeholders and looked for transparency in the personal motives with the one-on-one meetings. Moreover, he configured the profit-sharing scheme so that the firm and the branches share a common interest in serving the online customers, via interdependencies between the two counterparts.

As Insuragent Co. had started acquiring new customers for the new BM by the time the interviews were conducted, the company also had plans to extend the BM via new partnerships, new channels, and new customer relationships. For Phase 3, the firm mainly applies anticipating and abstracting practices in conceptualizing the extensions of the new BM. For instance, the firm aims at leveraging the Portal software to offer insurance policies as complementary offers to product purchases at e-commerce platforms during checkout. This implied new partnerships and new channels for the firm.

Another BM concept that the firm envisions is making the Portal software available for the use of other insurance agencies, in return for a share in the commissions. As this is yet another innovation in value proposition and value capture, the managers anticipate that gaining access to a wide selection of insurance providers through Portal would be favorable for other agencies that usually work for only one or a few providers. In addition to the practices anticipating and abstracting, the firm aims to benefit from the multi-purpose nature of the Portal software. Furthermore, the decision to keep the acquired technology unit as a separate entity from Insuragent Co. (dissociating) would enable the exploration of this new BMI initiative.

The BMI process of Insuragent Co. is visualized in Figure 1 along the four phases and changes in the business model building blocks with underlying SA

practices. Each group of bars indicated with the same color represent a new business model for Insuragent Co.: online platform BM, partnership with e-commerce platforms, and offering the Portal as a service.

4.2.2 Tire Co.

The phases of the BMI process for Tire Co. were depicted in Appendix C with developments in the building blocks and related SA practices. In line with the table, phases are explained in detail; however, not all citations are shared in the text. The reader may refer to the table for the interview evidence for each phase.

The BMI process at Tire Co. unfolded in the following phases. Phase 0 represents the groundwork before the conception of the new BM, consisting of the initial steps taken for BMI. Phase 1 starts when the new management started taking steps towards organizational changes to become more customer focused. Phase 2 features the development of the pay-per-kilometer concept as the defining characteristic of the new BM. Finally, Phase 3 represents the planned steps on scaling up the new BM.

Before the pay-per-kilometer concept was introduced in Phase 2, several steps in Phase 0 laid the groundwork for the BMI. The story dates to 2015, when the R&D efforts of the firm paid off with a new generation of high-quality tires for commercial and industrial use. The product offered high durability and consistent

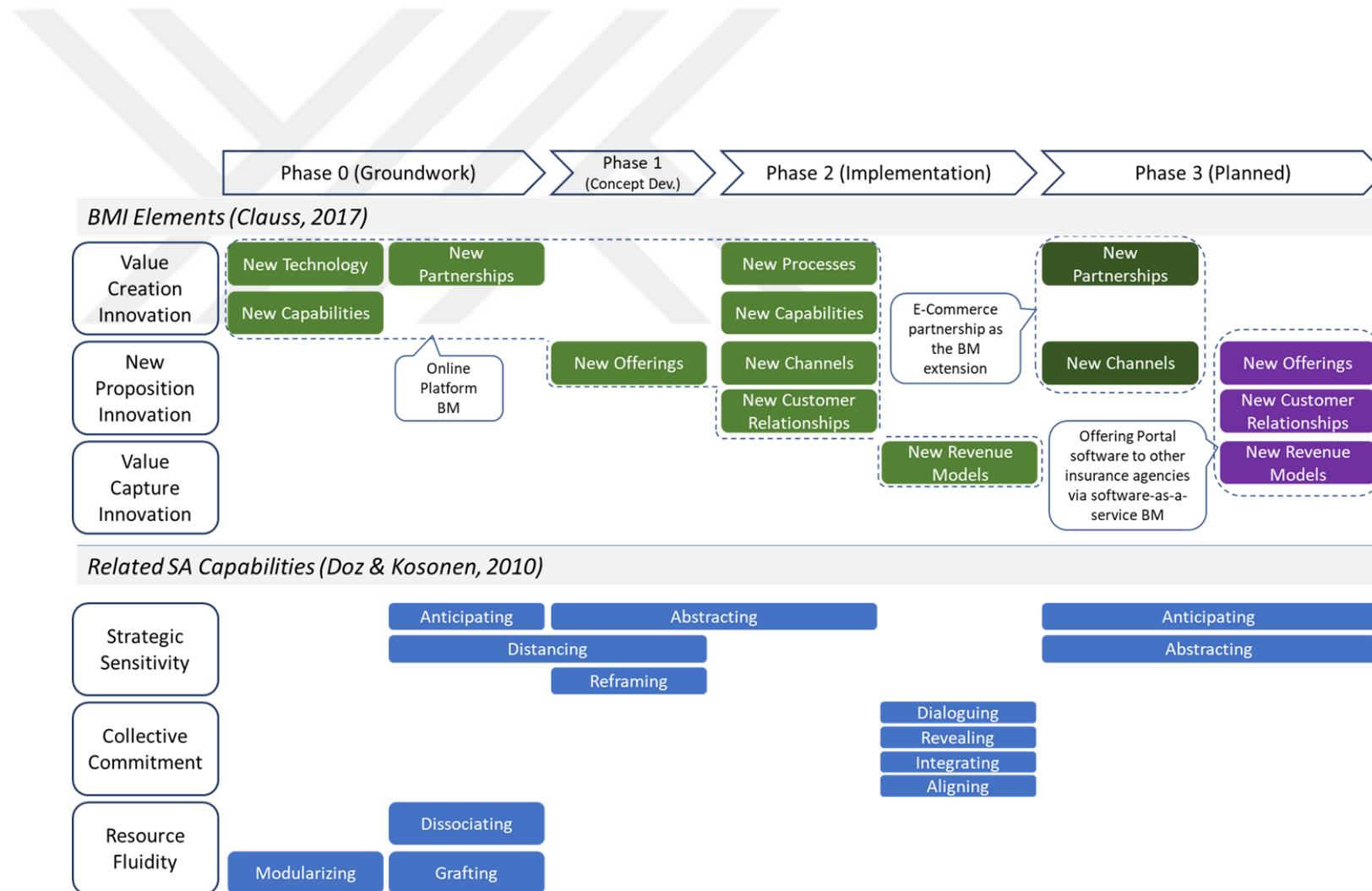


Figure 1. BMI process at Insuragent Co.

quality, enabling accurate predictions on the useful life. As stated by the business development manager (see Table 3), this aspect is crucial for the commercial viability of the new business model. The features of the new product, which enabled the development of the new BM, therefore improved the resource fluidity of Tire Co. The product implied a multi-purpose capability that was leveraged during the subsequent steps, thus reflecting the modularizing practice. Another innovation that served a similar purpose was the adoption of tire retreading technology. Retreading of used tires reduces costs for users via extended useful life. Tire Co. adopted this technology to better serve its customers in its traditional business, while it also was another major enabler of the new BM.

Another milestone in Phase 0 was the decision of Tire Co. parent company to divest from the B2B business globally, with the spin-off of the industrial division. Since the B2B business accounted for a small fraction of the total income for the corporation, the parent company decided to focus on its core business, the B2C segment. After the spin-off, Tire Co. became more attentive to opportunities presented in the market, which were previously overlooked by the managers at the parent company. As presented in the statements made by the business development manager and the commercial director at the firm (see Appendix C), decoupling of Tire Co. from the parent organization improved the fluidity of the resources. After being relinquished by a parent that used to pay little attention to the business, Tire Co. management team had the freedom to explore new opportunities.

The beginning of Phase 1 was marked by the appointment of a CEO from a leading global consumer goods company. After a brief adaptation period to a new industry, the CEO started evaluating the traditional tire business from an outside-in perspective. Shortly after taking office, he appointed a commercial director who had

an attentive eye to opportunities that would differentiate Tire Co.'s value offerings. In addition to distancing via bringing an outside-in perspective with the new CEO, Tire Co. practiced reframing with its new management team, exploring new avenues with a critical lens to the traditional BM.

Shortly after the changes in the management team, the firm started working on its customer focus. In the traditional model, the firm was mainly oriented towards the commercial aspects in the provider-dealer relationship. With the mindset shift driven by the new management, steps were taken to improve the communication of the value offer with the customers. This required improving the awareness of the dealers on the marketing mix, since they were the main customer touchpoint in the business model. For this purpose, the firm introduced a training department dedicated to improving the dealer know-how on product features and managing customer relationships. On the other hand, a fleet management team was formed to assist the dealers in handling the requests of large customers.

The shift from sell-in to sell-out meant actively participating in the dealers' sales processes instead of merely selling to the dealer and leaving the rest on the dealers' shoulders. Given the reflections provided by the managers, the management practiced abstracting in assessing the traditional business model and reframing in seeing the need for the mindset shift. The practices resulted in new customer relationships between Tire Co. and its customers. Furthermore, in line with this shift, mid-level managers from competing firms were transferred to develop new value propositions for customers, reflecting the distancing practice.

In line with improved customer proximity and transfer of know-how from competitors, Tire Co. introduced the advisory service as a new offering for the efficient use of tires by large customers such as construction companies. With service

staff deployed at the customer site, Tire Co. analyzed the wear patterns of the tires to provide recommendations on aspects such as when to change the tires and how to perform maintenance for efficient use. At this point, the firm considered various bundling and pricing alternatives for its advisory offering. While asking for a service fee in return for some projects, the service was offered with no charge in others, with the condition that the customer uses Tire Co. brands. These projects were a great opportunity for Tire Co. to observe the usage life of its products in different environments such as highways, pathways, and construction sites. By experimenting with several bundling alternatives and usage characteristics, the firm accumulated know-how on the service concept

The mindset shift in the organization and accumulated know-how on the service concepts during Phase 1 prepared the firm to take its value offering to the next level in Phase 2. This step also marked the most salient feature of the new business model for the firm. The service concept, offered so far as an add-on to facilitate product sale, took a different form with the introduction of the pay-per-kilometer concept as a new revenue model. Leveraging its know-how on the usage characteristics and relying on the quality of its tires, Tire Co. developed a new concept to offer its tires in return for payment per kilometer used, instead of selling the tires on per unit basis. As the firm was able to predict the wear per kilometer for its tires through accumulated know-how and consistent product quality, it was able to introduce the concept. Furthermore, according to the new BM, customers would leave all replacement- and maintenance-related activities to the firm. Tire Co. would thereby have full control over the activities related to the use of its products through the service team deployed at the customer site.

The new BM had a value capture logic that fundamentally contradicted with the traditional way of doing business. While selling more tires naturally meant higher profits in the old model, consuming less tires via higher efficiency was the driver of profits in the new model; since the service was being provided for a fixed fee per kilometer. As this contradicted with both the established organizational norms and policies (e.g., performance metrics) and the working principles with the dealers, several actions were taken to get the new BM to work.

First, the top management at the local organization had to be convinced. For this purpose, the commercial logic of the new BM was presented to the management. Although the model was new to Tire Co. globally, a major competitor in the industry had been operating a very similar BM in Europe for almost 30 years. In suggesting the new BM to country leadership, the business development manager practiced dialoguing as seen in Appendix C.

Second, after getting the buy-in of the top management, the new BM was tested on a customer that had a small-scale logistics fleet. The expectations and assumptions of Tire Co. with the new BM were tested, and the key activities supporting the BM were clarified. Although the test resulted in a minor loss, the experimentation served its purpose, as stated by one interviewee. After experimenting with the new BM, the firm was ready to present it to the global HQ.

Third, the firm presented the concept to the global HQ. For the presentation, the management created detailed scenarios of the forecasted profitability. Given the credibility of the local management due to past performance and the commercial viability of the scenarios, the global HQ decided to give the new initiative a chance. However, as the finance manager mentioned in the interview, the global leadership said: try this for a year or so, but if you can't keep your promise regarding

profitability, we'll have to cancel it. Therefore, dialoguing through open communication (of all assumptions and possibilities) was once again key to get the buy-in of the top management at this point.

After the approval from the global HQ, Tire Co. signed a three-year contract with a major logistics company as the first customer of the new BM. Despite the decision by global HQ to approve the concept for only one year, the country leadership trusted in the ability of the local team to reach the forecasted profitability figures and agreed to proceed with the deal. If the profit figures had not turned out as expected after one year, the country management would be in trouble, as it would not be possible to end the deal after the first year due to the contract clause. The country leadership took over the risk at this point, and thus practiced caring for its team. Despite the successful ramp-up of the project, the management had to get around the resource rigidities (lack of resource fluidity) on the way. For instance, since headcount plans are made on yearly cycles and reported to global management, the firm was unable to hire new staff to deploy in the new project. They thus turned to a long-term dealer for the payrolling of the required personnel: “For budgeting and planning reasons, we could not officially recruit the maintenance people we needed to deploy as part of this business model. Thus, we turned to a dealer that was a long-term partner for the payrolling of the personnel.” (Marketing Manager)

Phase 3 represents the plans of the firm for the new BM. Despite its success, the firm has several concerns in scaling up the pay-per-kilometer concept. Since dealers are an integral part of the traditional BM and still account for more than 95% of the profits, the firm is reluctant to aggressively pursue the new BM. Instead, as the interview data suggest, the firm considers the pay-per-kilometer concept as an alternative value proposition to be offered to suitable customers.

Although the new BM is being implemented successfully, this points to a collective commitment issue at this point. Despite the obvious advantages of the new model, the firm still has to address the dealer aspect and find a solution that accommodates everyone's interests to scale-up the new BM without any harm to the traditional BM.

Another aspect to be considered when scaling up the new BM is the lack of sufficient know-how at the firm regarding the usage characteristics at various contexts. For instance, there is yet little know-how on the durability of the tires in a construction context. Therefore, the firm needs to gather data through further experimentation to extend the BM to new contexts.

The BMI process of Tire Co. is visualized in Figure 2 along the four phases and changes in the business model building blocks with underlying SA practices. Each group of bars indicated with the same color represent a new business model for Tire Co.: pay-per-kilometer business model and BM scale-up & extension to new customer segments.

4.2.3 Fleet Co.

The phases of the BMI process for Fleet Co. were depicted in Appendix D with developments in the building blocks and related SA practices. In line with the table, phases are explained in detail; however, again, not all citations are shared in the text. The reader may refer to the table for the interview evidence for each phase.

The BMI process at Fleet Co. unfolded in the following phases. Phase 0 represents the groundwork before the conception of the new BM, consisting of the initial steps taken for BMI. Phase 1 starts when the new management takes the first step to enter the short-term rental business. Phase 2 features the acquisition and

integration of Rental Co. Finally, Phase 3 represents the planned steps on extending the new BM with digital value propositions.

The Phase 0 began when Fleet Co. reduced the holding period of its vehicles from 36 to 12 months. It was a strategic action taken to take advantage of second-hand car prices to offer newer cars to its customers. As the small firm size enabled the company to take quick action and transform the whole fleet, the company enjoyed increased customer satisfaction as a result. The relevance of the action for BMI is, as will be discussed in Phase 1, that shorter holding periods enabled the use of the vehicles also for short-term rental, a business that is fundamentally different from auto leasing. While newer vehicles represent new equipment and new offerings, the related SA practice was modularizing (resource fluidity), since the equipment gained a multi-purpose property from the perspective of the new BM.

When a credit squeeze among banks for long-term loans hit the auto leasing industry, the firm responded to the credit limitation by shifting its focus to short-term projects at the beginning of Phase 1. Due to its small size, Fleet Co. was again able to take quick action by catering to the short-term needs of its B2B customers and entering the short-term rental business with a new brand. Apart from the modularizing practice that prepared the company for short-term initiatives, the main enabler of Fleet Co.'s swift action was again its small size. Therefore, the roles of collective commitment and resource fluidity are downscaled for the firm. In other words, where a large business would need the two meta-capabilities to make fundamental changes in its business model, they were not a requirement for Rental Co. to the extent that its small size enabled it to take quick action.

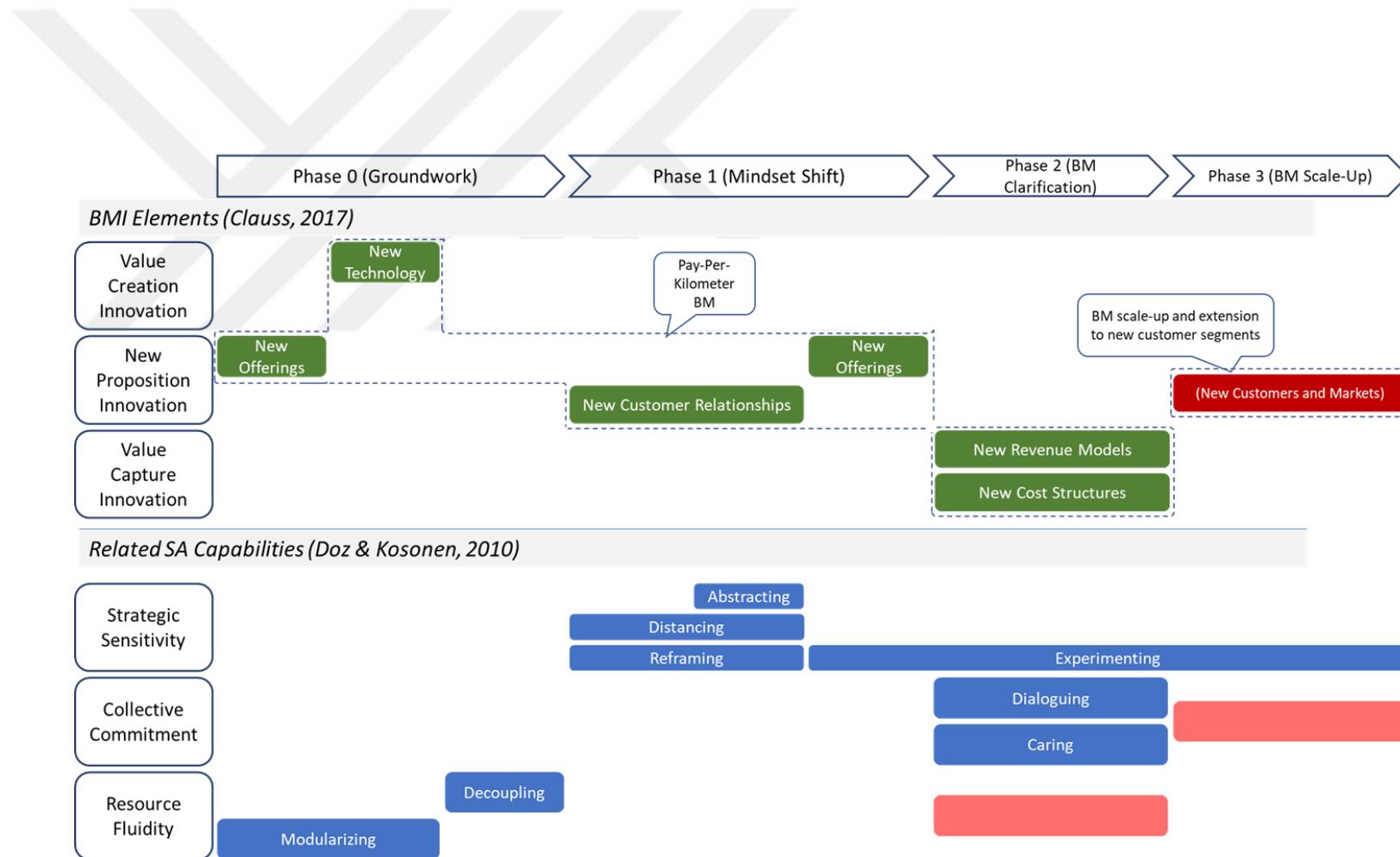


Figure 2. BMI process at Tire Co.

After the firm started operating in short-term car rental to look for new B2C customers, it had to face some difficulties that were previously unexpected. A major difficulty for the firm was a lack of brand awareness among the prospective customers. As Fleet Co. painfully realized, it would take years for a car rental company to build a well-known brand. On the other hand, the firm was incurring losses each day that the capacity was not being utilized. Since the firm could not quickly create customers; it cooperated with Yolcu360, an online platform for car rental, to rent out its vehicles to the customers of the online platform.

Although the firm remedied some of the losses incurred with the cooperation, the margins left to Fleet Co. was thin, as the lion's share of profits went to the online platform in this case. The firm suffered from a failure to correctly assess the short-term rental business model before taking action, and likely underestimated the challenges that some of its building blocks posed (e.g., branding) due to cognitive limitations. One could argue that this is partly due to a lack of strategic sensitivity, as activities such as distancing to bring the perspective of people experienced in car rental could have helped the Fleet Co. leaders draw a more coherent picture of the car rental BM. At this point, new channels and new customer relationships dimensions of the new business model were missing, provided with the firm attempt to bridge the gap in the BM with new partnerships.

Disillusioned by the challenges posed by the rental BM, Fleet Co. took another radical step by acquiring Rental Co., a firm in the car rental industry with an established brand and a network of branches in all major airports in Turkey. With this step that marked the beginning of Phase 2, Rental Co. had acquired a whole business model, practicing the textbook definition of grafting (resource fluidity): "Beyond having a global brand and established operations with wide geographical

coverage, with the acquisition we also had more credibility on the financial side, buying power through scale, and a wide selection of new vehicles.” In line with this statement from the finance director, the as the sales manager stated: “We've got the chance to develop new value propositions through Rental Co. to our existing clients, and invest in new, innovative projects for Rental Co. with our financial strength and enthusiasm of our leadership for new initiatives.”

Shortly after the acquisition, Fleet Co. started to integrate Rental Co. operations and organization to its business towards a single, functional organizational structure that was aimed to support both business models. The differing views obtained from interviews with both Fleet Co. management and an executive from the acquired firm are provided in Appendix D.

As could be argued based on the statements, failure to conceive the new BM with its key dimensions resulted in capability and process failure, since some of the crucial marketing processes were lost during integration. Furthermore, adopting a functional organization might be a main reason for the failure, especially if organizational changes were configured without a holistic assessment and understanding of the rental BM. Given that Fleet Co. leadership was unaware of the key aspects of a new BM during integration, it could be argued that the firm lacked the required strategic sensitivity, as in Phase 1. Furthermore, since decoupling practice is defined as organizing by customer as part of resource fluidity, one could argue that Fleet Co. went in the opposite direction by adopting a single functional structure for both businesses.

After experiencing the downsides of a functional structure, the firm decided to reverse the steps taken by re-introducing some of the roles that are vital for running the day-to-day business at Rental Co. With managerial roles that are solely

dedicated to Rental Co., the firm started gradually switching to a divisional structure. To compensate for the capability and process failures, the firm this time practiced decoupling.

After the acquisition of Rental Co. with several obstacles on the road during integration, Fleet Co. leaders started exploring the synergies between the two business models to develop new offerings and new customer relationships. The management was quick to discover a few, including an offer for the short-term needs of the corporate customers of Fleet Co.: “During the lockdown, we utilized the idle fleet of Rental Co. to serve the short-term needs of Fleet Co. clients. For instance, a multinational client frequently has short-term needs for their expatriate employees, whom we could not serve before.” (Call Center Manager)

Since running two BMs in parallel and adapting a product from one to the other is defined as switching (resource fluidity), the firm applied this practice at this step to develop new offerings. The firm also practiced reframing, applying the perspective of own BM to spot differences and improvement points on the opposite BM, as given in the statement by the finance director in Appendix D.

By the time the interviews were concluded, the firm was working on innovative new value propositions that leverage the capabilities of both business models. As given in Appendix D, these projects are highly encouraged by firm leadership.

The BMI process of Fleet Co. is visualized in Figure 3 along the four phases and changes in the business model building blocks with underlying SA practices. Each group of bars indicated with the same color represent a new business model for Fleet Co.: short-term rental BM and short-term rental BM extension.

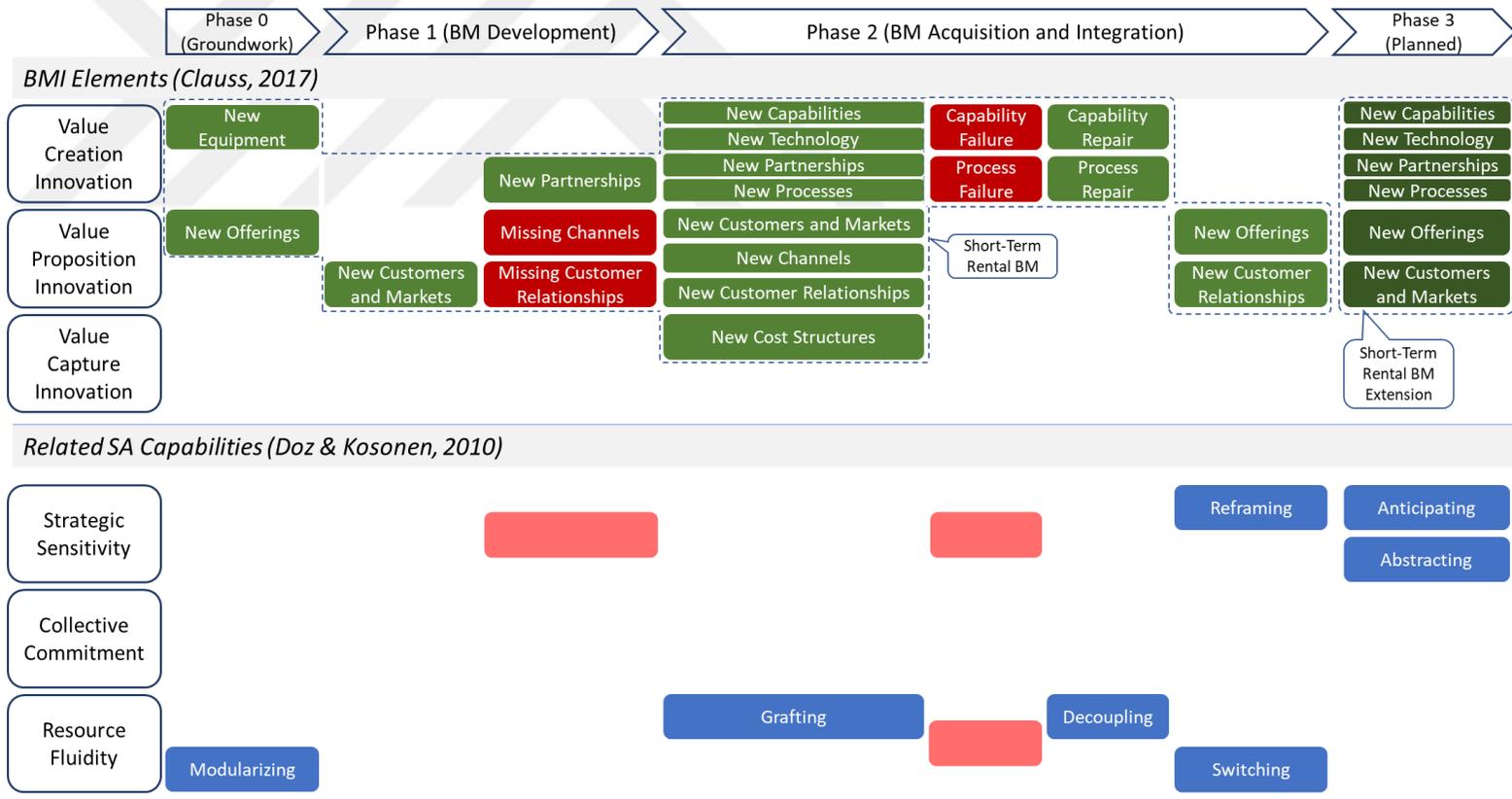


Figure 3. BMI process at Fleet Co.

4.2.4 Tool Co.

The phases of the BMI process for Tool Co. were depicted in Appendix E with developments in the building blocks and related SA practices. In line with the table, the phases are explained in detail. The reader may refer to the table for the interview evidence for each phase.

The BMI process at Tool Co. unfolded in the following phases. Phase 0 again represents the groundwork before the implementation of the new BM, consisting of the initial steps taken for BMI. Phase 1 starts when the service concept is implemented. Phase 2 deals with the transition to a digital solutions BM. Finally, Phase 3 represents the planned steps on extending the digital solutions BM.

The process for Tool Co. started when the global leadership decided to take several actions concerning country organizations to achieve customization and local adaptation in its offerings. Called make standard, sell special; the strategy required the empowerment of local organizations to achieve customization. The local organization in Turkey used to be mainly responsible for the import and distribution of standard Tool Co. products through a dealer network, thus making the local team mainly a sales organization. Therefore, the company had not been performing the specialized functions (such as marketing) that would enable the company to be responsive to local needs and characteristics. With the new market-oriented departments under a new general manager with increased autonomy, the local organization gained the capabilities and the autonomy to take the required actions in customization. Furthermore, in line with the increased autonomy given to local organizations, the company also switched to holding structure, with Tool Co. as one of the four business lines under a separate legal entity.

Given the restructuring efforts presented, it could be argued that the firm performed decoupling when separate organizations were formed for each business area. Furthermore, dissociating was applied, as the country organization gained autonomy as a result of the restructuring.

With the new organizational setup, the firm started offering product-related add-on services to customize its offerings for the large B2B customers in Phase 1. Since Tool Co. offers advanced industrial equipment for use in manufacturing processes, the services were aimed at improving the performance and durability of the equipment through maintenance. Also, the company provided expert advice on how to best perform certain manufacturing processes in which Tool Co. equipment is used. To gain the required capabilities for the provision of new service offerings and avoid any conflict that may arise with the traditional business, the firm took several actions.

First, the firm hired highly capable account managers and service managers to its middle ranks. These new managers, as observed during the interviews, were highly flexible and capable individuals to quickly learn new technical capabilities offered by the global center and adapt them to the customer needs. The new managerial capabilities added plug-and-play functionality to the firm (modularizing), since the firm was able to quickly deploy its global competences to the local context through these managers: “Tool Co. is very agile and open to change. We have key account managers for complex initiatives with high revenue potential, which require technical knowledge and effort”. (Business Development Manager)

Second, the firm had to avoid any conflict that might arise between product and service teams. Two actions were taken for this purpose: The first action was to introduce customer segmentation to separate the team responsibilities (decoupling).

The SME segment was served mainly with standard products through dealers, thus having little to do with the service teams. Large manufacturers segment, on the other hand, required adaptation and customization. Therefore, the second segment required collaboration between product and service teams.

The second action was an internal communication campaign introduced by the global HQ, with the motto first in mind, first in choice. The campaign reflected the global strategy of the company to always be the first provider that comes to mind when a need arises. As providing service implies closer and ongoing contact with customer, it improves the customer-provider relationship by increasing the mindshare. Product teams are well aware of this fact, as an executive in the product team stated, provided in Appendix E.

With the campaign, the company ensured collective commitment between product and service teams with different working principles and operational targets. As the interview evidence suggests, the company achieved this through integrating and aligning practices.

The beginning of Phase 2 is marked by the acquisition of several engineering and technology firms by the global HQ. While the acquisitions will not be discussed in detail, their relevance for the study is the acquisition of new capabilities and new technology via grafting (resource fluidity).

With the acquisition of new competencies, the firm developed new process solutions. For instance, with the acquisition of an engineering firm with advanced visual processing technology, the firm developed new process efficiency solutions that leveraged the visual data collected from clients' manufacturing environment. As the acquired data processing technologies enabled vast amounts of customer usage data to be collected and processed, the firm was able to develop new services based

on the know-how generated from the analysis of acquired data. The firm pooled all usage data in a single platform and standardized the rules and procedures in leveraging the data to develop new offerings as add-on modules, reflecting modularizing practice: “The predictive maintenance module is based on this common platform, which is the foundation for all add-on applications ... We gather all usage data from our customers into this database”. (Product Manager)

A typical add-on module that leverages the common data platform is predictive maintenance. Predictive maintenance solution enables customers to predict failures and downtime in their equipment through past usage data, leading to better maintenance practices. As mentioned by Tool Co. managers, the successful application of this module required all technical, organizational, and relational competencies developed during the previous steps, reflecting the role of previous developments in the business model and related SA practices: “If you'll offer the predictive maintenance module to a client, you should've attained a very advanced level of collaboration with them. Only then you can apply predictive maintenance to add further value to client operations”. (Product Manager)

“Predictive maintenance leverages data accumulated in the common data platform to provide actionable recommendations”. (Service Sales Manager)

To adapt the predictive maintenance offering to unique customer needs, Tool Co. needed to further improve the technical skills of the service teams. Therefore, a new role called *technical competence development manager* was introduced to devise and track the yearly competence development plans of the service teams. This reflects the practice of further *modularizing*, since Tool Co. continues to rely on the skills of a flexible team to customize the standard offerings of the company.

Following the development of the predictive maintenance module, Tool Co. started its first project with Auto Co., a long-term customer and a prominent manufacturer in the automotive industry. However, several issues arose when the module implied process and policy changes in customer operations. A major issue was the perception of Tool Co. from the view of the customer. *You are not a software company in our view*, said client managers, when the firm offered the solution. Another issue was the use of data collected from customer operations, as the customer was reluctant to give away the control over the data generated at the manufacturing site. Furthermore, the systems and protocols of the customer and that of multiple suppliers had to be compatible with Tool Co.'s solution. Last but not least, managers at Auto Co.'s IT department had to be involved in the negotiations but had no previous experience in negotiating with suppliers. Therefore, adapting the solution to the customer required new processes, routines, and activity relationships on the customer side, implying a change also in part of the customer business model.

Dealing with the difficulties in applying the project required prolonged negotiations with Auto Co. managers. At this point, Tool Co. needed to ensure collective commitment towards a new, boundary-spanning activity relationship between the firm and Auto Co. As the interview data suggests, changing the activity relationships which go beyond firm boundaries (and even affect Auto Co.'s other network members) required a close-knit relationship formed over years with Auto Co. As *first in mind, first in choice* philosophy had an apparent role in building this relationship, Tool Co. further needed *dialoguing, revealing, integrating, and aligning* practices to achieve collective commitment for the desired change. (See Appendix E)

Another challenge in applying the predictive maintenance solution was related to value capture. In pricing the solution, one approach was to include the

solution in total service price. A supporting argument for this approach was the customer expectation from Tool Co. offerings. Since they paid the price premium to Tool Co. (vis-à-vis competitor offers) for its high-quality equipment, some customers expected predictive maintenance to be part of Tool Co.'s existing value offering. Therefore, they did not want to pay an extra fee for a proposition (avoiding unexpected equipment failure) they expected to be already fulfilled. However, this approach was against the cost accounting logic employed by Tool Co. in using the shared resources and services offered by Tool Co. Global. Since the country organization was designed as a separate and autonomous entity and all system & related expenses for the solution are billed from the global center to Tool Co., the managers were discouraged to use this approach due to implied reduction in profitability. Therefore, the solution is only applicable when customers agree to pay a premium for the add-on. This is a resource fluidity issue, as established accounting and control procedures reduce the flexibility of Tool Co. in considering different value capture alternatives based on the customer case.

Finally, for Phase 3, Tool Co. managers discuss the future steps in becoming a solution-driven company in the application of new-generation manufacturing technologies. This implies an extension to the current business model since the company has already taken multiple steps in an Industry 4.0 business model. The firm expects further converge of ecosystem actors, and thus closer collaboration with other firms seems to be inevitable.

The practices to achieve collective commitment among all ecosystem actors reflects a challenge similar to one faced during the predictive maintenance initiative with Auto Co. mentioned earlier. Therefore, a variety of collective commitment practices are again implied by the above statement.

The BMI process of Tool Co. is visualized in Figure 4 along the four phases and changes in the business model building blocks with underlying SA practices. Each group of bars indicated with the same color represent a new business model for Tool Co.: Service BM, Digital Solutions BM, and Digital Solutions BM Extension.

The results are discussed in the next section.

4.3 Discussion

4.3.1 Business models and business model innovation

The findings reflect the validity of the business model as a unit of analysis for the field of strategic management. As Bigelow and Barney (2020) argue, the business model approach opens new avenues that integrate insights from supply-side (e.g., the resource-based view) and demand-side (e.g., the positioning school) theories of strategic management. In line with these arguments, the findings in this study suggest that the BM approach offers new insights and integrates previous theory by departing from a unit of analysis conceptualized as an interrelated and boundary-spanning set of value creation and value capture activities. The conceptualization of business models as an interrelated set of activities enables the integration of supply-side and demand-side theories. Furthermore, this conceptualization was observed to be of high practical relevance, since the data collected on the set of activities and their relationships easily lent themselves to theory building.

The practical relevance of the findings was further enhanced by the widespread adoption of the term business model among the interview respondents in conceptualizing and evaluating their businesses. This helped the respondents better

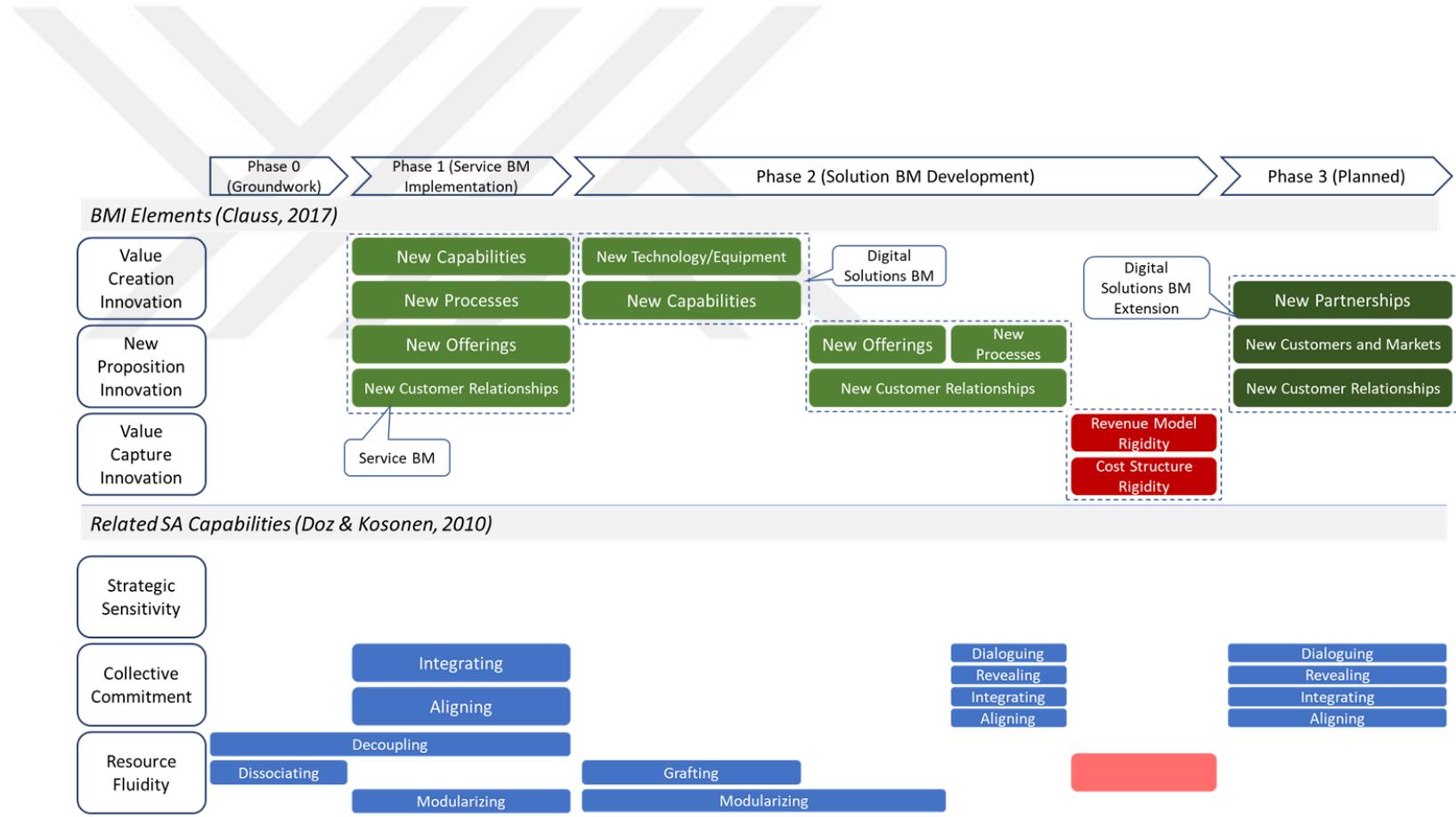


Figure 4. BMI Process at Tool Co.

reflect on the changes in the building blocks of their BMs with real-life examples, and thus offered a rich source of data to build theory, as also argued by Bigelow and Barney (2020). The business model concept (developed in the literature) was found to be closely related to the respondents' natural cognitive processes and sensemaking from their experiences gained while managing their businesses. In fact, the business model was readily available in the form of a cognitive schema among the respondents, only to be communicated to the researcher via triggering questions, since it was arguably the requisite mental artifact for effective decision making towards BMI.

Both BM perspectives (BMs as tangible attributes of real-life firms and BMs as cognitive schemas) adopted in the literature were observed to be relevant for the sample firms. While the former perspective formed the parameters in managerial decision making towards the design of the new models, the latter was intentionally used by managers when the perceptions and interests of different stakeholders had to be aligned. For instance, Insuragent Co. leaders used the online platform BM schema to get the buy-in of their agent network for the new model and thereby ensure collective commitment. The newly appointed leaders at Tire Co., on the other hand, clearly communicated the switch from the sell-in to the sell-out concept with the internal organization and the dealer network while forming new teams and processes to support the transition.

In innovating their business models, the firms followed different paths in conceptualizing their new BM. For Tool Co., the BMI process was incremental, and in line with the Industry 4.0 trend. Although digital servitization is a common path among most manufacturing firms (Luz Martin-Pena, Diaz-Garrido, & Sánchez-López, 2018), Tool Co. did not rely on a template to innovate its business model.

Instead, the firm incrementally developed new value propositions enabled by technology in line with its strategy to become a solution provider. Tire Co., on the other hand, switched to the pay-per-kilometer concept by developing a BM similar to one already employed by its main competitor. While it could be argued that Tire Co. relied on a BM template, the development of the building blocks for the new BM was highly incremental, as presented in the results. Tire Co. developed several value propositions such as the advisory service as part of its switch to the sell-out logic and achieved consistent quality in its products. These new capabilities and value propositions later formed the building blocks for the new BM. Insuragent Co. also had the BM template available in its product market. However, unlike Tire Co., the firm leveraged its offline resources (dealer network) to improve on the existing template, practicing mindfulness in BM design (Amit & Zott, 2021). Finally, the short-term rental BM was available in the market also for Fleet Co. when the firm started its BMI process. Although short term rental BM is more than 100 years old, its novelty for the Fleet Co. organization resulted in a change process that can be classified as BMI (Amit & Zott, 2021).

The research findings indicate a stepwise process of BMI. For all firms in the sample, the first steps were not intentionally taken by managers towards a predefined BM concept. On the contrary, the firms took these steps to either develop existing capabilities to support their traditional BM or adapt their resources to a dynamic environment. Thus, Phase 0 is characterized by unintentional development of building blocks for a new BM (groundwork). In Phase 1, firms either start developing the new BM (Insuragent Co., Fleet Co.) or take further steps in the organization towards a new value logic (Tire Co. – sell out, Tool Co. – make standard sell special). Phase 2 features the key steps taken to give the final shape to

the new BM for all firms. Phase 3 represents the future plans for all case firms, where firms conceptualize new extensions to their business models to either scale up their business or pursue new opportunities.

As shown in Figures 1-4, the elements from the BMI framework from Clauss (2016) were used to present the changes in the BM building blocks for case firms. Although changes in individual blocks cannot be labelled as BMI, the new business models resulting from the changes are indicated in figures by circling the relevant combinations of the building blocks. For instance, the online BM developed at Insuragent Co. is presented in Figure 1 as the combination of new technology, new capabilities, and new partnerships at Phase 0, new offerings at Phase 1, and new processes, new capabilities, new channels, new customer relationships, and new revenue models at Phase 2. In line with Clauss (2016)'s arguments, the BMI dimensions and sub-constructs (building blocks) do not change simultaneously or in the same way during the process across the cases. Each case shows unique BMI characteristics that are captured via the proposed elements, indicating the validity of the framework (Clauss, 2016).

4.3.2 Strategic agility

The role of strategic agility in BMI is evident across the cases. Each meta-capability underlying SA is discussed below.

Strategic sensitivity becomes critical when the case firms undertake the conceptual design of their new BMs. Among the cases, Tool Co. was the only firm that strategic sensitivity was not observed, since the key conceptual decisions on BMI were made at the global HQ, while the effects of those decisions on BMI were observed in the country organization. For the rest of the cases, strategic sensitivity

had a pivotal role in taking the initial steps towards BMI and shaping the working characteristics of the new BM.

At Insuragent Co., almost all practices related to strategic sensitivity suggested by Doz and Kosonen (2010) were observed. At first, the firm had a vague idea about the new business opportunities that the Portal software implies. Accordingly, the firm conceptualized the new BM with the input of the top management team as well as external advisors. While building on the online insurance platform template, the management was wise to perceive the weakness of the template related to offline customer support and addressed this weakness with its agent network. Subsequently, underlying activities and processes were designed and implemented according to this conceptualization. As presented in the previous section, strategic sensitivity was at the heart of the development of the new BM concept at Insuragent Co.

Despite the use of a wide array of strategic sensitivity practices, the use of experimentation was not observed at Insuragent Co. From the interview data collected, it could be argued that experimentation was not needed due to low uncertainty perceived by the managers regarding the working characteristics of the new BM. The first reason for this argument is that the firm made use of a BM template that was successfully implemented by a legitimate online business in its industry. The offline add-on to the template by the firm, on the other hand, was also a fully functioning part of its traditional BM, where the firm had decades of experience in execution. Based on their observation of the customer complaints on the template regarding customer support, the management was certain about the viability of the offline add-on. However, as the agent network external to the firm was a major

component of the offline component of the model, the firm needed to ensure collective commitment, which will be discussed shortly.

For Tire Co., strategic sensitivity was again a salient meta-capability. The new business logic was first conceived after a new CEO was appointed to the country organization following the spin-off of the industrial division. The new CEO was previously a director at a renowned consumer goods company characterized by strong customer focus. Seasoned in the market-oriented business logic, the CEO brought an outside-in perspective to Tire Co.'s business, which resulted in the conception of new business models. The guiding logic in Tire Co.'s BMI was the transition from sell-in to sell-out, as mentioned in the previous section. The existing BM was reframed from this perspective to develop new value propositions such as the advisory service, and to introduce new teams oriented towards customer service. Based on the interview findings, the conscious reframing of the traditional BM and a conceptual understanding of the transition by managers enabled the subsequent steps to be taken towards BMI.

Unlike Insuragent Co., Tire Co. made extensive use of experimentation in BM development. Although a BM template from a competitor was available also for Tire Co., the firm used experimentation first to learn about the wear patterns and performance characteristics of its own tires (and competitor products) via advisory service. The next time the firm used experimentation was during a pilot project for the new BM with a small-scale customer to test its operational and accounting assumptions. Finally, experimentation plays a major role in the firm's plans to scale-up the new BM across different customer industries and use cases. Since the firm needs extensive data to correctly predict consumption and thereby specify the service fee per kilometer, it must experiment with various working conditions (pathways,

construction sites, etc.). Therefore, two reasons could explain Tire Co.'s need for experimentation, unlike Insuragent Co., despite the availability of a BM template. First, the firm had a resource (tire) with unique performance characteristics upon which the business model is based. This required learning to configure certain BM elements (e.g., pricing) before executing the model on a full scale. Second, each project was highly capital-intensive and required several years of commitment worth millions of euros, unlike the sale of a basic insurance policy where the only risk is bad customer experience from a single purchase. Therefore, Tire Co. needed a pilot project first to test its assumptions.

The case of Fleet Co. also provides important insights on the role of strategic sensitivity in conceptualizing new business models, albeit in a negative sense. The managers underestimated the role of brand equity in the viability of the short-term rental business model when the firm entered the business. Lacking brand awareness among the target customers, the firm started incurring loss due to insufficient demand. Therefore, the firm had to partner with an online reservation platform to fill the demand-side void in its new BM. As the interview data suggest, the management falsely assumed that superior service would make up for the brand equity, pointing to the failure of a conceptual understanding of the basic working principles of the short-term rental BM. At this point in the BMI process of the firm, none of the strategic sensitivity practices were observed from the interview data, in line with the role of strategic sensitivity in properly conceptualizing new BMs observed in the other cases.

The issue of proper conceptualization of new BMs also surfaced during the post-acquisition integration of Rental Co. Interview informants from the acquired firm argue that Fleet Co. again overlooked some of the demand side activities such as

digital marketing, and therefore the acquired BM was impaired by poor organization design during the integration of the two businesses.

The cases discussed above allow for further conceptualization of strategic sensitivity due to a common pattern among the cases. Referring to the origins of the construct, Doz (2020) provides the following definition for strategic sensitivity:

The deepness of perception and the intensity of awareness and attention to strategic situations as they develop.

Based on a common pattern among the cases discussed above, an extension of this definition would be *the ability to arrive at a viable conceptual design of the target BM*. Arriving at a viable BM concept is vital for BMI, since the conceptual design clarifies the value proposition and the dynamics of value creation & value capture for the new BM. The underlying practices of strategic sensitivity from distancing and reframing, which helps identify strategic situations/opportunities, to experimentation, which helps validate the BM, serve the ultimate purpose of arriving at a working BM concept. Since the empirical evidence from the cases also support this point, this extension to the original definition of strategic sensitivity is proposed.

Collective commitment as a meta-capability also had varying characteristics across the case firms. Based on the research evidence, two factors explained the variation in the combination of underlying elements for collective commitment. The first factor was the network embeddedness of the business models; in other words, whether the external stakeholders embedded in the focal firm's activity network are affected by the business model change. The second factor was firm size, as the role

of collective commitment in BMI was downscaled at smaller case firms, in line with the literature evidence (Arbussa et al., 2017).

At Insuragent Co., the scope of collective commitment is beyond the firm boundaries since the firm heavily relies on its agent network for its both traditional and new BMs. In order to ensure the commitment of external stakeholders towards the new BM, the firm relied on a wide array of underlying practices proposed in the literature. However, due to the highly transactional nature of its relationship with the agent network, the firm mainly used financial incentives in the form of profit sharing in aligning the interests of its stakeholders. This is in line with the arguments of Amit and Zott (2021) regarding incentive compatibility. The authors argue that business models should be designed in a way that allows for adequate value capture for all external stakeholders involved in the BM, so that the interests of the firms in the activity system are aligned (Amit & Zott, 2021). On the other hand, the practices underlying internal collective commitment were not observed at the firm, since it did not have a complex management structure with multiple leaders (whose commitment to the initiative would be required). Instead, given its size, the firm is managed by a small board of directors who were on the same page regarding the BMI strategy.

At Tire Co., collective commitment was a relevant meta-capability for both internal and external stakeholders of the firm. For internal stakeholders, the managerial support for the new initiative escalated through the layers of management. The business development manager convinced the country management with the arguments based on the viability of the pay-per-kilometer concept, as it was already applied by a major competitor in the market. The manager thereby addressed the legitimacy issue with a BM template. In getting the buy-in of the global leadership, the country management further relied on the BM template in

addition to detailed financial projections. When the global HQ approved the project for only one year, the country management trusted in the capabilities of the local team in achieving profitability, and thus approved a service agreement binding the firm for three years. By taking personal risk against a risk-averse decision by the global leadership, the country management provided the opportunity for the local team to succeed with the new BM.

However, the scale-up of the new BM was constrained by the concerns regarding the relationships with external stakeholders. The dealers have a much less significant role in the new BM compared to their vital role in customer service and risk sharing in the traditional BM. Due to the firm's reliance on its dealers in the traditional model, it is hesitant towards offering the pay-per-kilometer concept to its customers at the expense of dealers' profits. Thus, there is an incentive compatibility issue to be resolved. Currently, the firm offers the concept only to newly acquired customers or existing customers that the firm may lose to competitors. Once solved, incentive compatibility will enable the scale-up of the new BM.

At Tool Co., collective commitment was initially an aspect internal to the firm during its introduction of product-related services. The company aligned the incentives of its product and service teams through the motto first in mind, first in choice, introducing the common goal of customer proximity. Since customer contact is more frequent and regular during service provision, product teams started including service propositions in their offers. This alignment is central to Tool Co.'s sustained relationship with its customers.

During the transition to the solutions BM, the firm once again needed collective commitment, this time with a key customer. Although Tool Co.'s value proposition offered superior benefits, it had to resolve client managers' concerns

about the legitimacy of Tool Co. in software solutions and data security. Via establishing common rules and procedures, the firm aligned the incentives of the client managers with its solutions business strategy.

Tool Co.'s solutions business further needs alignment with complementary product and solution providers through common norms and protocols towards joint value creation. This requires the alignment of the activity relationships between the firm and other ecosystem actors in an increasingly close-knit working environment, which is also partly a collective commitment issue.

The practices of collective commitment in Fleet Co.'s BMI were not observed from the data. As in Insuragent Co., small firm size and unilateral leadership structure have led managerial decisions on BMI to be implemented without resistance from the rest of the organization, thus making the practices for collective commitment redundant for BMI.

Resource fluidity is the meta-capability that precedes the BMI process for all cases. All cases had a groundwork phase before the start of the BMI process, since the resource base had to be adapted to support multiple (traditional and new) business models. However, the resource fluidity practices in this phase were not intentionally performed towards the new BM. The resources developed in accordance with the strategies of the traditional BM were later used to build new business models following the conception of the new BM.

In all cases, the availability of multipurpose resources (systems, processes, equipment, or people) was a prerequisite for BMI. At Insuragent Co., it was the Portal software. Initially built to streamline the offer process, the software enabled the viability of new BMs such as the online platform. At Tire Co., it was the new generation of products that offered durability with low performance differentials

among the products, which enabled accurate predictions of useful life based on usage conditions. Based on this capability, the firm developed the pay-per-kilometer concept, after also developing the supporting processes and capabilities. At Fleet Co., it was the firm's operational routine to renew its vehicles every 12 months, which enabled its fleet to support the short-term rental value proposition. Fleet Co. had reduced the holding period of its vehicles from 36 to 12 months driven by the price increase in the second-hand auto market to seize a short-term commercial opportunity. Following the firm's decision to enter the short-term rental business, the new fleet reduced the startup capital costs for the firm. Finally, for Tool Co., it was a highly capable middle management team. The account managers and product managers at the firm quickly learned new capabilities and adapted the new value offers developed by the HQ to local needs.

In two cases, acquisitions played a significant role in business model development. While Tool Co. acquired engineering companies with specific capabilities and thereby gradually switched to a new BM by adding new value propositions to its portfolio, Fleet Co. acquired a whole business model, leaping towards the new BM. While the acquisitions by Tool Co. represent bolt-on acquisitions, Fleet Co.'s acquisition is a typical example of platform acquisitions (Brueller, Carmeli, & Drori, 2014). According to the authors, the two types of acquisitions serve different purposes for strategic agility (Brueller et al., 2014). In line with the authors' arguments, Fleet Co.'s platform acquisition featured a large and established target firm, out of the need to acquire vested activities in the target domain. On the other hand, bolt-on acquisitions of Tool Co. featured young engineering firms, and the firm had to develop its organization and capabilities to realize the potential of its acquired resources. This capability development process

resulted in the focal BMI for Tool Co. For Fleet Co., however, integration of the acquired firm resulted in temporary value loss due to lack of strategic sensitivity, in line with Brueller et al. (2014)'s remarks regarding the role of sensing capability (as part of strategic agility) in acquisitions. This aspect will be further discussed in the next section as part of the suggestions for future research.

In addition to the two resource fluidity practices mentioned above, dissociating is also an enabler of BMI. At Tool Co., the restructuring of the country organization as an autonomous unit enabled the adaptation of global competencies to local needs, thereby fulfilling the make standard, sell special vision. At Insuragent Co., the separation of the technology unit and the core business allowed the development of new use cases for the Portal software. In other words, the separation of resource use from resource ownership enabled the focus of case firms on their core businesses, while resource owners explored new use cases for their resources, thereby developing new business models.

Two case firms, Tire Co. and Tool Co., had autonomous country organizations with clear financial targets. While establishing autonomy for country organizations proved very effective in achieving BMI, the control metrics and accounting logics occasionally disincentivized local managers towards the desired transition. At Tire Co., the new projects suggested by the country management were evaluated from a risk-return lens, leaving little room for trial-and-error through experimentation. The country management therefore had to go the extra mile by taking personal risk in applying the new concept, relying on the know-how accumulated on the new BM thus far. Similarly, the accounting logic employed at Tool Co. in using the common resources of the global organization by country units occasionally discouraged the firm managers in considering different pricing

alternatives based on the use case. While these protective measures are beneficial for the efficient execution of traditional BMs, and also necessary due to the need for financial control as a result of increased autonomy, they may hinder the development of new BMs; since profitability is not the single most important performance target during new business development (Murphy, Trailer, & Hill, 1996).

Decoupling was also observed among the cases, as mentioned in the previous section. Via organizing by customer domains, both Tire Co. and Tool Co. were able to unlock value from BMI. After its spin-off from the parent company, Tire Co. was able to focus on innovating its core business, which had been overlooked by the parent company managers due to the firm's share in overall profitability. However, Tire Co. could have benefited from further decoupling in its local organization since the new BM mainly concerned the high-end of the market while the SME customers would still be served via dealerships. The firm's established business model in serving all customer segments via similar distribution arrangements created an incentive compatibility issue, necessitating the commitment of the dealers towards the pay-per-kilometer concept, where they had little value add.

Unlike Tire Co., Tool Co. benefited from decoupling in its local organization. Since dealerships were mainly accountable for distribution to SMEs, larger customers were catered via account management teams. This enabled the application of new solutions to large customers without friction from stakeholders in the traditional BM.

On the flipside, excessive decoupling may result in duplicate functions and increased costs. As argued by Teece et al. (2016), strategic agility comes at a cost, and therefore resource fluidity aspects such as the level of decoupling should be

calibrated carefully to support traditional BMs efficiently via minimizing friction during BMI.

As presented in the findings and in the current discussion, larger case firms (Tire Co. and Tool Co.) relied on a wider variety of practices for resource fluidity compared to Insuragent Co. and Fleet Co. This is evidently due to the organizational complexity involved in larger firms compared to smaller organizations.

4.3.3 Strategic agility and business model innovation

In line with the gradual nature of business model change, the findings reflect the complexity of the SA-BMI relationship by capturing the temporality of the phenomenon. Figure 5 provides a simplified summary of BM change patterns and related SA meta-capabilities along four phases for the case firms.

Value creation innovation at case firms has laid the foundation for subsequent developments in the business models. This pattern is most visible at Insuragent Co., as the Portal software enabled the development of the new BM. At Tire Co., the process starts with the introduction of new generation tires, as mentioned in the previous section. It was a value proposition innovation by definition and thus indicated as such in the figures so far. However, it served as a value creation innovation for the new BM.

At Fleet Co., the capabilities that support the fleet renewal process was a value creation innovation for the firm. Finally, at Tool Co., offering product-related services required new capabilities for the provision of the service, thus representing value creation innovation.

	Phase 0	Phase 1	Phase 2	Phase 3
BMI Elements				
Value Creation Innovation	■	■	■	■
Value Proposition Innovation		■	■	■
Value Capture Innovation			■	■
Related SA Meta-capabilities				
Strategic Sensitivity		■	■	■
Collective Commitment			■	■
Resource Fluidity	■	■	■	■

BMI at Insuragent Co.

	Phase 0	Phase 1	Phase 2	Phase 3
BMI Elements				
Value Creation Innovation	■	■	■	■
Value Proposition Innovation	■	■	■	■
Value Capture Innovation			■	■
Related SA Meta-capabilities				
Strategic Sensitivity		■	■	■
Collective Commitment			■	■
Resource Fluidity	■	■	■	■

BMI at Tire Co.

	Phase 0	Phase 1	Phase 2	Ph. 3
BMI Elements				
Value Creation Innovation	■	■	■	■
Value Proposition Innovation		■	■	■
Value Capture Innovation			■	■
Related SA Meta-capabilities				
Strategic Sensitivity		■	■	■
Collective Commitment			■	■
Resource Fluidity	■	■	■	■

BMI at Fleet Co.

	Phase 0	Phase 1	Phase 2	Ph. 3
BMI Elements				
Value Creation Innovation	■	■	■	■
Value Proposition Innovation		■	■	■
Value Capture Innovation			■	■
Related SA Meta-capabilities				
Strategic Sensitivity		■	■	■
Collective Commitment			■	■
Resource Fluidity	■	■	■	■

BMI at Tool Co.

Figure 5. BM change patterns at case firms

All value creation innovations at case firms are related to practices underlying resource fluidity. Although resource fluidity enables the subsequent developments in

all BMI elements, it is found to affect other BMI elements through its main influence on the development of new value creation mechanisms. Therefore:

Proposition #7. Resource fluidity has a positive effect on the propensity to engage in business model innovation through its influence on value creation innovation.

Value proposition innovation at case firms occurred mostly starting from Phase 1, with Fleet Co. as the exception. At Fleet Co., a new generation of vehicles was a new value proposition due to an opportunity related to volatile vehicle prices. However, in Phase 1, the firm suffered from value proposition failure, due to the lack of strategic sensitivity for the demand-side characteristics of the new BM. Starting from Phase 2, changes in the value proposition are mainly accounted by the acquisition of Rental Co., making the case an exception in this regard.

At Insuragent Co. and Tire Co., the relationship between strategic sensitivity and value proposition innovation is evident, as discussed in the previous sections. Although strategic sensitivity plays the central role in the conception of the new BMs as a whole in the cases, the effect of strategic sensitivity mainly presents itself in the form of new value propositions developed given the new value creation capacity. Furthermore, at Fleet Co., strategic sensitivity presents itself as the related meta-capability to new value proposition innovations at the end of Phase 2 and at the beginning of Phase 3. This relationship was not observed at Tool Co., as value proposition and value creation innovations mostly occurred simultaneously, and new value concepts were developed at the global HQ instead of the country organizations. The evidence presented among the cases on the relationship between strategic sensitivity and value proposition innovation, and between the lack of strategic sensitivity and value proposition failure, the following is proposed:

Proposition #8. Strategic sensitivity has a positive effect on the propensity to engage in business model innovation through its influence on value proposition innovation.

Value capture innovation was not observed in all case firms. At Tool Co., the firm failed to consider various value capture alternatives due to rigidity in cost accounting principles at the firm. At Fleet Co., new value capture mechanisms were observed only after the acquisition of Rental Co. Meanwhile, at Insuragent Co. and Tire Co., value capture innovations were at the heart of the development of the business models.

At Insuragent Co., the viability of the new BM depended on the agreement with the agent network on the profit-sharing scheme. Arriving at incentive compatibility with the branches ensured collective commitment, while the resulting profit-sharing agreement defined the value capture mechanism of the new business model. At Tire Co., the pay-per-kilometer concept (the value capture mechanism) was the crux of the new BM. As it fundamentally defined the risk and return characteristics of the new business model, it required collective commitment among the local management as well as the global leadership. While the two cases differ regarding the scope of collective commitment required within and beyond the firm boundaries based on the boundary-spanning characteristics of the new BMs, the relationship between collective commitment and value capture innovation is evident in both cases. Therefore:

Proposition #9. Collective commitment has a positive effect on the propensity to engage in business model innovation through its influence on value capture innovation.

4.3.4 The role of strategic posture in business model innovation

While the purpose of this study is to explore the relationship between strategic agility and business model innovation, a pattern that emerged during the analysis cannot be overlooked. A common pattern among all cases is the role of evolving dominant logic during the BMI processes. In the BMI process, the shift in dominant logic was explicitly articulated by top management at two case firms (from sell-in to sell-out for Tire Co. and make standard, sell special at Tool Co.), while Insuragent Co. has undergone a comprehensive organizational transformation and introduced new marketing roles. Fleet Co., on the other hand, failed at first to fully grasp the demand-side dynamics of the new BM it acquired, possibly due to a managerial mindset that was stuck in the traditional BM.

Coined by Prahalad and Bettis (1986), the term dominant logic is defined as top management teams' mindsets, attitudes, and beliefs. The authors argue that a dominant logic consists of mental maps developed through experience in the core business and sometimes applied inappropriately in other businesses (Prahalad & Bettis, 1986). The dominant logic concept is highly related to the business model concept, as the empirical evidence in this study also suggests. The nature of conceptual relatedness between the two constructs depends on the alternative definitions of business models presented by Massa et al. (2017). While it appears to be a natural complement to the business model concept defined as an empirical phenomenon (or attribute of real-life firms), there is considerable conceptual overlap between dominant logic and business models defined as cognitive schemas (Massa et al., 2017).

Following Prahalad and Bettis (1986), the concept was used to define various managerial mindsets such as the service-dominant logic (Vargo & Lusch, 2004). A

typical manifestation of dominant logic in firm behavior is strategic posture. Defined as the level of activity of a firm in a certain strategic dimension (Mithas, Tafti, & Mitchell, 2013), strategic posture represents the firm orientation towards a coherent set of behaviors. Various types of strategic posture have been conceptualized so far in the literature, such as entrepreneurial orientation to define the firm proclivity towards entrepreneurial behavior (Lumpkin & Dess, 1996), small business orientation to define the distinct values and priorities typically found in small businesses (Runyan & Covin, 2018), and market orientation to define the firm proclivity to be responsive to customer needs through the generation and dissemination of relevant market information (Kohli & Jaworski, 1990).

In all case firms, BMI was accompanied by the emergence of a new dominant logic. From the empirical evidence, it is argued that this new logic manifested itself in the form of market orientation for the firms. The introduction of new marketing roles, gradual appreciation and adoption of certain marketing activities in the acquired firm and becoming more responsive to customer needs to customize standard value offers all point to improved market orientation at the case firms.

The question of why market orientation was a salient strategic posture during BMI for all case firms is open for further exploration. A possible explanation is the common direction of all recent technology-enabled business model innovations towards more customer proximity and mass customization. However, answers to questions such as whether market orientation plays a role in all technology-enabled business model innovations is not clear. Furthermore, the specific role that market orientation plays in BMI and in the SA-BMI relationship remains to be explored.

CHAPTER 5

STRATEGIC AGILITY-ENABLED BUSINESS MODEL CHANGE AND FIRM PERFORMANCE: A COMPARATIVE ANALYSIS BY FSQCA METHODS

The purpose of the research in this chapter is to address the following sub-question in the original research question:

How do the contextual characteristics combine with strategic agility to set the configurations for the effective pursuit of business model innovation?

While the role of the contextual characteristics firm size, environmental turbulence, and network embeddedness in business model innovation have been explored to some extent in the earlier sections; the purpose of this study is to investigate the role of these factors in a configurational logic to uncover the alternative paths to the effective pursuit of business model innovation. For this purpose, the configurations have been explored for two outcomes: 1-business model innovation for a sample of 77 firms in service industries, and 2-performance for a sub-sample of 49 firms that engaged in business model innovation. The analysis of the configurations for two related outcomes provide significant insights, since the interplay among SA and the contextual characteristics are yet to be clarified in the literature.

Adopting the configurational view as discussed above, this study builds on configuration theory (Ragin, 2008). Configuration theory focuses on a complex phenomenon such as business model innovation that would be addressed through the presence of a group of causal conditions (Ragin, 2008). This theory builds on the premise that the combination of the causal conditions can fundamentally alter the outcome depending on their arrangement. According to Greckhamer, Misangyi, Elms, & Lacey (2008), three principles define the characteristics of this theory: 1-a

single causal factor rarely leads to the outcome, 2- causal factors almost always operate in combination (rather than in isolation), and 3-the effects from a single causal factor may fundamentally differ based on the context. As different combinations of the causal factors may lead to the same outcome, the concept of “equifinality” has been introduced in line with these principles (Ragin, 2008). This study explores the possible configurations of strategic agility, firm size, network embeddedness, and environmental turbulence for business model innovation and BMI performance.

5.1 Methodology

To investigate the configurations for the specified outcomes, the study is based on a random sample of 1135 firms from Turkey. The researcher shared the link to the online questionnaire with information on the purpose of the research through LinkedIn, a social media platform for professional networking. The content of the questionnaire is provided in the original language in Appendix F. Two academic researchers reviewed the questionnaire to ensure that the scale questions measured the intended constructs. From the sample, the researcher received 166 responses with a 14.6% response rate. Within the responses, 77 were usable (complete questionnaires filled out by people from managerial positions exposed to BMI initiatives in firms from service industries). The rationale for choosing service industries over manufacturing for this research is that the business models employed by service firms are more diverse, thus providing a more suitable setting for research on BMI initiatives that concern a wider variety of BMs and BM building blocks. A reliability analysis of the usable responses from the manufacturing firms yielded

unsatisfactory Cronbach's Alpha scores for some of the measurement scales. Table 2 provides a summary of the sample characteristics.

Table 2. Sample Characteristics

Sample Characteristic (n=77)	#	Percent
Industry		
Retail (including e-commerce)	20	26.0%
Financial services	15	19.5%
Telecommunications	7	9.1%
Software and process solutions	6	7.8%
Media	5	6.5%
Transportation and logistics	5	6.5%
Consulting and legal services	3	3.9%
Other service industries	16	20.8%
Respondent function		
General Management	22	28.6%
Marketing and Sales	17	22.1%
Operations and IT	9	11.7%
Finance	9	11.7%
Business Development	8	10.4%
Product Management	7	9.1%
Other	5	6.5%
Respondent role		
C-Level/Partner/Director	17	22.1%
Manager/Senior Manager	51	66.2%
Other	9	11.7%
Firm type		
Domestic Company	29	37.7%
Foreign Subsidiary	26	33.8%
Start-up/Scale-up	10	13.0%
Other	12	15.6%
Number of employees		
0-249	29	37.7%
250 or more	48	62.3%

In the questionnaire, established scales from the literature were used to measure strategic agility, business model innovation, and the three contextual conditions. The scales were adapted from English to Turkish via translation into the

target language, evaluation of the translation in the target language, retranslation to the source language, and evaluation of the translation in the source language.

For the measurement of the three meta-capabilities of strategic agility, scales from two different sources were adapted. For strategic sensitivity, the five item sensing capability scale from Kump, Engelmann, Kessler, & Schweiger (2018) was used for measurement (Cronbach's Alpha = 0.83). For collective commitment and resource fluidity, respective three item scales from Clauss (2016) were adapted ($\alpha = 0.90$ and 0.73 , respectively). The scale items for strategic sensitivity in Clauss (2016) were not used as the translated version of the items would be difficult to understand in the local context, as advised by one reviewer. Therefore, the scale items from Kump et al. (2018) were used for strategic sensitivity. The three scales were combined to measure strategic agility ($\alpha = 0.90$).

For the measurement of business model innovation, Spieth & Schneider (2016)'s nine item scale was adapted ($\alpha = 0.89$) with only one item from the value offering innovation scale replaced with a similar item from Futterer, Schmidt, & Heidenreich (2018) due to the low reliability score of the original value offering innovation scale ($\alpha = 0.84$ after replacement). Regarding the measurement of the three contextual conditions; for firm size, a dummy variable was used (1 for firms with 250 employees or above and 0 for vice versa) without calibration for fsQCA analysis. For the operationalization of network embeddedness, Lin, Fang, Fang, and Tsai (2009)'s four item structural embeddedness scale was adapted ($\alpha = 0.72$). For the measurement of environmental turbulence, Jaworski and Kohli (1993)'s four item scale was adapted ($\alpha = 0.73$). Finally, for the measurement of performance Venkatraman & Ramanujam (1986)'s five item scale was used ($\alpha = 0.90$). For all multi-item measures, 5-point Likert scales were used with the anchors "absolutely

disagree” and “absolutely agree”. Please refer to the appendices F and G for the English and the Turkish versions of the questionnaire.

5.2 Data analysis using fsQCA

Fuzzy set qualitative comparative analysis (fsQCA) was used in the analysis to explore the relationship between the set of causal factors (strategic agility, firm size, environmental turbulence, and network embeddedness) and the outcome variables (business model innovation and performance). fsQCA 3.0 software was used (Ragin, 2017).

There are two main advantages of the fsQCA method over traditional quantitative techniques such as structural equation modeling. First, as mentioned, different combinations or paths can lead to the same outcome, supporting equifinality (Ragin, 2008). Second, the presence and the absence of a factor or an outcome may have different implications, supporting asymmetry (Ragin, 2008). As will be presented in the next sub-section, the equifinality and asymmetry aspects of this method offers new insights into the research on SA-BMI relationship.

As the requirement of the research method, all conditions and outcomes should be calibrated (Ragin, 2008). Calibration can be performed by people with substantial theoretical knowledge about the constructs under investigation to produce fuzzy set scores. While a fuzzy score of 1.0 refers to full membership in a given set, a fuzzy score of 0.0 refers to full non-membership, and a score of 0.5 is the crossover point. In the calibration of the Likert scale measures used in this research, the response statements that correspond to each point in the scale was considered. In the factors and the outcomes; while the statements “absolute disagree” and “disagree” would imply full non-membership in a given set, “absolutely agree” would

correspond to full membership. While network embeddedness remained a crisp set (0 or 1) as a dummy, the scores of the rest of the contextual factors between 2 (disagree) and 5 (absolutely agree) were adapted to fuzzy sets proportionately. On the other hand, in the calibration of strategic agility and the outcome variables BMI and performance, a “neither agree nor disagree” response to a scale item would imply a membership score of 0.2 while the “I agree” response implies a substantially higher set membership with a score of 0.8. For the measurement of strategic agility, this is due to the presence of a group of items covering the orthogonal and internally consistent set of aspects for which the Likert scores must be consistently high for membership in the SA set. For instance, if a firm gets a high Likert score in the resource fluidity scale item “Our people and their competencies are highly mobile within our organization.” (for instance, completely agree [5]) and a low Likert score in the collective commitment item “Our top management is able to make bold and fast strategic decisions” (for instance, completely disagree [5]), the combined Likert score (2.5) should not be directly translated to a set membership score of 0.5. Instead, since a firm that cannot make bold and fast strategic decisions is not likely to be a strategically agile firm according to the theory, a set membership within the interval of 0.15 to 0.2 is more appropriate. Given the orthogonal and internally consistent scale items also for business model innovation, the same logic holds for this construct. Regarding performance, on the other hand, the same calibration method was applied due to the statements in the scale items such as “Relative to our competitors, our financial performance was much better”. A response of indecisiveness deserves a membership score of 0.2 and agreement with the statement would imply that the firm is “mostly in the set” (0.8) of “much better” performers.

5.3 Results

5.3.1 Necessity analysis

The analysis of the necessary conditions for the outcome (necessity analysis) is the first step in an fsQCA study. According to the method, a condition or a configuration of conditions is “necessary” in case the consistency score is at least 0.9 (Schneider et al., 2010). As the results suggest, only strategic agility is necessary for the pursuit of business model innovation and the performance outcome in a sub-sample of firms that engaged in business model innovation (BMI fuzzy membership score is above 0.5 in this sub-sample).

Table 3. Analysis of Necessary Conditions

Outcome variable	BMI (n = 77)		Performance (n = 49)	
	<i>Consistency</i>	<i>Coverage</i>	<i>Consistency</i>	<i>Coverage</i>
<i>Conditions tested</i>				
Strategic agility	0.90	0.77	0.92	0.78
~Strategic agility	0.36	0.62	0.29	0.81
Firm size	0.66	0.61	0.65	0.61
~Firm size	0.34	0.51	0.35	0.75
Environmental turbulence	0.66	0.84	0.61	0.82
~Environmental turbulence	0.67	0.69	0.63	0.80
Network embeddedness	0.79	0.76	0.74	0.79
~Network embeddedness	0.56	0.78	0.50	0.84

5.3.2 Sufficiency analysis

A sufficiency test via the truth table to clarify the set of configurations to explain the outcomes business model innovation and performance is the next step in this fsQCA study. To have at least one empirically relevant case the frequency threshold has been set at 1, with a consistency threshold of 0.80. These specifications are relevant when the sample is large, thus increasing the empirical relevance (Vis, 2012).

The possible causal configurations are given in Tables 4 and 5 for the outcomes business model innovation and (BMI) performance, respectively. These solutions incorporate all the causal configurations that lead to the result (Ragin, 2008), explained in the following sub-sections.

5.3.2.1 Causal configurations for business model innovation

The models in this analysis present three causal configurations that lead to business model innovation (I, II, III). As seen in Table 4, the three configurations have consistency scores ranging from 0.80 to 0.85 indicating sufficiency to produce the outcome, as the values are above the recommended consistency cutoff of 0.75.

Table 4. Configurations for Business Model Innovation

Outcome variable	<i>Business Model Innovation (n = 77)</i>		
<i>Conditions</i>	<i>I</i>	<i>II</i>	<i>III</i>
Strategic agility		●	○
Firm size		●	○
Environmental turbulence	●		
Network embeddedness	●		●
Consistency	0.85	0.84	0.80
Raw coverage	0.63	0.60	0.14
Unique coverage	0.13	0.23	0.02
Overall solution consistency	0.80		
Overall solution coverage	0.87		

Black circles indicate the presence of conditions and unfilled circles indicate the absence.

Coverage, on the other hand, ranges from 0 to 1 and assesses the extent that the combinations explain business model innovation. The overall solution coverage for the outcome business model innovation is 0.87, indicating that a substantial part of

the sample is covered by the combinations. Measures of consistency and coverage for each combination is also indicated in the analysis.

In Table 4, the configurations are organized according to their ranking in terms of row coverage, as higher coverage values correspond to greater empirical relevance (Ragin, 2008). According to the methodology presented by Ragin (2008), the configurations are described below with the symbols * to represent the logical operation AND and ~ to represent the absence of the condition (e.g., low strategic agility, small firm size).

First, *configuration I* ($et * ne$) shows that a combination of high environmental turbulence and high network embeddedness is a sufficient condition for business model innovation. Second, *configuration II* ($sa * fs$) shows that a combination of high strategic agility and large firm size is a sufficient condition for business model innovation. Third, *configuration III* ($ne * \sim sa * \sim et$) shows that a combination of high network embeddedness but low strategic agility and small firm size is a sufficient condition for business model innovation.

5.3.2.2 Causal configurations for (BMI) performance

Table 5 shows the possible causal combinations for performance among the subsample of firms that pursued BMI initiatives. The model presents four causal configurations that lead to performance (I, II, III, IV). The four configurations have consistency scores ranging from 0.83 to 0.90, which indicates that the combinations are sufficient to produce the outcome. Furthermore, the overall solution coverage for performance is 0.77, which indicates that a substantial part of the sample is covered. The consistency and coverage measures for each individual configuration are also

provided in the analysis. As in Table 4, the configurations are organized according to their rank in terms of raw coverage in Table 5.

Table 5. Configurations for BMI Performance

Outcome variable	<i>Performance (n = 49)</i>			
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
<i>Conditions</i>				
Strategic agility	●	●		○
Firm size		●	○	
Environmental turbulence	○	●		○
Network embeddedness	○		●	●
Consistency	0.85	0.83	0.90	0.87
Raw coverage	0.45	0.41	0.27	0.25
Unique coverage	0.08	0.17	0.12	0.00
Overall solution consistency	0.84			
Overall solution coverage	0.77			

Black circles indicate the presence of conditions and unfilled circles indicate the absence.

First, *configuration I* ($sa * \sim et * \sim ne$) shows that a combination of high strategic agility, low environmental turbulence, and low network embeddedness is a sufficient condition for performance. Second, *configuration II* ($sa * fs * et$) shows that a combination of high strategic agility, large firm size, and high environmental turbulence is a sufficient condition for performance. Third, *configuration III* ($ne * \sim fs$) shows that a combination of high network embeddedness and small firm size is a sufficient condition for performance. Fourth, *configuration IV* ($ne * \sim sa * \sim et$) shows that a combination of high network embeddedness, low strategic agility, and low environmental turbulence is a sufficient condition for performance.

5.4 Discussion

Business model innovation implies a significant transition for service firms.

However, few studies explore the specific contextual configurations that business model innovations require and thus overlook the causal interdependencies between SA and the contextual factors. To further understand these complex relationships, this study applies the fsQCA method on a sample of 77 service firms to address the specific configurations that enable business model innovation. The analysis indicates that only strategic agility was the necessary condition for BMI, while the complex interplay among the contextual factors may provide alternative paths to the outcome.

For the outcome *business model innovation*, the mutually exclusive configurations *I* ($et * ne$) and *II* ($sa * fs$) with similar raw coverage values (0.63 and 0.60, respectively) indicate that the contextual conditions environmental turbulence and network embeddedness in combination present a path to business model innovation alternative to the path of high strategic agility in large firms. This result indicates that regardless of the level of strategic agility and firm size, embeddedness in networks and operating in turbulent environments together set the sufficient conditions for business model innovation. The main implication of this result is that firms may not always need strategic agility to innovate their business models under the specified contextual conditions, with a slightly higher raw coverage score than configuration II.

Configuration III ($\sim sa * \sim fs * ne$), which also substantially differs from configuration II, indicates that small firms with low strategic agility and high network embeddedness also provide the sufficient conditions for business model innovation. This is another implication that network embeddedness is a substitute condition to strategic agility. A plausible explanation for this result is that when the

external network is in transition, firms embedded in these networks may not need strategic agility to follow suit. Considering the three meta-capabilities, as the networks may provide the direction for business model change (replacing the role of strategic sensitivity), a transformation trend in the network might also validate the new BM for the stakeholders to follow (thus making collective commitment irrelevant in this configuration). Furthermore, embedded in inter-firm networks, firms may not need resource fluidity as they may leverage the resources of the firms in their network in developing new business models.

For the outcome *performance* in the sub-sample, configurations I and II that have high strategic agility in their combinations have higher coverage values than configurations III and IV that have high network embeddedness. Strategic agility and network embeddedness are again mutually exclusive in terms of their presence in the configurations. However, unlike the outcome *business model innovation*, strategic agility appears to be a more relevant condition than network embeddedness for performance among firms that engage in business model innovation. Therefore, although firms with low strategic agility may leverage their networks for business model innovation, performance as a result of the BMI initiative is not guaranteed. This argument is supported by the finding that strategic agility alone has a consistency score of 0.92 and a coverage score of 0.78 in performance, indicating the necessity of the presence of this factor.

CHAPTER 6

CONCLUSIONS

Due to the idiosyncratic nature of business model innovation at every organization, research on BMI will continue to feature qualitative studies in the future. Although measurement scales are available for both SA and BMI for quantitative research, the scale questions capture only a fraction of the challenges related to BMI, and thus detailed process studies on the phenomenon are needed, albeit with limited generalizability.

The results of this study indicate that the contextual factors play a role almost as vital as strategic agility in business model innovation and performance. The low-SA cases in the sample that achieved the outcomes imply that strategic agility may not be a necessary condition in all BMI initiatives. The finding that network embeddedness substitutes SA as a factor for the outcomes is striking. Further studies should explore the interplay between strategic agility and embeddedness; and explore how firms configure their inter-firm relationships for business model innovation. Furthermore, in line with Teece et al. (2016)'s argument that strategic agility comes at a cost and it should be calibrated based on the contextual factors, the concept should be further explored via cases of BMI in small firms or in firms with resource constraints.

Since business model is still a relatively new concept in strategic management research, its relationship with previous theories in organization studies and strategic management needs to be further explored. For instance, the BM concept raises new questions for the literature on cognitive schemas in the field of organizational behavior. Exploring the relationships between earlier theory and the

literature on BMI is to the benefit of both sides as studies on this topic will open new research avenues for earlier theory and provide the foundations for the new concepts. Research on strategic agility would also benefit from further theorization. As discussed in the previous sections, the underlying practices of SA are rooted in years of theory development in the field. For instance, the use of grafting to achieve BMI raises new questions about the role of acquisitions in business model innovation, a topic that has recently attracted scholars' attention. Furthermore, despite being a practically sound construct, the eclectic nature of the strategic agility concept raises questions of conceptual clarity in and compatibility among the underlying meta-capabilities, which should be addressed via further research.

The business model as a level of analysis opens new research avenues not only in organization studies and strategic management but also in other disciplines such as operations, marketing, and finance. Via an integrative lens that captures the practical challenges, scholars in the BM field will need to integrate theory from adjacent disciplines. While this will help ground the earlier strategic management theories in practical relevance, it will also remind the merits of strategic management for theory development to scholars in other fields.

APPENDIX A

OVERVIEW OF CASE STUDIES ON BMR IN THE LITERATURE

Study	Case Company(ies)	Research Question	Main Findings	Relevant SA Capabilities	Additional Capabilities
Arbussa et al. (2017)	Eurofirms, a Spanish HR services SME	The relationship between SA and BMR	Strategic sensitivity is the most critical SA capability.	All, with resource fluidity and leadership unity downscaled	Resourcefulness
Berends et al. (2016)	Dutch companies FEI, Bruns, Philips, and v. Gansewinkel	How established organizations develop new business models over time	Both leaping and drifting processes can result in business model renewal.	All, with an emphasis on cognition and action interacting over time	Experiential learning, effectuation
Bojovic et al. (2018)	Two technology startups founded in 2013 and 2014	The role of learning in business model innovation	Experimentation results in both learning and strategic legitimation - convincing stakeholders to embrace the business model.	Experimenting (s. sensitivity), aligning (l. unity)	Learning, legitimating, speed, co-creation with partners
Desyllas & Sako (2013)	Progressive, a top five US auto insurance company, introducing a new business model	How an incumbent firm profits from business model renewal	Long term competitiveness depends on building complementary assets and an ability to reconfigure them over time	Distancing, experimenting (s. sensitivity), resource fluidity	Building specialized, complementary assets to prevent imitation, absorptive capacity

Khanagha et al. (2014)	Ericsson, transitioning to a Cloud business model	How an established firm organizes for an emerging business model	The process that results in transition to a completely new business model is a collective & experimental learning process with stages of separation and integration.	All, with an emphasis on the role of incremental evolution on aligning views and managing paradoxes & multiple stakeholder demands	Integration capabilities, learning
Kim & Min (2015)	Brick-and-mortar retailers adding an online business model	The circumstances in which adding a new business model results in increased performance	Complementary assets should be aligned via earlier addition. For conflicting assets, an auto-nomous business unit should be introduced.	Mainly resource fluidity (decoupling, modularizing, switching)	Managing conflicting elements in parallel, integration capabilities
Laudien & Daxböck (2015)	10 manufacturing SMEs undergoing service transition	The role of path dependence in BMR	Path dependence should be considered in various contexts, with the possibility to tackle PD via certain BM designs	All, with emphasis on resource fluidity	Alliance, co-creation with partners
Sandström & Osborne (2011)	A multinational operating in the personal care industry	Barriers to BMR	BMR is challenging since it may go beyond firm boundaries. Incentives have to be aligned among interdependent actors according to the new business model/activity system.	All, while leadership unity and resource fluidity may go beyond firm boundaries	Alliance, co-creation with partners, effectuation

Velu & Stiles (2013)	A major US bank in the corporate bond trading market	Decision making process during the adoption of a business model disruptive to the existing one	The paradoxes in conflicting BMs are resolved through an incremental process of procedural rationality and political expediency.	All, with an emphasis on the political and cognitive dimensions of leadership unity. Switching (r. fluidity) is also an important capability.	Managing conflicting elements in parallel, legitimating, integration capabilities
Sauer (2018)	Hilti, introducing a service business model	The role of business model and other contributing factors in the scale-up of intrapreneurial ventures	A scalability framework in terms of demand, functional, operational, economic scalability	All, with an emphasis on experimenting (s. sensitivity) and all leadership unity practices	Scale-up, replication, learning, co-creation with customers, legitimation, speed, growth management

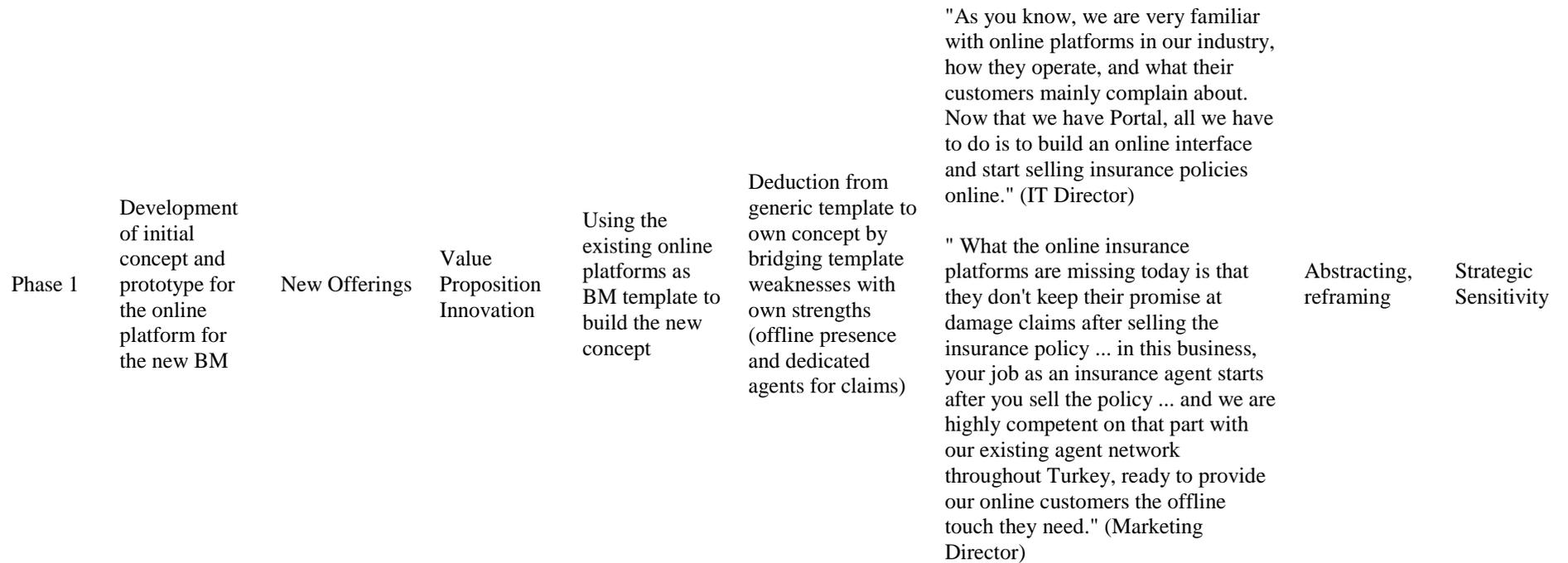
APPENDIX B

CHANGES IN THE BM BUILDING BLOCKS AND RELATED SA PRACTICES FOR INSURAGENT CO.

BM Dev. Phase	Change in BM element	First level BMR / BMI dimension	Main BMI dimension	Underlying actions	Description of actions	Cites	Related SA capabilities	SA meta-capabilities
Phase 0	Development of Portal software, which enables fast insurance quotation from 20+ providers	New Capabilities, New Technology / Equipment	Value Creation Innovation	Investing in multipurpose technologies	Investing in technology that would streamline existing operations and provide the basis for new value propositions	"We needed an insurance proposal engine to streamline our existing operations in which we cooperate with 20+ insurance companies to process the requests of our customers. After several failures, we have found the software provider which perfectly understands our needs and developed the Portal software in a joint effort. It wasn't long before we noticed that Portal offers exciting new business opportunities." (Marketing Director)	Modularizing	Resource Fluidity
Phase 0	Strategic partnership with the developer firm of Portal software to collaborate on future projects. Appointment of developer	New Partnerships	Value Creation Innovation	Partnering with tech-oriented firms for the prospect of developing new value propositions	Acquiring a share of the tech firm in return for shares from Insuragent Co., with the tech firm positioned as solution provider to Insuragent Co. and other prospective customers	"In order to develop new offerings from Portal software, our boss acquired 50% stake from the software company in return for a share of Insuragent Co. He also offered the owner of the firm (also the lead-developer of Portal) to our board." (Operations Director)	Anticipating, distancing Dissociating, grafting	Strategic Sensitivity, Resource Fluidity

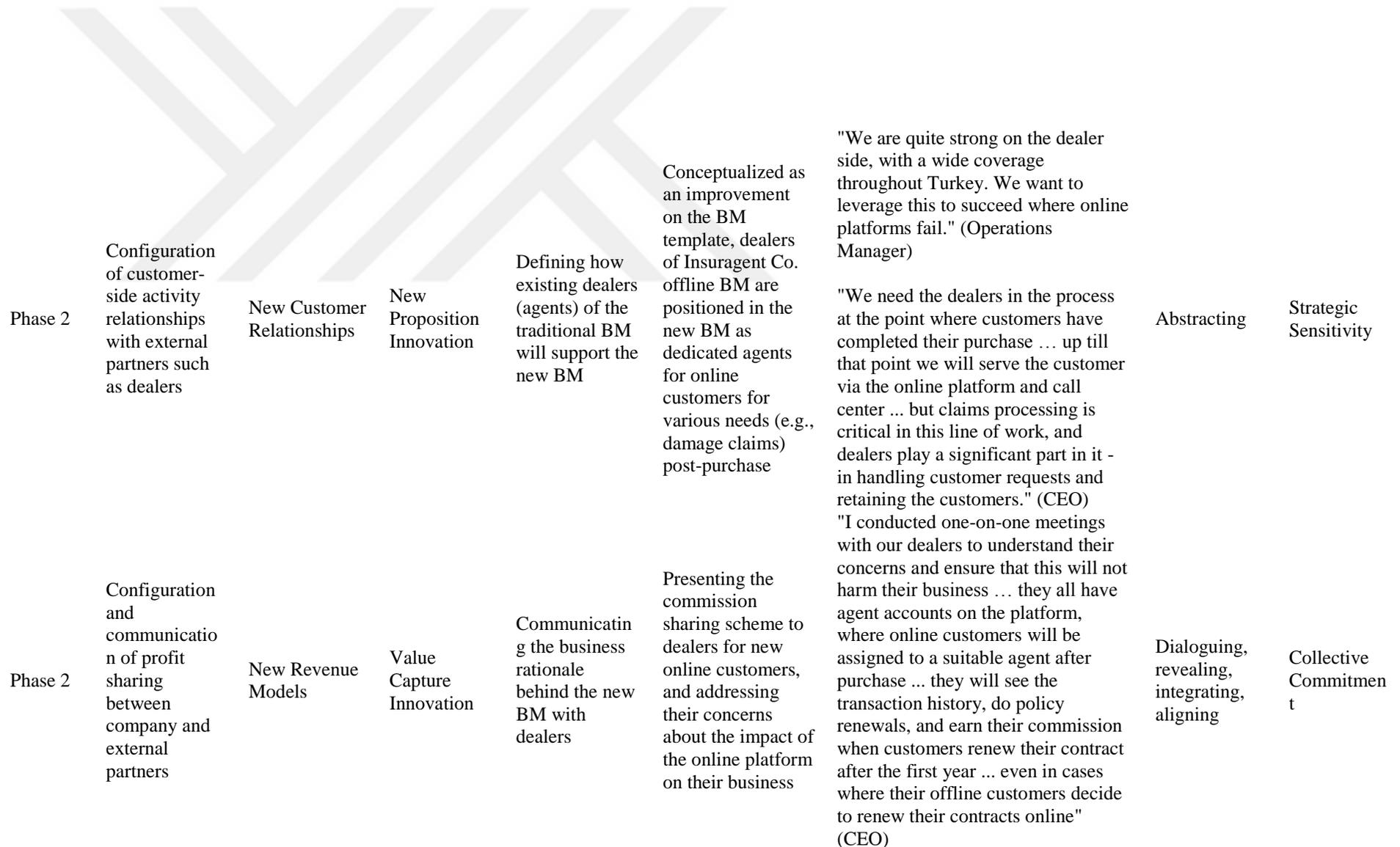


firm CEO to
the board





Phase 1	-	-	-	Hiring an outsider as the CEO	Hiring an outsider with fresh perspective to seize the opportunities offered by digital technologies and regulatory changes	"I started at Insuragent Co. first as an external advisor to offer my perspective on the big picture, based on the trends in the insurance industry, and thereby help rethink our way of doing business ... later I was offered a permanent role as the CEO." (CEO)	Distancing, reframing	Strategic Sensitivity
Phase 2	Development of the core processes (claims, proposal, etc.) for the new BM	New Processes	Value Creation Innovation	Creating process blueprints for the main activities to operate the new BM	Defining the main process steps to operate the new BM based on previous conceptualizations of BM elements	"Based on the concept given by the CEO, and our analysis of the existing operations of Insuragent Co., we created a blueprint of the key processes to operate the online platform and defined how the process steps would relate to Insuragent Co. competencies." (Operations Consultant)	Abstracting	Strategic Sensitivity
Phase 2	Creation of new functions and units (digital marketing, call center, etc.)	New Capabilities, New Channels	Value Creation Innovation, New Proposition Innovation	Creating digital- and market-oriented departments to operate the new BM	Introducing new departments and hiring new personnel to perform online marketing and call center activities to operate BM, based on previous BM conceptualizations	"The consulting project provided us with a new perspective on how to handle marketing both for our traditional business and the online platform ... we jointly specified the talent we needed to run the new business, and also learned from the newcomers (such as our new digital marketing executive) how to handle the aspects we had been missing in our initial plans" (CEO)	Abstracting	Strategic Sensitivity





Phase 3 (planned)	Partnering with other e-commerce platforms for competitive insurance offerings during checkout	New partnerships, new channels	New Proposition Innovation	Following the regulatory developments and market entrants to develop new partnership concepts	Exploring future value offer concepts based on developments in the external environment, and considering what Insuragent Co. has to offer to market entrants to jointly create value	"A new directive came into force a few months ago regarding distance sale of insurance policies, which offers a huge market opportunity. All e-commerce powerhouses in Turkey are applying for certification to sell insurance policies on their platforms ... what we're going to tell them is, 'be smart, don't try to do the whole thing by yourself; partner with us instead' ... our online platform, powered by Portal, can offer quick service to their online customers when they wish to buy an insurance policy on top of their product purchases." (CEO)	Anticipating, abstracting	Strategic Sensitivity, Resource Fluidity
Phase 3 (planned)	Offering the Portal software for the use of external insurance agents for a regular monthly fee		Business Model Innovation	Exploring new use cases for Portal	Using Portal software to develop a subscription-based business model for other insurance agencies	"We are looking for new ways to commercialize Portal ... as it makes life easier for all agencies, small or large, we'll offer the platform for a monthly subscription fee" (CEO)	Anticipating, abstracting	Strategic Sensitivity, Resource Fluidity

APPENDIX C

CHANGES IN THE BM BUILDING BLOCKS AND RELATED SA PRACTICES FOR TIRE CO.

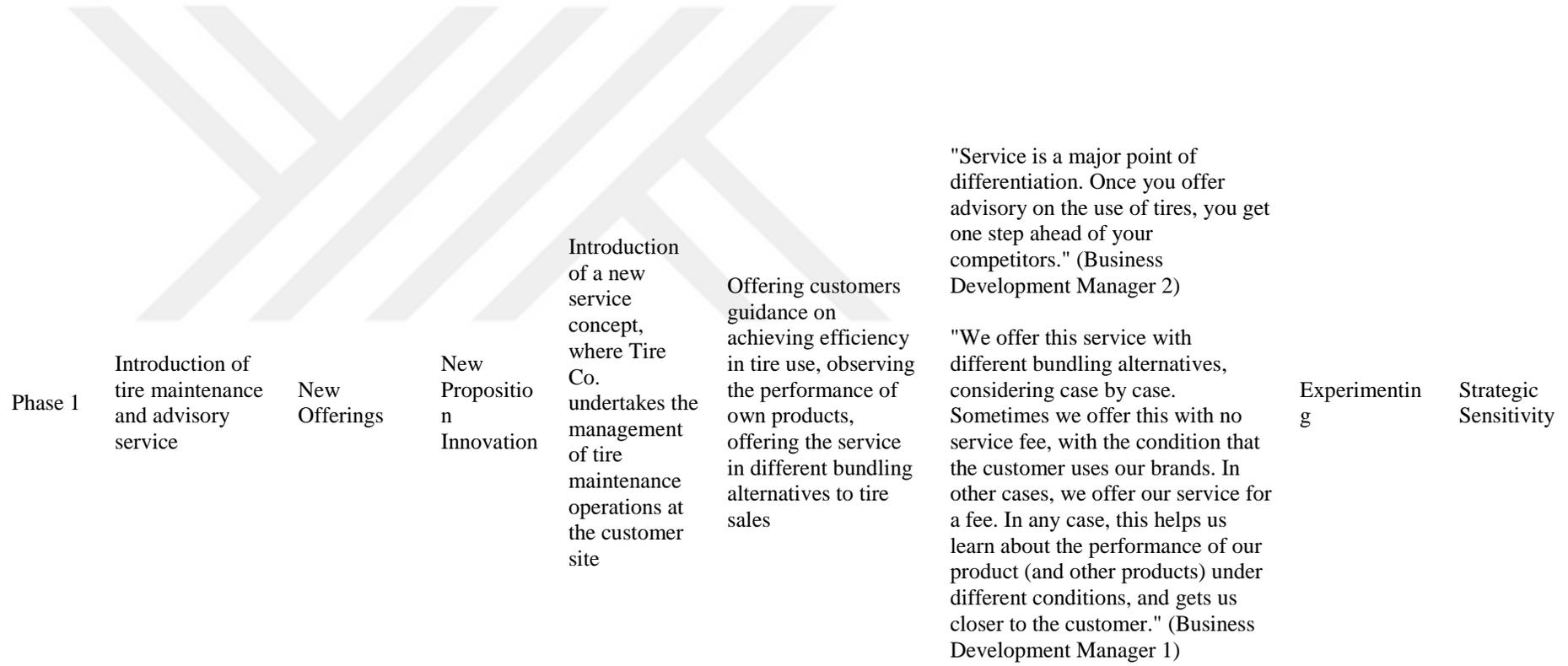
BM Dev. Phase	Change in BM element	First level BMI dimension	Main BMI dimension	Underlying actions	Description of actions	Cites	Related SA capabilities	SA meta-capabilities*
Phase 0	Development of a high-quality generation of tires	New Offerings	New Proposition Innovation	Development of a product enabling new BMs	The new tire models developed by Tire Co. offered quality and reliability, which enabled the application of outcome-based revenue models.	"Product quality is a very important prerequisite of this business model ... we started offering a new series of tires in 2015, and with these tires we started doing this (pay-per-kilometer). We could not have relied on the older generations of our products for this business model ... and this is the reason why our competitors do not work with this model, as they cannot rely on the durability of their products." (Business Development Manager 1)	Modularizing	Resource Fluidity
Phase 0	Adoption of tire retreading technology	New Technologies	Value Creation Innovation	Development of a multipurpose capability	Retreading of used tires reduces costs for users via the re-use of old tires that would otherwise be disposed. Tire Co. adopted this technology to better serve its customers.	"Our top competitors are highly capable in retreading. It also plays a very important part in the pay-per-kilometer model. Once you have this capability, your value offer becomes impeccable." (Commercial Director)	Modularizing	Resource Fluidity



Phase 0	-	-	-	Spin-off of Tire Co. from parent company	Tire Co. has spun off as an industrial tire business from an MNC which produces tires for a wide variety of vehicles. After the spin-off, the top management of Tire Co. became more attentive to new business opportunities that were previously overlooked.	"For the MNC (from which Tire Co. spun off), the industrial tire business was always a second priority. That is the reason of the spin off anyways; why sell a business which is your primary focus, right? Now what they used to do was, naturally, not pay attention to this type of business models (pay-per-kilometer)." (Business Development Manager 1)	Decoupling	Resource Fluidity
Phase 1	-	-	-	Appointment of a CEO from an unrelated industry to country organization	After the spin-off, a new CEO was appointed to the country organization from a leading consumer goods company	"The transformation on the commercial side started when a senior director at a leading consumer goods company was appointed as our CEO. Shortly after that, a visionary commercial director (whom we knew from our industry) was appointed. He paid attention to our <i>arguments</i> other than price: features, service, or whatever, that you would consider part of what you call <i>value</i> ." (Business Development Manager 1)	Distancing, reframing	Strategic Sensitivity



Phase 1	Dealers reoriented towards customers via better communication of the marketing mix	New Customer Relationships	New Proposition Innovation	Creation of market-oriented departments (training, fleet management, etc.)	Several departments have been introduced to develop new value propositions and communicate the value offer. While fleet management was responsible for developing customized solutions for larger customers, training department was focused on dealers to improve know-how on the value offer in their dealings with customers.	"As our products are becoming highly imitable by low-cost producers, we had to deal with the commoditization trend by becoming more customer-focused ... Once you are able to provide customized solutions that are hard to imitate, you are safe." (Mktg Manager)"This is a mindset shift. In order to shift from sell-in to sell-out, first you have to figure it out, and then provide the know-how to your dealers ... We used to say to the dealers <i>here is the product, good luck selling it!</i> ; but now we say <i>there is the target customer, and this is our message for you to communicate. Go complete the task.</i> " (Comm. Director)	Abstracting, reframing	Strategic Sensitivity
Phase 1	-	-	-	Appointment of middle managers to market-oriented departments from competitors	As part of the transition to become more customer-focused, people who previously held middle management positions at competitors, and who were experienced in developing product-related service solutions, were hired.	"What is unique about our country organization is that we've had many incoming managers from our competitors who are more experienced in developing such value offerings. This is actually the main reason why we quickly developed these new solutions." (Business Development Manager 1)	Distancing	Strategic Sensitivity





Phase 2

Development of the pay-per-kilometer concept

New Revenue Models

Value Capture Innovation

Getting the buy-in of top management

Presenting to top management the commercial logic, internal capabilities, the background of Tire Co. in providing the value offer, and examples from leading competitors in the field

"I said well, we argue that our products are top quality. We are able to provide the service. We are one of the top tire manufacturers in the world, and the leading logistics company in Turkey is our customer. Why can't we also do this? The top management agreed with excitement." (BD Manager 2)"There were questions from the top management such as 'why do this', 'what is the expected return'. Our BD manager (2) was quite eager to do this, so he presented all the arguments, e.g. our top competitor is also doing it and making money. Then our CEO agreed to proceed with it. (Finance Manager)

Dialoguing

Collective Commitment

Experimenting with a pilot project w/ a small-scale customer

Testing the BM-related assumptions and profitability forecasts, and clarifying the key activities with a small-scale operation

"We also did a pilot project to learn from. If you cannot keep your costs down as expected, you inevitably incur loss in this model. Thus, if we had started with a very large fleet, our losses could have been beyond tolerable. Thus we tested it on a smaller fleet, to get a sense of how we do this. Even if we incurred a little bit of loss, that's fine, as it is the cost of learning." (Marketing Manager)

Experimenting

Strategic Sensitivity



				<p>Communication with HQ regarding the commercial logic</p> <p>Taking risk on the country level without HQ knowing the full picture</p>	<p>Presenting the full scenario of future steps and profitability results to HQ</p> <p>Country leadership believed in the project and the project team, thus taking personal risk by not letting know the HQ on the full extent of the initiative</p>	<p>"We created detailed scenarios for the HQ about what the profitability would be in this business. Since this new model offered obvious advantages regarding profitability compared to our traditional, trading-oriented model; it was not very difficult to get the approval. However, they agreed to let us do this on a limited scope, saying <i>let's try it for a year or so, and see how it goes.</i>"</p> <p>"What the HQ initially said to us was, <i>try this for a year or so, but if you can't keep your promise regarding profitability, we'll have to cancel it.</i> But it does not work that way in real life. We had to sign a 3-year contract with our customer. So we took the risk and didn't tell the HQ about the contract clause, as the country management was confident that we would succeed. And we did." (BD Manager 1)</p>	<p>Dialoguing</p> <p>Caring</p>	<p>Collective Commitment</p> <p>Collective Commitment</p>
Phase 2	Implementation of the pay-per-kilometer concept	All	Business Model Innovation	Signing the first deal with a major logistics company	-	-	-	-

Phase 2	Implementation of the pay-per-kilometer concept	All	Business Model Innovation	Collaborating with a dealer to bypass the headcount restriction by HQ	Unable to recruit the maintenance personnel part of the PPK model as it had not been reported as part of yearly recruitment plans to HQ, Tire Co. had to turn to a dealer to get around the issue.	"For budgeting and planning reasons, we could not officially recruit the maintenance people we needed to deploy as part of this business model. Thus, we turned to a dealer that was a long-term partner for the payrolling of the personnel, in return for an invoice on the expenses." (Marketing Manager)	-	(Resource Fluidity)
Phase 3 (planned)	(Un)scaling the new BM	All	Business Model Innovation	Deliberate choice of management to consider pay-per-kilometer as an add-on to existing value propositions rather than an alternative BM	Unwillingness to scale up the new BM due to concerns about the relationships with dealers, an integral part of the traditional business model	"We do not prefer to promote this model to all of our customers. Our priority is to proceed with our add-on services. Because dealers are very much involved in our day-to-day business. This model is a clear threat to the profitability of our dealers, as their role in this model is merely payrolling and warehousing. No dealer would like that. Thus, we only go for PPK when the target does not work with any of our dealers, or it has been targeted by one of our competitors." (BD Manager 1)	-	(Collective Commitment)



**Lacking these meta-capabilities if stated in parenthesis*

APPENDIX D

CHANGES IN THE BM BUILDING BLOCKS AND RELATED SA PRACTICES FOR FLEET CO.

BM Dev. Phase	Change in BM element	First level BMI dimension	Main BMI dimension	Underlying actions	Description of actions	Cites	Related SA capabilities	SA meta-capabilities*
Phase 0	Taking advantage of price levels in the second-hand car market by revamping the fleet every 12 months	New Equipment, New Offerings	Value Creation Innovation, New Proposition Innovation	Taking quick action to take advantage of second-hand car prices to offer younger cars to customers	Adapting operations and financial planning to revamp its fleet every 12 months provided Fleet Co. the operational basis for the new BM. Fleet Co. was quick to adapt operations due to small size compared to larger competitors that could not take quick action	"We were used to the regular 36-month period in auto leasing, but given the second-hand auto prices in Turkey, we figured we could revamp our fleet every 12 months to better provide the boutique service we offer to our clients ... this created huge customer satisfaction and prepared us for the rental business. It was possible given our size compared to our main competitors, that we could easily adapt our processes and financial structure." (Board Member)	Modularizing	Resource Fluidity



Phase 1
Entering the short-term rental business with two new brands

New Offerings, New Customers and Markets

New Proposition Innovation

After a credit crisis that restricted the availability of long-term credits, Fleet Co. decided to switch to short term rental

Fleet Co. was quick to respond to an external shock due to small size and the earlier move towards shorter leasing periods. Top management response to the shock was to enter the short-term rental business targeted at project-based businesses and consumers.

"We depend highly on project financing, so when banks cannot offer you long-term leasing, you run out of bullets in your ammo, meaning you can't serve your customers... So, we quickly figured that we could leverage our recent short-term profile to develop new propositions ... We had to adapt our IT systems; it wasn't easy, but nevertheless we managed to do it." (Finance Director)

"Employees of our existing clients used to turn to us for short-term rentals, upon which we developed our rent-a-car concept ... and to seize the opportunity at three to 12-month period rentals for project-based businesses such as construction, we developed another short-term offering." (Marketing Director)

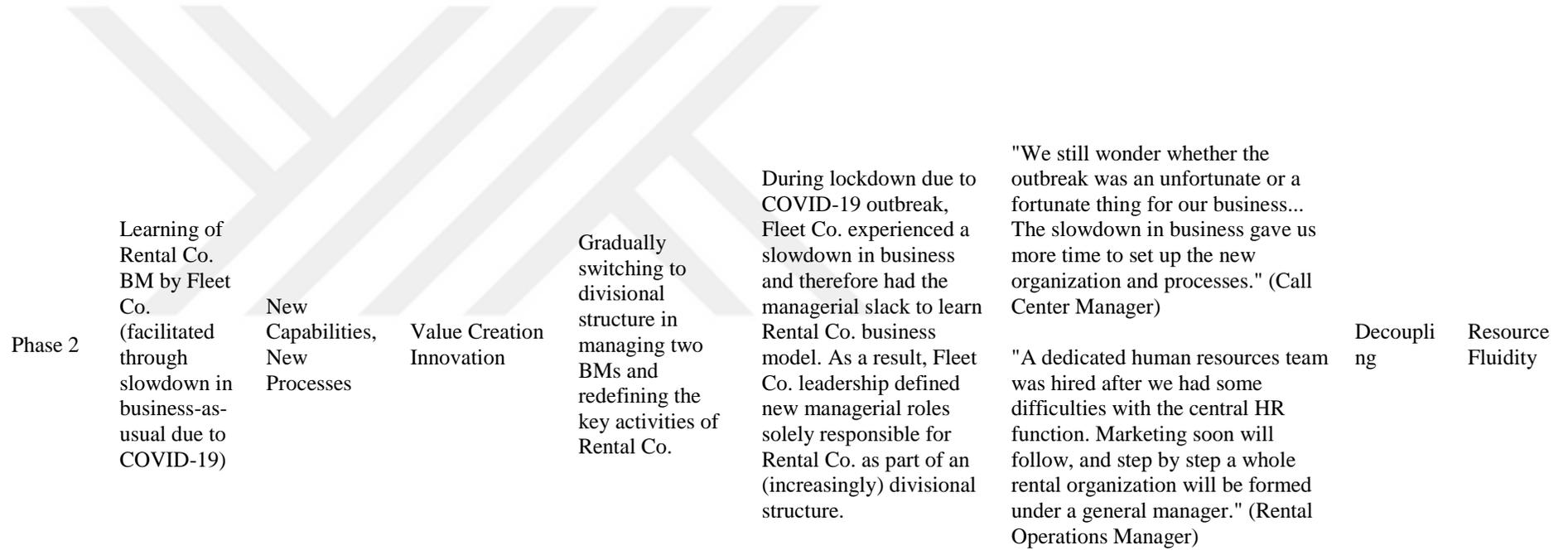
(CC and RF downscaled)



Phase 1	Cooperation with Yolcu360, an online platform for car rental	New Partnerships, New Processes, New Channels	Value Creation Innovation, New Proposition Innovation	Failure to fully grasp the new BM during planning stage compensated by partnership with another company on the demand side	Despite quick decision making and action, Fleet Co. failed to conceive all aspects of the rent-a-car business model at the planning stage. Instead, the company figured out on the way how to complement the missing parts of its new BM on the demand side, and thus cooperated with Yolcu360.	"We were quick to adapt and start our operations in short-term rental, but after a while figured out that building a brand is extremely difficult. We knew that but we thought we could tackle it with superior service. It requires huge upfront investment and several years to build a brand. But we can't wait for that long, as we lose money every day by not renting out our cars ... thus we ended up working with Yolcu360, an online platform where people make car reservations online, and the platform turns to suppliers like ours for vehicles and service." (Sales Director)	-	(Strategic Sensitivity), CC and RF downscaled
Phase 2	Acquisition of Rental Co.	All	Business Model Innovation (Acquisition)	Acquisition of Rental Co., a rent-a-car company in financial distress with a strong brand and wide branch coverage in the country	Leveraging its financial strength, Fleet Co. acquired Rental Co., a financially distressed rent-a-car company with a strong brand and branch presence in key locations such as airports with high density throughout Turkey. With the acquisition, Rental Co. complemented the missing parts of its short-term BM, namely brand awareness and operational coverage.	"Beyond having a global brand and established operations with wide geographical coverage, with the acquisition we also had more credibility on the financial side, buying power through scale, and a wide selection of new vehicles." (Finance Director)"We've got the chance to develop new value propositions through Rental Co. to our existing clients, and invest in new, innovative projects for Rental Co. with our financial strength and enthusiasm of our leadership for new initiatives." (Sales Manager)	Grafting	Resource Fluidity



Phase 2	Missing out some key activities and important marketing aspects during the post-merger integration of Rental Co.	Capability Failure, Process Failure	Value Creation Failure	Organizing all activities of Fleet Co. and Rental Co. under a single functional organization, failure to relate to the market-oriented mindset of Rental Co.	Lack of careful planning for post-merger integration and preference of a functional organization resulted in value loss for Fleet Co. Organizing activities and assigning managerial responsibilities without a full grasp of Rental Co. BM caused the leadership to overlook key activities and processes underlying the BM.	"As a holding company with several related initiatives, we decided to adopt a functional organization at the holding level and bring together all functional aspects of different businesses under a single leadership. For instance, we have one marketing director who covers all marketing aspects of our different businesses to seize cross-selling opportunities." (Board Member)	"It is the dream of every fleet leasing company to be in short term rental business. However, there is usually misjudgment among the leasing people on the operational and marketing aspects of this business ... during the integration of Rental Co., for instance, some digital marketing tasks were lost during the design of the new organization. Thus, several crucial digital marketing processes had gone missing for a while until Fleet Co. leaders noticed ... there is currently no manager dedicated full-time to Rental Co. marketing activities ... we have a fuzzy situation on the level of middle management." (Call Center Manager)	- (Strategic Sensitivity), (Resource Fluidity)
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Phase 2

Leveraging the synergies between the two business models to develop new value propositions for existing customers

New Offerings, New Customer Relationships

New Proposition Innovation

Using the idle capacity of Rental Co. to develop new propositions to Fleet Co. Clients

Managing the two business models in parallel, the leadership was able to switch resources between the BMs to develop new value propositions. During this switching, the leadership reflected on the differences in managerial mindset between the two BMs and opened new cognitive pathways in Rental Co. management to channel resources and thereby develop new value propositions at Fleet Co.

"During the COVID-19 lockdown, we utilized the idle fleet of Rental Co. to serve the short-term needs of our Fleet Co. clients. For instance, Pharma Co., our multinational client, frequently has short term needs for their expatriate employees, whom we could not serve before the acquisition." (Call Center Manager)

"After the acquisition, we noticed that Rental Co. was quite rigid in pricing; but in the world of B2B, you have to seize an opportunity when you see one. When you offer a promotion (to client employees) in cooperation with the HR department, you have the opportunity to reach their 5,000 employees who perfectly fit the Rental Co. customer profile. What we told the managers at Rental Co. was that they have to seize this opportunity by being a little more flexible in pricing." (Finance Director)

Reframing, switching

Strategic Sensitivity, Resource Fluidity



Phase 3 (planned)	Innovative new value propositions via partnerships (e.g., car delivery to customer location)	All Value Creation Innovation dimensions, New Offerings, New Customers and Markets	Value Creation Innovation, New Proposition Innovation	Working on new service concepts encouraged by leadership, and developing new capabilities to support new propositions	Supported with financial and operational resources by the leadership, Rental Co. managers are working on innovative new propositions. In order to fulfill these new propositions; the managers are exploring several value creation alternatives such as partnering with external stakeholders and developing existing capabilities such as IT infrastructure to support multiple propositions and business models.	"We are working on new projects such as chauffeur service and delivery to customer address. We expect that such new services are coming next to revolutionize the industry, and looking for external partners such as Getir to fulfill propositions such as delivery ... The leadership is eager to see them all brought to life as soon as possible ... But it all starts from having an IT infrastructure that accommodates all new propositions such as these. Thus, the first step is to complete the software development projects as planned - I wish we had completed them before." (Rental Operations Manager)	Anticipat ing, abstractin g	Strategic Sensitivity, CC downscaled
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**Lacking these meta-capabilities if stated
in parenthesis*

APPENDIX E

CHANGES IN THE BM BUILDING BLOCKS AND RELATED SA PRACTICES FOR TOOL CO.

BM Dev. Phase	Change in BM element	First level BMI dimension	Main BMI dimension	Underlying actions	Description of actions	Cites	Related SA capabilities	SA meta-capabilities*
Phase 0				Organizational (re-) structuring in Turkey office to switch to <i>make standard, sell special</i> logic	Switch to holding structure in Turkey, with Tool Co. as a separate company with increased autonomy from global HQ to develop solutions tailored to local needs, accompanied with a switch to markets from hierarchies in the governance of access to global resources (e.g., products, technologies, capabilities)	"Five or six years ago, we had what it takes to make standard, in other words, we had the product. But in order to sell special, we had to set up new business lines and functions focused on marketing and customization, and improve our project-based business capabilities ... The decentralized structure we adopted enabled us to be more autonomous in our local decisions to be more responsive to the customers by setting up our local teams and evaluating our competencies." (General Manager)	Decoupling, dissociating	Resource Fluidity
Phase 1	Offering product-related services	New Offerings, New Customer Relationships, New Capabilities, New Processes	New Proposition Innovation, Value Creation Innovation	Introducing account management roles	Hiring highly capable account managers in middle management to adapt Tool Co. solutions to client needs	"Tool Co. is very agile and open to change. We have key account managers for complex initiatives with high revenue potential, which require technical knowledge and effort. (Business Development Manager)	Modularizing	Resource Fluidity



Avoiding channel conflict through customer segmentation

Clearly separating customers targeted by Tool Co. dealers from larger clients with sophisticated needs

"I am responsible for our dealers at the firm. We don't have any complex initiatives or tasks required by our customer segment, thus what we do is regular product distribution through our dealers." (Business Development Manager)

Decoupling

Resource Fluidity



				<p>Avoiding conflict between product and service teams through <i>first in mind, first in choice</i> motto</p>	<p>As continuous service provision enables improved relationships with clients, Tool Co. Global introduced the motto "first in mind, first in choice" emphasizing that having the top priority in the perception of customers is to everyone's benefit in the long run, regardless of short-term gains from product selling</p>	<p>"Our line of business and that of service do not conflict with one another. I am particularly very careful about that, and involve service people in my proposals to improve customer satisfaction. This leads to longer sales cycles, but in the end I retain the customer. We are mature enough to understand this ... Maybe I would've earned more otherwise, but this is sort of a strategic partnership. First in mind, first in choice - in case the customer has any requests or issues, I (the firm) have to be the first in his mind. We have many cases like this." (Business Development Manager)</p>	<p>Integrating, aligning</p>	<p>Collective Commitment</p>
Phase 1	<p>Developing project-based process solutions (Local Organization)</p>	<p>New Offerings, New Customer Relationships, all Value Creation Innovation dimensions</p>	<p>Value Creation Innovation, New Proposition Innovation</p>	<p>Setting up local engineering design & development operations within a separate entity to meet customer requests</p>	<p>Tool Co. developed local capabilities for custom engineering projects, for which it previously sourced the required technical capabilities from Tool Co. Global. Tool Co. created a separate company to run the engineering design & development operations.</p>	<p>"We used to source the technical competences in custom development projects from Germany, where we have an engineering team for such special-purpose projects. But their services were very costly and they were slow to respond to our requests - we have sort of a cultural difference. Thus we had to take action here ... we invited the head of the engineering team to Turkey and set up a similar operation as part of a separate company." (Sales Manager)</p>	<p>Modularizing, dissociating</p>	<p>Resource Fluidity</p>

Phase 2	Acquisition of several engineering and technology firms which possess the targeted capabilities for new-generation services, by Tool Co. Global	New Capabilities, New Technology / Equipment	Value Creation Innovation	Acquiring companies with significant technical capabilities in niche service areas according to Tool Co. Global strategy	In line with the strategic direction of Tool Co. Global to provide advanced manufacturing solutions, the company acquired several engineering firms focused on new technologies such as image processing.	"Tool Co. acquired several companies in areas such as adhesive equipment and image processing ... our activities are focused on areas that would add value to our customers, thus we are application oriented ... for us, deep application knowledge is critical, and we serve our customers in such niche areas." (General Manager)	Grafting	Resource Fluidity
Phase 2	Introducing a common data sharing platform to build add-on value propositions (Tool Co. Global)	New Capabilities, New Processes	Value Creation Innovation	Pooling all usage-related data in a single platform	Tool Co. Global developed a multipurpose data platform to pool all usage-related data collected from the use of its products at client operations to develop new solutions	"The predictive maintenance module is based on this common platform, which is the foundation for all add-on applications ... We gather all usage data from our customers into this database". (Product Manager)	Modularizing	Resource Fluidity
Phase 2	Developing predictive maintenance services (Tool Co. Global)	New offerings	New Proposition Innovation	Leveraging acquired competencies, the common data platform and established relationships with customers to develop new solutions	Tool Co. Global developed data-driven services to offer quality-enhancing process solutions to its clients based on usage data. It would not have been possible if Tool Co. had not developed the close-knit relationship with its major customers, which led to the	"If you'll offer the predictive maintenance module to a client, you should've attained a very advanced level of collaboration with them. Only then you can apply predictive maintenance to add further value to client operations. (Product Manager) "Predictive maintenance leverages data accumulated in the common data platform to provide actionable		



accumulation of valuable usage data.

recommendations." (Service Sales Manager)

Phase 2	Developing customized predictive maintenance solutions for client needs (Local Organization)	New Customer Relationships	New Proposition Innovation	Introducing technical competence development roles to train account managers and product managers for the provision of new services	Leveraging the capabilities of a highly skilled team of account managers and training the team on the new Tool Co. Global solutions for tailoring the global solutions to client needs	"A new role was introduced in our service team called 'technical competence development manager'. The role devises and tracks the yearly competence development plan of the service staff, defines the required soft skills, and supports the team on the digitalization of the products. (Service Sales Manager)	Modularizing	Resource Fluidity
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Pilot project with a major client to define activities, roles, and responsibilities in predictive maintenance

Facing difficulties due to the customer perception of Tool Co. as a machine tool supplier rather than a software solutions provider. Establishing new relationships and routines with client departments and employees, defining responsibilities, establishing working principles such as the rules in the storage of usage data

"When we met with the top management of a major automotive client, they said 'you develop software solutions based on our usage data, but we do not consider you as a software provider. How will you use the data you gathered here in the future?' ... There were protocols between the systems we used on this client, but we had to slow down when the supplier of these protocols went bankrupt." (Product Manager)

"At this major automotive client that we work with, each supplier uses their own system with own server. The client wants to pool all the usage data from different suppliers under their control. Thus we still have to agree on a common ground with the client and the other suppliers." (Sales Manager)

Dialoguing, revealing, integrating, aligning

Collective Commitment



Phase 2	Rigidity in considering several pricing alternatives based on value added	(New Revenue Models, New Cost Structures)	(Value Capture Innovation)	Facing profitability-related concerns when pricing services and solutions based on client outcome	Due to the cost accounting logic imposed by Tool Co. Global, the local organization faced constraints when considering outcome-based pricing alternatives	"Our customers think they pay for our service so that the equipment always works at full capacity ... predictive maintenance is a tool to predict breakdowns, so it serves this purpose; but there is low customer awareness regarding its benefits. Thus, we consider including it in our overall service proposal instead of charging as an add-on, but then we have to incur the additional cost of running the systems (underlying predictive maintenance). The cost of running this module comes from the calculation of central expenses incurred at Tool Co. Global HQ, including personnel, IT and overhead ... this is the general accounting logic of Tool Co. when we source products or services to sell in our market on a target profit margin." (Product Manager)	(Resource Fluidity)
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Phase 3 (planned)	Becoming a solution-driven company in the application of new generation manufacturing technologies (planned)	All	Business Model Innovation	Clarifying the key activities and responsibilities of Tool Co. in the business ecosystem (activity system)	In an increasingly connected business ecosystem, Tool Co. will have to co-develop common protocols and activity relationships with clients and other members in the ecosystem such as complementary product and service providers.	"In recent years, our major clients started to request end-to-end process solutions from us. So we started working on offers for a full line of manufacturing process; which also integrates products from other suppliers, such as robots. This is the new trend; the direction that the market takes. As we have deep knowledge on our products and their use, we also have to improve ourselves on the products of other firms in our ecosystem, and collaborate with them to jointly create value." (General Manager)	Dialoguing, revealing, integrating, aligning	Collective Commitment
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**Lacking these meta-capabilities if stated in parenthesis*

APPENDIX F

STUDY 2 QUESTIONNAIRE

Title page

This study is carried out for purely academic purposes by Alptegin Albayraktaroğlu, Ph.D. Student of Boğaziçi University, Department of Business Administration. Our survey aims to understand the relationship of agility practices in companies with various management approaches and transformation projects.

Please read the questions carefully and answer them in the most appropriate way that corresponds to your company's current situation and management approach. Your answers to the survey will be kept confidential and the survey results will be used for statistical purposes. The time to answer the questionnaire is 5 to 10 minutes, and it is important that you answer all the questions completely.

All rights reserved for this survey. All or part of it cannot be used without the permission of the researcher.

For questions about our survey, you can contact us at

Continue to survey

First page

Please read the following statements carefully and mark how much you agree with the statement in the range 1: Strongly Disagree to 5: Strongly Agree. When giving answers, please consider the way things work based on the current state of your company, not on what should be.

STRATEGIC AGILITY (Kump et al., 2019; Hock et al., 2015)

1	Our company knows the best practices in the market.	1	2	3	4	5
2	Our company is up-to-date on the current market situation.	1	2	3	4	5
3	Our company systematically searches for information on the current market situation.	1	2	3	4	5
4	As a company, we know how to access new information.	1	2	3	4	5
5	Our company always has an eye on our competitors' activities.	1	2	3	4	5
6	Our top management is able to make bold and fast strategic decisions.	1	2	3	4	5
7	Our management collaborates for strategic decisions.	1	2	3	4	5
8	Strategic questions are collectively solved by our management without being bogged down in top-level 'win-lose' politics.	1	2	3	4	5
9	We are able to reallocate and utilize capital resources fluidly.	1	2	3	4	5

10	Our people and their competencies are highly mobile within our organization.	1	2	3	4	5
11	Our organizational structure allows for flexible redeployment of our resources.	1	2	3	4	5

Please answer the following statements taking into account the last two years of your company. (1: Strongly Disagree to 5: Strongly Agree)

BUSINESS MODEL INNOVATION (Spieth & Schineider, 2016; Futterer et al., 2018; Clauss, 2016)

12	Target customers have changed.	1	2	3	4	5
13	The product and service offering have changed.	1	2	3	4	5
14	The firm's position in the market has changed.	1	2	3	4	5
15	We offered new added value to our customers.	1	2	3	4	5
16	The firm's core competencies and resources have changed.	1	2	3	4	5
17	Internal value creation activities have changed.	1	2	3	4	5
18	New internal processes are established.	1	2	3	4	5
19	New organizational structures are established.	1	2	3	4	5
20	Roles and involvement of partners in the value creation process have changed.	1	2	3	4	5
21	New partnerships are established.	1	2	3	4	5
22	External partners are integrated into the internal value creation activities in new ways.	1	2	3	4	5
23	New collaboration partners regularly help us to further develop our business model.	1	2	3	4	5
24	Distribution has changed.	1	2	3	4	5
25	New sales channels are developed.	1	2	3	4	5
26	New trade channels are established.	1	2	3	4	5
27	Revenue mechanisms have changed.	1	2	3	4	5
28	Cost mechanisms have changed.	1	2	3	4	5
29	A new revenue logic is applied.	1	2	3	4	5

Second Page

Please read the following statements carefully and mark how much you agree with the statement in the range 1: Strongly Disagree to 5: Strongly Agree. While giving your answers, please consider the current state of the organization you work for and evaluate the way things work objectively.

ENVIRONMENTAL TURBULENCE (Jaworski & Kohli, 1993)

30	The actions of competitors in our major markets were changing quite rapidly.	1	2	3	4	5
31	Technological changes in our industry were rapid and unpredictable.	1	2	3	4	5
32	Customers' product preferences changed quite rapidly.	1	2	3	4	5
33	Changes in customers' needs were quite unpredictable.	1	2	3	4	5

NETWORK (STRUCTURAL) EMBEDDEDNESS (Lin et al., 2009)

34	We interact with other firms on a high frequency.	1	2	3	4	5
35	There is a long-standing interaction among our partners.	1	2	3	4	5
36	Network ties generate significant influences on partners' behavior during alliance.	1	2	3	4	5
37	The partners with which we maintain frequent relationships, in general, know each other.	1	2	3	4	5

Please answer the following statements taking into account the last year of your company. (1: Strongly Disagree to 5: Strongly Agree)

PERFORMANCE (Venkatraman & Ramanujam, 1986)

38	Relative to our competitors, our financial performance was much better.	1	2	3	4	5
39	Relative to our competitors, the market share of our organization was much better.	1	2	3	4	5
40	Relative to our competitors, the sales growth of our organization was much better.	1	2	3	4	5
41	Relative to our competitors, the product development of our organization was much better.	1	2	3	4	5
42	Relative to our competitors, the development of our organization was much better.	1	2	3	4	5

Third page

- When was your company founded?
- What is your role in the company?
- How long have you been working in the company?
- Which of the following best describes the type of company you work for?
 - Freelance
 - SME
 - Startup/Scale-up
 - Domestic Company (non-SME)
 - MNC Subsidiary
 - Holding
 - Other:
- What is the number of employees at your company?
- Which of the following industries do you operate in?
 - Heavy Industry
 - Waste Management and Recycling
 - Banking
 - Computer-Software Solutions
 - Biotechnology
 - Painting and Coating
 - Glass

- Cement
- Consulting
- Durable Consumer Goods
- Iron & Steel
- Education
- Electronics
- Industrial Products
- Energy
- Financial Services (excluding banking and insurance)
- Real Estate
- Food and Drinks Production
- Animal Farming
- Fast Moving Consumer Goods (FMCG)
- Pharmaceuticals
- Construction
- Paper
- Rubber
- Chemicals
- Cosmetics
- Jewellery
- Tire
- Logistics
- Mining
- Media
- Metals
- Nuclear
- Automotive
- Packaging
- Retail
- Petro-Chemicals
- Healthcare
- Defense
- Insurance
- Sports Equipment
- Agriculture
- Textile Manufacturing
- Telecommunications
- Shipbuilding
- Tourism
- Consumer Electronics
- Tobacco
- Transportation
- Software Solutions
- Other Service Sector

- Other

The following questions are personal and optional to answer. Your answers will be kept confidential and will only be used if you want us to contact you regarding the results of the study.

Company Title:

Name surname:

E-mail:

Phone:

Complete survey

Thank you page

Thank you for taking the time to complete our survey.



APPENDIX G

STUDY 2 QUESTIONNAIRE IN ORIGINAL LANGUAGE

Giriş sayfası

Bu çalışma tamamen akademik amaçlarla Boğaziçi Üniversitesi İşletme Bölümü Doktora Öğrencisi Alptekin Albayraktaroğlu tarafından yürütülmektedir. Anketimiz, şirketlerdeki çeviklik uygulamalarının çeşitli yönetim yaklaşımları ve dönüşüm projeleriyle ilişkisini anlamayı amaçlamaktadır.

Lütfen soruları dikkatlice okuyun ve şirketinizin mevcut durumuna ve yönetim yaklaşımına karşılık gelen en uygun şekilde cevaplayın. Ankete verdiğiniz yanıtlar gizli tutulacak ve anket sonuçları istatistiksel amaçlarla kullanılacaktır. Anketi cevaplama süresi 5 ila 10 dakika olup, tüm soruları eksiksiz yanıtlamanız önem taşımaktadır.

Bu anketin her hakkı saklıdır. Araştırmacının izni olmadan tamamı veya bir kısmı kullanılamaz.

Anketimizle ilgili sorularınız için adresinden bizimle iletişime geçebilirsiniz.

Ankete devam et

İlk Sayfa

Lütfen aşağıdaki ifadeleri dikkatlice okuyun ve ifadeye ne kadar katıldığınızı 1: *Kesinlikle Katılmıyorum* ile 5: *Kesinlikle Katılıyorum* aralığında işaretleyin. Yanıtları verirken, lütfen olması gereken duruma göre değil, şirketinizin mevcut durumuna göre işlerin yürüme şeklini değerlendirin.

STRATEJİK ÇEVİKLİK

(1: Kesinlikle Katılmıyorum, 5: Kesinlikle Katılıyorum)

1	Sektörümüzdeki en ileri yöntem ve uygulamalardan firma olarak haberdarız.	1	2	3	4	5
2	Firmamız, pazardaki gelişmelerle ilgili en güncel bilgilere sahiptir.	1	2	3	4	5
3	Firmamız, sektördeki en güncel gelişmeleri sistematik olarak tarar.	1	2	3	4	5
4	Firma olarak, yeni bilgiye nasıl ulaşacağımızı biliriz.	1	2	3	4	5
5	Firmamız her zaman rakiplerin faaliyetlerinden haberdardır.	1	2	3	4	5
6	Üst yönetimimiz cesur ve hızlı stratejik kararlar alabilir.	1	2	3	4	5
7	Üst yönetimimizdeki kişiler stratejik kararlar için kolayca iş birliği yapabilir.	1	2	3	4	5
8	Firmamızın karşılaştığı stratejik konular, yöneticilerin görüş ayrılığının yarattığı çekişmeler olmadan hızla çözümlenir.	1	2	3	4	5
9	Sahip olduğumuz teknik kapasiteyi yeni koşullar için kolayca adapte edebiliriz.	1	2	3	4	5
10	Çalışanlarımız, yetkinlikleri sayesinde firmada farklı roller alabilirler.	1	2	3	4	5

11	Organizasyon yapımız sayesinde, yetkinliklerimizi yeni koşullara hızla adapte edebiliriz.	1	2	3	4	5
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Lütfen aşağıdaki ifadeleri firmanızın son iki yılını dikkate alarak yanıtlayın. (1: Kesinlikle Katılmıyorum ila 5: Kesinlikle Katılıyorum)

İŞ MODEL İNOVASYONU

(1: Kesinlikle Katılmıyorum, 5: Kesinlikle Katılıyorum)

12	Hedeflediğimiz müşteri grubunda değişiklikler yaptık / yeni müşteri ihtiyaçlarına cevap verdik.	1	2	3	4	5
13	Ürün ve hizmetlerimizde değişiklikler yaptık.	1	2	3	4	5
14	Şirketimizin pazardaki konumunda değişimler oldu.	1	2	3	4	5
15	Müşterilerimize yeni katma değer sunduk.	1	2	3	4	5
16	Şirketimizin temel yetkinliklerinde değişiklikler yaptık.	1	2	3	4	5
17	İç süreçlerimizde (üretim/hizmet prosesleri vb.) değişiklikler yaptık.	1	2	3	4	5
18	Yeni iç süreçler oluşturduk.	1	2	3	4	5
19	Yeni organizasyon yapıları kurduk.	1	2	3	4	5
20	İş ortaklarımızın değer yaratmada oynadığı rol ve ortaklığın doğası değişti.	1	2	3	4	5
21	Yeni iş ortaklıkları kurduk.	1	2	3	4	5
22	İş ortaklarımızı faaliyetlerimize yeni şekillerde entegre ettik.	1	2	3	4	5
23	Yeni iş ortaklarımız, iş modelimizi geliştirmemizde önemli rol oynadılar.	1	2	3	4	5
24	Dağıtım kanallarımızda değişiklikler yaptık.	1	2	3	4	5
25	Yeni satış kanalları geliştirdik.	1	2	3	4	5
26	Yeni ticari kanallar oluşturduk.	1	2	3	4	5
27	Gelir modelimizde değişiklikler yaptık.	1	2	3	4	5
28	Maliyet yapımızda değişiklikler yaptık.	1	2	3	4	5
29	Yeni bir gelir elde etme mantığı uyguladık.	1	2	3	4	5

İkinci Sayfa

Lütfen aşağıdaki ifadeleri dikkatlice okuyun ve ifadeye ne kadar katıldığınızı 1: Kesinlikle Katılmıyorum ila 5: Kesinlikle Katılıyorum aralığında işaretleyin. Yanıtları verirken, lütfen çalıştığınız kurumun bugünkü halini düşünerek tarafsız bir gözle işlerin yürüme şeklini değerlendirin.

ÇEVRESEL TÜRBÜLANS (1: Kesinlikle Katılmıyorum, 5: Kesinlikle Katılıyorum)

30	Rakiplerimizin pazara yönelik aldığı aksiyonlar değişim içindedir.	1	2	3	4	5
31	Sektörümüzdeki teknolojik değişiklikler hızlı ve öngörülemezdir.	1	2	3	4	5
32	Müşterilerimizin ürün tercihleri hızla değişmektedir.	1	2	3	4	5
33	Müşterilerimizin ihtiyaçlarında beklenmedik değişimler olmaktadır.	1	2	3	4	5

AĞ (YAPISAL) GÖMÜLÜLÜK (1: Completely Disagree, 5: Completely Agree)

34	Faaliyet gösterdiğimiz çevredeki firmalarla yoğun etkileşim içindeyiz.	1	2	3	4	5
35	İş ortaklarımızın kendi aralarında geçmişten beri süregelen bir etkileşim vardır.	1	2	3	4	5
36	Ortaklık bağları, iş ortaklarımızın hareketleri üzerinde önemli ölçüde belirleyicidir.	1	2	3	4	5
37	Sık ilişki içinde olduğumuz iş ortaklarımız genellikle birbirlerini tanırlar.	1	2	3	4	5

Lütfen aşağıdaki ifadeleri firmanızın son bir yılını dikkate alarak yanıtlayın. (1: Kesinlikle Katılmıyorum ila 5: Kesinlikle Katılıyorum)

PERFORMANS (1: Kesinlikle Katılmıyorum, 5: Kesinlikle Katılıyorum)

38	Rakiplerimize kıyasla, toplam karlılık anlamında çok daha iyi performans gösterdik.	1	2	3	4	5
39	Rakiplerimize kıyasla, pazar payımızda önemli aşama kaydettik.	1	2	3	4	5
40	Satış büyümesi bakımından rakiplerimize kıyasla çok daha iyi sonuç elde ettik.	1	2	3	4	5
41	Rakiplerimize kıyasla, ürün geliştirmede çok daha başarılı olduk.	1	2	3	4	5
42	Rakiplerimize kıyasla, organizasyonumuz çok daha iyi gelişti.	1	2	3	4	5

Üçüncü sayfa

- Çalıştığınız şirket ne zaman kuruldu?
- Şirketteki göreviniz nedir?
- Şirkette ne kadar zamandır çalışıyorsunuz?
- Çalıştığınız şirketin türünü aşağıdakilerden hangisi en iyi tanımlar?
 - Serbest (Freelance)
 - KOBİ
 - Startup/Scale-up
 - Yerli Kurumsal Şirket
 - Yabancı Ortaklı Kurumsal Şirket
 - Holding
 - Diğer:
- Şirketinizdeki çalışan sayısı nedir?
- Faaliyet gösterdiğiniz endüstri aşağıdakilerden hangisidir?
 - Ağır Sanayi
 - Atık Yönetimi ve Geri Dönüşüm
 - Bankacılık
 - Bilgisayar-Donanım Çözümleri
 - Biyoteknoloji
 - Boya ve Kaplama

- Cam
- Çimento
- Danışmanlık
- Dayanıklı Tüketim Ürünleri
- Demir-Çelik
- Eğitim
- Elektronik
- Endüstriyel Ürünler
- Enerji
- Finansal Hizmetler (Bankacılık ve sigortacılık hariç)
- Gayrimenkul
- Gıda ve İçecek Üretimi
- Hayvancılık (Balık, büyükbaş, küçükbaş vb.)
- Hızlı Tüketim Ürünleri (FMCG)
- İlaç
- İnşaat
- Kağıt
- Kauçuk
- Kimyasallar
- Kozmetik
- Kuyumculuk
- Lastik
- Lojistik
- Madencilik
- Medya
- Metal
- Nükleer
- Otomotiv
- Paketleme
- Perakende (Gıda ve Gıda Dışı)
- Petro-Kimya
- Sağlık
- Savunma Sanayii
- Sigorta
- Spor Malzemeleri
- Tarım
- Tekstil Üretimi
- Telekomünikasyon
- Tersane
- Turizm
- Tüketici Elektronik Ürünleri
- Tütün
- Ulaştırma (Hava, Kara ve Demiryolu)
- Yazılım Çözümleri

- Diğer Hizmet Sektörü
- Diğer

Aşağıdaki sorular kişiseldir ve yanıtlamak isteğe bağlıdır. Cevaplarınız gizli tutulacak ve sadece çalışmanın sonuçları ile ilgili sizinle iletişime geçmemizi isterseniz kullanılacaktır.

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Vakit ayırdığınız ve anketimizi tamamladığınız için teşekkür ederiz.



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