Designing and orchestrating ecosystem-based business models: Processual study of value maximization in the sharing economy

PAVEL LACZKO

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Faculty of Business and Law
UNIVERSITY OF PORTSMOUTH
PORTSMOUTH, PO1 2UP
UNITED KINGDOM

Declaration

Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award.

Signed:

Om Juice

Pavel Laczko

Dissemination

Laczko, P., Hullova, D., Needham, A., Rossiter, A-M., & Battisti, M. (2019). The role of a central actor in increasing platform stickiness and stakeholder profitability: Bridging the gap between value creation and value capture in the sharing economy. *Industrial Marketing Management*, 76, 214-230. (ABS 3).

Laczko, P. (22, October 2018). Circular business model innovation webinar. *Instytut Innowacyjna Gospodarka (Institute for Innovative Economy, Poland)*.

Laczko, P. (9 -10, October 2018). Implementing platform-based business models to advance the circular economy in the EU. Workshop for a consortium of the R2Pi (Horizon 2020) project, *Jerusalem Institute for Policy Research*, Jerusalem, IL.

Laczko, P. (29, September 2017). Workforce Transformation: Thriving in the gig economy. *Digital Leadership Forum*, Reuters HQ, London, UK.

Other academic publications and conferences attended while registered for the doctoral degree at the University of Portsmouth

Hullova, D., **Laczko, P.**, & Frishammar, J. (2019, in press). The Role of Independent Distributors in Servitization: An Assessment of Key Internal and Ecosystem Problems. *Journal of Business Research*. (ABS 3).

Hullova, D. Simms, C., Trott, P., & **Laczko, P**. (2019). Critical capabilities for effective management of complementarity between product and process innovation: Cases from the food and drink industry. *Research Policy*, 48 (1), 339-354. (ABS 4*).

Laczko, P. & Hullova, D. (2018). Circular Economy Ecosystems to Support EPR & E-Waste Management. *ISPIM Conference*, Stockholm, SE.

Hullova, D., **Laczko, P.**, & Frishammar, J. (2017). A Knowledge-flow Framework for Transitioning from a Product-centric Business to Provider of a Customer-centric Solution. *British Academy of Management Conference*, Warwick, UK.

Working papers

Title: Ready to scale? Scaling and internationalizing digital multi-sided platforms. Target journal: *California Management Review* (ABS 3) / *Industrial Marketing Management*. (ABS 3).

Synopsis: This paper builds directly on arguments presented in this thesis and in Laczko et al. (2019). Based on the longitudinal case study, the main aim of this paper is to establish criteria for assessing the multi-sided platform's scalability and propose a processual management framework for the successful internationalization of these platforms.

Title: Orchestrating ecosystems: Integrating ecosystem actors to create, deliver and capture value in the circular economy. Target journal: *Research Policy.* (ABS 4).

Synopsis: The aim of this paper is not only to demonstrate that the circular economy needs to be implemented at the network level rather than a firm or project level but it also presents a processual model of how such ecosystems emerge. This paper is based on a longitudinal study of a single company that managed to develop and successfully leverages its ecosystem-based business model to speed up the transition to the circular economy through innovation and policy.

... and

Title: Twelve-gon model of industry disruptiveness: Determinants and strategic responses. Target journal: *Strategic Entrepreneurship Journal* (ABS 4*) / *Harvard Business Review* (ABS 3)

Synopsis: Based on an ongoing empirical work conducted among several disruptive startups over the past three years, this paper puts forward twelve distinct criteria that can be used to evaluate the likelihood of a particular industry being disrupted by digital platforms. Findings from this research will be significant not only for startups for whom it can provide a tool for finding the best entry points to the specific industry but also for incumbents who can use it to better understand the 'weak' points of their

industry and thus, address them - with profit - before they become someone else's entry point.

Acknowledgments

While presenting this thesis as a monograph, I have to admit that many of my ideas and views have been greatly influenced and shaped by people who have so generously shared their knowledge and experience with me. For this, I am very grateful.

For academic support, guidance, and early feedback on the thesis, I would like to express gratitude to my supervisors Professor Martina Battisti and Dr. Chris Simms. Besides, I am greatly indebted to Professor Johan Frishammar from Luleå University of Technology (Sweden), who introduced me to abductive research and provided early guidance and 'soft' landing into the scholarly world of academic publishing. I look forward to our continued collaboration.

It was Dr. Sarah Turnbull who has ignited my interest in academic research during my undergraduate studies at the Portsmouth Business School. I am grateful for your encouragement to pursue this path, Sarah. So far, it certainly has been an exciting journey. I am also indebted to Professor Paul Trout for providing me with an opportunity to undertake bursary-funded PhD research in the emerging area of the digital economy. I am thankful for your continued confidence in my abilities to undertake this project. I want to express my gratitude to our dean, Professor Gioia Pescetto, for initiating and supporting research exchange programs for PhD students at the Portsmouth Business School. Thanks to you, Gioia, I was able to spend three months at one of the most entrepreneurial universities in Chile; Pontificia Universidad Católica de Valparaíso (PUCV).

Sadly, as ambitiously anticipated, I did not improve my Spanish while living in this vibrant country, but I have met and worked with some truly remarkable people. While at the PUCV, I was very well looked after by Carolina Edwardsen, Diana Orozco and their team at the Dirección de Innovación y Emprendimiento who introduced me to many businesses, incubators, government officials and investors within the Chilean entrepreneurial ecosystem. Also, I would like to express my gratitude to Ricardo Catalan, Andres Vega, Sebastian Arrigada and their entire teams in both Chrysalis (business incubator) and Gen-E (social incubator) for not only introducing me to the Chilean national treasures - pisco and empanadas - but for sharing their insights and experience gained from running some of the most successful business incubators in Latin America. These three months have provided me with the

opportunity to meet and learn from people from FounderList, Start-Up Chile, CORFO and many early startups, and entrepreneurs from the Chilean business ecosystem with whom I had some great and very engaging discussions. Gracias por toda tu ayuda!

Outside academia, I have particularly enjoyed the regular discussions with Doug Morwood (CEO @ Whole Earth Futures) - one of the leading systems thinkers out there - about the new economy and firms' changing roles within. Our initial research engagement quickly turned into a continuous and productive long-term collaboration and friendship. Indeed, exciting times are ahead of us, Doug! I want to extend my gratitude to your team in Glasgow whom I had an opportunity to meet and work with on several occasions during my research stays in this fantastic city.

Further, I want to express my gratitude to Andrew, Ann-Marie, Charlie, Sergey, and their incredible teams at HeadBox. Thank you all! It was great to work with you on this project and witness first-hand how you have turned the small disruptive startup into a leading digital platform in the event industry in the UK, soon in Europe, and hopefully far beyond. I am confident that our ongoing collaboration will be equally fruitful.

Besides closely working with senior executives from HeadBox while undertaking this research, I have also collaborated with senior executives from Recorrido, Saahas, CorgiBytes, Arctic Shores, Coco Pallets, Eileen Fisher, Johnson & Johnson among many others to whom I rightly owe a big 'thank you' for sharing their valuable insights into how their disruptive business models work.

There certainly is one person without whom my PhD journey would not be so fruitful and enjoyable. Thus, I want to thank my other half Dusana, for her continuous personal and academic support and above all, inspiration. We make a great team! Last but not least, I want to extend gratitude to my family for always being there for me. Thank you!

Abstract

A majority of the well-designed multi-sided platforms create far more value for their stakeholders than they can capture for themselves, which often contributes to their short lifespans. In multi-stakeholder ecosystems, capturing value tends to be more difficult than creating it (Bock & George, 2018). Therefore, to understand how to implement, innovate, and grow multi-sided platforms, it is imperative to comprehend how these ecosystem-based business models create, and appropriate value over time. While traditional companies "create value by controlling a linear series of activities, [adopting] the classic value-chain model" (Van Alstyne, Parker & Choudary, 2016, p.5), platforms' competitive advantage revolves around the ability to leverage and orchestrate resources of their members, rather than aggregating them internally. Despite this fundamental difference, scholars continue conceptualizing multi-sided platforms by using the popular business model frameworks and tools. Many of these tools are suitable for mapping out challenges faced by a traditional organization (i.e., firm-centric view); however, they are of limited use in examining ecosystem-based business models (e.g., platforms, innovation networks, servitization ecosystems). These business models coevolve within the ecosystems in which they are embedded (Muzellec, Ronteau, & Lambkin, 2015). While these static tools could shed more light on what ecosystem-based business models are (i.e., structure, taxonomy, archetypes), they cannot advance our comprehension of how they work, which is still lacking in both academia and practice alike.

By building on the empirical case study of HeadBox; the first B2B digital platform that disrupted and is currently reshaping the UK's event industry, stakeholder theory, and broader ecosystem and business model innovation literature, this thesis offers an alternative conceptualization of these ecosystem-based business models in which, emergence and underlying value mechanisms - rather than static structures and building blocks - are central to our understanding of them. This conceptualization not only allows for a more dynamic study of multi-sided platforms in particular but also opens new avenues for future research of multi-stakeholder business ecosystems in general.

In this thesis, I argue that a platform-based business model is an ongoing coevolutionary process, influencing and influenced by changes in structures, relationships, and interactions among stakeholders within the broader system (i.e., value network, ecosystem), orchestrated by platform owner (i.e., central actor, focal firm, central hub) to maximize the value creation and capture opportunities for itself and all other stakeholders within the ecosystem. Thus, a particular business model archetype (i.e., pattern or structure) is a direct

manifestation of the underlying value-driving mechanisms that by exercising (or not exercising) their causal powers give it its perceived temporary 'structure' (i.e., archetypes). Besides putting forward a processual, and thus a more dynamic view of multi-sided platforms, and extending the emerging debate on sharing economy into a B2B context, the thesis aims to make several theoretical contributions to stakeholder theory (Freeman, 1984, 2010; Freeman, Harrison, Wicks, Parmar & De Colle, 2010; Freeman., Harrison & Zyglidopoulos, 2018; Harrison, Bosse, & Phillips, 2007) and value networks literature (Laamanen, Rong & Van de Ven, 2018; Perks, Kowalkowski, Witell & Gustafsson, 2017). First, I challenge the dominant view that the platform owner has only limited control over the platform's emergence. Findings from the longitudinal case indicate that the platform owner is not only able to, but also must actively orchestrate these networks (e.g., interactions, information flows) to continuously attract new stakeholders, keep the existing ones (i.e., increasing platform's stickiness) and benefit from such activities (i.e., expanding platform's profitability). In other words, it is the role of the platform owner to maintain and continually iterate the strategic direction in which the platform is heading. Second, along with uncovering core phases through which multi-sided platforms coevolve, I put forward eight value-driving mechanisms that enable the platform owner to effectively orchestrate its diverse multi-stakeholder ecosystem to maximize its value over time for both stakeholders and itself. Arguably, the platform's long term success can be determined by examining how the platform owner orchestrates these mechanisms throughout all platform's coevolutionary phases. Studying the processes of platform coevolution allowed me to not only further conceptualize the platforms underlying value-driving mechanisms, but on their basis build the necessary implementation and orchestration framework: Platform Stickiness-Profitability Compass, that forms the practical contribution of this thesis. Given the phenomenon-driven (PDR) nature of this study, this framework was 'stress-tested' in the field to assess its relevance and usability for practicing managers as a tool for designing, orchestrating and evaluating platforms and other ecosystem-based business models. These tests have not only riveted my attention to the strengths and potential application of this framework but also uncovered the shortcomings that present avenues for future research. The proposed framework provides a robust yet flexible tool that enables managers to innovate and grow their multi-sided platforms (or other multi-stakeholder ecosystems such as innovation networks) by prioritizing their dynamic mechanisms over static building blocks. This allows managers to keep these ecosystem-based business models 'evolvable', which is a prerequisite for sustaining them over time (Tilson, Sørensen & Lyytinen, 2012; Tiwana, 2014).

Table of Contents

Prologue to thesis	1
CHAPTER 1: Introduction to the thesis	3
1. Platform-based business models in the sharing economy	3
1.1 Aim and motivation for undertaking the study	5
Statement of aims	7
Research questions	8
Research objectives	8
1.2 The researcher	8
1.3 Research methodology and data collection	10
1.4 Contribution to the knowledge	11
1.5 Outline of the thesis	13
CHAPTER 2: Research context	16
2. Introduction to sharing economy	16
Aim and structure of the chapter	17
2.1 Shifting paradigm: Emergence and growth of the contemporary sharing economy	19
Toward a definition of the contemporary sharing economy	21
Dark side of the sharing economy	22
2.2 Shaping and redefining organizations and industries	22
Sharing economy as an intersection between social, economic and	
technological contexts	27
2.3 Core tenets of sharing economy and their impact	30
2.3.1 Access-based consumption: Maximizing value and utility by sharing	31
2.3.2 Co-creation of value: Collaborative-consumption in broader ecosystem	34
2.3.3 Digital platforms: From linear firms to value networks	35

Platform scalability and network effects	38
The architecture of digital platforms: Three architectural layers	39
Dynamic view of sharing economy platforms	41
2.4 Conclusion: Moving forward	42
CHAPTER 3: Theoretical Background	45
3. Introduction: A conceptual primer	45
Aim and structure of the chapter	47
3.1 From business models to business model innovation	48
3.2 Toward a unified construct: Defining platform business models	52
3.3 Business model innovation as a process	55
Dynamic view of business model innovation	58
Spanning organizational boundaries: An ecosystem perspective	59
Moving forward: Need for theoretical grounding	62
3.4 Stakeholder theory	63
3.4.1 Basic premise of stakeholder theory: Value and interconnectedness	64
3.4.2 Stakeholders dimensions: Toward the dynamic view	66
3.4.3 Orchestrating co-creation in stakeholder networks	67
3.5 Summary and implications	70
CHAPTER 4: Methodology	72
4. Conducting the study: Phenomenon-driven research	74
Closing the relevance gap	76
Aim and structure of the chapter	78
4.1 Processual research: Implications for research design	79
Real-time vs retrospective study of processes	80
Conceptualization of time in processual research	81
4.2 Research paradigm: Critical realism	84
Adoption of critical realism	84
4.2.1 Critical realist ontology: Stratification	86

4.2.2 Critical realist epistemology	88
Nature, structure, and relationships of entities	89
Processes and events	90
Mechanisms	91
4.3 Research method: Longitudinal qualitative case study	91
Case selection	94
4.4 Research strategy: Abduction	95
Systematic Combining: An alternative approach to positivist-dominant	
case research	96
4.5 Research settings and data collection	98
4.6 Data analysis	106
4.7 Evaluation of research quality	113
4.8 Research ethics	118
4.9 Conclusion	120
CHAPTER 5: Research Findings	121
5. Introduction: Toward an empirical framework	121
Aim and structure of the chapter	123
5.1 Case study background: Introduction to HeadBox	123
5.1.1 Identifying industry value drivers: Inefficiencies and frictions	127
5.1.2 Delivering basic two-sided offering: Core interactions	131
5.1.3 Extending vertically and horizontally: Stakeholders and value	134
5.1.4 Amplifying platform and stakeholders: Continuous innovation	138
5.1.5 Scaling up: Internationalizing the platform	144
5.2 Case study analysis: Stickiness-Profitability Compass	145
5.2.1 Stakeholder alignment and stakeholder altruism	150
5.2.2 Ecosystem control and stakeholder empowerment	153
5.2.3 Knowledge unification and access to unified knowledge	156
5.2.4 Breadth of value capture and the breadth of stakeholder value	158
5.3 Conclusion	161

CHAPTER 6: Concluding discussion	162
6. Orchestrating multi-sided platforms	162
Aim and structure of the chapter	163
6.1 Theoretical contributions	164
6.1.1 Platform coevolution: Need for continuous orchestration	160
6.1.2 Platforms viability: Sticky and profitable	170
6.2 Managerial implications	175
6.2.1 Tool for design and continuous orchestration of multisided platforms	176
6.2.2 Platform evaluation and benchmarking tool	183
6.2.3 Implications for curriculum development	186
6.3 Limitations and future research	187
7. References	190
8. Appendices	246
Appendix 8.1 Participant information sheet	246
Appendix 8.2 Participant consent form	251
Appendix 8.3 PBS Research Ethics Committee review	253

List of Tables & Figures

Table 1. Examples of sharing economy platforms focusing on different patterns	
of production and consumption in different economic pillars	27
Table 2. Comparison of the conventional two-sided platforms/marketplaces	27
and the sharing economy platforms	37
Table 3 Comparison of Theory-driven and Phenomenon-driven research	77
Table 4. Time dimensions and their impact on studying BMI process	83
Table 5 Key informants in preliminary research (discovery stage)	101
Table 5. Key informants in preliminary research (discovery stage)	101
Table 6. Key informants in longitudinal case research from the case company	103
	10/
Table 7. Key informants in longitudinal case research - industry experts	104
Table 8. Summary of core strategies for analyzing processual data	108
Table 9. CASET evaluation template for evaluating case study research	
Table 10. Comparison between the 'traditional' venue industry modus operandi	
and HeadBox driven disruption	130
Table 11. Phase two 'develop' of HeadBox platform development: core activities	
and main stakeholder groups	133
Table 12. Phase three 'extend' of HeadBox platform development: core activities and main stakeholder groups	138
	-20

Table 13. Phase four 'amplify' of HeadBox platform development: core activities and main stakeholder groups	143
Table 14. Platform Stickiness-Profitability Compass: Establishing addicted core and mapping current performance (based on the workshop)	180
Table 15. Platform Stickiness-Profitability Compass: Determining future strategic direction (based on the workshop)	182
Table 16. Using Platform Stickiness-Profitability Compass to establish post mortem of Yeloha (based on the workshop)	186
Figure 1. Sharing economy as a socio-economic-technological phenomenon	29
Figure 2. Sharing economy 'equation' - Integration of core tenets of sharing economy	31
Figure 3. Simplified architectural framework of a platform	40
Figure 4. The growing interest in BMI construct	49
Figure 5. Business model innovation: Landscape of the current research field	53
Figure 6. Implications of variance and process-based view on studying BMI	56
Figure 7. Stratified view of reality - Domains of the Real, the Actual and the Empirical	87
Figure 8. Deductive and inductive research approach	95
Figure 9. Abductive research approach	96
Figure 10. Three stages of the research process adopted in the thesis	99
Figure 11. Coding Scheme	111

Figure 12. Five phases of multi-sided platform development: iDEAS Platform	
Coevolution Phase model	126
Figure 13. Platform Stickiness-Profitability Compass	149
Figure 14. Platform Stickiness-Profitability Compass: Evaluating the current	
situation of two companies (based on the workshop)	178

Designing and orchestrating ecosystem-based business models: Processual study of value maximization in the sharing economy

Prologue to thesis

The sharing economy (SE) phenomenon is often conceptualized as a socio-economic response to industry inefficiencies emerging from underutilized assets, capital, and resources. Organizations whose business models (BM) are embedded in the sharing economy - for a while now - have been shaking up the established 'asset-dominant' industries. The very fact that these new entrants can quickly attract a large number of customers by solving the longstanding and often overlooked and ignored inefficiencies of a particular industry, puzzles many incumbent organizations. To different extents, SE slowly demonstrates its transformative powers across all core economic pillars - capital markets, asset markets, labor markets, and markets for goods and services. Associated changes within these pillars force organizations to rethink how they create, deliver, and capture value through their business models (Kazan, 2018). While many managers struggle to get their heads around this rather abstract and increasingly complex concept, the academic debates on SE business models are scant (Heinrichs, 2013; Richter, Kraus, Brem, Durst & Giselbrecht, 2017). Although shortages of theoretical insights are visible in nascent literature, organizational struggles are evident in high failure rates and short lifespan of increasing numbers of companies that are adopting SE platform-based business models. Many are failing to sustain, innovate, and scale these business models over time (Täuscher & Kietzmann, 2017). With multi-sided platforms being considered to be the most profitable business models (Cusumano, Gawer & Yoffie, 2019), it is surprising that our comprehension of how they work is still limited. In particular, we lack insights into how to design and orchestrate these ecosystems to increase their attractiveness and profitability over time. It is, therefore, one of the chief aims of this thesis to provide such insights.

While traditional business models are usually studied and designed at the firm-level, to understand SE platforms, we need to consider them from the ecosystem perspective (i.e., integration and orchestration of actors that are spanning organizational and industry

boundaries). However, the majority of extant empirical studies aimed at extending our understanding of ecosystem-based BMs, marginalize or oversimplify the ecosystem component, which leads to advocating tools and implementation frameworks initially developed for 'traditional' businesses in linear supply chains. However, as argued by De Reuver, Sørensen and Basole (2018), organizations to remain competitive increasingly focus on attracting and integrating diverse stakeholders from a broader ecosystem instead of controlling and closely managing their value chain. In essence, they are attempting to transition from the 'pipeline' to the ecosystem-based business model (Choudary, Parker & Van Alystne, 2015). Therefore, we need frameworks and tools that aid the development and management of these 'generative activities' over time (i.e., attracting and integrating stakeholders) to ignite and orchestrate the exponential growth these business models offer. With an ambition to provide such frameworks in this thesis, I present a processual model of multi-sided platform development; *iDEAS Platform Coevolution Phase model*, and the *Platform Stickiness-Profitability Compass* that aid effective long-term orchestration of multi-sided platforms in particular and aid our understanding of ecosystem-based business models in general.

CHAPTER 1: Introduction to the thesis

Platform-based business models in the sharing economy

"Strategy is becoming, to an increasing extent, the art of managing assets that one does not own."

Iansiti & Levien (2004, p. 1)

The interest in SE is proliferating on a global scale. Organizations whose offering is embedded in core tenets of SE are on the rise, experiencing exponential growth while entering and re-shaping a multitude of industries (Belk, 2014; Cherry & Pidgeon, 2018; Richter et al., 2017; Stephany, 2015; Sundararajan, 2013). While it is usually disruptive startups that dominate, it is evident that also incumbents are taking notice by realizing the potential and impact that SE has on their businesses. Many devise strategies for integrating principles of SE and inherently some form of an 'ecosystem-centric logic' into their existing business models (e.g., servitization, ecosystem integrator, product-service systems) or even attempt to create new ones to regain their competitive strength. Traditional organizations live in increasing fear of unexpected competitors that, through their unique and often diametrically different ecosystem-based business models (mainly multi-sided platforms), destabilize not only traditional businesses but the entire industries (Dreyer, Lüdeke-Freund, Hamann & Faccer, 2017). Considering the disruption that organizations such as Uber and Airbnb initially caused in the transport and hospitality industry respectively, it is unsurprising that the topics of sharing economy and its growing significance and impact have been dominating corporate

boardrooms across diverse sectors (IBM, 2015). Not only the concerns and fears are being voiced, but also the managers' interest in implementing sharing economy business models has been on the rise (Parmentier & Gandia, 2017). Two remarks from the informants that took part in the preliminary study illustrate both concerns and excitement in exploring SE:

"What we are seeing is that many of our customers are leaning toward sharing platforms. Due to the nature of our industry [FMCG], it does not affect us yet. But, we recognize its potential, and for the past five or so years, we have been exploring how we could innovate our business model to support and develop a more integrated offering. We are currently developing and testing a new line of products and services that are being integrated into the access-based e-commerce platform."

(I_(d) 3, Senior Executive, Global FMCG Brand, US)¹

... and

"Several years ago, as a result of a small pilot project, we have developed a sharing-based business model. Until recently it has been a small part of our company, but now it is becoming much more prominent [it generates almost 25% of all revenues]. It is too big to ignore, and we are worried that it will start jeopardizing our core business model [ownership based]. There is so much uncertainty ... should we slowly phase out our core model, or should we find a way to operate both simultaneously? What will be the cost to our business?"

(I_(d) 5, Sustainability Manager, Global High-End Female Apparel Brand, US)

A growing number of businesses - both startups and incumbents - are looking to adopt ecosystem-based BMs to better meet the needs of the increasingly heterogeneous customers by integrating and leveraging the resources of their stakeholder network (Fu, Wang & Zhao, 2018). By doing so, many of them are entering uncharted territories in which the firm's ability to innovate beyond organizational boundaries and embrace the ecosystem-centric logic determines its success (Evans & Schmalensee, 2016). It is more than evident that practitioners are longing to understand how to operationalize and scale such business models. Unfortunately, the extant literature is

More information about informants from preliminary study and details about data collection and a research method can be found in Chapter 4 Methodology. Specific information about informants is provided in Table 5. Given the Phenomenon-driven nature of this research, a preliminary study was used to identify key issues that incumbents, startups, and investors face in light of the sharing economy and its impact on existing value chains. Preliminary data collection informed the design and execution of this study.

somewhat scant on providing the needed insights, and to a large extent, continues answering the 'what' rather than 'how' questions (i.e., conceptualizing differences between BM archetypes rather than explaining how they work). However, to provide answers to probing 'how' questions is more complex and requires us to move beyond the surface level of business model components and archetypes. To truly understand how these business models work, we need to flesh out their underlying value-driving mechanisms that are manifested through particular structures, activities, processes, or lack of these thereof. The inherent complexity of systems and processes (Makkonen, Aarikka-Stenroos & Olkkonen, 2012) has arguably been deterring many researchers from adopting an ecosystem perspective or engaging in processual research when studying business models (Makkonen et al., 2012; Lowe & Rod, 2018). However, the need to shift from the still-dominant atomistic view of the world and the variance-based theorizing to more systemic approaches when studying contemporary phenomenon is being voiced by an increasing number of scholars (Bizzi & Langley, 2012; Fairclough, 2005; Mingers, 2016). Therefore, to allow for the study of business models as coevolutionary processes embedded in ecosystem context that create and capture value through orchestration of processes, activities, and interactions among diverse stakeholders, adopting a processual view in this study is paramount.

1.1 Aim and motivation for undertaking the study

"Is it not better to understand a phenomenon in-depth than to know how often the not understood phenomenon occurs?"

Gummesson & Gustavsson (2007, p. 230)

No doubt, sharing phenomenon is on the rise, and it is slowly reshaping our economy and society at large (Belk, 2014; Schor & Attwood-Charles, 2017; Schor & Fitzmaurice, 2015). Through the significant impact that SE already had on many industries (Belk, 2014), it is evident that the sharing economy is not just another buzzword, but rather a contemporary economic paradigm that has the potential to unlock new value streams and destroy the old ones (Chasin, von Hoffen, Cramer, & Matzner, 2018a; Cherry & Pidgeon, 2018; Parente, Geleilate & Rong, 2018). While some welcome this paradigmatic shift and see the vast

opportunities it presents, others are marginalizing or even dismissing its potency and possible impact. Many organizations recognize this and attempt to respond by innovating and redesigning their business models or introducing new ones altogether. However, they often fail to fully integrate and leverage the core tenets of sharing economy through these business models.

Contrary to common belief, it is not only incumbents that struggle to adapt and embrace the sharing economy, but 'newcomers' often experience difficulty in doing so too (Täuscher & Kietzmann, 2017). Many of these business models are short-lived, flawed, and heavily unbalanced (i.e., create more value than they can capture), and it usually takes less than 2-3 years before many of them perish (Cusumano et al., 2019). While multi-sided SE platforms are one of the most profitable and disruptive ecosystem-based business models, at the same time, they are the most problematic to implement and sustain in the long-term (Bock & George, 2018; Choudary et al., 2015). The main problems derive from the so-called 'chicken-and-egg' phenomenon characterized by an imbalance between supply and demand sides of the platform and mismanagement of the indirect network effects in the long-term. Also, many SE platforms attempt to scale too early (i.e., none or heavy reliance on single revenue stream when scaling-up), and while providing increasingly more value for their stakeholders, they are failing to capture enough value for themselves (Bock & George, 2018). Ironically, they often became victims of their rapid growth. With quickly increasing stakeholder base, their diversity, and their growing demands and without sustainable revenue streams, platform owners' cash-burn-rate quickly becomes infeasible.

Despite their troublesome nature, rapid proliferation, disruptiveness, and exponential profitability (Hagiu & Wright, 2015), our comprehension of how these platforms and other ecosystem-based business models work, is still rudimentary (Täuscher & Kietzmann, 2017). This lack of understanding not only pertains to scholars but sadly, it is manifested in practice through the high failure rate of these platforms (Yoffie, Gawer & Cusumano, 2019). The increasing news coverage of only successful SE platforms like Airbnb and Uber not only demonstrates the power and value that platform-based business models have but also indirectly suggests that designing and scaling these platforms is somewhat facile. Quite the contrary, the multi-sided platforms are among the most challenging business models to develop and sustain (Bock & George 2018; Chasin, von Hoffen, Hoffmeister & Becker, 2018b). Regardless, many companies embark on this journey - often equipped with roadmaps and business model innovation tools that are inadequate for designing and managing complex networked business models - to fail in less than two to three years after launch (Yoffie et al., 2019). While the contemporary business world is overflowing with examples of failed platforms, these rarely

receive attention from mainstream media, and their *post mortems* are sparingly discussed in the specialized and often investor-related press.

To increase the likelihood of success during the design, and scaling-up of multi-sided platforms, it is crucial to advance our knowledge of how they work and coevolve and, more importantly, how platform owners can orchestrate this coevolution to reap the full benefits that these business models offer. As argued in this thesis, the ultimate goal of a platform owner is to create an attractive ecosystem. However, we still lack insights into how to design and orchestrate these ecosystems to increase their attractiveness (value creation) and profitability (value capture) over time. The dynamic relationship between the value capture and value creation within multi-stakeholder ecosystems is yet not well understood, and more work is needed in this area (Adegbesan & Higgins, 2011; Dhanaraj & Parkhe, 2006; Reypens, Lievens & Blazevic, 2016). Therefore, I draw on stakeholder theory (Freeman, 1984; Freeman et al., 2010) to form a sensitizing concept (Blumer 1954; Bowen 2006) through which we can attempt to understand not only how value is co-created within platforms but also the dynamic roles played by their members (i.e., how these roles change over time and how this impacts the broader ecosystem). This theoretical lens, together with the literature on business models and business model innovation, conceives the vantage point from which I embark on further empirical exploration to flesh out the value-driving mechanisms of multi-sided platforms. Importantly, the thesis further builds on recent works of Reypens et al. (2016), (2017), Aarikka-Stenroos, Jaakkola, Harrison, and Aarikka-Stenroos, and Ritala Mäkitalo-Keinonen. (2017), and Makkonen et al. (2012), who, through their research, extend our understanding of ecosystems and multi-stakeholder network management, and thus provide an essential foundation for designing and carrying out this study. Therefore the main aim, research question, and objectives of this research are as follows:

Statement of aims

The main aim of this research is to abstract the underlying value-driving mechanisms of the multi-sided platforms by examining the platform owner's ability to manage and leverage these mechanisms to successfully scale these ecosystem-based business models over time.

Research question

 How does a platform owner orchestrate a multi-sided platform's coevolution to continuously increase its attractiveness to stakeholders within the platform-ecosystem (value creation) and for itself (value capture)?

Research objectives

- Map out processes and core phases through which multi-sided platforms coevolve
- Conceptualize underlying value-driving mechanisms of the platform's coevolution
- Develop platform orchestration framework for multi-sided platforms in sharing economy

1.2 The researcher

"The case selects the researcher [and] sometimes interesting empirical observations connect a researcher with a particular reality that provides opportunities for identification of exciting research phenomena."

Dubois & Gadde (2014, p.12)

Many researchers face a dilemma of whether to "cling to the values of academic fundamentalism, and the notion of pure research...or [instead] embrace a more practitioner-focused perspective and face the danger of conceptual and theoretical drift " (Starkey & Madan, 2001, p.8). Arguably, the majority of researchers make their position clear early in their academic careers. One's background, upbringing, and experiences significantly influence this choice (Van Maanen, Sørensen & Mitchell, 2007). In my case, it was over the seven years spent working in an industry that contributed to my inclination to adopt a more practitioner-focused perspective in my research (Laczko et al., 2019; Hullova, Laczko & Frishammar, 2019). Witnessing and directly experiencing some of the issues that prevail in contemporary business and management, presented a rather conspicuous choice for me. For example, in the paper 'Independent distributors in servitization: An assessment of key internal and ecosystem-related problems' (Hullova et al., 2019) our author team had developed a framework through which independent distributors can identify and address challenges that are present during transition from products to provision of services (i.e., servitization). While building extensively on extant theories, the paper's main aim was to inform practitioners and provide insights into the phenomenon that is often experienced by independent distributors but rarely covered in academic literature.

Before joining academia, I have worked in different management and consulting roles in both B2B and B2C markets. A large part of my work had consisted of devising strategies for digital transformation for a multitude of organizations in diverse sectors (e.g., finance, biotechnology, life-science, and retail). Organizations' struggles to transition, or integrate innovative business practices (e.g., digitalization, digitization, marketing automation) became evident in my day to day practice, and this constant exposure ignited my initial curiosity in understanding how firms develop and innovate their business models. As I have further fleshed out during the preliminary study, the most rewarding but also the most troublesome business models to implement and sustain are digital multi-sided platforms, which eventually became a focal point of my doctoral research. After consulting academic literature, I have concluded that not only practitioners struggle to understand these BMs, but also extant literature is somewhat scant on holistic² accounts and insights into how these BMs work (I discuss this at length in chapters 2 & 3). Therefore, I have decided to study this phenomenon further to not only contribute to closing the practical knowledge gap but also to extend the debate in the emerging literature on sharing economy, business model innovation, and digital multi-sided platforms. During my time working in the industry, I have developed excellent relationships with CEOs of several early-stage SE platform-based companies who allowed me to map out and conceptualize their journey from early inception to reaching full scalability. In words of Dubois and Gadde (2014), I was 'selected' by the cases themselves

_

² The term 'holistic' is used in relation to the processual nature of the study. In this context, it means that rather than focusing on a single part of a multi-sided platform or a single time-period (event, activity or outcome) of its development the study takes into account multiple time points, context, events and activities because of their interconnected nature. This view is in line with critical realism that is based around the principles of holism. Originating in natural sciences, the main principle of holism holds that systems (i.e., multi-sided platforms, innovation ecosystems, value networks etc...) should be viewed as wholes rather than a collection of parts. In its focus and main contribution, the study is arguably parsimonious as it 'narrowly' focuses on mechanisms of value co-creation within the platform. However, to abstract these mechanisms, it was essential to consider the platform as a whole and across a longer time frame.

1.3 Research methodology and data collection

"Rather than locating a phenomenon in a specific body of literature or by constructing gaps in existing theories, a theory is [used] to position the phenomenon relative to existing research [and further] flesh out the phenomenon."

Schwarz & Stensaker (2016, p.256)

To conduct this study, I adopt the approach advocated by Kilduff (2006), who suggests that the need for research should derive from real-world problems rather than from the gaps in extant literature. Identifying research gaps in literature before beginning an empirical study is advocated by many positivist leaning scholars (Eisenhardt & Graebner, 2007). However, as argued by Alvesson and Sandberg (2011), this process of spotting a gap in the literature leads to significant drawbacks. By building upon dominant assumptions without questioning them, this approach, to a large extent, preserves the *status quo*, resulting in failures to extend the boundaries of the field by exploring new areas. To avoid these pitfalls and to further bridge the ever-increasing gap between academia and practice, this thesis follows phenomenon-driven research (PDR) where the initial phenomenon of interest - practitioners' struggle to develop, implement and scale SE platforms - is a *terminus a quo* of the empirical investigation.

The phenomenon was divulged, and the practical knowledge gap was further sublimated through a series of interviews (twelve unstructured interviews) with key informants (CEOs, senior managers, and investors) during the preliminary study. This was followed by a longitudinal single case study of HeadBox - the first B2B multi-sided platform in the UK event industry - to map out its development and continuous coevolution. The early inception of HeadBox's multi-sided platform (pre-launch, 2014) represents a starting point of the data analysis, and the platform internationalization (extending offering beyond the 'localized' home market, 2019) its end. Primary data was mainly collected through face-to-face interviews, workshops, and regular company visits. In total, I have conducted 28 semi-structured interviews and four workshops with representatives from all key business functions within the case company. While HeadBox is central to this research, the development of the case study and its analysis was also aided through the collection of additional data from informants among industry experts (e.g., consultants, CEOs, platform founders). Over two years, I have conducted 18 semi-structured interviews with eight such informants. Engaging

informants external to the case company helped me to gain different perspectives and explore unexpected areas, which ultimately led to the development of a stronger and more holistic case study and a more robust framework thereof. Lastly, given the PDR nature of this study, the emerging framework was 'stress-tested' in the field through a series of workshops with eight independent informants to assess its relevance and usability for practicing managers.

1.4 Contribution to the knowledge

"The management or orchestration processes that a hub firm must perform to coordinate, influence, and/or direct other firms in the innovation network remain poorly understood."

Nambisan & Sawhney (2011, p.40)

While this research project was inspired by high failure rate, short lifespan and managers' lack of understanding of ecosystem-based business models and their desire to implement them, after consulting the extant literature in search for the preliminary answers, several gaps in academic understanding and calls for further research were identified. Therefore, the aim of this thesis is not only to provide novel insights into how these business models coevolve and how to effectively orchestrate this coevolution but importantly, to contribute to narrowing down the knowledge gap that is prevalent in the extant literature. More specifically, this thesis responds to Reypens et al. (2016) 's call for more insights into value co-creation among multiple stakeholders at the network level, as well as drivers of their effective collaboration. As argued by Kohtamäki and Rajala (2016, p.9), "based on the small body of empirical research on this topic, there is a need for more studies that analyze value co-creation in ecosystems." This is because the "comprehensive and detailed description of the processes and structures of value co-creation that characterize the strategic configuration of focal company's networks is still lacking" (Corsaro, Ramos, Henneberg & Naudé, 2012, p.55). Business offerings are continuously increasing in complexity (e.g., product-service systems, servitization, connected products), and their development and successful delivery require the collaboration of multiple stakeholders within the ecosystem (de Reuver et al., 2018). Therefore, gaining insights into the underlying mechanisms of value co-creation in these ecosystems is of

benefit not only to scholars - seeking insights into effective collaboration at the network level but also to practitioners, aiming at fulfilling their ambitions to become industry integrators.

This study also responds to Möller and Halinen (2017)'s, as well as Ostrom et al. (2015)'s call for more longitudinal studies that investigate the dynamic development of ecosystem-based business models rather than capturing events at one point in time. Furthermore, there is a limited number of studies taking platform owner's perspective on the coevolutionary nature of multi-sided platforms - i.e., establishing the link between continuous value creation and value capture in multi-stakeholder networks (Ritala, Agouridas, Assimakopoulos, & Gies, 2013). Although the existing literature continues to discuss the importance of establishing such links to maintain the feasibility of platforms and other complex ecosystems, the contributions are predominantly theoretically derived (Lepak, Smith, & Taylor, 2007) without providing any insight into how this can be achieved in practice (Fu et al., 2018). Ritala et al. (2013) are one of the few studies that identified tangible and intangible mechanisms that platform owners could focus on to increase the viability of their platforms. Furthermore, the authors criticize the lack of systematic evidence on how platform owners can facilitate both value creation and value capture in their ecosystems to maintain and increase their feasibility (Ritala et al., 2013). The dynamic relationship between the value capture and value creation within multi-stakeholder ecosystems is yet not well understood, and more work is needed in this area (Adegbesan & Higgins, 2011; Dhanaraj & Parkhe, 2006; Reypens et al., 2016). This thesis takes on this perspective and, through the carefully selected longitudinal case of HeadBox, investigates the platform owner's ability to orchestrate joint value creation while simultaneously increasing its own ability to benefit from such activities (i.e., value appropriation). The case of HeadBox provides unique insights into the development and successful management of a multi-sided platform in B2B sharing economy that is currently under-researched and not well understood among both scholars and practitioners. In this thesis, therefore, I not only put forward a platform coevolution process model that aid our understanding of the phases through which multi-sided platforms coevolve, but more importantly, I introduce the Platform Stickiness-Profitability Compass that allows for a more thorough understanding of the underlying value-driving mechanisms that platform owners need to orchestrate through each phase of its coevolution to maximize the value of their platforms over time.

Other criticisms verbalized by Breidbach and Brodie (2017) emerge from the fact that we still lack empirical studies that consider the 'latest generation' of multi-sided platforms in SE. The authors argue that current empirical studies in this domain are either based on the obsolete context (i.e., mp3 files sharing and its impact on the music industry) or well-known

industrial platforms (e.g., Microsoft or Cisco - see Cusumano & Gawer, 2002; and Gawer & Cusumano, 2014) that arguably differ from those emerging within the sharing economy. Within popular press as well as the academic journals, the Airbnb and Uber constitute some of the best–known and widely discussed examples of this phenomenon (Gerom, 2013); however, these are rather descriptive (often used only as a context for variance-based studies), and retrospective studies that provide limited insights into how platform-based business models in SE emerge. By building upon a longitudinal case study of the disruptive platform in the B2B event industry, this thesis also responds to Breidbach and Brodie's (2017) concerns by providing the long-needed empirical insights into how these latest-generation platforms coevolve and operate. Lastly, considering that the research into the sharing economy is still in its infancy (Cheng, 2016; Dreyer et al., 2017; Richter et al., 2017), this thesis also contributes to advancing our knowledge of the sharing economy by offering an integrative conceptualization of this phenomenon by intersecting sociological, economic and technological domains.

1.5 Outline of the thesis

"Platforms are purposefully designed complex systems with an underlying structure that influence how they behave, function, and evolve over time."

Tiwana (2014, p.84)

Understanding the basic premise of the sharing economy - its drivers and core tenets - is crucial for designing, innovating, and scaling SE platforms. Contributing to such understanding is the chief aim of *chapter two: Research context*. In particular, this chapter deciphers the principal paradigmatic changes that, to a large extent, are not only shaping the economy in general but impact the way we understand the organizations and their role within the broader business ecosystem. In this chapter, I discuss the following, and on their basis, I conceptualize the sharing economy paradigm:

• Shift from a static view of the firm to the dynamic ecosystem-wide (i.e., systems-level) view where a value of interactions and relationships precedes the importance of

ownership of physical assets for attaining a competitive advantage;

- Blurring the boundaries between production and consumption (i.e., value co-creation, prosumers, collaborative consumption);
- Decentralization, access and demand-based consumption across all three building blocks of our economy (capital, goods & services and assets);
- The transition from linear 'pipeline' business models to multidirectional networked digital platforms.

Based on this conceptualization, in *chapter three: Theoretical background*, I argue that the SE platforms are dynamic and coevolving ecosystem-based business models. Platform owners design and orchestrate interactions among multiple individuals or organizations to facilitate ongoing value co-creation within the platform ecosystem. These platforms span a firm's boundaries and, as such, exist at the intersection of the firm and ecosystem levels. Within these ecosystems, the processes for value creation and capture continuously evolve as a result of changing and emerging interactions among all ecosystem actors. Considering the business model being the firm's logic of creating and capturing value, the impact of the SE paradigm on the conceptualization of the business model construct is significant. In line with SE's core tenets, in this thesis, I thus view platform-based BM as:

- Dynamic construct in the state of becoming (i.e., ongoing process unfold in time);
- Embedded in the ecosystem which it shapes and is shaped by (i.e., coevolutionary);
- Facilitator and orchestrator of multidimensional value flows (i.e., co-creation).

Adopting this view is vital for gaining the necessary insight into how to innovate and orchestrate these business models to extend their alarmingly short lifespans. However, to articulate how SE platforms work, we need to move beyond the static surface-level view of business models (the 'what'). Instead, we ought to search for, and examine their underlying value-driving mechanisms (the 'how' and 'why') from a dynamic perspective, and at the ecosystem level. It is precisely this static firm-centric view that is widely adopted and advocated

by many scholars and practitioners that prohibits further advancements in our understanding of platform-based business models (Bucherer, 2011; Demil & Lecocq, 2010).

Therefore, given the coevolutionary and dynamic nature of these platforms, I adopt a processual approach and a qualitative longitudinal case study method. To allow for deeper level of abstraction that is essential for uncovering platform's regenerative value-driving mechanisms, I ground this study in critical realist research paradigm (Mingers, 2016; Ryan, Tähtinen, Vanharanta & Mainela, 2012; Sayer, 1992), that not only allows for stratified view of reality (i.e., mechanisms are not directly observable and exist at different strata of reality) but also deploys abductive (i.e., reproduction) logic, which is indispensable for achieving the desired level of abstraction. *Chapter four: Methodology* covers these in detail, providing the background to, and justification of deployed methods.

The role of the platform owner in developing a viable multi-sided platform resides in its ability to continuously manage synergies between the value it enables and creates (contributing to platform stickiness), and the value it appropriates for itself (increasing profitability). Therefore, for multi-sided platforms to be successful, they need to be both profitable (i.e., provide enough value capture opportunities for platform owner) and sticky (i.e., attractive for stakeholders to join and remain committed to the platform owner and other stakeholders). In chapter five: Research findings, through the longitudinal case study of a successful B2B platform, HeadBox, I demonstrate how these synergies can be achieved and orchestrated over time. On these bases, I put forward a Platform Stickiness-Profitability Compass that establishes the missing connection between value creation and value appropriation by the platform owner in ecosystem-based business models. The framework integrates eight 'value-driving' mechanisms that impact the platform owner's ability to establish synergies between value creation and capture within a platform. This framework demonstrates the complementary, yet, independent relationship between the two. The further discussion and positioning of the main contribution of this thesis in line with the extant literature are covered in chapter six: Concluding discussion. Given the PDR nature of this research, in this chapter, I also provide an empirical field stress-testing of the framework by independent practicing managers and further demonstrate its practical application to designing and orchestrating ecosystem-based business models. Besides, I also draw out considerations and research implications for policy and academic curriculum development in light of the research findings in this concluding chapter.

CHAPTER 2: Research context

2. Introduction to sharing economy

"The sharing economy phenomenon proved to be more than just a frail and temporary trend and has been capable of overturning competition across the globe."

Parente et al. (2018, p.52)

Despite the quickly growing interest in sharing economy among practitioners (Cannon & Summers, 2014; Howard, 2016; Sundararajan, 2016; Yu, 2017), academic research is lagging (Heinrichs, 2013; Richter et al., 2017). To date, research on the sharing economy is limited to motivations to share (Bucher, Fieseler & Lutz, 2016; Habibi, Kim, & Laroche, 2016; Hellwig, Morhart, Girardin, & Hauser, 2015; Lamberton & Rose, 2012; Möhlmann, 2015; Piscicelli, Cooper, & Fisher, 2015), trust (Ert, Fleischer, & Magen, 2016), competition (Cusumano, 2015) and legislation (Guttentag, 2015 Kassan & Orsi, 2012; Koopman, Mitchell & Thierer, 2014). However, in recent years several journals started to dedicate their special issues to sharing economy with hope to not only reach a consensus on what the sharing economy is but also to further advance the development of this field of inquiry (Academy of Management Discoveries, 2018; Entrepreneurship Theory and Practice, 2019³; Technology Forecasting and Social Change, 2017, 2019³). While the academic coverage of SE is slowly growing, the literature is to a large extent fragmented (Breidbach & Brodie, 2017) and the scholarly discussions on sharing economy take place across multiple disciplines such as information systems and technology (Constantinides, Henfridsson & Parker, 2018; Cusamano, 2015;

³ Forthcoming - At the time of writing both journals had open calls for contribution to the special issues with the closing date set for 31 March 2019.

Hamari, Sjöklint & Ukkonen, 2016), marketing (Lamberton & Rose, 2012), management (Belk, 2014; Cohen & Kietzmann, 2014), innovation (Guttentag, 2015), and environmental sciences (Piscicelli et al., 2014). Other criticisms verbalized by Breidbach and Brodie (2017) reside in the fact that we still lack empirical studies of sharing that consider the 'latest generation' of SE business models (i.e., facilitated and embedded in digital platforms). For instance, the authors criticize the fact that the majority of existing empirical studies of sharing economy originate from obsolete contexts such as mp3 files sharing and its impact on the music industry. Consequently, this impedes our understanding of the more contemporary phenomenon of sharing⁴ and prohibits further advancements of this field by providing novel exploratory insights that do not necessarily conform to the long-standing grand theories⁵ (i.e., avoiding theoretical 'straight jacket' as established by Schwarz and Stensaker, 2014 that is discussed in Chapter 4 Methodology). Lastly, as Breidbach and Brodie (2017) further argue, there is still an academic ambiguity on what constitutes sharing economy and generally accepted definitions are lacking (Arnould & Rose, 2016; Frenken & Schor, 2017).

Aim and structure of the chapter

Despite these vast conceptual limitations, this chapter does not focus on finding and justifying research gaps in sharing economy literature - too many exist due its emergent nature - but instead, it focuses on its synthesis. By building upon extant work, my aim is not only to avoid further fragmentation of the SE research field but also to provide a more comprehensive background to the sharing economy phenomenon. Doing so is crucial for establishing a better grounding for the arguments and assumptions that will follow in the subsequent chapters. In this chapter, I predominantly draw on the works of Belk (2014), Cusumano and Gawer (2002), Cusumano et al., 2019), Gawer and Cusumano (2014), Gawer and Henderson (2007), and Choudary et al. (2015). Nevertheless, while not directly focusing on 'gap spotting' - which

-

⁴ The term contemporary SE is used to not only differentiate between traditional (i.e., not facilitated by digital platform) sharing phenomenon that arguably exists for centuries (i.e., tribal and community-based living) but also the popularized sharing of digital content (e.g., music, games). While the contemporary SE is grounded in the original premise of sharing, the main difference lays in the use of technology, the nature of sharing (e.g., what we share, who we share with and how), and scalability of such platforms. The contemporary SE is defined in the later sections of this chapter (See Section 2.1. Shifting Paradigm: Emergence and growth of the contemporary sharing phenomenon).

⁵ Industrial Network Theory has become dominant in explaining sharing economy platforms however it poses several limitations (Ford, 2011; Möller & Halinen, 2017) that will be uncovered and further discussed in the later parts of this chapter.

can be highly counterproductive and impractical in an emerging field (Alvesson & Sandberg, 2011) - this chapter also contributes to the long-needed conceptualization of the SE. As will be discussed throughout this chapter, the phenomenon of sharing impacts the entire economy (e.g., capital, assets, labor, goods, and services) and forces organizations to rethink how they create, deliver and capture value through their business models. However, not only managers struggle to get their heads around this rather abstract and increasingly complex concept, but also the academic debates on sharing economy business models⁶ are scant (Breidbach & Brodie, 2017). While academic limitations are visible in nascent literature, organizational struggles are evident in high failure rates and short lifespan (Täuscher & Kietzmann, 2017). An increasing number of companies adopting SE-based business models are failing to sustain, innovate, and scale them over time (Bock & George, 2018; Choudary et al., 2015). The recent demise of once highly praised and very promising SE platforms such as Guevara (UK's Peer-to-peer insurance), Yeloha (peer-to-peer solar sharing network), Kitchen Surfing (on-demand chefs and cooks), Homejoy (home cleaning marketplace), Prim (on-demand laundry services) or Hello Parking (on-demand parking spaces) just further amplify the need for reaching a better understanding of SE business models. The common denominator behind these failures and many others was precisely how these business models were implemented, operationalized, and orchestrated over time (Santos, Pache, & Birkholz, 2015) rather than what business model archetypes they adopted.

The rest of the chapter is structured as follows. Firstly, the emergence, significance, and impact of the sharing economy phenomenon are discussed. To keep the context balanced, besides presenting successful examples of well-known companies such as Airbnb and Uber, in this chapter, I also present the SE's impact on other industries by drawing on examples of less known and emerging companies. The debate in the sharing economy has been mainly focusing on consumers (B2C or C2C). However, again through the use of carefully chosen examples, I demonstrate that SE holds much potential for businesses too (i.e., Business-to-Business & Government-to-Government), but this has not yet been well explored and documented. The second part of this chapter introduces three core tenets of the sharing economy, emphasizing their impact on organizations and the broader industry. Lastly, the chapter concludes with implications that these tenets pose on design, management, and innovation of SE business models.

_

⁶ This chapter aims to identify core paradigmatic changes brought about by sharing phenomenon and thus establish their impact on organizations and their business models. Concepts of the business model and business model innovation are discussed in full in the following chapter (Chapter 3 -Theoretical Background).

2.1 Shifting paradigm: Emergence and growth of the contemporary sharing economy

"If your business relies on a model of consumption that is inefficient for your consumers, chances are that there's already a new sharing economy marketplace that is looking to streamline it for them."

Sundararajan (2013, in press)

For several years now, we are witnessing how organizations whose business models are embedded in the sharing economy are shaking up the established 'asset-dominant' industries (Belk, 2014). The very fact that these new entrants can quickly attract a large number of customers by solving the longstanding and often overlooked, marginalized or ignored inefficiencies of a particular industry, puzzles many incumbent organizations (Munoz & Cohen, 2017).

Besides, technological advancements and social shifts (e.g., favoring access over ownership) that provide fertile soil for sharing economy to take off, another important driver of its growth is the increasing availability of funding. Investors are starting to grow fond of these businesses, which is evident through over £18 billion⁷ of venture capital that has been invested in sharing economy businesses since 2010 (Apte & Davis, 2019). Despite what some choose to believe, the sharing economy is not just a trend that will sooner or later fade away. It grows, and it is happening fast. In the European Union (EU 28), the value of sharing economy accounted for over £18 billion in 2016, and it is estimated to reach £517 billion by 2025 (Codagnone, Biagi & Abadie, 2016). There is a similar prognosis in the United States where the value of sharing economy was estimated to be around £11 billion in 2014 and by 2025 is expected to reach £264 billion (Laamanen et al., 2018). For instance, just in the United Kingdom alone, between 2013 and 2014, the value of transactions facilitated by SE platforms has increased by 87 % from £2.1 to £3.9 billion. In the following year, the UK witnessed a staggering growth of 92 %, reaching the transaction value of £7.4 billion (Rahim et al., 2017). Furthermore, the revenues that SE platforms generated were growing at a similar rate reaching

19

⁷ To maintain consistency, all figures were rounded up and converted to Great British Pounds (GBP) with a simplified conversion rate of EUR/GBP - 0.90 and USD/GBP - 0.79. These conversion rates were applied through the entire thesis where original figures were provided in EUR or USD.

£850 million in 2015, with projections to reach £18 billion by 2025 (Rahim et al., 2017). Similarly, in France, the SE transactions accounted for over £2 billion in 2015, involved more than 15 000 firms, and created over 13 000 permanent jobs (Codagnone et al., 2016). The SE platforms are growing in popularity and acceptance not only across Europe and the United States but also in the Middle East, South America, and Southeast Asia (Schor, 2015). For instance, Colombia is quickly becoming a sharing hub of Latin America, and Ecuador, with the integration of sharing economy principles into national policies, is slowly reshaping the entire nation. The increasing use of open data to support government initiatives to improve, for instance, waste management, public transportation, and communication is visible in Chile, Argentina, and Brazil (Tadashi Takaoka, Manager of Entrepreneurship at CORFO, Chile -Personal Communication). These countries are essentially creating a sharing platform at a national level that citizens and organizations can access and leverage to increase the utilization of private and collective assets and to minimize associated waste (i.g., energy, cost, resources, time). Considering the scale at which the sharing economy is penetrating different economies, it is fair to presume that in the next ten years, the sharing economy will become a significant part of the global economy (Reischauer & Mair, 2018).

Studying the past success of some of the largest and most prominent companies in the world, one could distill that to achieve a strong market position and reach billion dollars in revenues require accumulation, ownership, and control of strategic assets. However, the sharing economy is challenging this paradigm, and it is quickly proving that it is possible to achieve global scale and multi-billion dollar revenues in less than a decade with none or minimal assets in ownership. The sharing economy, as we know it today (i.e., powered by digital platforms), is a relatively new phenomenon that, to a different extent, impacts every industry (Tiwana, 2014). As the author William Gibson famously noted, "The future is already here, it is just unevenly distributed," and this is precisely what is happening with a proliferation of sharing economy phenomenon across industries (Cherry & Pidgeon, 2018). A contemporary sharing economy started to gain more mainstream attention with the launch and growing popularity of Airbnb that is considered to be one of the first and most successful SE platform-based business. To demonstrate the scope and speed at which SE platforms can challenge and compete with incumbents, one does not need to look far. For instance, the Marriott International is the largest hotel chain in the world with over 30 brands in its portfolio, owns more than 6500 properties (1.25 million rooms) in 127 countries and generates £18 billion in revenue (Marriott International, 2017). It is impressive that it took only 60 years (the first hotel opened in 1957) to reach this scale. Yet more impressive is the story of Airbnb. Considering that this relative newcomer to the hotel industry - in August 2018 Airbnb celebrated only its tenth birthday -

already operates in 191 countries, offers over 4 million listings, owns no assets and is estimated to be worth more than £30 billion (Team T, Forbes, May 2018). With this in mind, one can only contemplate the future impact that the sharing economy could have on other established asset-dominant industries. The SE platforms can put these traditional organizations at the edge of extinction if they fail or are too slow to adapt and innovate (Choudary et al., 2015). We have seen this in music and other content-based industries where digital platforms gradually replaced many traditional businesses. While some incumbents managed to remain in business, their market, as well as their margins, have shrunk considerably. It is important to note that digital formats such as mp3 appeared in the 1990s and the first digital platforms (e.g., Napster) in early 2000, which dates this industry at around thirty years. However, a lot of contemporary SE platforms are much younger, many being less than ten to five years old. Therefore, their full potential and disruptive powers are yet to be manifested. The academic literature is scant on providing empirical insights on this 'new generation' of SE platforms (Breidbach & Brodie, 2017). Instead, it uses case studies based on outdated examples (e.g., file sharing, mp3) to explain the contemporary nature of the sharing phenomenon. Such practice is one of the reasons behind Breidbach and Brodie (2017) 's call for more empirical studies that examine novel and disruptive SE platforms. It is one of the aims of this thesis to contribute to closing this gap by providing novel insights from a longitudinal case study of the 'new generation' B2B (business-to-business) SE platform that has disrupted the UK event industry.

Toward a definition of the contemporary sharing economy

Belk (2007) defines sharing as "the act and process of distributing what is ours to others for their use as well as the act and process of receiving something from others for our use" (p.126). Doing so often leads to better utilization of one's assets (Botsman, 2013) that otherwise would be idle for a considerable time. In a similar vein, Richter et al. (2017) identified several benefits of sharing economy - "lower consumer investments, lower fixed costs, better selection, identification of new aspects, sustainability and saving resources" (p.307), which they argue, further accelerate adoption of sharing economy by individuals and organizations alike. Therefore, the sharing economy can be defined as a "socioeconomic system enabling an intermediated set of exchanges of goods and services between individuals and organizations which aim to increase efficiency and optimization of under-utilized resources in society." (Munoz & Cohen, 2017, p.21). Undoubtedly, sharing as a concept is not

-

⁸ For instance, a personal car is on average utilized on 1.5-3%. Majority of drivers use it for less than 15 miles a day (Elkington, 2012)

new (Cherry & Pidgeon, 2018; Kathan, Matzler, & Veider, 2016; Sutherland & Jarrahi, 2018) and our society has been engaged in the business of sharing for centuries (i.g., bartering, tribal communities, cooperatives or self-help groups). The benefits of sharing for both companies and customers are well established in the literature and have been discussed since the 1970s (Berry & Maricle, 1973); however, it took more than four decades for SE to gain a foothold in the mainstream business. Many ascribe this proliferation of contemporary SE to technological advancements (Le Jeune, 2016). While the technology indeed played, and still plays a critical role in facilitating and scaling of SE platforms, it is not the sole denominator of its growing success. Historically, business models based on access rather than ownership (e.g., car, equipment, ski rentals, or public libraries) were bound by geographical or community-specific contexts (to some extent, they still are today). It was the technology that freed them up from these boundaries and led not only to the reinvention of existing business models but also to the creation of new ones (Trenz, Frey & Veit, 2018).

While technology provides a backbone for the sharing economy (i.e., SE is facilitated and deeply embedded in digital platforms), in essence, it is the people's growing willingness to share with 'strangers' that allowed sharing phenomenon to exit the closed circles of communities. As postulated by Schor (2015), it is precisely this willingness of 'strangers to share with other strangers' that characterizes and ultimately drives the contemporary sharing economy (i.e., the interactions stretch beyond the digital ecosystem as is typical for the consumption of digital content). As argued by Frenken and Schor (2017), this social shift is fueled by the rise of digital platforms, that through the use of algorithms, can turn vast user data into ratings and reputations, which ultimately makes 'stranger sharing' less risky and more appealing to a broader market.

Dark side of the sharing economy

While this thesis focuses on studying SE based business models from the vantage point of a platform owner in the B2B sector- and its role in maximizing value for itself and other actors with the platform - it is important to appreciate also negative impact that sharing economy may have on organizations, individuals, and society at large. In the extant literature, these are only emerging and are mainly discussed in relation to consumer-centric platforms (P2P) (Cheng & Foley 2018) such as Airbnb, TaskRabbit, and Uber. This stream of research, to a large extent, focuses on issues related to workers' exploitation (Sprague, 2015), negative impact on wages, tax avoidance, and lack of regulation (Avital et al., 2015; Kasprowicz, 2016; Malhotra & Van Alstyne, 2014). As argued by Malhotra and Van Alstyne (2014), addressing

these issues is essential for increasing the acceptance of the sharing economy and legitimizing its place with the global economy. Many authors, especially in the hospitality research stream, argue that sharing economy businesses are internalizing profits and externalizing costs and responsibilities (Kenney & Zysman, 2016, 2019; Malhotra & Van Alstyne, 2014; Marchi & Parekh, 2016). In other words, it is the platform users who often have to bear risks that their employers should be responsible for otherwise (e.g., indemnity, pension, tax contributions). Thus, some scholars argue that this unfair and unethical advantage is precisely why SE businesses are more competitive and profitable when compared to traditional organizations. For instance, it was estimated that Uber would have to pay extra of almost £700 million to its drivers if they were 'regular' employees (Srnicek, 2017).

Furthermore, Srnicek (2017) questions Uber's ability to survive if the company had to internalize these and ongoing labor-related costs. Other growing criticisms of SE platforms is that many are gaining monopolistic positions in their markets, accumulating too much power and influence over platform users (Brynjolfsson & McAfee, 2014; Kenney & Zysman, 2016; Owyang, 2015). As some of these P2P sharing economy platforms grow in influence and size, the 'sharing' element is becoming less central to their offering (Gyódi, 2019). For instance, as Slee (2015) found, more than 70% of Airbnb's revenue came from renting entire houses/apartments, and only the remaining 30 % have been attributed to sharing room(s) within existing homes. Besides, in numerous countries, Airbnb has been blamed for the surge in property prices within tourist locations, inaccessibility, and a lack of housing for residents and over-tourism (Milano, Cheer & Novelli, 2018). Also widely debated topic concerning the sharing economy is user discrimination (e.g., race, gender, or disability) (Ahuja & Lyons, 2017; Edelman, Luca & Svirsky, 2017; Fisman & Luca, 2016; Scholz & Schneider, 2016).

To overcome the inherent shortcomings and negative impact of sharing economy on individuals and society, the interference at both local and national levels through effective policy and legislation is being increasingly advocated (Kathan et al., 2016; Katz, 2015; Miller, 2016). The sharing economy has a long way to go, and as argued by Geron (2013), its short-term negative impact will be offset by positive future gains. However, for these gains to materialize, it is crucial to fully understand how the sharing economy is shaping our society to develop effective and flexible policies to maximize its potential while limiting its negative impact.

2.2 Shaping and redefining organizations and industries

"What we are experiencing at the moment is classic creative destruction: Even though there might be some negative short-term effects for the economy, long-term economic gains will ultimately pay off."

Kathan, Matzler & Veider (2016, p.670)

The impact that sharing economy has on traditional companies is visible and significant (Barbu et al., 2018). However, many are still trying to understand whether and how the sharing economy is affecting their business models (Kathan et al., 2016). The sharing economy has the potential to reshape every industry; however, its impact is not yet well understood. Reischauer and Mair (2018), building on the work of Altmann and Tripsas (2015), identified three fundamental differences between SE platform businesses and traditional organizations. Firstly, SE organizations, rather than focusing on developing the products and services that meet their customers' needs themselves, focus on creating a network of 'complementors' who can provide the desired products and services. The second distinction lies in the approach to profit maximization. While traditional organizations aim to maximize the profit from products and services by cutting costs, the SE businesses focus on developing critical mass and increasing interaction among the actors to maximize the value of the platform. Thirdly, this interaction is also reflected in organizations' KPIs. In contrast, traditional organizations measure market share and units sold as an indicator of success, SE platforms measure interactions among actors on the platform (i.e., quality of interaction, number of transactions or compensation costs). Furthermore, drawing on the work of Choudary et al. (2015) on digital platforms, the difference between traditional linear businesses and networked SE platforms is elaborated in section 2.3.3 (Digital platforms: From linear firms to value networks) further in this chapter.

Based on the findings from report commissioned by European Union, the SE platform businesses are "increasingly involved in important sectors of the economy such as transportation, accommodation and rental, retail, office space and logistics, finance and consumer credit, and the labor market" (Codagnone et al., 2016, p.14). Also, "with growing investment in sharing startups, the sharing economy is gaining increasing support from Government, seen as an existing opportunity to transform all sectors of the economy and offer

new competitive products and services to consumers" (Cherry & Pidgeon, 2018, p.941). Considering our economy from a broader perspective, it primarily consists of three core markets: a market for capital, assets, labor and, goods, and services. There is a sharing economy platform that is already revolutionizing every one of these core markets and hence, influencing the direction and the future of the entire economy (Schor, 2015, p.2). For instance, crowdfunding platforms such as Kickstarter, Lending Club, or Funding Circle influence the way people and organizations access and use capital (Kraus & Giselbrecht, 2015; Kraus, Richter, Brem, Cheng & Chan, 2016).

Further, the capital market is influenced by peer-to-peer digital currencies such as Bitcoin or Ethereum (blockchain-enabled SE platforms) that through their focus on decentralization of monetary transactions are aiming to complement and soon reshape the traditional banking and investment industry (Crosby, Pattanayak, Verma & Kalyanaraman, 2016; Kazan et al., 2018). The ways we use and access assets are changing too. Besides the well-known companies like Uber and Airbnb, others such as Wingly, Cohealo, or MuniRent are leveraging the value of underutilized assets in their industries. The recirculation of goods and the sharing of services is also quickly growing in popularity. Companies like Coursera, Udemy or Skillshare, are reinventing the education sector that admittedly is guilty of having one of the oldest business models ever. It remained relatively unchanged for the past 100 years (Duffell, 2014; Parker, 2018). Lastly, the labor market is also changing rapidly. Companies such as Instacart, Freelancer, and TaskRabbit are pioneering marketplaces for people to share their skills, expertise, and time with others. They are increasingly preferring this 'gig' based working (Manyika et al., 2016) over traditional fixed-time employment. The term gig economy9 is already established in business ,and to a lesser extent, in academia. Its impact is evident and for a while now, the topic of gig working has been moving higher up the government's agenda (Graham, Hjorth & Lehdonvirta, 2017).

While hospitality and transportation industries were the first to witness the power of the sharing economy, it is evident that sharing economy impacts a much broader spectrum of industries and, as such, has the potential to lead to their disruption (Fehrer, Woratschek & Brodie, 2018). The SE platforms used in the above examples are summarized and complemented by a brief description in Table 1.

_

⁹ Gig Economy is defined in the glossary and for more information on this phenomenon and its wider impact see works of Burtch, Carnahan and Greenwood (2018), De Stefano (2015) or Manyika et al. (2016). The recent book from Marco Biasi called *Humans as a Service : The Promise and Perils of Work in the Gig Economy* provides an excellent introduction to this emerging phenomenon.

Impacted Part of Economy (Market)	Patterns of Production & Consumption in Sharing Economy	Example Companies	Company Summary
Goods	Re-circulation of goods	Freegive	Freegive connects people who are giving and getting an unwanted item for free in their own towns. It's all about reuse, reduce, recycle and keeping good stuff out of landfills.
		Swapstyle	The world's longest-standing free online fashion swap marketplace. Women from all around the world can swap clothes online.
		Yerdle	Yerdle enables brands to buy back and resell used items by providing technology and logistics to develop white-label reseller programs.
Assets	Access to underutilized Assets	Cohealo	Cohealo enables hospital systems to increase the utilization of their medical equipment through proactive data analytics and equipment sharing.
		Wingly	Wingly connects pilots and passengers. Private pilots can add flights they have planned and potential passengers can easily book to fill the extra seats.
		MuniRent	Equipment and service sharing for public agencies. MuniRent empowers governments to reduce costs, increase utilization and improve efficiency.
Capital	Access to shared capital	Funding Circle	A peer-to-peer lending marketplace that allows investors to lend money directly to small and medium-sized businesses
		Kickstarter	Kickstarter helps artists, musicians, filmmakers, designers, and other creators find the resources and support they need to make their ideas a reality.
		Lending Club	A US peer-to-peer lending company. Lending Club connects borrowers with investors through the online marketplace. It provides both business and personal loans.
Services (Labour)	Access to flexible on-demand labor	TaskRabbit	A same-day service platform that connects people in need with skilled 'Taskers' to help with odd-jobs and errands.
		Instacart	Customers select groceries through a web application from various retailers and the order is delivered by a personal shopper.
		Parkinghood	A collaborative consumption marketplace that allows people to rent and share private parking spaces on a short-term basis
Services	Access to	Open	Open Garden enables anyone to share their broadband

	shared personal services	Garden	Internet service with people nearby. The WiFi sharing device enables everyone to offer up surplus bandwidth and get paid for it, or purchase Internet service from others
		Lemonade	Peer-to-Peer (P2P) insurance for renters and homeowners.
	Access to learning & education	Skillshare	An online learning community with thousands of classes in design, business, technology, and more. Skillshare's purpose is to make the new economy an open meritocracy, where the skills and expertise needed to succeed are available for anyone willing to learn them
		Udemy	With 24 million students, 80 000 courses and over 30 000 instructors Udemy is the leading global marketplace for teaching and learning, connecting students everywhere to the world's best instruction anywhere.
		Coursera	Coursera provides universal access to the world's best education, partnering with top universities and organizations to offer courses online

Table 1. Examples of sharing economy platforms focusing on different patterns of production and consumption in different economic pillars

Sharing economy BMs at the intersection of social, economic and technological contexts

The SE phenomenon does not neatly fit into the existing economic framework - quite the contrary - it challenges its core logic (Schor & Attwood-Charles, 2017). Many scholars argue that the rapid transition to the SE is fueled not only by changing societal values or technological advancements, but it is also underpinned by decreasing trust that people have toward governments, corporations, and other traditional institutions (Cherry & Pidgeon, 2018). As Cherry and Pidgeon (2018) further argue, it was the events of the 2008 economic crash that accelerated this transition. One does not need to look far to see that since the financial crisis, the decentralized digital currencies, crowd-funding, and peer-to-peer lending - as more reliable and fairer alternatives to traditional banks - have been growing in popularity. The impact goes beyond just capital markets. When compared to the conventional economy or intermediaries, these SE platforms offer a significant reduction in transaction costs between providers and seekers (Parente et al., 2018). The basic premise of the contemporary SE is that firms, through their ecosystem-based business models (e.g., digital platforms, online marketplaces, networks)

facilitate interactions that enable actors¹⁰ within these ecosystems to gain access to assets and complementary services provided by other actors, who in exchange benefit in monetary but, also non-monetary ways, from providing such access (Mair & Reischauer, 2017). Therefore, I conceptualize the contemporary SE as a socio-economic-technological phenomenon that exists at the intersection of economic, social, and technological contexts (Bucher, Fieseler, Fleck, & Lutz, 2018; Codagnone, 2016; Cohen & Kietzmann, 2014; Kathan et al., 2016). Whereas the economic aspect covers transactions and monetary value exchanges, the social aspect focuses on co-creation, relationships, and non-monetary value exchanges, and technology is used to facilitate interactions and to deliver and orchestrate both monetary and non-monetary value exchanges within the SE platform. I adhere to this conceptualization throughout the thesis to maintain internal consistency and congruence. Furthermore, adopting this 'intersectional' view is not only allowing us to achieve and maintain conceptual clarity in the definition of contemporary sharing phenomenon but also, on these grounds, to distinguish between different forms of business models that exist at any two contextual intersections (e.g., Open source platforms exist at the intersection of Social and Technological contexts, while e-commerce marketplaces like eBay exist at the intersection of Economic and Technological) besides contemporary SE platforms. This is depicted in Figure 1 that briefly describes each context and provides examples of companies, industries, and business models that exist at each of these contextual intersections.

Not only practitioners but also scholars struggle to precisely define what constitutes sharing economy (Arnould and Rose, 2016; Frenken and Schor, 2017). So far, SE had been described as collaborative consumption, peer-to-peer economy, or access-based consumption (Bardhi & Eckhardt, 2012; Barnes & Mattsson, 2016; Belk, 2014), among others. While to a certain extent, these terms refer to some of the core tenets of sharing economy, in isolation, they tend to fragment somewhat rather than unite our understanding of what constitutes SE. Therefore, the purpose of *a priory* establishing a top-level conceptualization of contemporary SE using the three contextual intersections not only help us to establish the long-needed boundaries between constructs that exist at these different intersections but more importantly, to advance our understanding of contemporary sharing phenomenon (i.e., existing at the intersection of all three contexts). These contexts form the core building block of SE and, thus, impact the way organizations create, deliver, and capture value through their business models.

-

¹⁰ In the sharing economy, the boundaries between producers, customers and other stakeholders are blurred. (Mair & Reischauer, 2017; Reischauer & Mair, 2018), which is reflected in the terms that are usually integral to many sharing economy definitions; collaborative consumption (Hamari et al., 2016); access-based consumption (Eckhardt & Bardhi, 2015); peer-to-peer economy (Bauwens, Kostakis & Pazaitis, 2019); on-demand economy (Sundararajan, 2016); or collaborative economy (Botsman & Rogers, 2010). Therefore, in this context, I use the term 'ecosystem actors' to refer to multiple stakeholders that coexists within the SE platform.

As such, they deserve a more detailed discussion that is a subject of the following section (2.3 Core tenets of sharing economy and their impact).

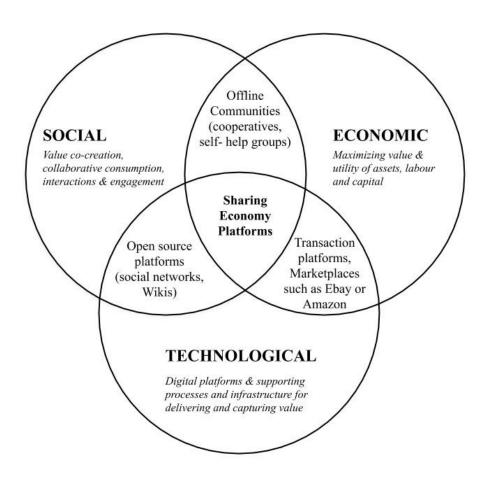


Figure 1. Sharing economy as a socio-economic-technological phenomenon

2.3 Core tenets of sharing economy and their impact

"The sharing economy is "promoting new forms of economic growth [and] is seen by some as a positive force, empowering citizens through the provision of new opportunities for profit, employment, and social interaction."

Cherry & Pidgeon (2018, p.940)

As established in earlier sections, the widespread adoption and rapid growth of the contemporary sharing phenomenon are fueled by paradigmatic changes within the identified contexts. In the *economic* context, we are witnessing a shift toward decentralized production and access and demand-based consumption across all three core building blocks of our economy (capital, goods & services, and assets). When considering *social* context, it is increasingly more difficult to place boundaries on production and consumption. These happen simultaneously - blurring the boundaries between production and consumption - and this process is often referred to as value co-creation or collaborative consumption. Finally, it is precisely the emergence and ability of digital multi-sided platforms to facilitate ecosystem-wide interactions and relationships among diverse actors that present the most significant shift in the *technological* context. Based on these three paradigmatic shifts and in line with arguments put forward by Acquier, Daudigeos, and Pinkse (2017), and Breidbach and Brodie (2017), I establish three core tenets of the contemporary sharing economy:

- 1. Access-based consumption (economic context);
- 2. Co-creation of value (social context); and
- 3. Digital multi-sided platforms (technology context).

The following sections discuss each tenet in turn and extrapolate its impact and implications on both existing and new ventures. Building further on these three tenets, I put forward the following definition:

The contemporary SE business models, while enabling their diverse users to share and access assets; goods and services; and capital and labor, are constantly orchestrating interactions and optimizing value co-creation processes and activities (continuous innovation) among the users to maximize their

attractiveness (for new and existing users) and profitability (for platform owner).

Borrowing from mathematics, this is depicted in Figure 2 in the form of a simplified equation that further reinforces the argument that the sharing economy is a combination of changing consumption and production patterns with co-creation of value leveraged through digital platforms (i.e., 'on the power of platform').

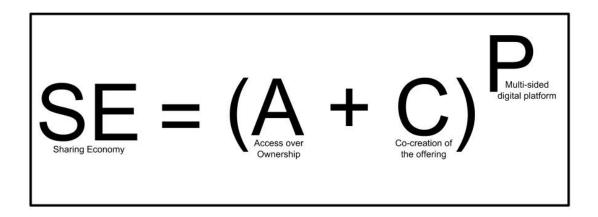


Figure 2. Sharing economy 'equation' - Integration of core tenets of sharing economy

2.3.1 Access-based consumption: Maximizing value and utility by sharing

"Sharing economy phenomenon is characterized by non-ownership, temporary access, and redistribution of material goods or less tangible assets such as money, space, or time."

Kathan et al. (2018, p. 663)

A shift in customers' preference from owning goods and assets to accessing and experiencing the utility these provide is evident in many industries. As such, it has been a strong driving force of the sharing economy, contributing to its rapid growth (Belk, 2014; Bucherer et al., 2018). The sharing economy presents a paradigmatic change - an increasingly

favored alternative to the traditional ownership-based consumption model. The current austerity and threats of future economic downturns influence people's choices to own fewer assets. This is not to only decrease their liabilities and costs associated with ownership (e.g., insurance, interest payment, maintenance fees) but also to increase liquidity and personal flexibility (Parente et al., 2018). To lower risk and increase flexibility, consumers but also organizations, are increasingly inclining toward temporary access over permanent ownership of goods and assets. Distribution and better utilization of idle capacity are at the heart of the sharing economy. To maximize the value of products, capital, skills, and time, individuals, organizations, and governments¹¹ are increasingly willing to grant access to their underutilized capacity to others (Bucherer et al., 2018: Cherry & Pidgeon, 2018). Customers and businesses alike are favoring access over ownership not only to avoid associated liabilities but also to take advantage of low cost and immediate access (Eckhardt & Bardhi, 2015). People realize that the long-term utility from owning some assets is rather low (e.g., transport, machinery, industrial and medical equipment, sports equipment, housing, but also clothing and electronics).

In sharing economy, assets and goods become more fluid, allowing individuals and organizations to access them as needed - temporary on-demand access in real-time (Kathan et al., 2018). This fluidity is giving companies new ways to share, access, and utilize existing assets. For instance, the B2B marketplace floow2.com enables organizations to turn an "asset's downtime into revenue" (Stephany, 2015, p. 10) by allowing them to share equipment, waste and excess materials, services and professionals. However, to transition from ownership to access requires the adoption of a different business model. Arguably not many organizations have infrastructure and processes in place that will allow them to share or seamlessly access the assets of others. For instance, a similar B2B company - TechShop - that allowed organizations to subscribe to access expensive machinery instead of purchasing (Kathan et al., 2018), after almost 12 years in business, in February 2018, filed for bankruptcy. This company was highly praised in VC related press in the past but, its failure was almost inevitable given its problematic and challenging to scale business model (i.e., cash-intensive and location dependent).

Gassmann, Frankenberger, and Csik (2014), in their comprehensive overview of 55 different business model archetypes, identified that one-fourth of them was to some extent embedded in principles of sharing economy (e.g., Revenue Sharing, Performance-based

_

While along with B2C or C2C some B2B examples are provided there are also sharing economy marketplaces that facilitate G2G sharing (Government-to-Government). One of these companies is MuniRent that enables equipment and service sharing for public agencies. This platform empowers governments to reduce costs, increase utilization and improve efficiency. Aim of this thesis is not to provide a detailed overview of sharing economy in different sectors and markets but rather, to use these examples to illustrate or exemplify the arguments. Many examples exist and are reasonably well documented in the popular business press.

Contracting, Pay-per-use, Fractional Ownership). For instance, in the B2B sector, it is the servitization-based business model (Cenamor, Sjödin & Parida, 2017; Hullova et al., 2019) that is being adopted not only by startups but it has been growing in popularity among many incumbents too (e.g., Phillips, Hilti, Rolls Royce). A proliferation of servitized business models further evidenced that access and performance over permanent ownership are beside consumers, also increasingly favored by businesses. This shift in consumption-production pattern puts enormous pressure on existing companies that need to refocus their attention from products and services to 'jobs' that customers want to get done and thus, rethink their value proposition, and redesign their business models accordingly (Kathan et al., 2018). Theodore Levitt was onto something when in his famous book - Marketing for business growth stated that "people don't want to buy a quarter-inch drill, they want a quarter-inch hole" (Levitt, 1974, p.71). He was advocating the need to focus on customers' jobs-to-be-done rather than products or services per se. However, while meant figuratively sharing economy is giving Levitt's remark a new, more tangible, and concrete meaning. This is significant because the growing importance of SE in a broad range of industries put many traditional firms "under pressure to consider how to incorporate the principles of the sharing economy into the design of their own business models¹² " (Laamanen et al., 2018, p.213). Knowing that emerging SE platforms are starting to threaten traditional businesses (Belk, 2014; Laamanen et al., 2018; Sundararajan, 2013), we still have a little understanding of how to design, manage, innovate, and ultimately scale these business models. Scholarly research on this aspect of SE phenomenon is still in its infancy (Cheng, 2016; Richter et al., 2017).

-

¹² For instance, Rolls Royce, instead of continuing selling the jet engines to its customers, started providing its engines as a service (Powered by Hour). The value proposition was simple; customers were only required to pay for every hour that the engine was in operation. Hilti, a manufacturer of products for the construction, building maintenance, energy, and manufacturing industries, also introduced a servitized pay-per-use business model as a response to shifting customers' needs. Hilti moved away from selling tools to offering full fleet management services. Furthermore, Audi, as a reaction to sharing economy, has been testing multiple business models for both B2C and B2B markets. Some of these models include - Audi Mobility Services (mobility-as-a-service, subscription), Audi Unite, and Audi at Home (access-based / community sharing), Audi on Demand (lease model) and Audi Shared Fleet (B2B pay-per-use model). More detailed discussion and examples of incumbents developing new or innovating existing business models can be found in works of Gassman et al. (2014), Gerstner (2002), Johnson (2010), Linz at al. (2017) or Mocker and Fonstad (2017).

2.3.2 Co-creation of value: Collaborative-consumption in broader ecosystem

The sharing economy "empowers consumers to both borrow and lend (sometimes also rent or lease), blurring the boundaries between consumption and production."

Bucher et al. (2018, p.296)

When compared to traditional firms, SE platforms face strategic challenges, resulting from increasingly blurred boundaries between production and consumption (Mair & Reischauer, 2017; Reischauer & Mair, 2018). This phenomenon is referred to as collective or collaborative consumption (Barbu et al., 2018). In other words, the core value unit (i.e., offering) in SE is always co-created through complex interactions among two or multiple actors (i.e., numerous types of customers, complementors, and producers). The co-creation takes place in the value network and thus spans beyond firms' boundaries (Barbu et al., 2018). As a result, SE platforms rather than focusing on delivering products and services to their customers, instead connect different groups of actors within the broader platform ecosystem (e.g., buyers, sellers, complementors and any other relevant stakeholders) to facilitate co-creation of the offering (Chasin et al., 2018^b; Cusumano, 2015; Gawer & Cusumano, 2014). Therefore, all actors within this ecosystem are - to different extents - constantly shaping the platform, and its core value units (Clauss et al., 2018; Priem, Li & Carr, 2012; Priem, Wenzel & Koch, 2018). Value co-creation thus is an iterative, collaborative process (Grönroos & Helle, 2010; Jaakkola & Hakanen, 2013) of realizing benefits "from the integration of resources through activities and interactions with collaborators" within the platform (McColl-Kennedy et al., 2012, p. 375). In essence, SE platforms do not "execute specific activities, but create the necessary organizational systems and conditions for resource integration among other [actors] to take place" (Ordanini, Miceli, Pizzetti & Parasuraman, 2011, p. 463). Ultimately, they facilitate and orchestrate interactions among all actors within the platform (Kumar, Lahiri & Dogan, 2018; Perren and Kozinets, 2018; Ritter & Schanz 2018). This is why SE platform owners are often referred to as a network orchestrator, platform leader, focal agent, or central actor (Brodie, Hollebeek, Jurić & Ilić, 2011; Cusumano & Gawer, 2002; Gawer & Henderson, 2007; Laczko et al., 2019). Besides facilitating value co-creation activities (Fu et al., 2018) platform leader is responsible for designing and continuously innovating the infrastructure (e.g.,

technology, process, and activities) to create new and leverage existing interactions and relationships among the actors. As postulated by Fu et al. (2018, p.962), "the richer the complementors' collaborative network and their value co-creation activities, the more potential participants will be attracted to the platform; the more valuable the platform to the complementors and end-users, the more heterogeneous and effective value co-creation activities can be developed." This phenomenon is referred to as network effect -usually endemic to digital platforms - responsible for their rapid exponential growth, but equally for their even quicker demise (Moser & Gassmann, 2016; Van Alstyne et al., 2016). Network effects and how they impact SE platforms are discussed in the following sections.

2.3.3 Digital platforms: From linear firms to value networks

Sharing Economy is an "economic activity facilitated by the internet, through digital platforms and applications that enable people or businesses to share, sell, or rent property, resources, time or skills."

Rahim et al. (2017, p.2)

Digital platforms are central to the success and scalability of contemporary SE businesses (Belk, 2014; Möhlmann, 2015; Schor, 2016). It is precisely these platforms that facilitate a vast range of interactions among its users that are prerequisites for co-creation and delivery of the platform's core value units (Choudary et al., 2015; Kazan et al., 2018; Eaton, Elaluf-Calderwood, Sørensen & Yoo, 2015). Based on the discussion presented in the previous sections of this chapter, it is clear that sharing phenomenon predates the Internet (Belk 2014; Frenken & Schor 2017; Querbes, 2018). For instance, car sharing as a concept has existed for over 70 years, with the first scheme launched in 1948 in Zurich (Codagnone et al., 2016). Many other community-based car-sharing programs emerged between the 1980s and 1990s in Northern Europe; however, none were able to scale up to the size of Uber or Lyft. The main contributing factors to the growth and scalability of such SE businesses nowadays are advancing technology combined with the growing 'know-how' and experience derived from

building e-commerce platforms and digital marketplaces in the past 25 years¹³ (Horton & Zeckhauser 2016). The success of these platforms was unprecedented. Since their inception, they quickly came to dominate and even monopolize their industries. For instance, more than 75% of all e-commerce transactions in China are made through Alibaba. Furthermore, Google has attained over 82% share in mobile operating systems, and a staggering 94% of mobile searches are conducted through Google's search engine (Van Alstyne, Parker & Choudary, 2016). Both platforms are less than 20 years old. The immense success of early platform pioneers (e.g., eBay, Google, Facebook, or Amazon) ignited a keen interest in platform-based BMs among both scholars and practitioners. By many, platforms are seen not only as most appropriate business models for the current economy but, they are also thought to be, by far, the most lucrative (Acquier et al., 2017; Fu et al., 2018; Munoz & Cohen, 2018). Over 70% of privately funded companies with a valuation above \$1 billion (£790 million) use some variation of a platform-based business model (Cusumano et al., 2019; Evans & Gawer, 2016). Just in 2016, the total market capitalization of platforms reached over £3.4 trillion globally. It is not surprising then that Cusumano et al. (2019) consider platforms to be the most valuable business models.

The impact that platform-based businesses have on the traditional 'pipeline-based' organizations is conspicuous. While many of the "pure pipeline businesses are still highly competitive, when platforms enter the same marketplace, the platforms virtually always win, [...and] that's why pipeline giants such as Walmart, Nike, John Deere, and GE are all scrambling to incorporate platforms into their models" (Van Alstyne et al., 2016, p.5). Pipeline business, the term developed and popularised by Choudary et al. (2015), refers to traditional companies that "create value by controlling a linear series of activities, [adopting] the classic value-chain model" (Van Alstyne et al., 2016, p.5). However, platform-based businesses, instead of developing and controlling linear value flows, focus on orchestrating value co-creation activities in the network. In other words, a platform's competitive advantage revolves around its ability to leverage and orchestrate resources of its members, rather than aggregating them internally (Choudary et al., 2015; Eaton et al., 2015). Van Alstyne et al. (2016, p.5) summarise this very well by arguing that with the growing adoption of platforms, we are witnessing "shifts from controlling to orchestrating resources, from optimizing internal processes to facilitating external interactions, and from increasing customer value to maximizing ecosystem value."

¹³ Our understanding of platforms came a long way as we were able to learn from some of the most successful platform-based companies such as Amazon (Est.1994), Ebay (1995), Google (1998), Alibaba (1999) and Facebook (2004). Success of these and many other platforms has ignited practitioners and scholarly curiosity into understanding how these digitally-enabled ecosystem-based business models work.

This is in stark contrast to the long-dominant resource-based view of the firm (Barney, 1986; Barney, 2001; Barney, Ketchen & Wright, 2011). As argued by Choudary et al. (2015, p.25), the "traditional view of competitive advantage - that bigger is better and the more you own, the more you win - has broken down" when it comes to platforms. Cusumano et al. (2019, p.2) define a platform as "a company-owned business [...] that connects individuals and organizations at the level of an industry in order to enable innovations or transactions among users and other market participants."

While all digital platforms share a somewhat similar architecture (Choudary et al., 2015), it is essential to note that several differences between sharing economy platforms, traditional e-commerce platforms and other digital marketplaces exist (see Kumar et al., 2018 for the detailed comparison). Constantiou, Marton & Tuunainen (2017) postulate that the most fundamental difference, when compared to traditional platforms, is that "sharing economy platforms do not enable the selling and buying of goods but rather facilitate peer-to-peer rental and sharing" (pp. 233–234), which requires different combination of "organizational and market mechanisms to coordinate platform participation and, ultimately, to create value" (pp. 231-232). Borrowing from the work of Kumar et al. (2018), Table 2 summarizes the key differences between traditional e-commerce and sharing economy platforms.

Conventional two-sided market (e.g., eBay with suppliers above and customers below the value chain)	Sharing economy (e.g., Uber with service providers above and customers below the value chain)
Product-focused	Service-focused
Revenues generated through sales	Revenues generated through short-term rental
Heterogeneity of products under one firm (e.g. a variety of products in eBay, Amazon or Alibaba)	Homogeneity of services under one service enabler (e.g. service of reliable transportation in Uber; access to labor in TaskRabbit)
No face-to-face interaction with the customer needed	Face-to-face interaction with customers plays a major role (co-creating offering online and offline)
Service quality is secondary	Service quality is essential
Marketing initiatives of the focal product toward customers can be executed through suppliers (e.g. promoted listings)	Marketing initiatives of the focal service toward customers cannot be executed through service providers
Suppliers have low risks associated with their involvement or assets due to the transfer of ownership	Service providers (network actors) have high risks associated with their involvement or assets due to the personal nature of the transaction

Table 2. Comparison of the conventional two-sided platforms/marketplaces and the sharing economy platforms (Adapted from Kumar et al., 2018, p.3)

In essence, SE platforms "do not produce resources [but instead] they provide the infrastructure for individuals [and companies] to access or share existing resources that they already possess" (Mair & Reischauer, 2017, p. 4). This infrastructure is provided and continuously developed by the platform owner, aiming to continually increase the variety of value units, quality of interactions, and ultimately the scope of the platform (Constantiou, Marton & Tuunainen, 2017; Parente et al., 2018). This, in turn, leads to increased platform attractiveness for both existing and new users alike (Fu et al., 2018). Other scholars argue that besides these, SE platforms are acclaimed to contribute to more environmentally friendly alternatives in the market (i.e., sharing instead of owning), increase interpersonal interaction (i.e., co-creation and collaborative consumption) and above all democratize economic activity (i.e., decentralization of income and gig economy) (Munoz & Cohen, 2018; Lutz & Newlands, 2018).

Platform scalability and network effects

Importantly, digital platforms allow SE firms to scale their business at an unprecedented speed (Acquier et al., 2017; Hamari et al., 2016). This ability to scale quickly enables SE firms "to accommodate growing consumer demand that can be satisfied by growing provider supply without requiring additional resources" (Chasin et al., 2018b, p.196). In essence, as the demand grows on one side of the market, the platform owner, instead of investing in additional resources, aims to attract more suppliers or complementors to accommodate the increase in users at the given side of the market. However, the scalability is contingent upon achieving an initial user base by leveraging network effects, which, according to Chasin et al. (2018b), is one of the most significant obstacles that any platform encounters. The challenge of leveraging network effects resides in platforms' ability to attract and serve multiple users (i.e., customers will not join if there are not enough suppliers or other customers, and vice versa). In principle, we can distinguish between two different types of network effects, and these are; direct and indirect (Cusumano et al., 2019; Fu et al., 2018). The direct network effect (one-sided) refers to the platform's ability to attract and onboard users from the same side of the market (Parker & Van Alstyne, 2005, 2017; Eisenmann, Parker & Van Alstyne, 2009). Direct network effects mostly affect the social networks, in which value grows proportionally to the number of active users. However, in multi-sided platforms, the indirect network effects (cross-sided) are in force because the value of these platforms grows with the increasing number of users at each side of the market (i.e., users, suppliers, third party, service providers) (Gawer & Cusumano, 2014). These users provide complementary applications and services

and, thus, co-create value among themselves. It is, therefore, the role of the platform owner to develop strategies aimed at attracting and onboarding multiple users from all sides of the market (Hagiu & Spulber, 2013). While this might sound rather logical in principle, in practice doing so has always been considered problematic. For instance, Caillaud and Jullien (2003) refer to this as a 'chicken and egg problem', whereas users from one side of the market will only join the platform if there is a sufficient number of other users. Ultimately, the overall profitability of the platform depends on the number of interactions among its users (Choudary et al., 2015; Van Alstyne et al., 2016). As Parente et al. (2018) posit, SE platforms often capture value by charging a fee for every transaction that takes place across the platform, and therefore, their reliance on network effect is critical as it determines the platforms' ability to become profitable sooner.¹⁴

The architecture of digital platforms: Three architectural layers

Choudary et al. (2015), while acknowledging the vast differences between various types of platforms (e.g., blogging platforms, social platforms, e-commerce marketplaces), has developed a simple unifying architectural framework (see Figure 3) that shed more light on different configurations of platforms. This framework consists of three dynamic layers that continuously evolve and change throughout the platforms' lifecycle and as such form the basis for understanding the basic structure of the platform-based business model (Choudary et al., 2015, pp.61-62):

- 1. Network-Marketplace-Community layer All interactions and relationships among actors takes place at this layer. Thus, this layer is coevolutionary, and while designed by platform owner (i.e., features), it is, to a large extent, influenced and shaped by actors. In sharing economy platforms, the network is the core source of value. It is said that SE platforms have a 'thick' marketplace/community layer.
- 2. Infrastructure layer Enables the value co-creation activities that take place at the network layer. It encapsulates the tools, services, and rules that govern the entire platform. Infrastructure is not fixed, and it continually evolves. While changes in this layer can be in response to the coevolution of the network layer, the platform owner

_

¹⁴ It is important to note that not all platforms focus on profitability at the early stages of their inception and rather aim to increase their user-based by leveraging network effect. This usually applies to social networks that depend only on direct network effects. These need to be very well funded as their 'burn-rate' is very high. Great example of this is Twitter, which during its multibillion-dollar IPOs had no established revenue model/ monetization mechanism.

exercises full control of its platform infrastructure. The infrastructure layer can be a dominant layer in some platforms (e.g., open-source platforms such as Android), but it is usually invisible to the SE platform's actors. While it acts as a backbone of SE platforms, the majority of infrastructural changes, if not manifested at network layer through the introduction of new features or interactions that support existing or new value units, are largely invisible to platform actors (i.e., they are not the direct source of value).

3. Data layer - The primary function of the data layer is to match supply with demand. Every platform, while to a different extent, uses data in some way. Some platforms act as data aggregates, and thus, this layer is the most dominant one (e.g., Nest or some stock/currency trading platforms). In SE platforms, this layer is usually invisible to users; however, it forms the basis for many essential platform features that depend on aggregated data (e.g., real-time availability, flexible pricing, ratings, and feedback). Furthermore, this layer flow of data and information, allowing platform owners to gain better insights into users' behavior, interactions, relationships, or transactions. These insights can serve as initial inputs for continuous innovation of the platforms (whether directly monetized or not), which is implemented through infrastructure level and usually manifested through marketplace layer (e.g., new feature, new interactions or improvement to the existing interactions, complementary or new value units, or continuous improvement to quality and platform governance).

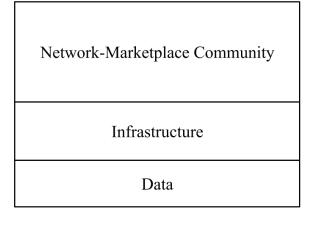


Figure 3. Simplified architectural framework of a platform (adapted from Choudary et al., 2015, p.61)

Any platform functions across all three layers; however, "the degree to which each layer dominates may vary" (Choudary et al., 2015, p.62). This degree of variation gives platforms their unique configuration. While this is a rather static taxonomical view of the platforms, it also acknowledges that the 'thickness' and dominance of these layers change over time and they are in themselves subjects to innovation and ongoing coevolution (Choudary et al., 2015). So far, the taxonomy of digital platforms developed by scholars has mainly been grounded in their distinct features (Diniz, Siqueira & van Heck, 2019; Kazan et al., 2018; Vendrell-Herrero, Bustinza & Gomes, 2018) rather than their commonalities (Baldwin & Woodard, 2009), leading to increasing complexity and fragmentation of scholarly literature. However, the architectural framework developed by Choudary et al. (2015) provides a long-needed unified view, which allows for better conceptual unity when studying platform-based business models. While every platform is different, these differences are a mere reflection of unique configurations of the marketplace, infrastructure, and data layers and with them related processes and activities. Lastly, all three layers are interconnected and complementary; thus, changes at one layer are manifested or can trigger consequential changes at other layers. Given the co-evolutionary nature of digital platforms, I argue that these layers are in a state of constant flux, which is manifested through ongoing cause-and-effect iterative activities that take place across these layers. Therefore, to distill their underlying regenerative mechanisms, we need to adopt a rather dynamic view of such business models.

Dynamic view of sharing economy platforms

Extant academic studies that focus on platforms and other ecosystem-based business models, predominantly build on the Industrial network theory (Ford, 2011; Möller & Halinen, 2017), and are almost entirely focused on their economic aspects (i.e., pricing) (Fu et al., 2018, Tilson et al., 2012). However, Industrial network theory has only limited ability to explain how and why platforms emerge and develop because it assumes that platforms are both exogenous and fixed (i.e., the platform owner has limited influence over other network actors and, the networks are emergent without any guidance) (Gawer, 2014). Furthermore, this theory focuses only on the dyadic buyer-seller relationship, which poses several limitations on our understanding of other roles that platform actors play (i.e., complementors, innovators, co-creators). Contrary to these assumptions, the research on network orchestration assumes that the platform owner can purposefully influence and manage the development of an ecosystem (Müller-Seitz, 2012). To a certain extent, this thesis is in agreement with both views

and argues that ecosystems are both deliberate and coevolutionary (Moore, 1996). It is the platform owner that *deliberately* develops the platform ecosystem; however, this ecosystem then continuously *coevolves* as a result of actions, relationships, and interaction between a platform owner and other actors, and among actors themselves. Arguably, it is somewhat rare that actors' roles remain static during the platform's lifecycle (Tilson et al., 2012). The existing definitions of platforms are often limited to product and technology aspects but neglect the interconnected actions of different actors within the network. For the purpose of this study, I adopt the recent definition by Perks et al. (2017, p. 107), who established the term' value platforms' to describe platforms' dynamic configuration of "multilateral set of partners that need to interact in order for a focal value proposition to materialize" (Adner, 2017, p.40).

2.4 Conclusion: Moving forward

"Sharing-economy business models connect thousands of suppliers and customers via an information and communications technology (ICT) platform that relies on the active participation of a wide range of different ecosystem stakeholders."

Laamanen et al. (2018, p.213)

While Hagiu and Wright (2015) argue that digital platforms are one of the most profitable business models, our understanding of how they work is still limited (Choudary et al., 2015; Evans & Schmalensee, 2008). This lack of understanding not only pertains to scholars, but sadly, it is manifested in practice through the high failure rate of SE platforms. (Cusumano et al., 2019; Täuscher & Kietzmann, 2017). The increasing news coverage of only successful SE platforms like Airbnb and Uber (also scholars almost exclusively use these two examples) not only demonstrates the power and value that platform-based BMs have but also indirectly suggests that designing and scaling these business models is somehow easy (Chasin et al., 2018b). This is very far away from the truth (Tiwana, 2014). For instance, Cusumano et al. (2019) identified that from "various sharing economy platforms that emerged in the 2010s, many collapsed within 2-3 years" (p.8), and some of those that survived have rather 'problematic business model (e.g., Twitter, Uber).' The bigger these businesses are becoming, the more money they are loosing. Furthermore, Staykova and Damsgaard (2015) suggest that

platform-based business models can be designed, implemented, and operated in numerous ways (i.e., having different configurations across the three architectural layers), which essentially impacts their profitability and lifespan. Therefore, it is not a matter of 'what' business model firm adapts but rather of 'how' this model is implemented and managed that determines its long-term success (Barbu et al., 2018). SE platforms can be based on several different revenue models (Evans, 2013; Tiwana, 2014) and their suitability depends on how well a particular revenue model is aligned with the overall value proposition and corresponding value delivery mechanisms of this platform (i.e., the balance between value creation and value capture). The choice and development of revenue models are further influenced by costs and strategies for onboarding multiple users, and for managing scalability and liquidity (Evans, 2013) that are unique to platform-based BMs. According to Parker, Van Alstyne, and Choudary (2016), a majority of the well-designed platforms create far more value for their stakeholders than these platforms can capture, which often contributes to their short lifespans. As argued by Bock and George (2018, p. 80), "capturing value is often much more difficult than creating it." Essentially, the concept of value creation and capture is central to every business model. Chesbrough (2007) summarises this rather well by postulating that a "business model performs two important functions: It creates value, and it captures a portion of that value" (p.22). Therefore, to understand how to implement, manage and innovate SE platforms, besides understanding their unique architecture (Kazan et al., 2018), it is imperative to comprehend how these ecosystem-based business models create and capture value over time. By drawing upon extant literature on the business model and business model innovation in the following chapter, I aim to provide a necessary primer for establishing the conceptual basis for such understanding. Importantly, in Chapter 3 (Theoretical background), I argue that to articulate how the SE platforms work, we need to move beyond the static surface-level view of business models (the what) and instead search for, and examine their underlying value-driving mechanisms (the how and why) from a dynamic perspective. It is precisely this static firm-centric view that is widely adopted and advocated by many scholars and practitioners that derails our attention from further exploring its unique characteristics and instead relying on the 'safety nets' of the popular and generally accepted frameworks. For instance, Gassmann et al. (2014) argue that business models of almost 90% of the firms globally can be described by one, or through a combination of the 55 different business model archetypes. This probes an immediate question; why some organizations prosper, and others, even within the same industry, are nearing bankruptcy when they all follow the same business model archetype? The short answer is that different archetypes only describe the surface level of particular BMs without disclosing their underlying value-driving mechanisms that could explain how they

work and evolve. This 'surface' approach only tells us about the visible and static parts of these business models. For instance, in the case of SE platforms it usually refers to the structure of the marketplace-network layer and its features, but misses out the other two layers that essentially govern this marketplace (not to mention the constant interactions and consequential iterations among these levels). As will be further corroborated in the following chapter, this approach has other limitations, mainly residing in its assumption that value flows linearly. While this holds for traditional 'pipeline-based' business models, the value in platform-based BMs is always co-created through complex interactions that take place within the broader network (Choudary et al., 2015; Van Alstyne et al., 2016). The popularized linear and often static approach (i.e., archetypes and building blocks) tells us little about interactions, relationships, and multidirectional value-flows that are characteristic of platforms. However, understanding these is critical because platforms "create value by connecting and organizing transactions producing themselves [...and] their relative value rises with the number of actors – users and suppliers - joining their ecosystem" (Acquier et al., 2017, p.5). Thus platforms need to be viewed as dynamic systems where processes for value creation and capture continuously evolve (Kohler, 2015; Moser & Gassmann, 2016; Vargo & Lusch, 2011). However, the dynamic relationship between the value capture and value creation within networks is yet not well understood, and more work is needed in this area (Adegbesan & Higgins, 2011; Dhanaraj & Parkhe, 2006; Reypens et al., 2016). Therefore, I further draw on stakeholder theory (Agle et al., 2008; Freeman, 1984; Freeman, Harrison & Wicks, 2007) to provide theoretical lens through which we can attempt to understand not only how value is co-created within the ecosystem but also the dynamic roles played by its members (i.e., how these roles change in time and how this impacts the broader ecosystem). This theoretical lens (sensitizing concept), together with the literature on BM and BMI, forms the necessary vantage point from which I embark on further empirical exploration to flesh out the value-driving mechanisms of SE platforms.

CHAPTER 3: Theoretical Background

3. Introduction: A conceptual primer

"The business model concept is crucial in this [sharing economy] context since it is the emergence of new, digitally enabled, web-based business models that drives the diffusion of collaborative consumption."

Dreyer et al. (2017, p.90)

The majority of companies are capable of developing new technologies; however, their abilities to innovate their business model to integrate, use, and profit from these technologies are limited (Chesbrough, 2010). In essence, the success of a firm's offering is determined by the business model used for its commercialization. Chesbrough (2010, p.358) postulates that "the same idea or technology taken to market through two different business models will yield two different economic outcomes." Therefore, it should not come as a surprise then that the common denominator of great success but also alarmingly high failure rates among organizations adapting to the sharing economy paradigm - both startups and incumbents - is their business model. On the surface, the business models of thriving, as well as withering SE organizations, appear to be very similar. Many are indeed adopting the same business model archetype. As argued in chapter 2 Research context, the business models of almost 90 percent of companies globally can be distilled down to 55 different business model archetypes out of which, nearly one quarter is to some extent based on digital platforms or embedded in principles of sharing economy (Gassmann et al., 2014). This implies that there must be thousands of SE organizations out there that follow the same general business model pattern to create and capture value. However, they do so with a varied level of success, usually achieving diametrically different results. Therefore, the success of one organization cannot be predetermined solely by the business model archetype it adopts. To understand what makes the particular business model more successful in one organization, but less so in another, we have to look under their 'hood.' Studying business models from the surface level is like trying to decipher the mechanics of a car by solely analyzing its exterior. For instance, knowing the car's size, color, number, and type of body parts provides a little value in understanding how it works — not mentioning the premature generalizations that could lead to bizarre conclusions such as that the red hatchbacks are quicker than their blue counterparts. As risible as this might sound, these surface-level generalizations resemble, to a large extent, what has been happening in the business model research field. However, to understand how business models work, we need to go beyond their exteriors and explore their working parts. Admittedly, this is easier said than done, as it requires us to move from perceiving and studying business models as static and empirically-observable structures to the more abstract conceptualization of their dynamic nature (i.e., exploring their underlying regenerative mechanisms). Put another way; we need to shift our attention from 'what' business models to implement to 'how' to operationalize, manage, and innovate these business models to reach the desired scale. Therefore, throughout this chapter, while still engaging in a brief discussion of the business model construct as such (i.e., what is a business model), my main aim, by drawing upon relevant literature and theory, is to establish a loose theoretical boundaries that can guide the further empirical exploration of how the ecosystem-based business models in SE unfold over time. For this reason, I adduce from extant discourses in BMI literature, which to a certain extent, considers business models from a dynamic perspective (i.e., innovation is regarded as a continuous activity rather than an episodic change) and thus, provides the necessary conceptual primer for this study.

Furthermore, to understand the underlying mechanism of SE platform-based business models, we need to appraise the BMI literature in the light of SE's core tenets (established and discussed in Chapter 2), in which these business models are inherently embedded. This leads to several implications that, besides directly impacting the extent of application of the discussed BMI literature, also influenced the choice of theoretical lens adopted in the thesis. Therefore, in line with the basic premise of sharing economy, I consider SE platforms to be coevolutionary (they shape and are shaped by their members and interactions among them), ongoing activity (always in a constant flux - the state of becoming) that spans organizational boundaries (value is co-created through the interaction of multiple diverse stakeholders within the broader ecosystem). This led to an adoption of the stakeholder theory (Freeman, 1984) as a theoretical lens through which this phenomenon was studied. Stakeholder theory revolves around the concept of 'value' and how this value is 'jointly' created by all stakeholders within a network

(Freeman, 1984; Freeman et al., 2010). Due to the continuous changes in power, influence, interests or behavior of stakeholders (Harrison et al., 2007), the stakeholder theory considers these networks to be dynamic (Fassin, 2008, 2010; Lamberg, Pajunen, Parvinen, & Savage, 2008; Lamberg, Savage, & Pajunen, 2003) Therefore, stakeholder theory provides a robust yet flexible theoretical frame for studying how the business models innovation unfolds at the ecosystem level. Based on the conceptualization of BMI and the theoretical implications of stakeholder theory, I argue that temporality is an intrinsic property of SE platforms and thus, it is crucial to adopt a processual view (as opposed to a variance-based approach) in studying these ecosystem-based business models. To this end, in this thesis, I build upon the works of Langley (1999, 2007) and Pettigrew (1997). Adopting a processual approach is necessary for understanding the emergent nature of SE platforms and their underlying mechanisms. Under this view, they are considered to be dynamic structures that are always in the process of becoming (Pettigrew, 1997). By studying the core events and how they unfolded over time, and by exploring the changing relationships between structures and entities - that exists at the ecosystem level (i.e., systems perspective), we can attempt to conceptualize the underlying mechanisms that have causal powers over these events and structures (Mingers, 2016; Sayer, 1992). While this leads to significant ontological and epistemological implications, these are only introduced and further elaborated in Chapter 4 Methodology to maintain the conceptual clarity of this chapter.

Aim and structure of the chapter

This chapter provides a necessary conceptual and theoretical primer to guide further empirical exploration of underlying value-driving mechanisms of SE platforms. Given the phenomenon-driven research and abductive research strategy¹⁵ adopted in this thesis, the primary aim of this chapter is not to locate a phenomenon within the discussed literature or construct gaps in extant theories (Schwarz & Stensaker, 2016). Instead, its role is to position the phenomenon of SE platforms relative to the existing discourses in literature while using the theoretical lens of stakeholder theory to further flesh out this phenomenon.

The rest of the chapter is divided into two main parts and structured as follows. The first part of the chapter provides a concise overview of the extant literature on business models

_

¹⁵ While implications of phenomenon driven research and other core methodological considerations were briefly introduced in chapter 1 (Introduction to the thesis), the thorough discussion is provided in Chapter 4 Methodology.

and business model innovation, covering the early developments of the research field (pre-2000) up to more contemporary contributions (post-2010). The relative recency and the somewhat emerging nature of this research field are reflected in significant fragmentation and lacking conceptualization (Andreini & Bettinelli, 2017) of the BM & BMI constructs. Therefore, attempts are made to synthesize and extend its application to the context of sharing economy. Furthermore, I aim to explicate the impact of its three core tenets on our understanding and conceptualization of SE platform-based BMs. The second part of this chapter introduces the basic premises of stakeholder theory as initially proposed by Freeman (1984, 2010), and extended by later scholars (Freeman, Wicks & Parmar 2004; Freeman et al., 2007, 2010, 2018; Harrison, Freeman & Abreu, 2015). It further corroborates the concept of value, which is considered central to stakeholder theory (Freeman, 1984) while discussing stakeholders' dynamic roles, powers, and relationships within the ecosystem. The concepts underlying the stakeholder theory are critical for improving our understanding of the dynamic nature of SE platforms and the platform owner's role in orchestrating them to continuously increase their viability and attractiveness to maintain existing and attract new stakeholders.

3.1 From business models to business model innovation

"A mediocre technology [or idea] pursued with a great business model may be more valuable that a great technology exploited via a mediocre business model."

Chesbrough (2010, p. 354)

The business model as a construct exists for over sixty years (Bellman et al., 1957; Ijiri & Simon, 1964); however, only with the advent of the Internet, both practitioners (Pohle & Chapman, 2006) and academic scholars (Lambert & Davidson, 2013) started to show increasing interest in developing this construct. The early studies (between years 1990 - 2000) had adopted a rather conceptual approach using a business model as a new unit of analysis (Linz, Zimmermann & Müller-Stewens, 2017). The vast majority of these early studies (the first 'wave' of development) had been directly related to the Internet; e-business (Amit & Zott, 2001; Timmers, 1998; Magretta, 2002) and its role in the creation of new e-business models (Amberg

& Schröder, 2007). In the following period, the interest in the topic prevailed but, the researchers' attention post-2000 started to shift from conceptualization toward configuration and taxonomy of business models (Zott & Amit, 2007, 2010). In other words, studies that were emerging during this second 'wave' of development mainly focused on differences among distinct business models, exploring why some are superior to others (Foss & Saebi, 2017^{a,b}). Furthermore, in early 2000, the works of Linder and Cantrell (2001), and Mitchell and Coles (2003) were among the first to introduce the idea that the business model can be a subject to innovation itself. Scholars started building upon their work and coined the new concept business model innovation - that began to proliferate into scholarly research. While this was an essential development in the field, it took almost ten years for BMI to get a solid foothold in the extant literature (Foss & Saebi, 2017^a). However, since 2011, several hundreds of studies emerged (Andreini & Bettinelli, 2017; Foss & Saebi, 2017^{a,b}), establishing the third and last 'wave' of BMI research development, which persists until today (Foss & Saebi, 2017^a). Growing interest in the BMI during the third 'wave' is discernible throughout the literature with many journals dedicating their special issues to explore this construct; Strategic Entrepreneurship Journal (2015), R&D Management (2014), International Journal of Innovation Management (2013), Industrial Marketing Management (2013), Long Range Planning (2010, 2013), and Management and Organization Review (2018). This growth is depicted in Figure 4, which shows growth in BMI academic publications between the years 2000 and 2018.

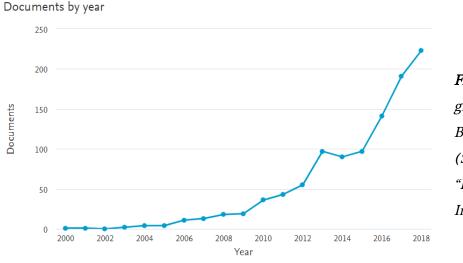


Figure 4. The growing interest in BMI construct (SOURCE: Scopus, "Business Model Innovation")

While many researchers still focus on conceptualization, taxonomy, and innovative dimensions of BMs, the contemporary research (the third 'wave') is starting to pick up momentum and leaning more and more toward transformational approaches to studying BMI (Linz et al., 2017). In other words, the researchers are slowly transitioning from asking what questions to why and how questions, which, according to Jeppesen (2005), can lead to more fruitful discussion and development of a better theory of BM and BMI. When compared to other modes of innovation, the BMI is a relatively new field of inquiry; still in need of sound conceptualization (Foss & Saebi, 2017b, 2018), and development of implementation frameworks that are relevant and practically applicable for industry practitioners (Bucherer 2011; Zott, Amit & Massa, 2011). The BMI related discussions have been dominating corporate boardrooms for well over ten years, yet, we have not seen these talks to materialize. For instance, the well-known study conducted by IBM in 2008 found that 98% of CEOs globally were planning to engage in business model innovation within the next three years (IBM, 2008). Many of them did indeed, as the follow up studies (IBM, 2015, 2016) revealed. According to this study, a staggering 80% of surveyed CEOs were actively engaged in BMI by exploring new and alternative business models. However, the number of companies that go ahead with the BMI implementation is alarmingly low. While many of them are aware of the need to innovate, as IBM's data shows, only some can envision how the new BMs should look, and even fewer can implement it (Bucherer 2011; Zott et al., 2011). For a while now, practitioners have been searching for road-maps, tools, or other implementation frameworks that could aid their BMI initiatives. Not only are these tools missing, but a large number of managers are still puzzled with the concept of a business model itself (Sarasvathy, 2007). This poses an immediate question; How should managers innovate their business models when they still struggle to comprehend what the business model is and what it entails? Arguably, not much has changed since the Margetta (2002, p.8) famously remarked that "the 'business model' and 'strategy' are among the most sloppily used terms in business; they are often stretched to mean everything-and end up meaning nothing. " Arguably, as will be discussed in the following section (3.2. Toward a unified construct: Defining business models), it seems that we have even further fragmented our understanding of the BM and BMI construct by ever-stretching their meaning. In the same vein, several research informants who took part in the preliminary stages of research conducted for this thesis have expressed similar concerns. One of them has voiced these particularly well by using the following analogy:

"When on the boat, you usually know where you are sailing to and how you are going to get there. You are comfortable losing sight of the shore because you can use your GPS and radar to know where you are, avoid collisions and obstacles, predict weather and maintain the right course. But, we don't have BMI radar. [While] we know where we would like to go, we are not really sure how to get there and how to maintain the right course once we have reached the point of no return [committed to the change]. How can we then know that we are doing the right thing in the right way?"

(I_(d)1; CEO, Financial Services, UK)¹⁶

When compared to other modes of innovations (i.e., product or process innovation), the empirically derived managerial frameworks and guidance on how to manage BMI are scarce in the extant literature (Venkatraman & Henderson, 2008; Bucherer, Eisert & Gassmann, 2012). Furthermore, current studies that offer these business model innovation management frameworks are often criticized for being too descriptive and usually limited in their application to a single industry (Lambert & Davidson, 2013; Souto, 2015). Lacking conceptualization, vast fragmentation, the limited understanding of BMI processes, and above all practitioners' demand for applicable BMI implementation tools further amplifies the need to solidify our understanding of BMI and develop frameworks for its implementation. In doing so, we can attain a better understanding of how SE platforms work and evolve. What follows in the upcoming sections of this chapter is to attempt the former, while the latter, concerning platform-based BMs, forms a focal point of the empirical part of this thesis (Chapter 5, 6 & 7).

_

¹⁶ All informants that took part in the preliminary study are summarized in Table 5 in chapter 4 Methodology.

3.2 Toward a unified construct: Defining platform business models

"A business model performs two important functions: It creates value, and it captures a portion of that value."

Chesbrough, (2007^a, p.22)

Paradoxically, growing scholarly interest in the BM and BMI construct, instead of leading to conceptual clarity, has led to further fragmentation of the field (Demil, Lecocq, Ricart & Zott, 2015). Distinct research streams approach BMI from different perspectives without considering and further building upon past studies that emerged from related but yet different streams (Andreini & Bettinelli, 2017). This eclectic approach to BMI, combined with a persisting marginalization of the past research from within 'competing' research streams, impede developments of commonly agreed frameworks and theories of business model innovation, which extant literature seriously/perilously lacks (Arend 2013; Zott & Amit, 2010). To a large extent, this silo approach (Arend 2013) is criticized by many in the more recent literature review studies conducted in BM and BMI research fields (e.g., Andreini & Bettinelli, 2017; Foss & Saebi, 2017a; George & Bock, 2011; Lambert & Davidson, 2013; Schneider & Spieth, 2013; Wirtz, Pistoia, Ullrich & Göttel, 2016; Zott et al., 2011). Figure 5 depicts the current fragmented landscape of the BMI research field. The structure of the diagram is borrowed from the Chemistry, and it illustrates a synthesized summary of the most recent SLRs studies in BMI field (Andreini & Bettinelli, 2017; Foss & Saebi, 2017a; Gassmann, Frankenberger & Sauer, 2016). Currently, the research into BMI can be divided into five distinct literature streams with each using different conceptual abstractions when studying BMI construct (Andreini & Bettinelli, 2017):

- 1) Entrepreneurship Business opportunities (i.e., André Cavalcante, 2013)
- 2) Strategic Management Value Creation (i.e., Zott & Amit, 2010)
- 3) Marketing Networks and Relationships (i.e., Aspara, Hietanen & Tikkanen, 2010)
- 4) Organisational Studies Activities and Configurations (i.e., Demil & Lecocq, 2010)
- 5) Practitioner Literature Business Tool (i.e., Johnson, 2010)

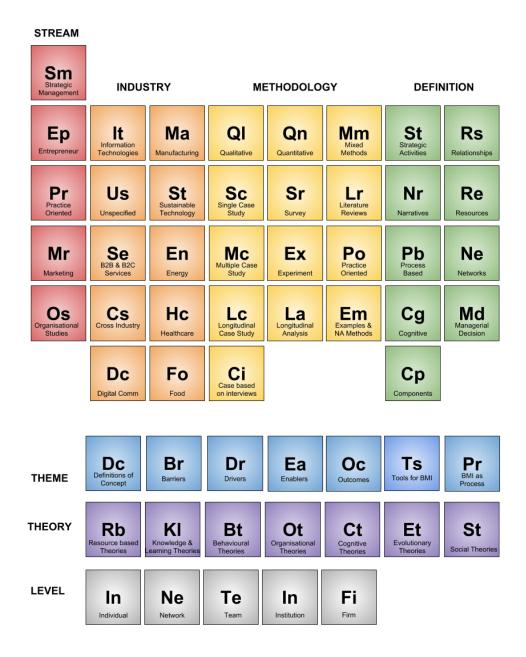


Figure 5. Business model innovation: Landscape of the current research field

Differences in definitions, levels of analysis, theoretical groundings, and critical themes among the identified literature streams suggest that conceptual discrepancies exist even within the same streams (Andreini & Bettinelli, 2017). Additionally, many contemporary contributions to the BMI field instead of synthesizing the extant conceptual and empirical literature are contributing to its further fragmentation (Foss & Saebi, 2017a; Gassmann et al., 2016). The very fact that various definitions of BMI are simultaneously in use further amplifies this problem

(Andreini & Battinelli, 2017). The conceptual abstraction of these definitions is not only influenced by the literature streams from which they emanate but also the dominant theoretical views adopted by authors and their underlying ontologies (Gassman et al., 2016). For instance, throughout most of the literature, the business model is either conceptualized as a structure (Zott & Amit, 2010; George & Bock, 2011) or as a network (Zott & Amit, 2007), while the BMI is predominantly being defined from strategic (Afuah 2003; Teece, 2010), cognitive (Aspara et al., 2013) or activity-based (Zott & Amit, 2010) perspectives.

The differences among these literature streams are well documented by Andreini and Bettinelli (2017). Therefore, instead of elaborating on these differences, in the following sections, I aim to synthesize this literature to further our understanding of how platforms unfold over time. All these streams of the literature provide an essential yet only partial understanding of the BMI. Therefore, instead of 'favoring' one stream over another and arguing its merits, I draw from multiple streams. It is evident that perspectives adopted by the identified research streams to study and conceptualize BMI reside on various ontological assumptions. However, by adopting stratified ontology in this thesis, I postulate that these different BM and BMI conceptualizations are not mutually exclusive, but instead, I consider them to describe different strata of the same reality¹⁷. While the insights they provide into BMI differ, they are, to no small extent, complementary and thus needed for developing a more holistic understanding of platforms coevolution (i.e., platforms should be viewed as wholes rather than a collection of different parts or components). To this end, I build upon studies that adopt a processual view of BMI, advocating its dynamic, complementary, and emergent nature. Considering platforms as constructs, I further draw on literature that adopts an ecosystem perspective to conceptualize the BMI. On those bases, I propose the following definition of an ecosystem-based business model, which I corroborate in the following sections:

Ecosystem-based business model (i.e., platform) is an ongoing coevolutionary process, influencing and influenced by changes in structures, relationships and interactions among actors within the broader ecosystem, orchestrated by platform owner (i.e., central actor, focal firm, central hub or ecosystem integrator) to maximize the value creation and capture opportunities for itself and all other ecosystem members.

¹⁷ To discuss ontological assumptions and their impact further in this chapter would derail the attention from its chief aim; to introduce and discuss the core concepts that form the theoretical primer for this study. The explicit connection between discussed concepts and underlying research philosophy, including detailed corroboration of its components and underlying assumptions (ontology and epistemology) are presented in Chapter 4 Methodology.

Thus, a particular business model archetype (i.e., pattern or structure) is a direct manifestation of the underlying value-driving mechanisms that, by exercising (or not exercising) their causal powers give it its perceived temporary 'structure.'

Adopting this conceptualization of platform-based BMs not only allows for synthesis, but it also opens new avenues for examining BMs and BMI from a more holistic perspective (e.g., focusing on relationships and interactions and how they shape or are shaped, by BM over time to further understand its dynamic nature). Considering the complexity and the multifaceted nature of the prosed definition, the role of the following sections is, therefore, to dissect and clarify its underlying logic, and corroborate each conceptual component (i.e., coevolution, orchestration, central actor, ecosystems) by drawing on relevant literature (BMI processes, ecosystems and networks) and theory (stakeholder theory). Lastly, core tenets of sharing economy paradigm and their impact on understanding and conceptualization of BMI are emphasized by establishing links between the discussed components of the proposed definition and these tenets.

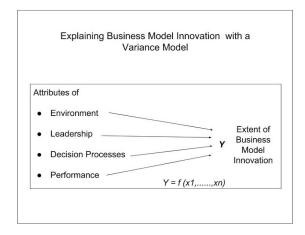
3.3 Business model innovation as a process

"The major contribution of process research [...] is to catch reality in flight, to explore the dynamic qualities of human conduct and organizational life and to embed such dynamics over time in the various layers of context in which streams of activity occur."

Pettigrew (1997, p. 347)

Santos, Spector, and Van der Heyden (2015) postulate that BMI research should be more about 'how is it being done' than 'what is being done,' to advance our understanding of this phenomenon. As argued by Ferlie and McNulty (1997), a processual approach to research is of more use and more substantial interest for practitioners. However, the majority of the contributions to BMI literature correspond to a variance-based view (or cross-sectional theorizing) (Mohr, 1982), aiming to answer 'what' questions. Many of these studies, for instance, focus on fleshing out drivers (André Cavalcante 2013; Chesbrough 2007; Ng, Ding & Yip, 2013), barriers (Chesbrough, 2010; Lange, Geppert, Saka-Helmhout & Becker-Ritterspach, 2015), outcomes (Demil & Lecocq, 2010), archetypes (Gassmann et al., 2014), antecedents

(Osiyevskyy & Dewald 2015) or patterns (Afuah, 2014; Amshoff, Dülme, Echterfeld & Gausemeier, 2015) of BMI. While 'variance' studies are beneficial for advancing this rather new and emerging research field, they "do not provide the temporally embedded accounts that enable us to understand how" BMI unfolds over time (Langley, 2007, p. 273). Arguably this ascendancy of variance view in BMI research, to a large extent, explains the growing divide between what is researched and what practitioners find valuable and useful (Alvesson & Sandberg, 2011). Furthermore, Langley (2007) argues that it is precisely the process studies that are crucial for improving our understanding of how to improve performance (i.e., how to improve the success rate of BMI implementation and scalability). However, as further argued by Langley (1999), both approaches (process and variance) are essential for advancing our knowledge because each has different strengths and weaknesses. The fundamental difference between process-theories and variance theories is that "variance theories provide explanations for phenomena in terms of relationships among dependent and independent variables (e.g., more of X and more of Y produce more of Z), [while] process theories provide explanations in terms of the sequence of events leading to an outcome (e.g., do A and then B to get C)" (Langley, 1999, p. 692). The impact of both variance and processual approach on how BMI is studied and understood is depicted in Figure 6.



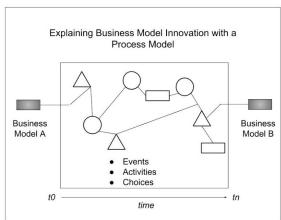


Figure 6. Implications of variance and process-based view on studying BMI (Adapted from Mohr 1982)

Growing academic and practitioner interest in BMI is evident; however, the insights into how BMI unfolds are limited (Chesbrough, 2010; McGrath 2010). Schneider and Spieth

(2013) argue that more research is needed to uncover different BMI processes and their underlying effects on the success of these initiatives. So far, scholarly understanding of BMI processes is rather vague with lacking coherent processual frameworks (Stampfl, 2015, 2016). Only recently, the studies in BMI started to a certain extent, adopt a processual view of BMI (e.g., Bucherer, 2011; Bucherer et al., 2012; Euchner & Ganguly, 2014; Frankenberger, Weiblen, Csik, & Gassmann, 2013; McGrath, 2010; Sosna, Trevinyo-Rodríguez & Velamuri, 2010; Stampfl, 2014; Teece, 2010) that is needed for understanding the dynamic nature of SE platforms. While these studies lay out important foundations for studying BMI as a process, they offer limited insights into their underlying mechanisms. In other words, these studies are based mainly on double reduction logic (Mingers, 2016) that inherently does not allow for this level of abstraction. Adopting this logic means that researchers first reduce the causal powers of entities and structures (i.e., underlying regenerative mechanisms) from the domain of the real to the domain of the actual, narrowing their focus only on events that occurred (i.e., ignoring absences). Secondly, they reduce these 'actual' events to only those that could be observed and measured empirically (i.e., reducing from the domain of the actual to the domain of the empirical)¹⁸. The issues with double reductionism are best voiced by Mingers (2016), who postulate that this approach "does no more than re-describe the data in the form of a mathematical law, with no greater concept of causality than constant conjunctions of events" (p.55). Furthermore, as argued by process scholars (Langley, 1999, 2007), business models are not static but rather unfolds over time - they are in a constant state of becoming - and thus a coherent conceptualization of time is crucial for advancing our understanding of this phenomenon (Cornelissen, 2017). To borrow from Pettigrew (1997, p. 338), a process is "a sequence of individual and collective events, activities and activities unfolding over time in context." However, only a limited number of the extant BMI process studies acknowledge the importance of time and even fewer use multiple dimensions to it, 19 which impose further limitations on our understanding of how SE platforms unfold;' how is it being done' (Santos, Spector and Van der Heyden (2015).

In the extant literature, there are two dominant views on how BMI unfolds. The first view is advocated by scholars such as Demil and Lecocq (2010) and Chesbrough (2010), who postulate that business model innovation requires an analytical approach based on thorough

¹⁸ Issues of double-reductionist logic are elaborated in Chapter 4 in which, an alternative to this approach is presented and argued while further elaborating on the domains of real, actual and empirical, and what role they play in understanding how platforms unfold over time.

¹⁹ The concept of time, its different dimensions, and their conceptualization are expanded in Chapter 4 Methodology. This chapter further discusses the role of time in processual research and in particular derives its impact on the study of BMI processes, and overall research design.

analysis. This view is supported by Bucherer (2011) and Bucherer et al. (2012), who call for a more structured and systematic approach to studying and designing BMI processes. Contrary to this view stands the more spontaneous approach advocated by McGrath (2010) and Svejenova, Planellas, and Vives (2010). Authors argue that BMI is a creative process, and as such, can benefit from a less structured and less analytical approach that resides on a simple trial and error approach (Sosna et al., 2010; André Cavalcante, 2014). Arguably, the appropriateness and value of each approach will vary according to the lifecycle of the particular business model (Frankenberger et al., 2013). Appropriateness of approach adopted is likely to be further influenced by the type of BM (André Cavalcante, Kesting & Ulhøi, 2011) or its newness (novelty) to the firm (Abdelkafi, Makhotin & Posselt, 2013). These approaches are not mutually exclusive, and to solidify our understanding of how BMI unfolds, we can draw from both. Doing so is in line with the 'ongoing and coevolutionary' conceptualization of BMs that this thesis postulate, implying that the firm's BM is influenced and shaped by other network actors over time. While this influence can be anticipated and, to a certain extent, managed (i.e., structured approach), the firm cannot fully control the actions of these actors, requiring more fluid and spontaneous approach innovating their BMs.

Dynamic view of business model innovation

As argued by Astley and Van de Ven (1983), organizations are complex, dynamic social phenomena that are in constant flux (i.e., a permanent state of becoming) and, therefore, should be studied from the dynamic perspective. Such a view allows for the incorporation of multiple levels of analysis while taking into account numerous and contingent causal processes. However, the majority of the research on organizational phenomena is rather 'static' (Hitt, Boyd & Li, 2004), following the variance-based approach. The majority of past studies consider BMI from a static perspective, concerning themselves with particular business models, their performance, drivers or outcomes (e.g., Karimi & Walter, 2016; Bock, Opsahl, George & Gann, 2012; Cucculelli & Bettinelli, 2015). Arguably, knowing that business model 'A' is generally more suitable or superior to the business model 'B' reveals almost nothing about how firms can move over time from its existing BM to the envisioned one (Langley & Tsoukas, 2010). These limitations become more troublesome, and the need for adopting a dynamic perspective more relevant (Vargo & Lusch, 2011) when attempting to study SE platforms. This is because these ecosystem-based business models are dynamic by their very nature; they are coevolutionary (Kohler, 2015; Moser & Gassmann, 2016; Maglio & Spohrer, 2013; Muzellec, Ronteau, & Lambkin, 2015). As established in Chapter 2, SE platforms continuously coevolve as a result of actions, relationships, and interactions between a platform owner and platform members, and among the members themselves. Therefore, these business models need to be viewed as "dynamic configurations of (tangible and intangible) resources that act as a foundation upon which network members co-create value through a set of specific practices" (Perks et al., 2017, p. 107). However, the existing literature on BMs and BMI is somewhat scant on explaining these dynamic configurations, and the majority of the extant studies approach BMI from a rather static perspective (Bucherer, 2011; Demil & Lecocq, 2010). It is precisely this static firm-centric view that prohibits further advancements of our understanding of how BMI unfolds (Demil & Lecocq, 2010; McGrath, 2010; Morris, Schindehutte & Allen, 2005; Sosna et al., 2010) not only with SE context but in general. While some scholars argue that BMI is not a one-off activity (Teece, 2010), and as such requires constant attention from managers (Hedman & Kalling 2003; Samavi, Yu & Topaloglou, 2009; Chesbrough, 2010), their influence over BMI field has so far been marginal. This dynamic view of BMI phenomenon is mainly advocated by the organizational scholars (e.g., Girotra & Netessine, 2013, 2014; Achtenhagen, Melin & Naldi, 2013; André Cavalcante, 2014) who view BMI as an organizational change process. However, their voices are still faint and yet to be heard in mainstream BM and BMI research streams. Despite the fact that organizations have been long-recognized as 'ever-evolving complex and open systems' (Dubois & Araujo, 2007), and an increasing number of scholars have been calling for more research to adopt this view (Langley, 2007), studies that examine organizational phenomena from dynamic perspective remain rare (not only in BM and BMI research fields but in organization and management in general). Such studies only exist on the sidelines of the still-dominant variance-based research and are only slowly gaining a foothold in mainstream organizational research.

Spanning organizational boundaries: An ecosystem perspective

As argued by Fu at al. (2018), platform-based business models exist somewhere between firm and marketplace. Their boundaries are not as definite as those of traditional firms, but equally, they are not as permeable as is characteristic for marketplaces. The basic premise of the platform business model is the infrastructure that allows multiple users to build and deliver products and services, which is similar to other marketplace-based models. However, the rules for participation and conduct (exclusivity or inclusivity of users) is more defined and controlled to better manage the competition among users, and maintain the quality of the offering. When compared to traditional linear business models, platforms are

more complex (Laamanen et al., 2018). These complexities are reflected in a continually increasing amount of relationships and their diversity. However, besides this being the main challenge, it presents boundary-spanning opportunities for co-investing, co-learning, and co-innovation that ultimately drive up the platform's value over time by being the bedrock of its exponential growth (Laamanen et al., 2018). While traditional business models are usually studied and designed at firms' level, to understand SE platforms, we need to consider them from the network or ecosystem perspective (i.e., integration and orchestration of actors that are spanning organizational and industry boundaries). (Choudary et al., 2015). However, the majority of empirical studies focused on extending our understanding of platforms marginalize or oversimplify the role of the ecosystem in which they are embedded (Shaughnessy, 2016). As argued by Anggraeni, Den Hartigh and Zegveld (2007, p.11), "the business ecosystem perspective offers a new way to obtain a holistic view of the business network and the relationships and mechanisms that are shaping it while including the roles and strategies of the individual actors that are part of these networks." Given the turbulent times characterized by quickly shifting economic, social, and technological paradigms, adopting an ecosystem perspective is no longer a matter of choice, but a necessity for devising strategies and viable business models for the future.

Kohler (2015, pp.63-64) postulate that "existing companies are under pressure to reinvent their business models as company borders are dissolving and the value creation process is changing from linear to networked, from the top-down to bottom-up, from centralized to decentralized, and from closed to open." Despite this pressure, scholars are continuing to adopt a rather atomistic view of BM and BMI, implying that BM is a sum of its essential components that exist irrespective of their environment. As such, it leads to an assumption that for organizations to innovate their BM, all they need is to modify or replace these components. This somewhat isolated and atomistic approach to BM is being adopted by many practitioners (Johnson, 2010; Osterwalder & Pigneur, 2010), creating a precarious illusion that BMI is an activity that is fully controlled by the firm.

Such thinking can partially explain why so many BMI initiatives do not deliver the expected results or even fail altogether. This is further amplified by the growing popularity and adoption of static BM and BMI implementation frameworks and tools (Girotra & Netessine, 2014; Osterwalder & Pigneur, 2010; Sinfield, Calder, McConnell & Colson, 2012) to devise and articulate ecosystem-based BMs. While these tools were designed for, and thus, are suited for mapping out challenges faced by a single organization (i.e., firm-centric view), they have little value for examining networked organizations that coevolve within the ecosystems in which they are embedded (Choudary et al., 2015). In other words, through these popular models, we

can explain the 'pipeline' businesses, but they fall short of explaining how platforms work. As argued by De Reuver et al. (2018, p.124), "competition no longer revolves around how to control the value chain but around attracting generative activities associated with a platform." Therefore, we need frameworks and tools that aid the development and management of these 'generative activities' over time. Gawer and Cusumano (2008) postulate that the ultimate goal of platforms is to create an attractive ecosystem; however, we still lack an understanding of how to design and orchestrate these ecosystems to increase their attractiveness and profitability over time.

Adopting an ecosystem view will allow to overcome the existing shortcomings (i.e., linear value chains, centralization, and firm-centric view) (Makkonen et al., 2012) because it "offers a new way to obtain a holistic view of the business network and the relationships and mechanisms that are shaping it while including the roles and strategies of the individual actors that are part of these networks" (Anggraeni et al., 2007, p. 11). Furthermore, adopting this view is crucial for understanding the SE platforms, which in their very quiddity span organizational boundaries, connecting individuals and organizations at the level of an industry in order to enable innovations or transactions among users and other market participants (Cusumano et al., 2019). Therefore, in line with other scholars, in this thesis, I argue that platform-based BM is an organization boundary-spanning constructs (Shafer, Smith, & Linder, 2005; Teece, 2010; Zott & Amit, 2008, 2010) embedded in ecosystem context (Aarikka-Stenroos & Ritala, 2017; Aarikka-Stenroos et al., 2017; Maglio & Spohrer, 2013; Makkonen et al., 2012; Muzellec et al., 2015), which constantly impacts and is impacted by other actors in this ecosystem. In essence, BM and ecosystem in which it is embedded coevolve. Thus, platforms are both deliberate and coevolutionary; while initially designed by a platform owner, they are invariably shaped by the ecosystem in which they exist regardless of whether the platform owner is actively managing this change or not. Firm's constant interaction with, and among all other actors within this ecosystem, is central to the concept of coevolution (Kohler, 2015; Moser & Gassmann, 2016; Maglio & Spohrer, 2013; Muzellec et al., 2015), which drives continuous changes in value (creation and capture), relationships and structures in firm's BM and ecosystem at large. This implies that the BMI unfolds and is manifested at the ecosystem level, and thus, to distill its underlying driving mechanisms adopting an ecosystem perspective is essential. Moore (2006, p. 33) defines ecosystems as " intentional communities of economic actors whose individual business activities share in some large measure the fate of the whole community." While BMI scholars rarely adopt this perspective, the ecosystem approach has been gaining significant footholds in strategic management, innovation, and technology management research fields (Aarikka-Stenroos & Ritala, 2017; Aarikka-Stenroos et al., 2017) to accommodate the shifting paradigm (i.e., from static to dynamic view of firms, from linear to networked view of value chains, from development to co-creation of offering, and so on). Therefore, this thesis builds upon these research streams to complement the BMI literature, in which such studies are still scarce.

Moving forward: Need for theoretical grounding

Building upon extant literature on BM and BMI, this thesis conceptualizes the SE platforms as dynamic constructs (i.e., in the state of becoming) that are embedded in ecosystems context, which they shape and are shaped by it. Therefore, to abstract their underlying mechanisms, we first have to shed more light on how and why the roles of different ecosystem actors change over time and how these changes impact value creation and capture within the entire ecosystem (i.e., impact on firms business model). In this thesis, I draw such insights from stakeholder theory (Freeman, 1984) that is used to provide a theoretical grounding for the introduced conceptualization of the SE platform as a coevolutionary process embedded in an ecosystem context. Furthermore, this theory posits that due to the dynamic nature of ecosystem actors, the ecosystem in which they exist is in the constant state of flux. Lastly, this theory provides the needed insights into the role that the platform owner plays in designing and continuously orchestrating interactions and relationships between itself and other ecosystem actors and among actors themselves. Arguably, establishing such understanding is crucial for fleshing out the SE platform's driving mechanisms. Therefore, the following sections introduce the stakeholder theory and discuss its impact on our comprehension of ecosystem-based business models in general and SE platforms in particular.

3.4 Stakeholder theory

"Compared with traditional organizations, a platform connects more stakeholders and resources in a much broader scope, but with a looser organizational form. Therefore, a mechanism to maintain the platform as a whole and to drive the running and development of the platform is important."

Fu et al. (2018, p.961)

The SE platforms not only mediate transactions between diverse stakeholders (Evans, 2003, 2013; Rochet & Tirole, 2003, 2006) but also enable the creation of long-term relationships between the platform owner and stakeholders, and among stakeholders themselves. Typically, within these platforms (Hagiu, 2014; Kumar et al., 2018; Muzellec et al., 2015) diverse groups of stakeholders simultaneously create and capture value; they are co-creators of the offering (Marcos-Cuevas, Nätti, Palo & Baumann, 2016; Vargo & Lusch, 2004). Stakeholders' "participation on the platform affects the quality of the product it offers" (Evans & Schmalensee, 2010, p. 22) to other stakeholders. It is precisely these "joint actions of [stakeholders] rather than the features and attributes of products" (Perks et al., 2017, p. 106) that shape the platforms' core value units (i.e., primary offering). This active role that stakeholders play is one of the main driving forces of the platform's exponential growth when compared with traditional businesses (Grassmuck, 2012). Thus, I argue that stakeholders are central to the platform's success. Therefore, to understand how these platforms work and coevolve over time, we need to a) understand the roles that stakeholders play, b) how these roles change over time, and ultimately c) how a platform owner can orchestrate these dynamic relationships and interactions among stakeholders to leverage the overall value and attractiveness of the platform. Therefore, in the following sections, I draw on stakeholder theory (Freeman, 1984) as the sensitizing concept (Bowen, 2006) to provide a long-needed theoretical grounding for ecosystem-based BMs and to derive the methodological implications for further empirical exploration.

3.4.1 Basic premise of stakeholder theory: Value and interconnectedness

The role of stakeholder theory is to "encapsulates some very useful ideas for us to figure out how to create value for each other in a better way."

Agle et al. (2008, p.185)

Stakeholder theory revolves around the concept of value and how this value is 'jointly' created by all stakeholders within a particular ecosystem (Freeman, 1984; Freeman et al., 2010, 2018). For instance, in sharing economy, it is not only the value of a particular offering that is affected by stakeholders' interaction (Evans & Schmalensee, 2010) but, they have a direct impact on the value of the entire platform (Muzellec et al., 2015). Paradoxically, as Harrison and Wicks (2013) argue, the recent advancements in stakeholder theory take 'value' and what it constitutes for granted. The authors further criticize that the "narrowing in conceptions of value tends to obscure other critical aspects of utility relevant to a discussion of value — particularly dimensions that extend beyond profitability and economic returns" (p. 100). The majority of contributions to stakeholder theory are organization-centric and look predominantly at the mechanisms through which individual companies create value for themselves by collaborating with external parties (Friedman & Miles, 2006). However, as postulated by Agle et al. (2008, p. 166), stakeholder theory is "not a theory of the firm [but] rather it is a very simple idea about how people create value for each other," which makes it suitable as a theoretical lens for studying ecosystem-based business models.

Over the years, research on stakeholder theory started to almost neglect its fundamental philosophical underpinnings, i.e., the 'interconnectedness' of stakeholders (Freeman et al., 2007). To a large extent, research has focused on the distribution of economic value and the right to these economic outcomes by different stakeholders. In other words, extant literature mostly neglects the interaction between stakeholders. Instead, it examines the role and impact of stakeholders from an 'entitlement' perspective, i.e., what duties the firm [platform owner] has towards different stakeholders and to whom it is accountable (Donaldson & Preston, 1995; Kochan & Rubinstein, 2000). Ignoring the direct or indirect role that stakeholders play in creating value for the platform owner and one another, significantly impairs the further development of stakeholder theory (Fassin, 2012; Freeman et al., 2010;

Harrison & Wicks, 2013; Lankoski, Smith & Van Wassenhove, 2016). Hence, it is important to conceptualize the underlying processes of value creation and its distribution (Harrison et al., 2007). Harrison and Wicks (2013, p. 98) suggest evaluating the definition of value in stakeholder theory and advocate to extend this construct beyond economic gains to improve our "understanding [of] why firms succeed over time [and] why stakeholders are drawn to (and remain with) some firms." This understanding is fundamental for examining how platform owners can design and orchestrate their ecosystems to maximize their ability to maintain existing stakeholders and draw in new ones over time. Stakeholders directly influence the platform owner's ability to create and capture value for itself and all stakeholders within the platform. They are the main 'change agents,' (Muzellec et al., 2015, p.148) because interactions and changing relationships among these stakeholders impact the structure and evolution of the SE platform over time (Lappi, Haapasalo & Aaltonen, 2015), arguably, leading either to its growth or decay.

In the sharing economy, the platform owner does not own any assets and depends solely on its stakeholder network to provide access to these assets along with other relevant resources and services (Freeman et al., 2010). Harrison et al. (2007) argue that "specific types of stakeholder-based resources (e.g., knowledge of stakeholders' utility functions, a reputation for respecting shareholders) and capabilities (e.g., continuously forming updated value propositions for stakeholders) enable the firm [platform owner] to create and appropriate value" (p. 2). Arguably, the success of SE platforms depends on the ongoing attention that the platform owner pays to its stakeholders' changing needs and interests (Freeman, 1984). However, in the multi-stakeholder platforms, the platform owner is confronted with a myriad of often diametrically different needs and goals that are pursued by its diverse stakeholders. Therefore, the extent to which the platform owner can balance these goals over time often determines the overall value and attractiveness of the platform (Freeman, 1984; Letaifa, 2014).

3.4.2 Stakeholders dimensions: Toward the dynamic view

"Dynamic nature of the ecosystem is reflected through changes in stakeholder roles."

Lappi et al. (2015, p.112)

The stakeholder theory is often criticized for conceptual ambiguity (Miles, 2017; Fassin, 2008); therefore, we first need to "refine what we mean by stakeholders if the term is to prove helpful at a conceptual level and practical level" (Freeman et al., 2010, p. 208). Extant literature aims to group different stakeholders based on their common characteristics into distinct groups (Sirgy, 2002). However, this assumed homogeneity of stakeholders within particular groups inhibits our understanding of relationships not only between firm/platform owner and stakeholders (Wolfe & Putler, 2002) but also among stakeholders themselves. As argued by Fassin (2012), "different stakeholders will behave differently, even within one group of stakeholders " (p.92). Savage, Nix, Whitehead & Blair (1991) distinguished between 'primary' and 'secondary' stakeholders, while Mahoney (1994) classified stakeholders based on their involvement to active and passive. Furthermore, Miles (2017), based on an analysis of almost 900 definitions of stakeholders, identified four emerging typologies - influencers, claimants, recipients, and collaborators. The adaption of the dichotomous view when attempting to advance the stakeholder theory is prevailing (Miles, 2017). However, the "major drawback of simple typologies is their inability to assess relational attributes such as proximity, connection, co-dependence, or mutual exclusivity" (Miles, 2017, p. 441). The role of stakeholders in creating, delivering and capturing value changes over time as the issues faced by companies and the context in which they operate are changing (Friedman & Miles, 2006; Winn 2001). Therefore, they need to be studied from a dynamic perspective by adopting a processual rather than a variance-based approach to examine the underlying mechanisms that drive or inhibit these changes over time.

Stakeholders play different roles within the platform, and usually their power, behavior, level of influence and interactions with the platform owner and with other stakeholders changes over time (Harrison et al., 2007; Lappi et al., 2015; Sueli dos Santos & De Domenico, 2015). The importance and influence of different stakeholders often depend on the lifecycle phase at which the platform is at the given time (Jawahar & McLaughlin, 2001), which leads to continually changing stakeholder dimensions (Täuscher & Kietzmann, 2017). Reypens et al.

(2016, p.47) summarize this well by postulating that:

"due to varying stakeholder dimensions, value co-creation takes place in a broad and complex system of stakeholders who hold different positions. The higher the number and diversity of stakeholders, the more these positions differ, thereby influencing the value space in which stakeholders participate, and value co-creation takes place."

As a result, this dynamic nature of platforms, continuously increasing number and diversity of stakeholders combined with their changing needs, powers and interests creates significant orchestration challenges for the platform owner (Nambisan & Sawhney, 2011; Powell & Swart, 2010).

3.4.3 Orchestrating co-creation in stakeholder networks

"Platforms create value by facilitating interactions between external producers and consumers [...therefore,] the emphasis shifts from dictating processes to persuading participants, and ecosystem governance becomes an essential skill."

Van Alstyne et al. (2016, p.5)

The business ecosystem as a concept originated from value networks (Normann & Ramirez, 1993) and was introduced and further conceptualized by Moore (1993, 1996, 1998). Moore (1996) postulates that in business ecosystems value does not follow a linear pattern as it is characteristic of traditional value chains. Instead, this value is jointly co-created through interaction among multiple individuals or organizations. Alves, Fernandes, and Raposo (2016, p.1627) argue that "co-creation occurs whenever the resources of one system integrate with those available in other service systems." Therefore, the value is "co-created in the interaction between customers, sellers, and other actors" within the platform or a broader ecosystem (Marcos-Cuevas et al., 2016, p.97). However, the processes and structures of value co-creation are yet not well documented within the literature (Corsaro et al., 2012) and, several authors call for more research into value co-creation among multiple stakeholders at the network level (Reypens et al., 2016). As further argued by Reypens et al. (2016, p.41), co-creation requires

"coordination of stakeholders and their activities," which, within SE platforms, is usually undertaken by the platform owner. Therefore, the platform owner is considered to be a facilitator of the platform and, as such, is responsible for designing and orchestrating interactions among multiple heterogeneous stakeholders within this platform ecosystem (Constantiou et al., 2017). Given the dynamic nature of SE platforms, platform owner needs to be able to continuously innovate these interactions to maximize the perceived value of its platform to attract new and maintain its existing stakeholders (Geissinger, Laurell & Sandström, 2018; Helfat & Raubitschek, 2018: Iansiti & Levien, 2004; Van Alstyne et al., 2016). This is usually supported by technology and rich data (Gawer & Cusumano, 2002), development and enforcement of rules for stakeholder participation, and establishment of governing principles for particular interactions (Teece, 2017).

The role of the central actor (also referred to as an ecosystem integrator, hub firm, or network orchestrator) in network development is becoming increasingly important (Thomas, Autio, & Gann, 2014). Growing attention that is paid to the central actor is due to the shifting focus from firm-centric innovation to network-centric innovation (Nambisan & Sawhney, 2011), where the central actor plays a critical role in orchestrating interactions among diverse stakeholders. Therefore, in the platform ecosystem, it is the platform owner who assumes the role of a central actor. Despite its growing importance, the existing studies neglect or marginalize the central actor's role in orchestrating these networks and, instead, focus on mechanisms through which diverse stakeholders gain financial benefits and appropriate value within such networks (Nambisan & Sawhney, 2011). The existing literature has been significantly influenced by industrial network theory (Ford, 2011; Möller & Halinen, 2017), which argues that the central actor has limited influence over the network members and, the networks are emergent without any guidance. Contradictory to this assumption, the research on network orchestration assumes that the central actor can purposefully influence and manage the development of a value network (Müller-Seitz, 2012). To a certain extent, this thesis agrees with both views and argues that the SE platform is both deliberate and coevolutionary (Moore, 1996). It is essentially the platform owner that deliberately develops the platform (i.e., processes and activities); however, this platform then continuously coevolves as a result of ongoing actions, relationships, and interactions between the platform owner and its stakeholders, and among stakeholders themselves. While the 'coevolution' requires the platform owner to grant some control over the platform to stakeholders (Wind, Fung, & Fung, 2009), the platform owner remains responsible for developing and orchestrating all core processes and interactions that contribute to value creation and value capture within this platform (e.g., giving up some control in marketplace/network layer but maintain full control of infrastructure and data layers). Dhanaraj and Parkhe (2006, p. 659) define network orchestration as "the set of deliberate, purposeful actions undertaken by the hub firm [platform owner] as it seeks to create value (expand the pie) and extract value (gain a larger slice of the pie) from the network." In their theoretical article, the authors propose that to create and capture value from the stakeholder network, the central actor, needs to ensure knowledge mobility. The knowledge mobility will function effectively in instances when the central actor is willing to provide and can access the knowledge residing at other members of the ecosystem, learn from them, and share those learnings within the broader network (Dhanaraj & Parkhe, 2006). Another important orchestration task is to facilitate ecosystem stability by trying to avoid the rise of competitive pressures among members by, for example, creating more value for a particular group of stakeholders. To achieve this, the central actor can focus on building much stronger ties with stakeholders through multiplexity – increasing the number of joint projects (Dhanaraj & Parkhe, 2006; Kenis & Knoke, 2002). In sharing economy, for multi-stakeholder platforms to be viable, not only for the platform owner but, for all stakeholders, the platform owner needs to attain the critical mass (Cusumano & Gawer, 2002; Evans & Schmalensee, 2010). Given the multifaceted nature of the platform, the right timing of stakeholder onboarding and integration is essential to avoid an imbalance between supply and demand.

Kumar et al. (2018) argue that the central actor's long-term success depends on its ability to acquire, retain, and win back profitable stakeholders. Each stakeholder has a 'customer-like power' to join or not to join the platform (Harrison & Wicks, 2013, p. 103). Therefore, the central actor needs to draw in these stakeholders by focusing on establishing business relationships that are mutually beneficial for all network actors (Gawer & Cusumano, 2014). Visnjic, Neely, Cennamo, and Visnjic (2016) argue that for the central actor, it is imperative to establish an ecosystem that promotes participation and innovation by diverse stakeholders. As this ecosystem grows, the central actor faces an increasing number of orchestration challenges related to value creation and capture for its stakeholders (Perks et al., 2017). A growing multitude and diversity of stakeholders make this process somewhat challenging because the central actor needs to be able to continuously demonstrate value for all stakeholders within the network (Paquin & Howard-Grenville, 2013). In other words, the central actor needs to ensure that "the value creation and capture processes continuously evolve" (Kohler, 2015, p.81).

According to Freeman et al. (2010, p. 41), "many stakeholder theorists have focused on the inherent conflict between stakeholder interests and, in doing so, they have forgotten that stakeholder interests are also joint." Therefore, instead of being fixated on differences among the stakeholders, Harrison et al. (2015, p. 865) call for more research into examining and

establishing 'overlapping interests of various stakeholders' that could lead to more effective stakeholder management strategies. In this thesis, I argue that it is precisely the role of the platform owner to establish these joint interests, reinforce, and leverage them over time to continuously demonstrate value to all stakeholders within the platform and thus increase its value and attractiveness over time.

3.5 Summary and implications

The impact that platform-based businesses have on traditional organizations is often detrimental. While traditional companies "create value by controlling a linear series of activities, [adopting] the classic value-chain model" (Van Alstyne et al., 2016, p.5) platforms' competitive advantage revolves around its ability to leverage and orchestrate resources of its members, rather than aggregating them internally. Despite this fundamental difference, scholars continue conceptualizing them by using the popular business model frameworks and tools without realizing their shortcomings. While these tools are suited for mapping out challenges faced by a traditional organization (i.e., firm-centric view), they are of limited use in examining networked organizations (i.e., platforms and innovation networks) that coevolve within the ecosystems in which they are embedded. While these static tools shed more light on what platforms are (i.e., structure, taxonomy, archetypes), their contribution to our understanding of how they work is minimal. This lack of understanding not only pertains to scholars, but sadly, it is manifested in practice through high failure rates of platforms (Cusumano et al., 2019).

With the proliferation of platforms, we are witnessing "shifts from controlling to orchestrating resources, from optimizing internal processes to facilitating external interactions, and from increasing customer value to maximizing ecosystem value" (Van Alstyne et al., 2016, p.5). While many of the traditional businesses remain highly competitive, it is only until the platforms enter their industries. Companies such as Walmart, Nike, or John Deere are all well aware of this, and for a while, have been slowly transitioning from their current linear BMs to platforms. In contrast to traditional BMs, platforms allow for exponential rather than linear growth, present significantly lower risk associated with ownership, and require less financing. While traditional BMs are usually studied and designed at firm-level, to understand platforms,

we need to consider them from the ecosystem perspective (i.e., platforms span organizational and industry boundaries). Within this ecosystem, platforms continuously coevolve as a result of actions, relationships, and interaction between the platform owner and stakeholders, and among stakeholders themselves. However, this is not reflected in currently used tools and BM implementation roadmaps. And yet, scholars and practitioners employ these tools to design and innovate platforms. This could, at least partially, explain the low success rate and short lifespan of these BMs. It is precisely the influence and growing popularity of the static atomistic views that distill BMs down to the 'mix-and-match' building blocks (e.g., Nine block canvas) that derail our attention from their dynamic coevolutionary nature. The dominant static view of BMs combined with the lack of appropriate tools for developing and innovating platforms is the main obstacle to the adoption of these BMs among incumbents and one of the main reasons behind the alarmingly low success rate among start-ups.

Therefore, in this thesis, I aim to 1) map out processes and core phases through which multi-sided platforms coevolve, 2) conceptualize their underlying value-driving mechanisms, and on these bases, 3) develop platform orchestration framework for multi-sided platforms in sharing economy. However, this leads to several significant methodological considerations (e.g., processual view, critical realist ontology, abductive research logic) that are at length discussed in the following chapter.

CHAPTER 4: Methodology

Adherence to different ontologies, epistemologies, and assumptions about human nature have a direct impact on the choice of appropriate methodologies to study the phenomenon (Burrell & Morgan, 1994). As argued by Hughes and Martin (1997), it is precisely the researcher's view of reality (ontology) that is central to all other assumptions that the researcher holds. Therefore, adopting certain philosophical positions might prohibit researchers from investigating a particular phenomenon, as the relevant methodology may be inappropriate for studying such phenomenon (Weaver & Olson 2006). Only by carefully exploring the core underpinnings of the adopted ontology, the researcher can understand and refine what type of data is needed and how to interpret it. For instance, considering that stakeholder interests "are inseparably connected in a system of value creation" (Harrison & Wicks, 2013, p.103), the process of value creation cannot be studied from only one perspective (i.e., firm-stakeholder dyads), nor in a single point in time. Instead, it requires the adoption of an approach that focuses on a holistic understanding of all value mechanisms within the entire ecosystem (e.g., platform, business ecosystem, or innovation network). This very requirement rules out a deployment of quantitative-based, fixed methodologies that are often central to theory-driven research. Such an approach requires the researcher to develop hypotheses and propose causal relationships between an a priori identified variables that are all deduced from extant literature (Cooper & Schindler, 2006; Karami, Rowley, & Analoui, 2006). Doing so, one would have to assume that the social world is objective (positivist ontology), and reality is formed of law-like regularities. While data can yield empirical regularities (i.e., the primacy of epistemology results in reducing the reality down to what we can study or comprehend), to establish generative mechanisms that are driving them, we need to abstract them through disciplined imagination (Langley, 1999; Tsoukas, 1989). There is more to reality than what we can observe/experience empirically (Coryn et al., 2010).

As further argued by Meyer and Lunnay (2013, p.9), in "theory-driven research, deductive analysis requires the researcher to compare data back to the initial theoretical framework ... [therefore,] data that are not part of the initial framework are often excluded from the analysis." The 'interpretivism' attempts to "understand and explain the social world primarily from the point of view of the actors directly involved in the social process" (Burrell and Morgan, 1994, p.227) and thus, overcome the challenge of excluding data that were not

part of the initial framework. However, similar to positivism, interpretivist researchers are also prone to epistemic fallacy because they, too, reduce the reality only to what is empirically observable. Therefore, "rigid adherence to purely deductive or purely inductive strategies seems unnecessarily stultifying" (Langley, 1999, p.695). To overcome this sterile stand-off between the adoption of an inductive or deductive approach to research inquiry, an increasing number of scholars in management and organization research field advocate the use of an abductive research approach (Järvensivu & Törnroos, 2010; Meyer & Lunnay, 2013). The main difference between deduction and abduction is that deduction aims to prove how something must be, while abduction aim is to establish how something might be. It is precisely the aim of this thesis to abstract the causal mechanisms that are most likely to influence the value creation and value capture within multi-stakeholder networks. These mechanisms might not always be manifested, nor their manifestations need to be always empirically observable. To abstract these mechanisms, it is essential to adopt a methodology that allows for studying the events, processes, and activities and how they unfold in time. This very requirement essentially rules out the adoption of a variance-based approach because it is "generally static, frequently ignore complex interrelationships between explanatory variables and have great difficulty with directions of causality" (Langley & Truax, 1994, p.646). Therefore, this thesis adopts a processual approach that focuses on the "dynamic nature of contextual variables, as well as the interactions between them [...and thus,], has a better chance of identifying cause-effect chains" (Langley & Truax, 1994, p.646) in multi-stakeholder ecosystem-based business models.

4. Conducting the study:

Phenomenon-driven research

"Research that involves real organizations, that studies how something actually works, or that is motivated by the problems faced by practitioners, is valuable because of its potential for theory building and validation as well as for designing and redesigning organizations."

Daft & Lewin (1990, p.3)

This thesis follows phenomenon-driven research (PDR) where the initial phenomenon of interest - practitioners' struggle to develop, implement and scale SE platforms - is a *terminus a quo* of the empirical investigation undertaken in this research. The phenomenon was divulged, and the practical knowledge gap was further sublimated through a series of interviews with key informants (CEOs, senior managers, and investors) during the preliminary study (more details about informants and data collection are provided in Section 4.5 Research settings and data collection). The early discussions with practitioners proved invaluable for uncovering the practical gaps in knowledge, formulating research questions, and narrowing down the *focus* of this thesis. This lead to the development of the following research question that this thesis aims to answer:

How does a platform owner orchestrate a multi-sided platform's coevolution to continuously increase its attractiveness to stakeholders within the platform-ecosystem (value creation) and for itself (value capture)?

The adoption of PDR is crucial to study an "important or emerging phenomena that cannot be linked to the current theoretical frameworks" (Rynes, 2007, p.1380). This is precisely the case with SE platform-based BMs that, despite their dynamic and boundary-spanning nature, are studied and conceptualized using static and firm-centric theories (Gassmann et al., 2016). This theoretical 'straight jacket' (Schwarz & Stensaker, 2014) not only limits the span and depth of scholarly research on SE platforms but also leads to the development of incomplete or misleading frameworks and implementation guidelines for practitioners. While

we cannot attribute the high failure rate and short lifespan of SE platforms (Bock & George, 2018; Choudary et al., 2015; Cusumano et al., 2019; Täuscher & Kietzmann, 2017) to these discourses alone, we can consider them to be the amplifiers of the growing need to approach the study of SE platforms from a more practical perspective. As argued by Amis and Silk (2008), it is crucial for research to respond to and take into account requirements of those whose interests it is aiming to serve, however, focus on filling predominantly 'practical gaps' is still rare in organization and management research (Johnson, 2003; Sandberg & Alvesson, 2011). Instead, scholarly research is focusing on constructing and filling theoretical gaps, despite their relevance and value for practitioners (Alvesson & Sandberg, 2011; Kilduff, 2006; Schwarz & Stensaker, 2014, 2016). Alvesson and Sandberg (2011) criticize this process of 'gap-spotting' because "the assumptions underlying existing literature, for the most part, remain unchallenged in the formulation of research questions " (p.247). In other words, management scholars are overly devoted to contributing to existing theory (Hambrick, 2007), which on the one hand, creates marginal contributions to extant theories but, on the other, inhibits the development of novel theories and rich accounts of intriguing phenomena.

Furthermore, Alvesson and Sandberg (2013) postulate that management scholars focus too narrowly on theory per se instead of its underlying mechanisms, application to practice, and explanatory powers. According to Alvesson and Sandberg (2011, p. 251), this approach has been seen by many editors of leading academic journals as a "disturbing problem in management studies." As argued by Kilduff (2006), a better theory can be constructed by filling gaps in our understanding of the real-world phenomena, not by focusing on the gaps derived from the extant literature. This approach is particularly troublesome when research is centered around new and emerging phenomenon embedded in changing paradigms such as sharing economy. Rather than trying to fit this emerging phenomenon into the existing conceptual frameworks, researchers should aim to "produce ideas outside the conceptual boxes of the past" (Daft & Lewin, 1990, p.6). However, many scholars, instead of developing new and advancing emerging theories, espouse a "perpetual advancement of established and favored theories" (Schwarz & Stensaker, 2014, p.481). This 'save' choice of producing a theoretical contribution and getting their work published is increasing the quantity but not necessarily the quality and relevance of academic outputs for practitioners (Davis, 2006; Parker, 2018).

Closing the relevance gap

Due to the fixation and over-emphasis on established and popular theories, academic research instead of leading the field of organization and management research lags behind the practitioners. However, this is not a contemporary notion. The gap between what practitioners are interested in and what academics investigate has been dilating for the past forty years (Cummings 1983; Daft & Lewin, 1990; Davenport & Markus, 1999; Miner, 1984; Susman & Evered, 1978). The impact of this divide is probably best illustrated by Daft and Lewin's (1990, p.l) remark that "the body of knowledge published in academic journals has practically no audience in business or government." Many scholars argue that since the 1980s, the applicability of academic research for practitioners has been on the continuous decline (Daft & Lewin, 1990; Hitt & Greer, 2012; Parker, 2018; Rynes, Bartunek & Daft, 2001; Starkey & Madan, 2001). One of the main reasons for this diminution is the fact that the field of organizational studies is dominated by the 'normal science' mindset (i.e., foundationalism). This leads to research studies being limited to a small number of conceptual groundings that, on the one hand, can produce research at a faster pace, but contributions "are less likely to lead to fundamental new insight" (Daft & Lewin, 1990, p. 3). To start closing this 'relevance gap,' scholars suggest using real problems as an input for research inquiry (Amis & Silk, 2008; Davies, 2006; Kharuna, 2010; Van de Ven, 2007). This phenomenon, rather than a theory-driven approach, can not only contribute to bridging this gap but also lead to novel and unique insights. The key differences between these two research approaches are summarized in Table 3. The phenomenon-driven research (PDR) is not new, and as noted by Schwarz and Stansaker (2016, p. 247), PDR is at the heart of classic works of great management thinkers such as Barnard, Taylor, Fayol, Roethlisberger, or Dickson. The need for more PDR studies is being communicated by many editors of leading journals (Vermeulen, 2007; Fendt, Kaminska-Labbé & Sachs, 2008; Bartunek, 2007) such as Journal of Management (editorial by Feldman, 2004), Long Range Planning (editorials by Baden-Fuller, 2008; Grant, 2012) and Academy of Management (editorial by George, 2014). Growing interest and importance of PDR is demonstrated by the establishment of the Academy of Management Discoveries journal that was founded in 2015 in response to the overly theory-focused research (editorial by Van de Ven et al., 2015).

	Theory-driven research	Phenomenon-driven research
Aim of research	Contribute to a specific (and often preexisting) theory	Contribute to a body of knowledge; facilitating conventional understanding
Motivation for research	Fill a theoretical gap or make a theoretical contribution; theory as knowledge	Understand a managerial or organizational phenomenon; capturing and extending knowledge
How the contribution is made	By creating or developing construct-to-construct linkages	By mapping (new) constructs on to a phenomenon
The role of theory	Using existing theory to build a new theory or enhance current theories	Using empirical data to position or build theory. Eclectically drawing on and integrating multiple theories to describe and explain the phenomenon
Primary target audience	Academics	Academics and practitioners
Research output	Incremental advancements to existing theory	Radical advancement of current knowledge through the development of new theories or ideas. Also allows for extension and new combinations of existing theories

Table 3. Comparison of Theory-driven and Phenomenon-driven research (Adapted from Schwarz & Stensaker, 2014, p.486)

The PDR can be defined as "a problem-centered orientation to research, focused on capturing, documenting, and conceptualizing organizational and managerial phenomena of interest" (Schwarz & Stansaker, 2016, p. 245-6). The point of departure when conducting PDR is a phenomenon that is identified before or during the fieldwork (Schwarz & Stensaker, 2016). The PDR approach to identifying and shaping research questions and carrying out the research influenced many of the seminal works in the organization and management research field (Smith & Hitt, 2005; Bartlett & Ghoshal, 1989, 1992, 2002; Eisenhardt & Graebner, 2007; Lavie, 2006). The phenomenon is not always tied to the gaps in theory or extant literature but rather, describes an 'empirical puzzle' (Schwarz & Stensaker, 2016). For instance, by observing the fast growth of SE platforms, I grew curious to understand why some companies adopting this model are incredibly successful, while others are quick to fail. However, the PDR approach is not an excuse to avoid theory. Quite the contrary, a theory is integral to this approach. As argued by Schwarz and Stensaker (2016, p. 256), "PDR researchers need to explain very

carefully how they invoke and make use of theory [because], the PDR is not atheoretical but merely uses theory differently." The main difference is that theory in PDR is not used to guide researchers in establishing the research question, but instead, it is used to frame and narrow down the research question that emerged from the observation of the 'real' phenomenon (Schwarz & Stensaker, 2016). In this thesis, for instance, the BM and BMI literature combined with stakeholder theory, ecosystem theory and network orchestration theory provided the indispensable primer and a loose theoretical frame for studying SE platforms as a coevolutionary process embedded in ecosystem context in which they create and capture value through the orchestration of stakeholders' resources and capabilities. In essence, I use the theory to position the phenomenon of SE platforms relative to the existing discourses in literature and to further flesh out the phenomenon.

Aim and structure of the chapter

As identified by Von Krogh, Rossi-Lamastra, and Haefliger (2012), there is not only a growing need for phenomenon-driven research but also for guidelines on how to design and conduct PDR. However, Ryan et al. (2012) put forward a tenable argument for grounding PDR process-based studies in critical realism (CR) research paradigm to provide a practical solution for carrying out such studies. Therefore, in this thesis, in addition to building on seminal works of Sayer (1992), Bhaskar (1978, 2008, 2013), Collier (1994), and Mingers (2016) who lay out the foundations of critical realism, I draw upon practical guidelines and recommendations on how to integrate these principles into the organizational research that were developed and further advanced by Easton (2002, 2010). I elaborate on these in the following sections. The rest of the chapter is structured as follows. The first part introduces the processual view that allows for the in-depth study of the phenomenon in the context and time (i.e., studying events, entities, and changing structures). However, to understand the underlying mechanisms that cause these events (or lack thereof), we need to assume a stratified ontology, which leads to the choice of critical realism as an overarching research paradigm. This is followed by a discussion on critical realism, in particular, its ontological and epistemological assumptions. Lastly, in the remaining sections of this chapter, I introduce and elaborate on research methods (longitudinal single case study), a research strategy (abduction), and data collection and analysis.

4.1 Processual research: Implications for research design

"Social reality is not a steady-state [but] it is a dynamic process [that] occurs rather than merely exists, [therefore] human conduct is perpetually in a process of becoming."

(Pettigrew, 1997, p.338)

While there is a large number of resources for researchers adopting a variance-based approach in their research (e.g., constructing typologies or testing existing theories), this is not the case for process-based research where generally accepted methodologies and guidelines on designing and analyzing such research are still rare (Van de Ven & Hubert, 1990; Van de Ven & Poole, 2005; Sminia, 2009). Lowe and Rod (2018) summarized the reasons for processual research being under-represented in the literature by stating the following:

[...] it is a difficult concept to get one's head around and therefore, probably scares both researchers and reviewers/editors off. The dominant structure-based position entails the position that phenomena have underlying fixed causes accessible through experience using empirical methods by centered subjects able to take outside, objective assessment. Those who subscribe to this perspective are conditioned into cause and effect reasoning but they are not fully conscious of this habitus. Thus, anything outside of their mechanistic metaphor suffers auto resistance/ rejection as a consequence of cognitive dissonance. The trouble is that the alternative, process-oriented paradigm is more complex and non-mechanistic, characterized by multiple truths in multiple contexts all evolving and rife with a paradox – which makes it difficult/impossible to translate into the machine metaphor (p. 163).

Despite this unfortunate under-representation of process-oriented studies in literature, the seminal works of Andrew Pettigrew (1997), Andrew Van de Ven (Van de Ven, 1992; Van de Ven & Poole 1995, 2005), and Ann Langley (1999, 2007) lay the necessary foundations for conducting processual research in organizations. Their contributions offer both theoretical and methodological guidance for building theory from processual data that is assiduous yet flexible.

Adopting processual view in research requires "considering phenomena dynamically – in terms of movement, activity, events, change and temporal evolution [of] how and why things - people, organizations, strategies, environments - change, act and evolve over time" (Langley, 2007, p.271). Borrowing from Pettigrew (1997, p. 338), a process is "a sequence of individual and collective events, activities and activities unfolding over time in context." As can be understood from Pettigrew's (1997) definition of processes, the 'individual and collective' implies that studying processes requires integration of multiple levels of analysis rather than studying them in isolation - i.e., considering these processes to be part of a networked system not a standalone structures or events (Halinen, Medlin & Törnroos, 2012). It is difficult to draw a line between different levels because of their intertwined nature (Halinen et al., 2012; Langley, 1999). As suggested by Pettigrew (1997), the events are taking place in certain 'sequence,' which adds further complexity to singling out or even distinguishing different levels of analysis. For instance, while a particular event takes place on an individual level (e.g., joining, interacting or contributing to the marketplace layer of the SE platform), it often impacts (and is impacted by) other levels (e.g., changes to infrastructure or data layers of the platform). In essence, the sequence of events does not have to follow a linear logic. They usually flow iteratively - back and forth - among multiple levels. Lastly, when examining the final part of the process definition put forward by Pettigrew (1997), the word 'unfolding' is critical in understanding the coevolutionary processes through which the SE platform is shaped over time. The very definition of the word unfolding, implicitly demands that all processes are placed and studied in time, however, as will be discussed in the later sections, time exists in different forms (i.e., conceptualizations) that to some extent need to be integrated into processual research design (Quintens & Matthyssens, 2010).

Real-time vs retrospective study of processes

According to Langley (2007), there are two main vantage points from which to study processes. While the first approach is focused on studying historical accounts that led to the present situation (retrospective processual research), the second approach takes a present situation as a point of departure intending to track organizational change processes into the future (real-time processual research). Usually, in the complex network-level studies, "the researcher is often obliged to combine historical data collected through the analysis of documents and retrospective interviews with current data collected in real-time" (Langley,1999, p. 693). Due to the dynamic and boundary-spanning nature of SE platforms, it was essential to adopt a combination of these approaches (Langley, 1999) to establish a particular sequence of

activities that were taking place during the four year period during which the platform of the case company - HeadBox -was coevolving. The retrospective approach was mainly used to map out the inception of the SE platform through its launch and the first year of operation. The real-time approach was focused on examining how this platform unfolded in time - following its full commercial launch - until reaching the desired scale and profitability (i.e., internationalizing the platform). I elaborate on data collection and research settings in section 4.5 and, detailed case description that maps these change processes, is presented in chapter 5 Findings.

Furthermore, Halinen et al. (2012) identify three distinct types of processual research. They classify them based on the different conceptualization of time that is dominant in each type; 1) Flow Mapping, 2) Sequential Mapping, and 3) Point Mapping. This study corresponds to the Sequential Mapping process research in which "one or several periods can be chosen for data collection, and all these may involve both real-time and retrospective inquiry" (Halinen et al., 2012, p.219).

Conceptualization of time in processual research

Adopting a processual view requires researchers to define the sequence in which events, actions, and activities unfold over time (Van de Ven, 1992; Pettigrew, 1992, 1997; Langley, Smallman, Tsoukas & Van de Ven, 2013). Therefore, time is a crucial dimension in processual research (Cornelissen, 2017). However, it is often neglected or marginalized by researchers (Pettigrew, 1992; Quintens & Matthyssens, 2010; Van de Ven & Poole, 1995). For instance, many process-focused studies in BM and BMI research fields do not take time into account. When conceptualizing these processes, they refer to different stages of development, but they often fail to establish a timeline, boundaries, time horizon, or frequency (Quintens & Matthyssens, 2010). Arguably, our understanding of how SE platforms unfold is primarily affected by our conceptualization of time (Ancona, Goodman, Lawrence, & Tushman, 2001; Ancona, Okhuysen & Perlow, 2001; Halinen et al., 2012; Halinen, Törnroos & Elo, 2013). In this thesis, I build on the work of Quintens and Matthyssens (2010), who conceptualize the time based on seven distinct dimensions. These dimensions are the timing, the duration, the frequency, the pace, divisibility, the flow, and the order. Authors advocate the integrative view of time, suggesting that each dimension needs to be considered when designing and conducting process-based research to gain a richer understanding of studied processes. Doing so can uncover "urgency of issues, critical time lags, time targets, priorities, [and] feedback loops" (Quintens & Matthyssens, 2010, p.97). However, the authors also acknowledge that some

combinations of these dimensions might not always be feasible. For example, if the researcher is examining the cyclic process phenomenon (i.e., loops), it is difficult to establish a precise start and end of these processes. These time dimensions and their impact on studying SE platforms as dynamic processes are summarized in Table 4. As articulated by Quintens and Matthyssens (2010, p. 95), these dimensions need to be "linked with each other to create a more holistic view on time." For example, the frequency at which some of the processes of platform coevolution occur becomes relevant only if time is conceptualized as a divisible construct. Furthermore, depending on whether the flow of processes is cyclical or linear, the impact they will have on our understanding of time-order will also differ significantly.

Process dimensions of time	Sub-dimensions	Key considerations for research design, data collection and analysis
Timing		When the platform inception/development/coevolution etc and the particular processes/activities within the start and finish?
	Start point –end point	Why do they start/finish?
		How are these processes experienced and how they relate to other aspects of time?
Duration		How long does it take from start to reaching endpoint for individual processes?
	Time horizon	How is this related to the time beyond the current case/context?
	Empty time	How do we have to interpret empty time in SE platform coevolution related events?
Frequency		How often do processes (all or some) (re)-appear?
	Novel –cyclical–punctuated	Can the trend be detected?
		What causes this trend?
		Are there any reiterations or not?
Pace		Can we detect a speed at which reiterations occur?
	Constant–decline –incline	What causes a change in pace?
	Constant—decime —meme	What is the consequence of the change in pace?
		Is the moment of time important?
	Time-based –event-based	Are the previous processes or events important?
		What does this imply for the research design?
Order	Monochromic-polychromic	Can/do some processes occur simultaneously or not?
	Obligatory– non-obligatory	Is there an obliged order for processes to succeed or not? How does this impact the research design?

Divisibility	Discrete-continuous	Can we divide time into measurable units or not?
		Do these units have an equal duration?
Flow	Cyclical–linear–spiral	How are knowledge /insights accumulated?
		Are some processes linearly oriented, cyclical or spiral?
	Past-present-future	What is the importance of the past, present, and future?
		How are past and future linked to the present?

Table 4. Time dimensions and their impact on studying BMI process (Adapted from Quintens & Matthyssens, 2010, p. 94)

While the adoption of a processual view of SE platform coevolution can lead to richer insights and a better understanding of this phenomenon, it also poses several methodological challenges. Suitability of different methodologies and methodological considerations for conducting processual research has been discussed intensively over the past two decades (Halinen et al., 2012). According to De Cock and Sharp (2007), many scholars who claim to adopt process view often revert to using non-process based methods. As postulated by Mingers (2003, p. 559), "method(ologies) make implicit or explicit assumptions about the nature of the world and of knowledge." Therefore, they need to be closely aligned with the underlying theory. In essence, theory and method are 'intertwined' (Langley 1999, p. 691) and, they need to support one another to mitigate constraints or incoherence (Abbott, 2001). I was able to establish this synergy by adopting a critical realist philosophy, longitudinal qualitative case method, and abductive research strategy. These are not only compatible with a processual view (Easton, 2002, 2010) but further enhance its potential to produce novel theories and insights (Ryan et al., 2012).

4.2 Research paradigm: Critical realism

"We are often unaware of (or not encouraged to articulate) our basic epistemological or ontological upbringing and assumptions. Authors who subscribe to logical positivism or empiricism may view things quite differently from those who favor hermeneutic, interpretive approaches or positions guided by postmodernism or critical theory."

Van Maanen et al. (2007, p.1146)

Whether fully articulated by researchers, every research project is influenced by beliefs and assumptions that the researchers hold "about how the world is (ontology) and how we can come to know it (epistemology)" (Easton, 2002, p. 108). The combination of these beliefs and assumptions forms the basis for a particular research paradigm (Mingers, 2003) that impacts the way we understand and interpret the social world (Blaikie, 2007, 2010). In essence, "a paradigm is thus a construct that specifies a general set of philosophical assumptions [...about] ontology (what is assumed to exist), epistemology (the nature of valid knowledge), ethics or axiology (what is valued or considered right), and methodology" (Mingers, 2003, p. 559). As established in earlier sections of this chapter, the basic premise of processual research holds that social reality is dynamic and is always in the 'process of becoming,' requiring researchers to catch this reality in flight (Pettigrew, 1997, p. 338). As postulated by Ryan et al. (2012, p. 301), "this dynamic and changing nature of social structures is inherent in the foundational critical realist conceptualizations," offering a robust yet flexible philosophical foundation for conducting process studies (Araujo & Easton, 2012; Ehret, 2013; Peters, Pressey, Vanharanta & Johnston, 2013; Ryan et al., 2012).

Adoption of critical realism

The CR provides a "distinctive methodological approach, which rejects both the naive optimism of those expecting to uncover law-like regularities from empirical data and the defeatism of those who deny any possibility of generalizing our understanding of idiosyncratic phenomena" (Blundel, 2007, p. 15). This is one of the main reasons why the adoption of CR as a philosophical framework is gaining footholds in multiple domains of social sciences (Easton, 2002, 2010; Miller & Tsang, 2011; Ryan et al., 2012). Despite being a relatively new philosophical

orientation, the growing influence of CR is evident in many diverse disciplines including marketing (Easton, 2002, 2010; Hunt, 1992), information systems (Mingers, Mutch, & Willcocks, 2013; Wikgren, 2005;), management (Fleetwood & Ackroyd, 2004), organization studies (Ackroyd & Karlsson, 2014; Delbridge & Edwards, 2013; Fairclough, 2005; Tourish, 2013), and sociology (Cruickshank, 2003; Hamlin, 2002; Sayer, 2000). This surge in popularity of CR among organization and management scholars is caused by "their growing dissatisfaction with the inherent explanatory limitations of postmodern and post-structuralist epistemologies and their grounding in a social constructionist ontology" (Reed, 2005, p.1629). As Mingers (2015, p. 321) postulates, "a large number of researchers are attracted to CR because it "promises a way out of the sterile standoff between positivism and constructivism/ interpretivism." The most comprehensive accounts of CR not, only in regards to its philosophical groundings or history but also its implications for research, can be found in the work of Sayer (1992, 2000). However, from a practical perspective, this thesis follows the approach developed by Easton (2002, 2010) and Ryan et al. (2012) who provide sound methodological guidance on conducting processual studies grounded in CR philosophy - from constructing the research to communicating and framing the findings.

To fulfill the objectives of this thesis, it is crucial to adopt a philosophical frame that promotes a rich understanding of processes - and how they unfold over time, context, and across different levels - to allow for the needed empirical abstraction of their underlying generative mechanisms. As argued by Ehret (2013, p. 320), critical realism is not a theory, but it should be instead viewed as an "under-laborer aiming to furnish researchers for the design of theories." CR's non-deterministic framework is the most suitable foundation for designing process-driven research methodologies (Ryan et al., 2012) that are aimed at understanding how structure and agency change over time. Furthermore, Blundel (2007, p. 16) postulate that CR "promote[s] a methodology based upon a search for the underlying generative mechanisms that connect different states or events, "which is crucial for understanding how SE platforms work and unfold over time (i.e., coevolve). Importantly, CR takes into account the context in which the phenomenon exists or emerges from (Sayer 2000). One of the CR's strengths is that it promotes the study of relationships between phenomena at multiple levels of analysis (Blundel, 2007; Low & Macmillan 1988). Lastly, CR considers structure and agency as separate, and this allows for understanding the SE platform as both "a causal mechanism shaping agency as well as elaboration from the interaction of agents" (Ehret, 2013, p.319). Both structure and agency are considered emergent (i.e., a process of becoming), and therefore, CR emphasizes the importance of time in studying the underlying processes and relationships (Araujo & Easton, 2012; Peters et al., 2013), which is central to processual research (Langley et al., 2013). The following sections introduce the core ontological and epistemological assumptions of CR and distill their implications for research methods and research strategies that are introduced in the later sections of this chapter.

4.2.1 Critical realist ontology: Stratification

"Critical realism interrelates ontology and epistemology. On the one hand, it posits a realist ontology, that is, the existence of a world independent of researchers' knowledge of it. On the other hand, critical realism holds to a fallibilist epistemology in which researchers' knowledge of the world is socially produced."

Miller & Tsang (2011, p. 144)

Contrary to empiricist and conventionalist-based research philosophies, CR "asserts the primacy of ontology" (Mingers, 2016, p.18). In other words, the reality is not limited to what we can see or experience (e.g., empiricist approach), it exists with or without our comprehension of it; reality is "independent of observers" but, at the same time, it is "socially constructed" (Easton, 2010, p. 120). Critical realists insert that reality is both intransitive and stratified (Bhaskar, 1978; Collier, 1994; Ehret, 2013). CR recognizes two forms of stratification. The first form is between "structures or mechanisms; the events that they generate; and the subset of events that are actually experienced" (Mingers, 2016, p.19). All these exist at different strata of reality and thus, forming the domains of the *Real* (structures and mechanism), the *Actual* (events), and the *Empirical* (observable or experienced events) (depicted in Figure 7). Given their centrality to CR, these domains are further corroborated in the following sections.

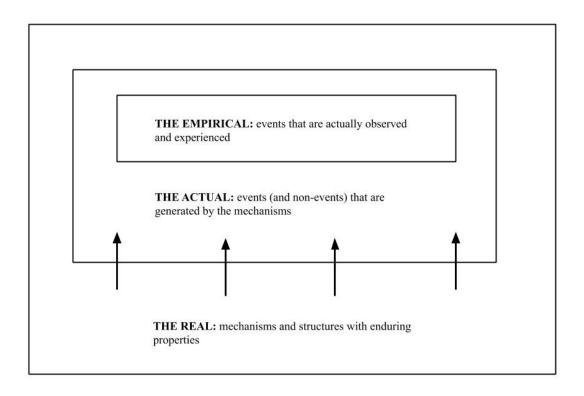


Figure 7. Stratified view of reality - Domains of the Real, the Actual and the Empirical (Adapted from Mingers, 2016, p.19)

The second form of stratification is concerned with the causal powers of objects themselves. The "causal powers at one level can be seen as generated by those of the lower level (atomic valency)" (Mingers, 2016, p.19). For instance, in SE platform, the underlying mechanisms that govern platform's coevolution are often manifested through constant changes in the marketplace (one of the three core layers of platform BM - discussed in chapter 3), interactions and relationships among stakeholders, however, these mechanisms by their very nature, are not directly observable (existing in strata of the real). This is in line with the processual approach to research that concerns itself with "any process that exists between two points in time, regardless of whether actual processes are observable" (Tuttle, 1997, p.350). Therefore, distilling the reality to only what is palpable (empiricist approach) can lead to the epistemic fallacy of "confusing the nature of reality with our knowledge of reality" (Fairclough, 2005, p. 922). This is precisely why the CR inserts primacy of ontology - i.e., the ontology takes precedence over the epistemology.

4.2.2 Critical realist epistemology

"Epistemologically, the aim of Critical Realism is to explain the relationship between experiences, events, and mechanisms. The perspective emphasizes questions of 'how and why' a particular phenomenon came into being, got its specific character and so on. The emphasis is on the explanation of the constitution of an empirical phenomenon and not to give predictions."

Jeppesen (2005, p.5)

Critical realists insert that reality rather than being flat should be viewed as stratified, consisting of multiple layers (i.e., the reality is divided into different domains with each having specific properties) (Bhaskar, 1978; Ehret, 2013; Jeppesen, 2005; Peters et al., 2013). Arguably, the primacy and stratification of ontology have significant implications for CR's epistemology (Bhaskar, 1978). The stratified view of reality is based on the assumption that we can experience only the surface (*empirical* stratum) of the reality without being able to observe deeper strata (*actual* and *real*). The difference between these three strata is best explained by Fairclough, (2005, p. 922) who posit that the 'real' stratum "is the domain of structures with their associated 'causal powers'; the 'actual' is the domain of events and processes; the 'empirical' is the part of the real and the actual that is experienced by social actors."

As researchers, we aim to understand the phenomena by studying its underlying structures through empirical inquiry. However, it is not the empirical events (*empirical stratum*) that lead to structures and mechanisms, as argued by positivist research tradition. While some of these structures and mechanisms (*actual stratum*) are manifested through observable empirical events, they are not necessarily their cause (Reed, 2005). As further argued by Reed (2005, p. 1630), these deep underlying structures and mechanisms are "not directly accessible to sense experience and have to be theoretically constructed through a process of conceptual abstraction and retroduction."

As discussed in the previous chapters, our lack of understanding of SE platforms is a result of this 'surface-based' double reductionist logic adopted in the extant studies. In other words, the nature of the phenomenon is distilled down to only observable events, which in words of Mingers (2016), only leads to mere re-description of the data " in the form of mathematical law, with no greater concept of causality than constant conjunctions of events"

(p.55). To understand how SE platforms work, we need to uncover their underlying generative mechanisms, and it is precisely the CR approach that provides a necessary methodological framework and research guidelines that allow for attaining this level of abstraction.

Nature, structure, and relationships of entities

Entities, or also called objects, form the "basic theoretical building blocks for critical realist explanation" (Easton, 2010, p. 120). These building blocks can represent networks, firms, stakeholders, relationships, resources, ideas, among many others. Furthermore, entities can take different forms; they can be "human, social or material, complex or simple, structured or unstructured" (Easton, 2010, p. 120). Therefore, the SE platforms are structured complex systems comprised of diverse entities (e.g., stakeholders, stakeholder groups, and their resources). Critical realists maintain that all entities have causal powers and liabilities and thus, over time to some extent, influence one another (Sayer, 1992), and in doing so, create particular structures. For instance, the structure of the marketplace/community layer of SE platforms is strongly influenced and continuously shaped by the interactions between a platform owner and stakeholders, and among stakeholders themselves (e.g., forming a new relationship, accessing resources, integrating new stakeholders and resources into the platform). The influence that one entity has over another can be best understood by examining the relationship between these entities. To change these structures, therefore, requires a change in relationships among entities. Arguably, in SE platforms, it is precisely the role of platform owner to influence these relationships (e.g., through orchestration, rules, and governance) and, in so doing, allowing for the new structures to emerge. As argued in earlier chapters, platforms are coevolutionary; however, a platform owner can exercise some control over the interactions among the platform's stakeholders and, thus, consistently contribute to shaping the platform's structure over time.

Furthermore, critical realists distinguish between "two kinds of relationships among entities; necessary and contingent" (Easton, 2010, p. 121). This "distinction recognizes that entities can have some relations (*necessary*) that will affect one another and some (*contingent*) that may affect one another (2010, p. 121). Therefore, CR holds that all events have to be explained by focusing on the combination of entities' necessary and contingent relations. For instance, in SE platforms, the relationship and interactions between suppliers and consumers are necessary but, the relations among diverse suppliers are contingent (e.g., competition, price, type of offering) (Kazan et al., 2018). Therefore, the structure of SE platforms can be seen as a

constellation of diverse entities that have different necessary and contingent relations, and it is precisely the changes in these relations that impact the platform's structure over time. Critical realists postulate that structures are created by and, therefore, can be changed via a human agency (Ryan et al., 2012). However, a human agency, while able to influence structures, is also influenced by them. This CR assertion is in line with the processual approach and stakeholder theory that view actors as both producers and products of structures (Giddens, 1979; Sztompka, 1991). Over time, these structures can become autonomous and lead to reasonably stable conditions of action (Bhaskar, 2008; Peters et al., 2013). Arguably, it is the level of institutionalization that determines how permanent and inherently how difficult these structures will be to change by organizational entities (i.e., human agency) in the future. It is precisely this view of the structures as modifying and modified by entities that are ascribed agency where critical realism differs from social constructivism. Constructivists hold that social structures do not have causal powers over organizational entities (Bhaskar, 2013). While constructivists posit that organizational entities are crucial in shaping platforms, they reject the role and impact that existing structures have on these entities (Easton, 2010).

Processes and events

Changes in relationships among entities lead to different outcomes (e.g., growth or dismay of SE platform, the high or low perceived value of the core value unit), and it is precisely the processes through which these events or outcomes emerge and unfolds in time that critical realists investigate. Returning to the stratified ontology, the events and outcomes form the externally visible strata (*empirical stratum*) through which CR aims to uncover the processes (*actual stratum*) that lead to an establishment of social structures (*real stratum*). Therefore, the study of processes is central to CR, "especially those that produce and reproduce the ordering of events and social institutions" (Easton, 2010, p.120). As argued by process theorists, time is a critical construct in studying processes because the past is always shaping the emerging future (Pettigrew, 1997). Processes are cumulative; what happened in the past is shapes what is happening in the present and what will happen in the future. Therefore, critical realism considers time and temporality as inseparable from the study of process in the social world. As argued by De Cock and Sharp (2007, p. 238), processes cannot be cut out as 'input—process—output' but must be seen as existing within a historical continuum.

Mechanisms

Critical realists assert that relationships have causal powers. The attribution of causal powers to relationships is significant from the ontological perspective because it implies (contrary to social constructivism) that entities have the power to change the social world (Fairclough, 2005). As argued by Ryan et al. (2012, p. 308), "critical realism is ultimately concerned with identifying the cause behind an event, also known as causal mechanisms [generative mechanism]." It is these mechanisms that are central to explaining the causal powers of social structures. In essence, the mechanisms can be seen as "ways in which structured entities by means of their powers and liabilities act and cause particular events" (Easton, 2010, p. 122). However, as argued by Sayer (1992), the same event can have different causes, and equally, the same mechanism can produce different events. Therefore, "critical realists use temporality to understand the generative mechanisms that shape social systems" (Peters et al., 2013, p. 339). Lastly, CR holds that temporary organization comprises of causal mechanisms that are manifested at different levels, times, and to a different extent, which is in line with arguments put forward by process scholars. Furthermore, critical realists argue that studying only causal powers of people (i.e., individual as a level of analysis) is not enough to explain comprehensively the social world (Fairclough, Jessop & Sayer, 2002) and recommend to adopt a more systemic approach that allows for integration of multiple levels of analysis (Halinen et al., 2012; Langley, 1999; Mingers, 2016; Pettigrew, 1997).

4.3 Research method: Longitudinal qualitative case study

"The approach of the CR researcher to research methods is usually highly flexible and adaptive by comparison with other researchers. Successful research depends on intellectual creativity not on following methodological rules."

Ackroyd & Karlsson (2014, p.22)

The choice of research method not only impacts researchers' view of the existing theory but also the way they collect, understand, and articulate data (Van Maanen et al., 2007). Dubois and Araujo (2007) warn that researchers need to be aware of the implicit assumptions

of the methodology they follow to assess and ensure its compatibility with the research philosophy in which their study is grounded. Without achieving this alignment, the researchers face the risk of producing an "incoherent conclusions or falling into the trap of brute empiricism" (Dubois & Araujo, 2007, p. 179). The transcendental realist ontology and eclectic realist/interpretivist epistemology of the CR demand the adoption of idiographic methods (Easton, 2010; Peters et al., 2013).

Principally, critical realists distinguish between two main types of research design; intensive and extensive, that can be used to link *abstract* (theory) with *concrete* (empirical data) (Sayer, 1992). For instance, the adoption of the extensive research design is suitable for identifying quantifiable attributes of organizations such as the adoption or diffusion of a SE platform-based BMs across different industries or countries. However, to understand the dynamic nature of these platforms - i.e., how they unfold over time and context - the adoption of intensive research design is necessary (Jeppesen, 2005). The intensive design - by applying mainly qualitative methods - allows for gaining an in-depth understanding of the studied phenomenon (Sayer, 1992). Due to the inherent complexity, the dynamic, and boundary-spanning nature of SE platforms, the research method needs to not only allow for the collection of rich qualitative data but also to do this across an extended time horizon. Therefore, this research project adopts a longitudinal qualitative case study method (Dubois & Araujo, 2007; Dubois & Gadde, 2002; Dubois & Gadde, 2014).

Case research allows for a study of "complex configurations of events and structures in situated spatial and temporal contexts, which preserve the integral character of social phenomena" (Dubois & Araujo, 2007, p.171). This method emphasizes a deep understanding of a small number of entities over making generalized statements about large samples. It aims to achieve this in-depth understanding by collecting and unifying data from multiple sources (Easton, 2010) that help researchers to place phenomenon into context and better understand how this phenomenon unfolds across multiple levels (Blundel, 2007). Importantly, in the case research, both "time and processes play a major role" (Quintens & Matthyssens, 2010, p. 91). This method also promotes and maintains a firm connection between theory and data (Dubois & Araujo, 2007), which is not only integral to processual PDR research, but it is requisite for abductive research logic that is central to CR philosophy (Ackroyd & Karlsson, 2014). Abductive research strategy and its links to critical realism are discussed in the following section (4.4.Research strategy: Abduction).

Social science differs considerably from the natural sciences because it considers organizations as ever-evolving complex and open systems (Dubois & Araujo, 2007). Therefore, the SE platforms need to be studied as dynamic systems comprised of a myriad of entities,

relationships (a combination of necessary and contingent), processes and structures that exist, interact, and are manifested across multiple levels (i.e., network, firm, individual). As Ackroyd and Karlsson (2014, p.24) postulate, "for CR researcher, one goal of the research is to identify the sequence of causation or causal mechanisms at work," and this is best achieved by adopting a longitudinal single case study method.

This method is particularly useful for capturing the 'reality in-flight' (Pettigrew, 1997) by allowing for holistic and in-depth study of rich social accounts in both time and context (Bartunek, Rynes, & Ireland, 2006; Suddaby, 2006; Dubois & Gadde, 2014; Eisenhardt & Graebner, 2007). As argued by Perks (2005), case study research is the most suitable for studying complex processes embedded in time, allowing for both studying phenomena in retrospect and in real-time (Langley, 1999). Because the case research is "particularly fruitful in explaining complex social phenomena by identifying deep processes and structures that cause particular events to happen" (Ryan et al., 2012), it is considered to be the most suitable method not only for CR grounded studies (Blundel, 2007; Easton, 2002, 2010; Halinen and Törnroos, 2005; Jeppesen, 2005; Ryan et al., 2012) but also for studying organizational processes (Järvensivu & Törnroos, 2010; Langley et al., 2013; Quintens & Matthyssens, 2010). In essence, adopting a longitudinal case method allows for; 1) multilevel analysis, 2) consideration and inclusion of context in which phenomenon exists, 3) integration of different conceptualizations of time, 4) rich study of processes and events both retrospectively and in real-time, 5) abstract causal mechanisms of these processes, and 6) generalizability through theoretical abstraction. In the case research, it is theoretical rather than statistical generalizability that researchers seek (Geertz, 1973). This allows for the "generalizability of empirical descriptions to theory" as opposed to generalizing from a sample to population or from theory to different settings (Lee & Baskerville 2003, p.237). However, "generalizing beyond the given field setting in case research corresponds to generalizing beyond the given population in statistical research" (Lee & Baskerville, 2003; p.235). In other words, equally, as quantitative researchers cannot generalize beyond the studied population, the case researchers cannot generalize beyond or across different cases (Geertz, 1973; Lee & Baskerville, 2003).

Case selection

As postulated by Ackroyd and Karlsson (2014, p.24) in CR-research, "contrary to the view of many positivists, it is the well-chosen and well-made case study, rather than the statistical inference that is often crucial in the development of scientific knowledge." The case study around which this thesis evolves focuses on tracking the almost four-year development (events preceding the year 2016 were studied retrospectively) of HeadBox, the first B2B sharing economy platform that enables business customers to offer and hire creative and unusual off-site spaces (including associated services and full event management solutions) in the UK (case company is in detailed introduced in Chapter 5 Findings). When selecting the case, I have considered several criteria. Firstly, the case company needed to be a SE platform (an ecosystem-based business model) in the early stages of development (e.g., less than two years old) to allow for the real-time mapping of events, processes, changing relationships and structures over time. To do so required a more intensive data collection a regular contact with key informants. Therefore, the second main selection criterion was informants' potential commitment and general interest in overall research. This was closely related to the third criterion, which required a considerable level and extent of access (i.e., regular access to data, informants, and stakeholders) to the case company. While this was not an initial criterion, the case company operates in B2B markets, and therefore, this longitudinal case study also offers insights into the sharing economy and ecosystem-based business models in B2B markets, which are currently scarce in academic literature (Breidbach & Brodie, 2017).

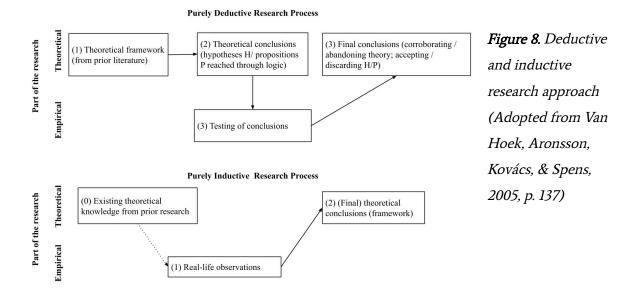
Throughout the almost three-years intensive engagement with HeadBox, I was able to study the development and coevolution of this platform from its early inception up to reaching scalability, which allowed me to devise its dynamic generative mechanisms on which basis I built the empirical SE-platform implementation framework. Essentially, the case of HeadBox provides unique insights into the development and successful management of a sharing economy platform that is currently under-researched and not well understood in both practice and academic literature (Cheng, 2016; **Dreyer et al., 2017**; **Richter et al., 2017**). Different stages of development, their characteristics, and processes, in addition to a detailed description of the case, are presented in Chapter 5 Findings.

4.4 Research strategy: Abduction

Abductive "design can help the researcher to see and understand more than just the aspects s/he is looking for and thus is a suitable research design for a critical realist informed the study."

Ryan et al. (2012, p.305)

Research strategy represents a logic of inquiry through which to answer the research question (Blaikie, 2010). Therefore, in line with the philosophical groundings (Burrell & Morgan 1994), this study adopts the abductive research strategy (ARS) (Blaikie, 2007; Järvensivu & Törnroos, 2010) to uncover the regenerative mechanisms through which SE platforms coevolve over time. The ARS "incorporates what the inductive and deductive research strategies ignore - the meanings and interpretations, the motives and intentions" (Blaikie, 2007, p.90). As further argued by Järvensivu and Törnroos (2010, p.102), "unlike induction, abduction accepts the existing theory, which might improve the theoretical strength of case analysis [and at the same time] abduction also allows for a less theory-driven research process than deduction, thereby enabling data-driven theory generation." The difference between these three approaches is depicted in Figure 8 & Figure 9.



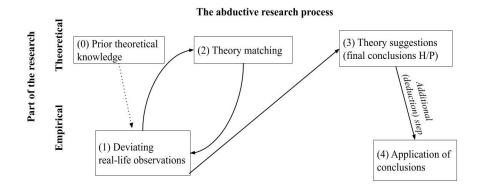


Figure 9. Abductive research approach (Adopted from Van Hoek et al., 2005, p. 139)

The abductive research strategy emphasizes the search for suitable theories through which empirical observations can be understood (i.e., sensitizing concepts) - it does not force data to conform to a particular theory. In other words, abduction can be seen as an ongoing interplay between theory and empirical observations (Dubois & Araujo, 2007; Van Hoek et al., 2005; van Maanen et al., 2007). However, as argued by van Maanen et al. (2007), ARS can take many forms, but these are not yet well understood, and practical guidelines are still scarce. However, systematic combining - an approach to conducting ARS studies developed by Dubois and Gadde (2002, 2014) - provides scrupulous yet flexible guidelines on adopting and integrating abductive logic into case study research.

Systematic Combining: An alternative approach to positivist-dominant case research

The case study method in business and management research was popularised and is still dominated by works of Eisenhardt (1989) and Yin (2003). Eisenhardt and Yin have not only been advocating the legitimacy of case study research for almost thirty years but also developed practical guidance on its execution (Piekkari, Plakoyiannaki, & Welch, 2010). While being credited for laying out the foundations of case research, their deductive logic (i.e., researchers' starting point is a theoretical proposition about the phenomenon under study), claims over research objectivity (i.e., advocating generalizability based on increased number of case studies), and linear approach to practical execution of case studies (i.e., a step-by-step sequential process with fixed guidance for each step) are increasingly criticized (Dubois & Araujo, 2007; Dubois & Gadde, 2014; Piekkari et al., 2010; Welch, Piekkari, Plakoyiannaki & Paavilainen-Mäntymäki, 2011). The issues with sequential thinking and its inappropriateness for theory building were first voiced by Bourgeois (1979), who advocates the adoption of approaches that allow for simultaneous parallel processing.

This positivist influenced mainstream case research follows the trajectory that 'the more cases, the better' which is evident in the works of Yin (2003, 2009, 2013), Eisenhardt (1989, 1991) and, Eisenhardt and Graebner (2007). The authors postulate that by employing the multiple-case design, the robustness of the study can be increased and better theories constructed. However, as argued by Dyer and Wilkins (1991), many classical theories were derived precisely from single cases because they allowed for the inclusion of context and provided rich accounts of the phenomenon. Both Eisenhardt (1991) and Yin (2013) consider 'replication' to be crucial and necessary for case research. Because researchers focus only on inclusion and detailed study of "the relationships that are replicated across most or all of the cases" (Eisenhardt & Graebner, 2007, p. 30), they often omit precisely the rich details that make the case interesting or could contribute to further advancing our knowledge of the phenomenon (Dyer & Wilkins, 1991). Tsang and Kwan (1999) argue against the pursuit of replicability and suggest that it "impedes rather than enhances social sciences" (p.761) because "both subject and researcher changes over time" (p. 765) and thus, even the same researcher would not be able to replicate the 'same' study over time. To borrow from Heraclitus (535-475 BCE), "No man ever steps in the same river twice, for it is not the same river and he is not the same man."

Furthermore, the deductivist approach to case study research (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 2012) elicits two rather significant concerns. Firstly, ensuring that no preconceived theoretical perspective is forced on data is difficult, if not impossible - researcher usually 'sees what (s)he previously set out to see' (Charmaz, 2006; Schwarz & Stensaker, 2014). Secondly, because the point of departure in positivist case research is theoretically derived "ready-to test-hypothesis" (Dubois & Gadde, 2014, p.1278) it derails the researchers' attention away from a novel and compelling insights that span the realms of the adopted theoretical perspective (Dubois & Gadde, 2014; Dyer & Wilkins, 1991). In other words, by narrowly focusing on predetermined theoretical frameworks, researchers can start losing the essential features of the case (Huberman & Miles, 1994; Miles & Huberman, 1994).

Fundamentally, critical realists reject the approach to case research advocated by Eisenhardt (1989) and Yin (2003) because it implies positivist epistemology (also the tools offered for conducting case research rely on replication logic, objectivity, and positivist notion of generalizability) (Dubois & Araujo, 2007; Dubois & Gadde, 2014; Easton, 2010; Jeppesen, 2005) that is in direct conflict with non-positivist grounding of CR' epistemology (Easton, 2010; Sayer, 1992). As a more viable and practically applicable alternative to positivist case research stands the systematic combining approach developed by Dubois and Gadde (2002, 2014). The systematic combining is "a nonlinear, path-dependent process of combining efforts

with the ultimate objective of matching theory and reality" (Dubois & Gadde, 2002, p. 556). The premise of 'matching' allows researchers to move "back and forth between framework, data sources, and analysis" (Dubois & Gadde, 2002, p. 556) as opposed to following a linear 'step-by-step' process. Furthermore, this approach allows for the exploration of all relevant theoretical lenses through which the emerging data can be explained and understood because the "framing of the research evolves during the study" (Dubois & Gadde, 2014, p.1279). Therefore, in line with basic premises of PDR (Schwarz & Stansaker, 2016) and processual research (Langley, 1999, 2007) and the CR's ontological and epistemological positions (Easton, 2010; Sayer, 1992), this thesis is designed in nonlinear fashion and follows the principles of systematic combining that enable "theoretical framework, empirical fieldwork, and case analysis evolve simultaneously" (Dubois & Gadde, 2002, p. 554). I elaborate on the impact that this approach had on empirical investigation and the overall conduct of the study in the following sections.

4.5 Research settings and data collection

"Process explanations that draw on narrative data are particularly close to the phenomena they purport to explain."

Pentland (1999, p.712)

The data collection for this thesis consisted of three core stages; discovery, longitudinal case research, and framework application. These stages are depicted in Figure 10 and each stage is further elucidated in the following sections.

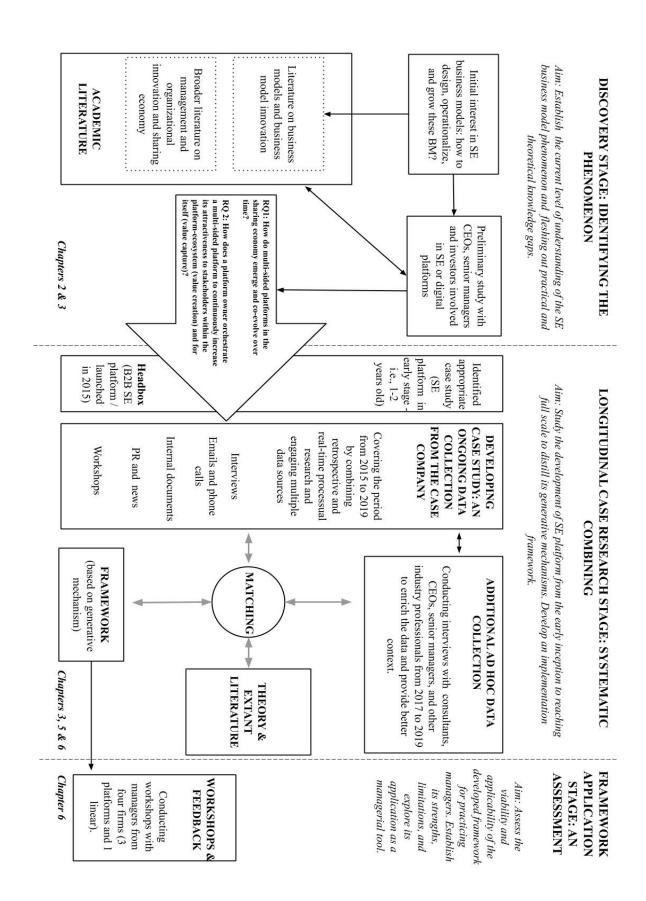


Figure 10. Three stages of the research process adopted in the thesis

Discovery stage

My initial interest in sharing economy developed while working in the industry as a marketing and digital strategy consultant. I was able to witness first-hand the hardship that some organizations went through when attempting to integrate SE principles into their existing business models. After scrutinizing the academic literature and popular business press, I soon discovered that while SE platforms are among the most profitable business models, they are also one of the most troublesome to implement and sustain (Bock & George, 2018; Cusumano et al., 2019). Furthermore, the coverage of this phenomenon in the extant literature is scant (this is in length discussed in chapters 2 & 3). While literature acknowledges the significance of SE platforms and other ecosystem-based business models, it provides little explanation of how they work, how to implement, and successfully grow them over time. As discovered during the preliminary research, industry professionals were seeking answers to such questions. During this early 'discovery' stage of research, with the help of several informants, I was able to further flesh out the phenomenon using the 'problematization' approach (Alvesson & Sandberg, 2011) to establish and hone the research question which this thesis seeks to answer:

How does a platform owner orchestrate a multi-sided platform's coevolution to continuously increase its attractiveness to stakeholders within the platform-ecosystem (value creation) and for itself (value capture)?

During the discovery stage, I conducted a combination of twelve unstructured and semi-structured interviews with five industry informants. The initial first round of interviews was unstructured to establish a rapport, promote dialogue, and identify informants' areas of expertise and their vantage point. Whereas the second follow-up interviews followed a more structured approach, seeking more clarity and building on insights gathered during the first set of interviews. All informants were chosen carefully from my existing industry contacts to gain broader insights into the phenomenon. For instance, two informants at the time of research were CEOs of the digital platform-based businesses of which one was successful and quickly growing while another was undergoing an administration after being in operation for almost five years. From the remaining three informants, one was an investor specializing in digital multi-sided platforms, and the other two worked as senior managers that were tasked with the exploration and implementation of ecosystem-based business models for their organization. Informants' positions, associations, and experience (including the number and duration of interviews) are summarized in Table 5.

Informant ID	Unstructured interviews (inc. length in minutes)	Semi-structured Follow-up interviews (inc. length in minutes)	Informant's position, association, and expertise
$I_{(d)}1$	45	60	CEO & co-founder (Online accounting and payroll platform, UK). Experience in managing and growing digital platforms for over 10 years.
I _(d) 2	90	45; 20	Angel investor, co-founder & CEO of UK's start-up incubator/accelerator (12 platform-based ventures in a current investment portfolio). Experience in evaluating and growing early-stage SE and other digital platforms. Involved in start-up incubation, financing, and scaling-up of digital ventures (over 20 years of experience as an investor).
I _(d) 3	60	60	Senior Manager (Global FMCG, USA). Responsible for leading the organization's platform strategy - focusing on the development of SE platform to support connected products. Over 20 years of corporate experience gained through working for global Fortune 500 brands.
I _(d) 4	60	20	CEO & co-founder (Peer-to-peer online payment platform, UK) - Serial entrepreneur with a background in management consulting. First-hand experience of platform BM demise - the firm filed for bankruptcy after almost 5 years of being in operation.
I _(d) 5	60	30; 20	Senior Manager (Female apparel brand, USA) - Responsible for integration of SE principles into the existing business model.

Table 5. Key informants in preliminary research (discovery stage)

Initially, the informants were asked questions such as: what do you think is the impact of SE on your industry now, and what you anticipate in the future; what it takes to successfully compete in the sharing economy; or what do you see to be the most significant strengths and weaknesses of ecosystem-based business models (e.g., digital platforms, servitization ecosystems). These rather generic questions were discussed with all informants regardless of the industry in which they work, and their level of experience. However, given the diversity of informants and their distinct positions and breadth of experience, the questions, and focus of the follow-up interviews were tailored for each. During each interview, departures from the specific questions were encouraged to pursue intriguing new insights (Eisenhardt, 1989). For instance, an interview with informant I(d) 2 (Angel investor) was initially focused on how to

identify success factors of digital ecosystems/platforms. However, the large part of the discussion that followed centered around stories of how and why different platforms originated- and also failed - drawing on examples of many multi-sided platforms that the informant co-founded or invested in over the years.

These early discussions not only provided valuable insights into the phenomenon which led to the refinement of the initial research question but also laid out the necessary considerations for case study selection and led to the development of the initial interview protocol used throughout the second stage of data collection.

Longitudinal case research stage

During this stage, I aimed to cover almost four years, during which the SE platform HeadBox continuously coevolved. To do so required a combination of retrospective and real-time data collection (Bizzi & Langley, 2012). The first year since the inception of the HeadBox's platform through its launch was examined retrospectively. During the remaining years of its coevolution, I immersed myself in intensive real-time processual research. I was closely following the developments of the HeadBox platform from its initial inception to reaching scale (Chapter 5 Findings discusses the particulars of this period in more detail).

Primary data was mainly collected through face-to-face interviews, workshops, and regular company visits. In over two years, I have conducted 28 semi-structured interviews and four workshops with representatives from all key business functions to uncover the main stages (by, for instance, examining processes, activities, structures, and stakeholders) of its platform development. I conducted repeated interviews with the founder and chief executive officer (CEO), head of marketing, head of product, head of sales, and some of HeadBox's most significant corporate stakeholders to map out the changes over time (these are detailed in Chapter 5 Findings) (Langley & Truax, 1994, p.625). Lastly, to keep abreast of changes and emerging developments, I maintained the regular contact (phone and/or email) with some informants to share ad hoc updates and ask questions without arranging a formal face-to-face interview, which significantly speeded-up and streamlined the follow-up process (Table 6 provides more details about informants and type and duration of primary data collection). Email communication, but mainly transcripts from these regular follow up interviews, contributed almost 200 additional pages of text, complementing the transcripts from 'official' interviews (approx. 580 pages) conducted throughout this stage. Besides primary data, I collected and analyzed numerous internal documents, press releases, and related news coverage, totaling over 300 pages.

Informant ID	Position	Workshop 1 & 2 Attended (Y/N)	Semi- structured Interviews (minutes)	Workshop 3 & 4 Attended (Y/N)	Follow -up (min)	Feedback on the framework (focus group 90 min)	Regular Email/ Phone Contact
I1	CEO & Founder	Y/Y	60; 60; 45	N/Y	30; 45	Y	Quarterly
I 2	Head of Marketing	Y/Y	90; 60; 90; 45	Y/Y	60; 60	Y	Monthly
I 3	Senior Sales Manager	N/Y	90; 45; 60;	Y/Y	60	Y	Quarterly
I 4	Head of Product	Y/Y	30; 90; 60; 30	N/Y	30; 30	Y	Monthly
I 5	Business Development Manager	N/N	60; 60	Y/Y	-	-	-
I 6 - I 10	Stakeholders	-	5 (~45each)	-	-	-	-

Table 6. Key informants in longitudinal case research from the case company

While the HeadBox is central to this research, the development of the case study and its analysis was also aided through the collection of additional data from informants among industry experts. I have conducted 18 semi-structured interviews with eight such informants during this stage (Table 7 provides more details about the informants' position, association, and extent of regular contact). These discussions not only provided a necessary context but also prompted new and thought-provoking questions and directions for further investigation, allowing me to seek new insights and thus further enrich the data. During the research, I have also maintained regular contact (phone and/or email) with some of these informants to share and elaborate on emerging ideas outside of the formally scheduled interviews. Engaging informants external to the case company helped me to gain different perspectives and explore unexpected areas, which ultimately led to the development of a stronger case study. For instance, one of the informants (I12 - CEO of the IT consulting company) helped me to gain a better understanding of the technical infrastructure of digital platforms, 'governance-focused' algorithms, and data management strategies. These valuable insights allowed me to explore the

data and governance layers of the HeadBox's SE platform in depth in order to establish how these layers are impacted and impact the marketplace/community layer (different platform layers were established and are discussed in chapter 2, section 2.3.3 Architecture of digital platforms).

Informant ID	Semi-structured interviews (minutes)	Informant's position and association	Regular Email/ Phone Contact
I 11	30; 45	Senior Manager (Healthcare, US)	quarterly
I 12	45; 60; 30	CEO (Information Technologies, US)	-
I 13	60; 30	Senior Manager (Private Investment Fund, CL)	quarterly
I 14	60	Associate Partner (Private Investment Fund, CL)	-
I 15	60; 60; 60	Project Manager (Government Agency, UK)	-
I 16	60	Senior Advisor (NGO, NL)	-
I 17	90; 45; 30; 30;	Managing Director (Business Consulting, UK)	monthly
I 18	45; 60;	Program Manager (Incubator & Accelerator, CL)	quarterly

Table 7. Key informants in longitudinal case research - industry experts

Framework application stage

As argued earlier, for phenomenon-driven research, it is crucial not only to adhere to sound methodology and contribute to extant literature and theory but ultimately, to respond to and take into account the requirements of those whose interests it is aiming to serve (Amis & Silk, 2008). In the case of this research, it is the practitioners who are intending to develop or are actively managing SE platforms or similar ecosystem-based business models. Therefore, the developed framework should also be relevant and 'user-friendly' so managers can deploy it as a tool for developing better platforms and orchestrating their coevolution over time. To assess this, I sought feedback directly from managers. To do this, I have approached informants who were external to the case company (HeadBox) and have not participated in any of the earlier

stages of this research to reduce their bias and familiarity with developed framework. In total, nine such informants took part. I adopted a 'hands-on' workshop-based format to 'stress-test' the framework in order to assess how it can be operationalized and applied by practitioners when solving a real-world problem. I have conducted two workshops, one with four informants and the other with the remaining five. I sought guidance on workshop design and its execution from informants (in particular informant I17 and I18 - industry experts who took part in the main data collection stage) that worked as consultants and often design and facilitate such workshops themselves. During each workshop, I have first described the empirical frameworks (these are established and discussed in chapter five Findings) and explained in detail their intended practical application. This was followed by questions and clarifying discussion. These workshops consisted of three parts that were conducted sequentially, with the latter part building upon the former. Firstly, the informants were asked to use the Platform Stickiness-Profitability Compass to assess their company's performance, and envision how the existing business model can be innovated or re-designed. The task in this initial part of the workshop varied for different informants to keep it relevant for their immediate situation three informants worked for traditional 'linear' business (Servitizing manufacturer), four for platform (Transportation), and the remaining two as management consultants/advisors (Circular Economy) with experience in both linear and ecosystem-based businesses.

The second part of the workshop comprised of the case study of a failed startup; Yeloha. While I have presented basic factual information about this company, the informants were asked to use secondary sources to gather as much relevant information as possible. By firstly using the iDEAS framework (described in chapter five Findings), informants were tasked to establish the phases through which the Yeloha's platform coevolved so far. This was followed by applying the Stickiness-Profitability Compass to evaluate how well and to what extent, the company orchestrated each of the eight value-dring mechanisms of value creation and capture of its platform. Essentially, this framework was used to establish the post mortem of the Yeloha. While the third and final part of the workshop comprised of the feedback session, the *ad hoc* questions, reactions, and concerns were monitored and noted during the entire duration of the workshop by myself and the senior colleague who accompanied me during both workshops. Lastly, each workshop was followed by a short phone conversation (10-20 minutes) with two informants from each workshop group who expressed the most interest (both positive and negative) in the presented frameworks.

4.6 Data analysis

"Longitudinal process research generates huge quantities of verbal data that can be difficult to manage."

Langley & Truax (1994, p.625)

In this thesis, I followed a non-linear data analysis process in which "theoretical framework, empirical fieldwork, and case analysis evolved simultaneously" (Dubois & Gadde, 2002, p. 554). Consistent with the principles of systematic combining, the data analysis involved matching the theory with empirical observations (Dubois & Gadde, 2002, 2014) by continuously moving 'back and forth' between empirical data, framework, existing literature, and theory. I adhered to this approach during both the *discovery* and *longitudinal case study stages* of this research. The overall aim, type of data, duration, and nature of data collection differed significantly during these two stages; therefore, I present them in a sequence. Firstly, in the following sections, I briefly describe the process of data analysis that I have adopted during the discovery stage after which, I proceed to a detailed discussion of the data analysis approach espoused throughout the second stage.

Discovery stage: Identifying and fleshing out the phenomenon

To gain a more holistic understanding of practitioners' accounts of SE platforms (e.g., perception, drivers, obstacles, design consideration, innovation, and personal experience - both positive and negative), I adopted a combination of unstructured and semi-structured interviews. All interviews were transcribed and analyzed using a thematic analysis approach (Bryman, 2004). This stage followed a somewhat iterative logic where insights gained from informants were compared and contrasted with extant literature while at the same time, the usefulness and applicability of different theoretical concepts and conceptualizations of business models presented in literature were discussed with informants (Dubois & Gadde, 2002, 2014). The main aim of the discovery stage was to distill and further flesh out the 'practical gap' (Schwarz & Stansaker, 2016) that is prevalent among practitioners but is not being addressed in the extant literature. However, the preliminary study not only led to refining the research question and establishing the case selection criteria, but ultimately, the identified themes informed the interview protocol that was used throughout the main data collection stage.

Longitudinal case research stage: From processual data to generative mechanisms

Analyzing processual data impose several challenges (Langley & Truax,1994). By their very nature, processes consist of a complex series of events that take place in different contexts and over a specific time (Langley, 1999). In essence, process data "consist largely of stories about what happened and who did what when—that is, events, activities, and choices ordered over time" (Langley, 1999, p. 692). Furthermore, Langley (1999) identified seven strategies that researchers can adopt to analyze and theorize from processual data. Each strategy has its strengths and weaknesses, and as argued by Langley (1999), they are best to use in combination to not only eliminate some of their inherent shortcomings but to also improve the overall accuracy. These strategies are summarized in Table 8.

In this thesis, I deployed a combination of three of these strategies. Firstly, I built a detailed *narrative* (establishing five stages of platform coevolution and integrating these into iDEAS framework that is introduced in chapter 5 Findings) that allowed me to graphically represent events, stakeholders, and structures through *visual mapping*. It is important to note that these two strategies were not necessarily sequential. While the emerging narrative formed the basis for constructing visual maps, new events, and relationships that were uncovered through visual mapping were continuously integrated into the narrative (i.e., constant iteration) to further expand its explanatory power (Makkonen et al., 2012). Finally, to establish the core mechanism through which the platform was coevolving, I adopted the *temporal bracketing* strategy.

To adhere to the core principles of critical realism, I emphasized the periodization of episodes (Makkonen et al., 2012) during the narrative development. During this stage, my aim was not only to establish different phases (this is usually a starting point for processual research) but also identify sequences and casualties within each phase. This allowed for a better conceptualization of generative mechanisms (Blundel, 2007; Sayer 2000) at the final stages of the data analysis.

Strategy	Key Anchor Point(s)	Fit with Process Data Complexity	Form of Sensemaking
Narrative strategy	Time	Fits with ambiguous boundaries, variable temporal embeddedness, and eclecticism.	Stories, meanings, mechanism
Quantification strategy	Events, outcomes	Focuses on "events" and their characteristics. Eschews ambiguity.	Patterns, mechanisms
Alternate templates	Theories	Adaptable to various kinds of	Mechanisms

strategy		complexity. Different templates capture different elements.	
ctrategy Incidents (units of text) categories		Adapts well to eclectic data ambiguity. May miss broad high-level patterns.	Meanings, patterns
Visual mapping Events, ordering re		Deals well with time, relationships, etc. Less good for emotions and interpretation.	Patterns
Temporal bracketing strategy Can deal with eclectic data but needs clear temporal breakpoints to define phases.		Mechanisms	
Synthetic strategy Processes (e.g., decisions, change, new products)		Needs clear process boundaries to create measures. Compresses events into typical sequences.	Predictions

Note: strategies adopted in this thesis are italicized and highlighted in grey by the author

Table 8. Summary of core strategies for analyzing processual data (In part adapted from Langley, 1999, p.696)

In this thesis, the data analysis is mainly based on primary data collected during the regular interviews and workshops with informants from the case company and independent industry experts. While the majority of the interviews were semi-structured, and to a larger extent, followed an interview protocol, the initial introductory interviews were unstructured and reassembled an informal, friendly discussion rather than a well-structured research interview. Given the longitudinal nature of this research, establishing rapport and laying out necessary foundations for a long-term relationship took precedence over gathering data from 'day one.' During the early interviews, I was trying to establish historical developments (retrospective approach) and context. However, these were continuously fleshed out throughout the entire data collection as informants were often referring to the past events and changing contexts whenever describing the current or future envisioned situation (e.g., using past events as a frame of reference for the existing or planned ones). All interviews were recorded, transcribed, and complemented with email communications, documents (i.e., press releases and internal documents), researchers' notes from observations, meetings, phone calls, and workshops (Hinings, 1997; Quintens & Matthyssens, 2010; Sekaran & Bougie, 2016). Through this stage, I have collected almost 800 pages of interview transcripts, additional 100 pages worth of notes, and around 300 pages of internal and external documents. To better cope

with the growing quantity and complexity of data, which is one of the main challenges of conducting processual research, I had been regularly uploading these into Atlas ti7 software for qualitative analysis. The data collection and analysis took place simultaneously - i.e., constant iteration between data, theory, case, and emerging framework. In other words, the continuous flow of additional data over time not only led to better clarity but, to a large extent, helped me to uncover areas that needed further exploration. This ultimately led to the engagement of additional theoretical lenses, ongoing developments, and further expansion of the narratives and introduction of new and modification of existing themes throughout temporal bracketing. For instance, using the narrative strategy, I was able to establish five core phases of SE platform development; however, I was building the narrative of these phases simultaneously and throughout the entire research (i.e., retrospectively uncovering details about the earlier phases of the development). In other words, while these phases took place sequentially in the real-world, the events and processes that took place during particular phases were not uncovered sequentially during the data collection. Instead, they were mapped out over an extended period. Before attempting to finalize the core themes that led to preliminary identification of the platform's coevolutionary regenerative mechanisms, a detailed narrative and visual map of each phase were discussed, corrected, and verified by informants. The final narratives and visual maps are presented in a distilled form in Chapter 5 Findings to provide the necessary context for the developed framework. For clarity purposes, these narratives are ordered into five distinct phases and visual maps simplified and condensed into easy-to-digest tables.

Besides the detailed narratives of HeadBox's SE platform coevolution, transcripts of interviews with informants from HeadBox and industry experts, extensive notes from meetings and workshops along with internal and external documents proved invaluable when establishing the initial codes during the temporal bracketing (Langley, 1999). These initial codes mainly referred to different ways (i.e., processes, activities, relationships) through which the platform owner creates value for stakeholders and manages the value appropriation across the entire stakeholder network. It is important to note that while doing so, I was focusing on establishing (and coding for) underlying meanings rather than directly identifying words or phrases within the transcripts and other documents. Once these codes were established, I followed with comparisons, grouping, and in-depth examination of the relationships among the codes to form the first-order categories in an attempt to establish the SE platform's generative mechanism. Four stakeholder value-driving mechanisms and four corresponding mechanisms, enabling the platform owner to capture value, were distilled as first-order categories. To assess the inter-coder reliability, a sample of initial codes was given to my senior colleague and

co-author with a request to categorize these into the overarching themes. The inter-coder reliability was manually assessed and calculated by dividing the number of units placed in the same category (i.e., ascribed same or similar meaning) by the number of units coded (Prasad, 2008). It was tested in two phases, a pilot test of reliability when we compared around 30 codes (inter-coder reliability coefficient 0.90- satisfactory) that was later followed by an assessment of the full sample. The extent to which we evaluated the characteristics of a message and reached the same conclusion was 0.85, which we regarded as satisfactory (Campbell, Quincy, Osserman, & Pedersen, 2013). The areas of low agreement in the coding scheme allowed me to identify problems (i.e., using too generic or descriptive terms, re-describing the events instead of focusing on their meaning, using inappropriate words or their synonyms) that after further discussions were clarified, leading to higher quality results overall. The last step involved generating second-order themes that represent a higher level of abstraction in the coding, and at the same time, form the two main building blocks of the framework: Platform Stickiness -Profitability. In summary, these steps enabled me to develop an empirically derived framework that integrates codes, first-order categories (a generative mechanism), and second-order themes (overarching dimensions). The coding scheme is depicted in Figure 11.

To help provide a context, as well as direction for the study, I used the stakeholder theory as a sensitizing concept (Bowen, 2006; Harrison & Wicks, 2013; Sandberg & Tsoukas, 2011). The theory served as a general sense of reference and guidance (Blumer, 1954; Bowen, 2006), rather than a 'fixed presentation of the pregiven world' (Sandberg & Tsoukas, 2011, p. 352). Following principles of abductive research, I used the sensitizing concept to (continuously) inform the interview protocols, lay out the foundations for the data analysis, establish the first-order categories, and to develop the second-order themes (Bowen, 2006). For instance, during the process of conducting initial interviews at HeadBox, I observed that the concept of organizational affiliation proposed by Harrison and Wicks (2013) played a critical role in HeadBox's success. Stakeholders were willing to actively participate in value creation activities mainly because the platform owner motivated them to do so by building a fully transparent merit-based competition among different/all stakeholder groups. Such dynamics incentivized stakeholders to stay and transact within the platform - i.e., increasing its attractiveness.

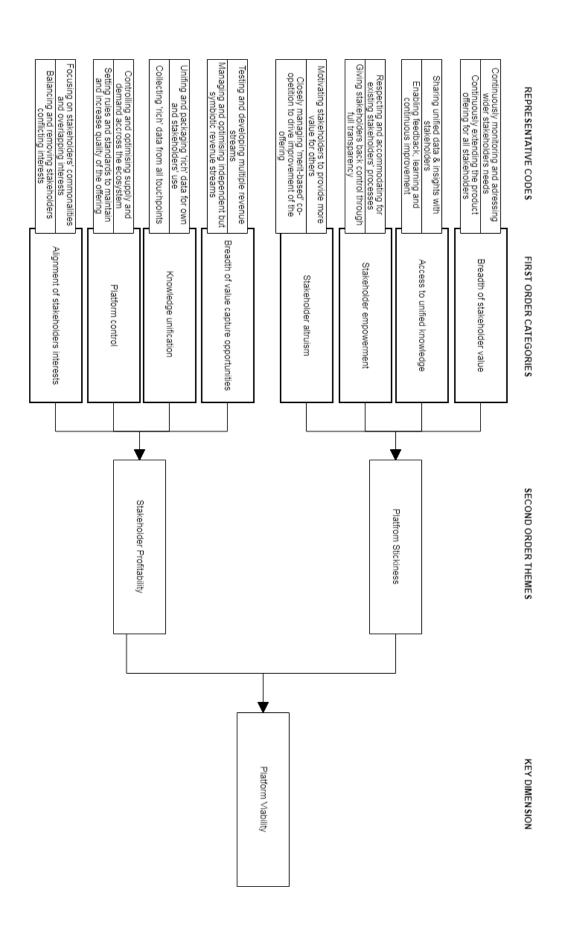


Figure 11. Coding Scheme

Furthermore, it is worthwhile to clarify that in line with the basic premise of the systematic combining approach, the choice of theory and the extent of its application resulted from evolving empirical data rather than this theory being chosen prior to initial data collection (i.e., imposing a 'theoretical straightjacket' on data) (Schwarz & Stensaker, 2014). This approach allowed for consideration of several theories throughout the research process, and while the stakeholder theory (Freeman, 1984) forms the backbone of this research (sensitizing concept), I also draw on ecosystems (Moore 1993, 1996, 1998, 2006), shared value (Ouchi, 1979), and organization learning (Argyris, 1976) theories to provide better theoretical grounding for the empirical framework that is introduced in chapter 5 Findings. Building upon these 'additional' theories not only allowed me to better interpret the data (narrative and visual mapping strategy) but also to distill the generative mechanism through which the SE platform coevolve (bracketing strategy). Understanding these mechanisms is crucial for successfully orchestrating SE platforms (i.e., simultaneously increasing stakeholder value and platform owner's ability to capture the desired portion of this value). While I discuss the impact of these mechanisms on platform owner and stakeholders within the platform ecosystem in chapters five Findings, I also provide practical guidance on how platform owners can use the proposed framework to understand and better orchestrate these mechanisms to either leverage or minimize their potential impact on their platform over time (see section 6.2 Managerial Implications)

Before submitting the framework for practitioners' evaluation (Framework application stage), the feedback was first sought from both; informants from the case company, as well as the independent industry professionals. The main task for these informants was to examine the framework's fit and the extent to which it indeed incorporates the generative mechanisms that were shaping the platform during the identified phases. The feedback and recommendations received from informants helped me to refine the *Platform Stickiness-Profitability Compass* further. This framework is introduced in chapter 5.

Framework application stage: Assessing viability and practical application of the framework

As mentioned in earlier sections of this chapter, for phenomenon-driven research, besides contributing to academic literature and developing, extending or modifying the extant theory, should ultimately be applicable and deemed useful by practitioners. Therefore, in the final stage of the research, I submitted the empirical framework under the scrutiny of

practicing managers to assess its practical value and extent of its application. The aim of this stage was not to alter the framework, but rather to assess its applicability (e.g., relevance, ease of use, strengths, and weaknesses). Data collected during this stage was in the form of written observational notes (independently undertaken by two researchers), in particular capturing informants' questions, recommendations, and criticisms. These notes were enriched by documents that informants were asked to produce during workshops, providing additional insights into how the framework was used to complete the given tasks. This vast and varied feedback allowed me to identify the areas (i.e., parts of the framework, mechanisms) that were difficult to grasp at first and needed additional explanations for the framework to become more accessible and easier to use for practicing managers. Thus, on these bases, I was able to devise concise guidelines on how practitioners can use it to develop and better orchestrate their platforms (or other ecosystem-based business models). I elaborate on potential practical applications of the framework, its strengths, but also its limitations and shortcomings in Chapter 6. In this chapter, I further derive future research direction from these strengths and weaknesses to rivet the attention of future research to more practical rather than solely theoretical knowledge gaps.

4.7 Evaluation of research quality

"Assessing the quality of qualitative research is more than just a technical or methodological exercise. It requires an understanding of the ontological and epistemological bases of the researcher and the research."

Amis & Silk (2008, p.475)

When attempting to evaluate the quality of case study research, Piekarri et al. (2010) suggest focussing on paradigm consistency, reflexivity, and transparency rather than assessing its compliance with rigid rules imposed by prepotent positivist tradition (Amis & Silk, 2008; Dubois & Araujo, 2007; Gephart, 2004). For instance, the popular and still dominant²⁰

²⁰ The evidence of positivist epistemology is conscious in Eisenhardt's argument that "adding three cases to a single-case study...offers four times the analytical power" (Eisenhardt & Graebner, 2007, p. 27), however, Dubois and Araujo (2007) postulate that "adding more cases to a research design for the sake of providing a closer approximation to the standards of quantitative methods is misguided and ultimately, self-defeating" (p.177). As

"Eisenhardt's approach to case studies exemplifies many of the problems associated with conducting research on a qualitative tradition whilst relying on validation criteria more appropriate for quantitative methodologies" (Dubois & Araujo, 2007, p.174). As Amis and Silk (2008, p.457) posit, the "research quality is inseparable from the ontological and epistemological foundations of the research project." Therefore, adhering to a recommended single set of standards for evaluating case research also assumes and indirectly imposes a single philosophical approach for researchers to follow (Piekarri et al., 2010). In essence, the quality assessment criteria need to be consistent with the philosophical underpinnings of the assessed research. This is one of the main reasons why Johnson, Buehring, Cassell and Symon (2006) recommend the adoption of *contingent criteriology* that allows for assessment of research quality based on researchers' commitment to its ontological and epistemological assumptions - i.e., evaluating how 'true' the researcher remained to these in developing or contributing to theory (Bochner, 2000) - rather than how well it follows the rules implied by a dominant research philosophy. Amis and Silk (2008) identified three epistemologically distinct schools of thoughts that influenced how the quality of qualitative research has been assessed:

1) Foundationalism is characterized by the adoption of positivist and postpositivist criteria such as validity (internal and external), reliability, objectivity, and generalizability (Cook and Campbell, 1979; Campbell and Stanley, 1963; Campbell, 1975). Researchers, aiming to adhere to these criteria, deploy a "range of techniques, ranging from, but not limited to, keywords in context analysis, componential analysis, taxonomies, word counts, frequencies, cognitive mapping, semantic analyses, and word matrices" (Amis & Silk, 2008, p.459). To sustain foundationalists' scrutiny, many case researchers, instead of pursuing what is peculiar and interesting in their cases, seek out and prioritize commonalities, which arguably defeats the very premise of qualitative case research (Dyer & Wilkins, 1991; Tsang & Kwan, 1999). Such practices hinder the development of new (or advancement of emerging) theories and instead lead to limited and rather marginal contributions to popular extant theories (Daft & Lewin, 1990; Wicks 1989). After examining leading organization studies and management journals, Amis and Silk (2008) concluded that "qualitative research in general [is] significantly underrepresented [and] those pieces that are published are predominantly foundational in orientation" (p.460). The foundationalism in qualitative research has been accepted and adopted by many researchers because of its advocacy in seminal works and papers offering guidelines on how to conduct qualitative research, which themselves are written from a foundational perspective. Such papers in organization studies and management are widely

discussed in earlier sections of this chapter, while Eisenhardt's approach is still dominant it is being increasingly criticized (Easton, 1995, Dubois & Araujo, 2007).

accepted, used, and highly cited works of Eisenhardt (1989), Yin (1994, 2003), and Seale (1999). The foundationalism also forms the basis for studies that position themselves as literature review papers that aim to evaluate the 'quality' and 'rigor' of previously published case studies based on these positivist-based criteria (e.g., Gibbert, Ruigrok & Wicki, 2008). Thus, indirectly underplaying the significance of many of the published case-based studies that are grounded in different research paradigms.

- 2) Quasi-foundationalism is characterized by the adoption of *neorealist* criteria that emphasize the triangulation and application of appropriate research methods. These criteria are more abstract and subjective when compared to foundationalism. The quasi-foundationalism acknowledges the reflexivity of a researcher, and his work " is often presented as reflective and self-conscious, providing insights into the ongoing struggles related to authorship, truth, validity [and] reliability" (Amis & Silk, 2008, p.464). Given the rather interpretative accounts of resulting study researchers need through adoption of appropriate research methods demonstrate credibility (trustworthiness of the researcher's representation of resultant accounts, i.e., triangulation), transferability (ability to transfer insights into other settings), dependability (transparent methods and logical arguments) and confirmability (exposing and eliminating biases). However, "resultant account is still an interpretation of a series of events that is inevitably partial and written from a particular perspective [which] renders problematic any attempt to base quality purely on the rigor of the methods followed" (Amis & Silk, 2008, p.466).
- 3) Nonfoundationalism argues that quality needs to be part of the research design. In other words, it needs to be "internalized within the underlying research philosophy and orientation rather than being something to be 'tested' at the completion (foundationalism), or during (quasi foundationalism) the research" (Amis & Silk, 2008, p.466). Furthermore, the nonfoundationalism assesses research quality based on researchers' axiological position. As further argued by Amis and Silk (2008), the "criteria for evaluating the quality of qualitative research must be based upon a holistic appreciation of the scholarship" (p.467). The authors acknowledge that this approach is subjective and problematic for some; however, they postulate that "such considerations open up possibilities for the field of organization studies in terms of the research questions posed, methodologies deployed, and mechanisms of presentation used" (p.467). Thus, throughout this chapter, I have attempted to establish harmony among the chosen research problems, methods, theories, and epistemological and

ontological assumptions (Amis & Silk, 2008) rather than evaluating research quality after its completion.

Besides conforming to the nonfoundationalist approach to evaluating overall research quality and rigor in this thesis, I also adopt a CASET evaluation framework developed by Goffin, Åhlström, Bianchi, and Richtnér (2019) to evaluate case study research in particular. This framework provides a more granular view of different quality criteria for assessing case study design, data collection, and analysis. Therefore, an evaluation of this research against each criterion proposed by Goffin et al. (2019) is provided in Table 9, which acts as a concise summary of core methodological implications discussed throughout this chapter.

Evaluation criteria		Explanation of measure	Anchoring statements
Research Design	Theoretical foundations	Was a clear explanation given of why the case method was the most appropriate method to adopt?	The novel and emergent nature of the phenomenon demanded the use of method that allows for 1) multilevel analysis, 2) consideration and inclusion of context in which phenomenon exists, 3) integration of different conceptualizations of time, 4) rich study of processes and events both retrospectively and in real-time, 5) fleshing out causal mechanisms of these processes, and 6) generalisability through theoretical abstraction. The general justification and discussion on the appropriateness of adopting a longitudinal case method are elaborated in section 4.3.
	Pilot study	Was there a pilot study preceding the main study?	The preliminary study (I refer to it as 'Discovery stage' in the thesis) consisted of a combination of 12 unstructured and semi-structured interviews with 5 industry informants. This is further discussed in section 4.5 and summary of informants (i.e., number and frequency of interviews, position, associations and expertise) who took part in this pilot study is provided in Table 5.
	Theoretical sampling	Was the explanation provided of which case(s) were chosen and why?	Main criteria for case selection were established during the pilot study and more details about the case company are presented in section 4.3 and in particular, the sub-sectio - 'Case Selection.'
Data Collection	Triangulation	Was the research based on multiple sources of data?	Besides collecting different sources of data from the case company(e.g., interviews, documents, reports), I have also consulted various industry experts. This is in detail discussed throughout section 4.5.
	Review and validation of evidence	Was the evidence reviewed and validated by external parties?	The emerging findings were regularly discussed with industry experts (interviews). This helped not only to gain a holistic understanding of data but also to seek out areas that needed further investigations.

	Transparency of data collection	Was it made clear how the data collection process was conducted?	Different stages of data collection as well as involved informants are in detail presented throughout sections 4.5 and 4.6.
Data Analysis	Inter-coder agreement	Were the data coded by multiple investigators?	The inter-coder reliability was manually assessed and calculated by dividing the number of units placed in the same category (i.e., ascribed the same or similar meaning) by the number of units coded (Prasad, 2008). It was tested in two phases, a pilot test of reliability when we compared around 30 codes (inter-coder reliability coefficient 0.90- satisfactory) that was later followed by an assessment of the full sample. The extent to which we evaluated the characteristics of a message and reached the same conclusion was 0.85, which we regarded as satisfactory (Campbell et al., 2013). In addition, both iDEAS Platform Coevolution Phase model and Platform Stickiness-Profitability Compass (both are introduced in chapter five Findings) were validated by informants from the case company as they were emerging throughout the study.
	Case presentation	Were findings and empiricical evidence presented in a way that made it clear how author(s) reach their conclusions?	Besides providing a full coding scheme (see Figure 11) the most representative quotes from the informants were integrated into relevant sections throughout chapter five to provide a more robust empirical grounding for both, the findings and from them developed frameworks.
	Case interpretation	Did the case analysis move beyond description and conceptual ordering?	To avoid the 'trap' of double reductionist logic this study adopts stratified ontology (see section 4.2 and subsection 4.2.1 in particular) and follows the approach put forward by Langley (1999) for analyzing and theorizing from the processual data, that is further elaborated in section 4.6. This study combines narrative, visual mapping (iDAES Platform Coevolution Phase model was derived from this approach which is visible through its rather descriptive basis) and temporal bracketing that allowed for a more abstract conceptualization of value-driving mechanisms (integrated into Platform Stickiness-Profitability Compass) that form the main contribution of this thesis.
Post-hoc	Reflecting on validity and reliability	Was there a discussion about the quality of the research?	Section 4.7 provides both general as well as study-specific discussion. The aim throughout the entire chapter four Methodology was to establish a sound link between ontological underpinnings of this study, adopted method and the underlying research strategy, thus, providing a more transparent yet robust methodology for conducting processual studies in complex systems.

Table 9. CASET evaluation template for evaluating case study research (adopted from Goffin et al., p.9)

4.8 Research ethics

"In the area of management research, it becomes difficult to establish hard-and-fast ethical principles, and good practice requires considerable judgement from the researcher."

(Easterby-Smith, Thorpe & Jackson, 2012, p.96)

Considering that the data was collected predominantly from human informants, the conduct of this research was guided by the Declaration of Helsinki (DoH), while strictly adhering to Concordat to Support Research Integrity (CSRI), and to the University of Portsmouth ethics policy. As laid out by DoH, researcher and the research design itself should respect the individual (Article 8), and his/her right to self-determination and the right to make informed decisions (Articles 20, 21 and 22) regarding participation in research, both initially and during the course of the study (Bell & Bryman, 2007). This research project has been reviewed and granted a favorable opinion by the Portsmouth Business School Research Ethics Committee on 3 May 2017 (application reference E446) (see Appendix 8.3).

The primary data collection consisted, to a large extent, of multiple rounds of interviews with research informants over a longer time-frame (i.e., over two years). To minimize the disruption to their day-to-day activities, and avoid negative impact on their job-related performance, I ensured that I could accommodate their differing availability and preferences. This meant that I often worked outside of the traditional 9-5 office hours. Given the longitudinal process-oriented nature of this research, the first part of the initial interviews with informants from the case company as well as those external to it were kept informal and somewhat unstructured to establish rapport (Brinkmann & Kvale 2005), provide more information about the research, discuss its aims, and to finally seek a verbal consent to participate in the study (Cooper & Emory, 1995; Crow, Wiles, Heath & Charles, 2006; Walker & Haslett, 2002). During these initial discussions, the informants had a chance to ask questions, reflect on project materials that were sent to them at least one week before the interview (i.e., participant information sheet and consent form - see Appendix 8.1& 8.2), and decide whether to take part in the study. In these documents, I ensured that they were free of academic and business jargon to present the information in "a form that is manageable and meaningful" to informants (Crow et al., 2006, p.93).

This study does not directly focus on the subjective experiences of informants but instead uses them to create more detailed accounts of the case company's growth and development over time. Therefore, before approaching individual informants from the case company, I have sought written consent from the company itself (e.g., signed on behalf of the company by senior executive signatory), to ensure the commitment to the research at a group level (Cooper & Emory, 1995). To collect and analyze rich processual data, I engaged with company officials regularly over two year period, and thus, I was exposed to a large number of confidential information, both verbal and written. Therefore, to protect the company's know-how, sensitive, and strategically important information, I have signed an NDA (non-disclosure agreement) with HeadBox before commencing the study. The aim of the study was to abstract core value driving mechanisms from the actual data and insights gathered from the company instead of reporting on these and presenting them for their face value. In this thesis, where possible, I also use direct quotes from informants to further empirically underpin the presented arguments (Grinyer, 2002; Walker & Haslett, 2002). These quotes were approved (Kvale, 1996; Mero-Jaffe, 2011) by firms' CEO and CMO, and many of them have already appeared in the academic publication - The role of a central actor in increasing platform stickiness and stakeholder profitability: Bridging the gap between value creation and value capture in the sharing economy - co-authored by these two executives (see Laczko et al., 2019). During the almost three-year research engagement with HeadBox, I have collected a vast amount of data and uncovered many peculiar facets of multisided platforms that require further investigation. Therefore, I continue collaboration with these executives, and together we are working on two additional research papers that shed more light on scaling and internationalization of multisided platforms.

4.9 Conclusion

"Theorists often write trivial theories because their process of theory construction is hemmed in by methodological strictures that favor validation rather than usefulness."

Lindblom (1987, p. 512, cited in Wicks, 1989)

In this study, I adopt a non-linear, anti-positivist approach to case research that is grounded in critical realist ontology and epistemology (Easton, 2002; 2010). Interestingly, Piekkari et al. (2010) use the term 'innovative practice' to describe case studies that do not follow the mainstream positivist approach, which arguably only demonstrates the rarity of such approach in organization and management research fields. In this chapter, I attempted to present riveting arguments for adopting an alternative approach to conducting, analyzing, and theorizing from the qualitative case research. In doing so, I have not only uncovered shortcomings of the positivist approach to case studies but, more importantly, laid out the methodological foundations (constraints and consideration) of this thesis. It needs to be clarified that I do not deem the positivist approach to be inappropriate per se, but rather, I see it unfitting and limiting for achieving the aims of this study. This is mainly because of its imposed primacy of epistemology - i.e., distilling the reality to only what is directly observable through double-reductionist logic (Fairclough, 2005). The main aim of this thesis is to uncover the underlying regenerative mechanisms of SE platforms' coevolution. However, these are not directly observable, and therefore, adopting a research paradigm whose ontology allows for a stratified view of reality is crucial to move from mere re-description of processes and events to their causation (Mingers, 2016).

I integrate these generative mechanisms into an empirical model that not only explains how SE platforms coevolve but also lays out the necessary foundations for designing, developing, and continuously orchestrating ecosystem-based business models. These are the tasks that the platform owner undertakes to increase the viability of its platform over time in order to reach the desired scale and, thus, increase the likelihood of the platform's long-term success. This framework is in detail introduced in the upcoming chapter 5 Findings, in which I also elaborate on its theoretical groundings and provide an elaborate analysis of the longitudinal case study on which basis this framework was established.

CHAPTER 5: Research Findings

5. Introduction: Toward an empirical framework

While well-known examples of more traditional two-sided markets (e.g., eBay, Google, Amazon) and industrial platforms (e.g., IBM, Microsoft, Cisco) are prevalent in platform research (Cusumano et al., 2019; Cusumano & Gawer, 2002; Gawer & Cusumano, 2014). What we lack, however, are empirical insights into the new generation of multi-sided SE platforms (Breidbach & Brodie, 2017). These have only recently started yielding the interest of both scholars and practitioners. So far, Airbnb and Uber constitute some of the most widely discussed examples of such business models (Gerom, 2013; Mair & Reischauer, 2017). These two examples dominate empirical studies in SE and multi-sided platforms research domains. However, the conclusions from these studies are rather descriptive and fragmented, drawing only a partial picture of how SE platforms work. Not only the majority of these studies focus on singular aspects of sharing (e.g., motivations to share, individuals' willingness to share, negative aspects of sharing), but many use Airbnb or Uber as context rather than the central subject of the study itself. While the extant studies provide valuable insights into the sharing economy phenomenon and the new generation of digital platforms in general, they fall short of providing holistic accounts of how their ecosystem-based business models emerge and coevolve over time. In essence, we lack longitudinal processual studies that shed more light into; how these platforms work and what are the underlying mechanisms that allow for their continuous evolution and growth? We not only have limited understanding of how value is co-created and captured in complex networked/ecosystem-based business models (Kohtamäki & Rajala, 2016; Marcos-Cuevas et al., 2016; Reypens et al., 2016) but also insights into the roles that platform owners play in designing and orchestrating these value exchanges, interactions, and relationships over time are missing (Kohler, 2015; Moser & Gassmann, 2016; Reypens et al., 2016). Many scholars attempt to explain platform evolution by drawing on industrial network theory (Ford, 2011; Möller & Halinen, 2017) and thus, creating an impression that platform owner has limited influence over the stakeholders within the platform and, the platforms are emergent without any guidance (i.e., actors have none or limited agency). This emergence is, to a large extent, attributed to network effects, but this, at best, only provides blurred and often oversimplified accounts of how multi-sided platforms work. While the literature on network effects is slowly maturing, we still have an only partial understanding of what draws stakeholders to join the platform and why they remain with the platform owner (Harrison & Wicks, 2013; Nambisan & Sawhney, 2011). As argued by Smedlund and Faghankhani (2015, in press), "the capacity to renew the platform's offering is essential for platform evolution and growth," therefore, understanding the platform's generative value-driving mechanism is essential for orchestrating its continuous innovation and growth. As Smedlund and Faghankhani (2015, in press) further argue, it is "difficult to lock-in participants if the platform does not continuously offer something new and of value." However, we still lack insights into how platform owners orchestrate multi-sided platforms to continuously increase its value and attractiveness to stakeholders.

Lastly, the vast majority of extant studies of SE phenomenon and the multi-sided platforms are almost exclusively based on B2C or C2C sectors (Mair & Reischauer, 2017). Thus, our comprehension of the sharing economy platforms in a B2B context is still limited (Wosskow, 2014). In this thesis, I attempt to contribute to filling these gaps, and this chapter, in particular, presents an empirical foundation of such efforts. Through the analysis of the longitudinal case study, this chapter not only offers in-depth insights into how a new generation B2B SE platform HeadBox coevolved (presented as iDEAS Platform Coevolution Phase Model in section 5.1) but more importantly, it fleshes out and further conceptualizes its generative value-driving mechanisms. These mechanisms form the basis of the proposed empirical framework (presented as Platform Stickiness-Profitability Compass in section 5.2) that explains how platform owners can continuously increase the overall value and attractiveness of their platforms (stickiness) while at the same time extending their value capture opportunities (profitability).

Aim and structure of the chapter

This chapter takes its starting point in the description of the platform owner, HeadBox. This is followed by the introduction of the iDEAS Platform Coevolution Phase Model, developed by using the combination of visual mapping and narrative strategy to provide a descriptive, yet rich accounts of each of the five distinct phases through which the platform coevolved. Throughout these phases, I map out the initial development and ongoing coevolution of the HeadBox's platform. The early inception of the platform (pre-launch, 2014) represents a starting point of the data analysis, and platform internalization (extending offering beyond the initial home market, 2019) its end. Building on these phases, in the second part, I present an analysis of the case and introduce the Platform Stickiness-Profitability Compass. Derived mostly through temporal bracketing (moving from 'empirical' through 'actual' to strata of 'real'), this framework represents a more abstract conceptualization of regenerative value-driving mechanisms that were, in different ways, and to varying extents, manifested during all phases of HeadBox's platform coevolution. Essentially, this framework integrates eight value-driving mechanisms through which platform owners can: 1) draw in diverse stakeholders, 2) keep and engage these stakeholders over time, and 3) establish multiple monetary and non-monetary value capture strategies throughout platforms' coevolution. In other words, guiding platform owners in increasing the platform's stickiness and profitability over time.

5.1 Case study background: Introduction to HeadBox

HeadBox is the UK's first online B2B marketplace for spaces, associated services, and bespoke corporate event management. The company launched its online platform in May 2015 with a vision to disrupt and re-invent the UK event industry. The launch of HeadBox was in response to existing rigidities and inefficiencies within the industry where the "whole process of searching and paying for spaces was really painful — manual, very inefficient and time-consuming" (founder and CEO). Using novel technology, HeadBox systematically tackled the critical industry challenges, such as lack of transparency, inflexible pricing, or the limited variety of spaces offered. By continuously addressing these inefficiencies, the company was able to create value for a wide range of diverse stakeholders, who, as a result, started to be increasingly drawn to the platform. However, the development and application of technology in addressing industry-wide problems is just one of HeadBox's competitive strengths. HeadBox

was quick to realize that there are many spaces that are not being used during certain times of the day (i.e., low utilization of assets). By opening these spaces to its customers, the company was not only able to respond to business customers' growing demands for space variety (i.e., alternatives to traditional conference venues and meeting rooms) but also to generate additional revenue for these space owners during the idle times. With new spaces being added daily, HeadBox currently offers over 10,000 of these in London, Manchester, Birmingham, and other large UK cities. Types of available spaces range from "traditional meeting rooms through galleries, workshops, warehouses, schools, universities, churches, photographic studios, cinemas, theatres, all the way to treehouses" (founder and CEO). By achieving the desired level of platform stickiness and profitability (i.e., loyal customer base, codified processes, infrastructure and governance, and multiple revenue streams), HeadBox was ready to start scaling-up its platform beyond its home market. With an additional £4 million investment secured in early 2019, the company announced its plans to enter four European countries (France, Germany, and the Netherlands).

Initially, HeadBox started as a free to use platform where business customers could search, book and pay for spaces for their events, conferences, off-site meetings, and any other types of formal or informal gatherings. Now (2020), the company offers full corporate event management. While HeadBox has started out by tackling a single issue related to the event industry (i.e., digitalize the searching and booking process), they were quick to identify and integrate relevant stakeholders within this industry and by doing so, advance their initial platform offering to become an all-inclusive digitized event management service. Early on, the company made a strategic decision to focus solely on the B2B market. Arguably, "the B2B sector of the business differs from B2C in many ways - the way you market is different, the inventory that you focus on is different and the features that you build over time will be different because consumers care about certain things that business consumers do not care about and vice versa" (head of product). HeadBox instead of focusing on developing its platform around a general needs of a broader market (i.e., addressing few needs of many stakeholders) decided to focus on wider needs of a rather narrow market (i.e., addressing multiple needs of fewer stakeholders). This simple, but strategically significant decision eliminated doubts about what features to build in the future and also the unnecessary trade-offs between B2B and B2C needs and demands. Focusing solely on the B2B market is also underpinned by the fact that "those customers repeat [their purchase] - they come back to book other venues, they have bigger budgets, and the average transaction value is much higher" (Founder & CEO). This further enabled HeadBox to focus on retention and nurturing the

relationship with its stakeholders instead of continually aiming to increase the number of transacting stakeholders.

Following the processual research approach (Langley, 1999, 2007; Langley et al., 2013; Pettigrew, 1992, 1997), I have distilled HeadBox's development into the five core coevolutionary phases. Through these phases, the company coevolved from an initial two-sided platform reliant on a single revenue stream to a multi-sided platform with multiple complementary, yet independent, revenue streams in less than three years since its launch (e.g., growing annual revenue from under £500 000 in 2016 to over £50 million in 2018). This development was achieved by HeadBox's focus on maximizing stakeholder value and strategic integration of new stakeholders into the platform (e.g., a 300% increase in contracted HeadBox Corporate clients, over 3000 additional spaces and over 120% increase in user-base in 2018), while actively extending its own value capture opportunities (100% increase in annual average order value per HeadBox business clients and over 140 % increase in net sales in 2018).

I offer a visual summary of HeadBox's platform development in Figure 12, which depicts its coevolution throughout the five conceptually distinct phases, forming the basis of the iDEAS Platform Coevolution phase model. The following sections elaborate and in detail discuss each phase, establishing the necessary narrative for the conceptual abstraction (Reed, 2005; Mingers, 2016) that is presented in the second half of the chapter (5.2. Case study analysis) in which, the Platform Stickiness-Profitability Compass is put forward.

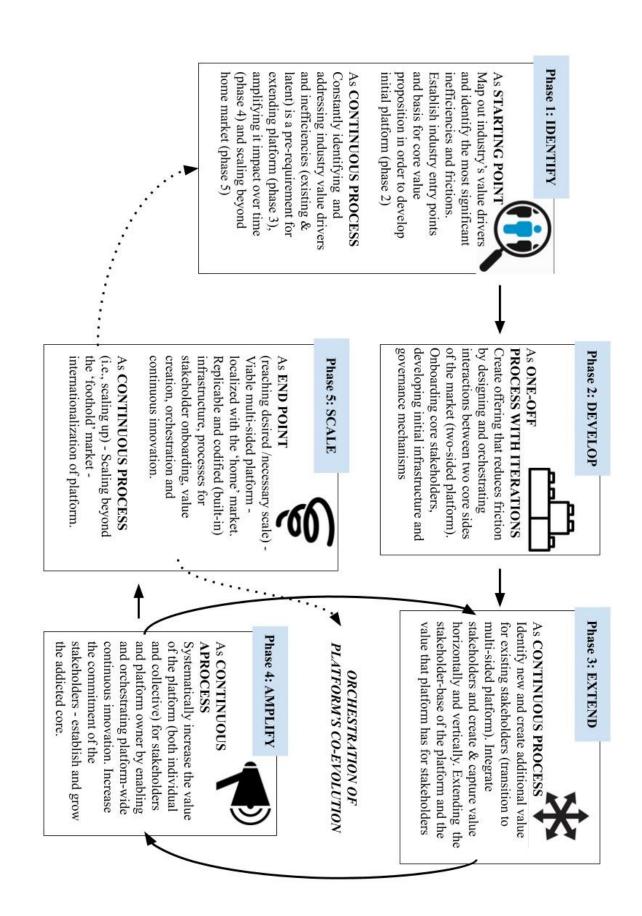


Figure 12. Five phases of multi-sided platform development: iDEAS Platform Coevolution Phase Model

5.1.1 Identifying industry value drivers: Inefficiencies and frictions

Since its inception, HeadBox has engulfed its platform offering around the critical value drivers that were becoming increasingly important for customers but were neglected by the existing industry players (identifying as a starting point and one-off activity). The event industry "is way behind the customer, and as such, it presents a whole host of opportunities" (founder and CEO).

"I started HeadBox really for two reasons; the first was, I had to find amazing creative spaces on a regular basis for the likes of Unilever, Coca-Cola and other big blue-chip clients when I was at my last company FACE which I founded. I realized that to get these unique places, there was a whole process of searching and paying for space, which was really painful. The individual venues and venue listing companies were using these very outdated methods, and often I was tearing my hair out flooded by posted notes and lots of unnecessary phone calls and wasted time."

(founder and CEO)

In other words, the launch of HeadBox's SE platform was a direct response to the widening inefficiencies in this industry. Addressing these inefficiencies not only opened up new entry points to the already saturated marketplace but importantly, the focus on continuously solving industry issues remains quintessential to HeadBox's value proposition (identifying as a continuous process) until today. By focusing on solving these long-standing industry inefficiencies, HeadBox was able to develop a relevant and appealing platform offering and, thus, start gaining its initial customer base. Through its approach and novel use of technology, the company has significantly increased the transparency within the industry, increased the variety of the offering, and decreased the barriers to purchase, among many others.

"What we did with our platform from the industry perspective, we have streamlined the very inefficient processes. On the side of our guests, we are saving them hassle, time, and money so they can just go to one place to get an extensive list of venues with transparent pricing, reviews, and ability to directly contact venue owners. On the hosts' side, we provide a new marketing channel [not only] for traditional venues but for many other less traditional and interesting spaces [e.g., theatres, galleries, workshops]

that go underutilized for certain times of a day, week or year that did not have access to such marketplace before."

(head of marketing)

I have identified twelve such value drivers and industry inefficiencies that HeadBox addresses through its SE platform offering. These are summarized in Table 10 that provides a direct comparison between the UK's event industry's current *modus operandi* and the 'disruptive'- new to the industry - approach pioneered by HeadBox. While HeadBox managed to successfully enter the event industry by addressing its most pressing inefficiencies and value drivers, they did not stop there. With the use of sophisticated algorithms (based on machine-learning technology) and advanced analytics, HeadBox continues searching not only for latent and emerging issues to solve but importantly, continuously improving its existing solutions. This approach is deeply embedded in the company's value proposition that is central to HeadBox's innovation and growth strategy - and it is likely to remain so in the future as it drives its competitive advantage.

"Our value proposition drives everything. It drives our growth, and it is key to your strategy - you can always adapt the way you market your value proposition, but you always need to be clear and consistent on what your value proposition actually is. Ours is based on solving more and more customer and industry problems. The more we keep solving problems, the more we make it simpler, easier and faster to search, book and pay for spaces by using technology to get rid off those inefficiencies, I think the harder it will be for competitors - the barrier goes up."

(founder and CEO)

The industries are constantly changing, and so are their inefficiencies and value drivers. While during the early days of HeadBox's inception the founder had identified these 'manually' - mainly through personal experience - and on their basis developed the initial two-sided platform offering (this is part of phase two that is elaborated in section 5.1.2), the continuous mapping of changes was vital throughout the remaining phases of HeadBox's platform development. Without doing so, HeadBox would not be able to orchestrate its platform to not only continuously address existing stakeholder needs and identify the latent ones, but to keep its offering relevant and appealing to broader stakeholder base within, as well as from beyond the industry (this is part of phase three and four that are covered in sections 5.1.3 and 5.1.4).

"We released the MVP [minimum viable platform] back in May 2015 ... and we have just built things onto that. Now [2019] we have a dynamic pricing model, we added complex and sophisticated messages to the system. We added the ability to issue bespoke packages, create projects, favoring spaces that you like to come to share with members of your team. We kept solving the industry inefficiencies step by step, and we continue to do so."

(head of sales)

Value driver / Inefficiency	Traditional venue industry modus operandi	HeadBox disruption
Transparency	None to very low transparency – the role of venue providers is to build barriers among stakeholders to maintain control, usually withholding contact information, data, price, and thus disabling direct communication and value co-creation among stakeholders.	Full transparency — enabling stakeholders to directly communicate with one another, sharing data and knowledge about other stakeholders and maintaining flexible, but fully transparent, pricing.
Price elasticity and flexible pricing options	Inability to facilitate and support different pricing preference and requirements of diverse venue providers — imposing a standardized pricing model on all stakeholders.	To improve efficiency within the wider industry, HeadBox initially introduced flexible pricing (over 250 possible pricing combinations) and recently launched fully dynamic pricing.
Variety / venue choices	Lack of new venue openings – focused on traditional, easily accessible venues such as hotel meeting rooms and conference centers. Imposing standard venues on customers/stakeholders who have a multitude of different needs.	Widening venue choices to creative and non-traditional places by identifying 'idle' assets/unused spaces and thus accommodating diverse needs of venue seekers (venues range from opera houses through to warehouses, ateliers and remote tree houses).
Technology adoption	Very low adoption and integration of new technologies – industry adheres to standard 'directory listing' approach. Within the industry, there is no support for real-time information (RTI) and collection and use of 'rich' data.	Addressing industry inefficiencies through technology — development of the digital marketplace with 'rich' data being central to the success of both HeadBox and its diverse stakeholders.
Role of intermediary	To facilitate transactions between stakeholders without enabling their direct contact — maintaining the distance between all stakeholders.	Acting as a 'hub firm' – facilitating and aiding two-way communication between different customers. HeadBox is minimizing the distance between stakeholders.
The breadth of stakeholder needs to be addressed	Usually focused on addressing one or very limited needs of many diverse stakeholders – 'few of many.'	Focused on addressing a wide range of needs for a specific/limited number of stakeholders – 'many of few'.
Level of standardization	Imposing general standards that all stakeholders need to adhere to (i.e., pricing, cancellation policy) — standardizing everything to maintain control over all stakeholders.	Supporting and encouraging stakeholder diversity by accommodating their existing processes and limitations — not standardizing what does not need to be standardized and thus attracting

		stakeholders who otherwise would not join.
Data and stakeholder feedback	Data capture is often transaction focused with limited focus on rich data. Lacking mechanisms to collect granular and actionable feedback from stakeholders. Data is used only by an intermediary, often for monitoring purposes.	Capturing and unifying rich data with a focus on stakeholder engagement and experience. Using technology to collect granular and actionable feedback (specific to a particular aspect of offering). Data is shared across a platform to continuously improve different aspects of wider offering (each stakeholder can do something better based on data).
Stakeholder barriers to purchase	Using rigid processes that often discourage stakeholders to purchase (i.g., imposed invoicing mechanism, single purchasing option).	Strong focus on removing actual and perceived barriers to taking up the offering (e.g., multiple purchasing options, adherence, and compatibility with existing systems)
Stakeholder integration	Isolating rather than integrating stakeholders, leading to very limited value co-creation opportunities within the platform. Intermediaries are aiming to 'exploit' each side of the market – 'divide and conquer'.	Integrating stakeholders to facilitate and promote value co-creation within the platform.
Stakeholder retention	A business strategy focused on customer acquisition rather than retention. Intermediaries struggle to retain customers by their lack of focus on their wider needs.	Accommodating the wider needs of customers and continuously innovating the offering to appeal to all stakeholders involved. Business strategy is focused on retention by creating superior stakeholder experience.
Stakeholder management and control	Transaction-based. Purposefully reducing visibility and stakeholder control to get them 'locked in.'	Relationship-driven. Increasing visibility, engagement and empowering stakeholders to increase the 'stickiness' of the offering.

Table 10. Comparison between the 'traditional' venue industry modus operandi and HeadBox driven disruption

5.1.2 Delivering basic two-sided offering: Core interactions

Although the HeadBox had identified several industry inefficiencies, it first started focusing on those that were directly hindering or even completely prohibiting value-creating interactions among stakeholders within the existing venue industry (e.g., direct interaction between hosts and guests). Facilitating these value-creating interactions was central to HeadBox's MVP (minimum viable 'platform') design, leading to the development of the two-sided platform that was initially based on promoting a higher degree of transparency and direct interaction among stakeholders within this platform (e.g., just in 2018 the HeadBox facilitated over 70 000 digital interactions via instant messenger alone).

"Our competitors, for example, don't have an instant messenger or other tools through which the guest and host can talk directly. This is because they are worried that the clients would then bypass the platform. But our approach is very different. We actually think that if you built a platform that is good enough and it does everything that our clients want it to do, then why would they go 'around' the platform. We are supposed to be adding value, not restricting it by limiting interactions."

(head of marketing)

While HeadBox is the first in the UK to apply advanced digital technology to reshape the event industry, it is not the technology itself that drives its continuous innovations but rather its application to constantly identifying industry value drivers and inefficiencies that need to be addressed. It uses technology to facilitate and orchestrate interactions that need to take place to continuously enable and create value for broader stakeholders within the platform ecosystem. In other words, technology supports and facilitates HeadBox's strategy instead of determining it.

"The reason why platform cannot be easily stolen or copied over is the fact that it takes time to replicate it. It takes a lot of time to replicate the solution. It is not very difficult to envisage the technology behind this solution. To flesh out an idea for a smart person would not take much time really, the execution of that keeps us in the market, as long as we keep moving forward, we will stay ahead."

(head of product)

When designing the MVP, it was critical for HeadBox to achieve the balance between familiarity and novelty to increase the initial adoption. The company had technological capabilities to address many of the identified industry inefficiencies and frictions; however, many of these solutions would not be compatible with existing infrastructure and systems that were central to many stakeholders that HeadBox was trying to attract to join its platform. Therefore, the company's aim during this phase was to provide 'just-enough' novelty to attract these stakeholders but also ensure that its platform was able to support their existing processes to further lower the accessibility barriers.

"It is pretty hard to change the industry that is chaotic and very fragmented ... it takes more time than you envisage, therefore very often, you have to make peace with reality and tailor your product a bit closer to what happens now. So, in other words, if you are trying to create something completely revolutionary, it is not going to be adopted because it is too much of a shift from what people do today, and they will just have more objections that you can handle."

(head of product)

During the second phase of development, HeadBox focused on attracting two different groups of stakeholders; space owners (hosts) and space seekers (guests) to its platform (see Table 11). However, HeadBox was only generating revenue from the host side of the market, where it was charging a commission on bookings. Along with the initial revenue model, the company has identified a non-monetary but strategically important way to capture value through the collection and unification of different customer rich data (a combination of transactional, behavioral, engagement, and experience data). In the future, this led to the development of additional services, slowly leading to the creation of additional revenue streams. In doing so, over the time HeadBox, was able to build a more accurate picture of their stakeholders - "a single source of truth" (head of marketing). By collecting rich data from multiple touchpoints, HeadBox soon realized that a large number of their business customers come from different functions of the same organizations. This was an initial impulse to launch the Corporate Dashboard, which amalgamates accounts of different individuals from the same company. This addition, to the already well-functioning platform, was well received by companies because it reduces fragmentation, offers better budget control, and leads to improved internal transparency. Importantly, an increasing number of business customers who subscribed to Corporate Dashboard started using HeadBox almost exclusively for all their corporate events. Not only their engagement (e.g., higher number and frequency of

interactions) and commitment to the platform increased, but also their overall spend grew as HeadBox started integrating complementary services (e.g., catering, entertainment, and venue dressing) into the platform. As a result, the average annual order value almost doubled in 2018 in comparison to the previous year. This, in turn, attracted several hundreds of multinational corporations, including HSBC, Uber, and Expedia, to subscribe to Corporate Dashboard. By launching the Corporate Dashboard, HeadBox entered its third phase of development as it started to extend its offering vertically (within the same industry) and horizontally (entering new industries).

Instead of attempting to scale up its already feasible two-sided platform (i.e., this is where many platforms fail, they simply scale up too early - for more elaborate discussion see Täuscher & Kietzmann, 2017), HeadBox focused on extending its ecosystem (phase three) and amplifying its value to existing and new stakeholders (phase four) within its home market - localizing the platform. By doing so, the company aimed to not only develop more revenue streams and integrate more diverse stakeholder groups but mainly to increase the overall value of its ecosystem (i.e., increasing platforms stickiness - discussed in more detail in section 5.2.).

Phase Two: Delivering basic two-sided offering								
Aim	interactions between two	Create a basic offering that reduces friction by designing and orchestrating core interactions between two sides of the market (two-sided platform). Onboard stakeholders (indirect network effect) and establish an initial user base.						
Core activities →	Drawing stakeholders	Keening stakeholders	Monetizing					
Main stakeholder group ↓	in (value creation)	Drawing stakeholders Keeping stakeholders opportunities						
B2B guests (individual	Ability to easily search, book and pay for unique and creative spaces that	Maintaining free access to an easy-to-use digital platform	Ability to collect transactional data (no					
business users)	meet wider needs; all in one place/platform	Increasing variety and type of venues offered	direct revenue)					
Hosts	Additional exposure to a	Free listing on the platform	Commission (%) from					
(venue providers / space owners)	vast range of relevant customers	Access to high-end tools to better present and sell spaces	the price paid by 'guests'					

Table 11. Phase two 'develop' of HeadBox platform development: core activities and main stakeholder groups

5.1.3 Extending vertically and horizontally: Stakeholders and value

By having access to a growing number of data points at both guest and host side of the market, HeadBox realized that securing a venue is just a fraction of all the processes that can be streamlined within the broader event industry. While in the second phase of its platform development, the company focused on designing and facilitating core interactions between the main stakeholder groups, in the third phase it aimed to integrate other ecosystem actors into its platform.

"There is a whole range of services that always revolve around the events industry. A part of HeadBox's message to the market is that we are trying to pull all those things together, to have them all in one place that is managed centrally. As such we want to tap into that wider ecosystem, so not just deal with venues but also build a community of suppliers that have been vetted by us that their service matches our standard levels and we help promote them, and they get a slice of our pie in terms of customer retention."

(head of product)

... and

"A lot of venues do not offer anything else beyond the access to space. The things that people need from spaces are very diverse - some need flowers, some need DJs, some magicians and so on. The supplier ecosystem is huge, and we want to bring all suppliers into our platform. Therefore we are launching a HeadBox & Co [launched in early 2018] -, and this will bring in suppliers into the platform so that you can not just book space, but you can also book for example catering, equipment, music, entertainment and everything else - it will be all in one place."

(founder and CEO)

By utilizing the existing technology, HeadBox was able to extend its marketplace to not only accommodate the broader stakeholder groups but also to develop relevant complementary services and orchestrate the platform-wider orchestration among the growing number of stakeholder groups. These are summarised in Table 12. This table also incorporates stakeholder related activities that were established during the second phase (see Table 11) because they continue throughout the following phases - they are continuous and cumulative - and therefore, for clarity purposes, additional stakeholder groups and the activities specific to the third phase

are highlighted in gray within the Table 12. This is not only to demonstrate the cumulative and emergent nature of multi-sided platforms but to showcase the overlapping connection between activities specific to different phases of the platform's coevolution.

"We can do exactly the same thing here that we have done for venues but for the suppliers. You know this is an entire industry that has yet to be disrupted, and we already have our technology built in a way that it is just 'plug-in and go' - we can replicate our existing structure and processes and optimize it for suppliers [horizontal stakeholders] to build a new marketplace or extend our existing one."

(head of marketing)

By utilizing technology and data, HeadBox is continuously monitoring and is quick to respond to emerging stakeholders' needs by introducing new, or by extending and modifying the existing offering. HeadBox drives continuous improvement within the entire ecosystem by sharing relevant data and insights in real-time with all stakeholders. The company is trying to put itself "into the position of a data hub to provide the industry with insights. HeadBox gets a lot of activity on its platform, and so it can analyze all this data and derive the trends and see what the behavior tends to be and then use this information to augment offering" (head of product). For example, this led to the introduction of flexible pricing, customized cancellation policies, and complementary services.

"When we first launched the platform, we offered one price - venue hire. However, for example, private dinings do not do venue hire, they do a minimum spend, so they do not charge you for the room, they just say you have got to spend 500 pounds when you are in that room. Big conference facilities do not do venue hire they say you can have it for free, but you just pay for the people that come in, per person, a daily delegate rate they call it. It is a different way of looking at the pricing, but we have to think about when we want to automate this we had to build a dynamic pricing module that included daily delegate rate, that included a minimum spend, that included venue higher. This is an example of how we are taking something that is really complicated and built our product to overcome the issue."

(head of sales)

It is important to note that during this phase, HeadBox increased not only the number of stakeholder groups that it successfully integrated into the platform (e.g., third-party services, corporates) but importantly the value created for its new and existing stakeholders and thus the overall value of the platform. This led to an increase in revenue streams that HeadBox was generating from different stakeholder groups. Besides the commission fee from venues, the company was also generating revenue from annual subscription fees for Corporate Dashboards, paid-for services for hosts (i.e., professional photography, 3D tours, and premium listing) and listing fees for third-party suppliers.

"We are growing tactically; we are not onboarding venues at the same rate we are onboarding a year and a half ago because we do not need to. It is not smart to grow as aggressively as we were in that area, because we are never going to match the supply with the demand if we carry on like that."

(head of marketing)

Furthermore, during this phase, HeadBox rather than solely focusing on growing its stakeholder base focused instead on increasing the commitment and involvement of existing stakeholders, which led to a significantly high retention rate. For example, many of the corporate clients started using HeadBox exclusively, for all their event needs - "we introduced HeadBox across the whole network as the one and only supplier through which we book all venues" (Corporate Dashboard customer). The rising commitment to the platform also became evident among the hosts who started investing more into improving their listings by adding professional photography, 3D tours and by improving their performance (acting upon feedback provided by guest and HeadBox). In other words, HeadBox started to become the only platform these hosts used for getting not only venue bookings but for organizing the entire events.

Lastly, this commitment to continuous improvement and innovation had positively impacted business guests' uptake and regularity at which they used the platform. This, in turn, led to revenue growth at the supplier sides of the platform and thus increasing the stickiness of the platform and forming the addicted core of the platform (discussed in section 5.2). As argued further in this chapter as well as in chapter 6, it is precisely the stickiness of the platform and platform owner's ability to develop and continuously grow the platform's addicted core that determines its scalability and long-term success. In the case of HeadBox, before attempting to scale its platform the company not only focused on integrating additional complementary stakeholders vertically (e.g., HeadBox's Corporate Dashboard) and horizontal (e.g., HeadBox & Co - more extensive supplier network) but aimed to firstly amplify (phase 4) the value of its platform for both stakeholders and itself (i.e., maximising platform's value creation and capture opportunities).

Phase Three: Extend	ing vertically and horizonta	ally						
Aim	Identify new and create additional value for existing stakeholders (transition to multi-sided platform). Integrate stakeholders and create & capture value horizontally and vertically. Growing the stakeholder-base of the platform by adding complementary stakeholder groups rather than solely enlarging the two core stakeholder groups (hosts & guests).							
Core activities →	Drawing stakeholders	Keeping stakeholders in	Monetizing					
Main stakeholder group ↓	in (value creation)	(value creation)	opportunities (value capture)					
	Ability to easily search, book and pay for	Maintaining free access to an easy-to-use digital platform	Ability to collect					
	unique and creative spaces that meet wider needs; all in one place/platform	Increasing variety and type of venues offered	transactional data (no direct revenue)					
B2B guests (individual business users)	Accommodating	Enabling free access to basic third-party services	Ability to collect					
business users)	stakeholders' existing processes and preferences (removing barriers to use the platform)	Introducing cross-platform feedback mechanisms (merit-based competition among stakeholders) and increasing stakeholder engagement	richer data based on transactions, behavior, and engagement (not monetized)					
	Additional exposure to	Free listing on the platform	Commission (%)					
	a vast range of relevant customers	Access to high-end tools to better present and sell spaces	from the price paid by 'guests'					
Hosts (venue providers / space owners)	Accommodating stakeholders' existing preferences and	Continuous improvement of available tools to help stakeholders to improve sales (i.e., 3D, virtual tours)	Additional revenue from paid placements (advertising) on generic venue collection pages					
	processes (i.e., custom cancellation policy or flexible pricing)	Premium listings on particular collection pages (not search based premium listing/inclusion)	Fixed fee for the provision of additional services					
		Ability to use flexible pricing models	- (photography, 3D)					

Comments	Transparency, budget control, and convenience through	Access to the unified corporate platform (dashboard)	Annual subscription fee to the corporate platform
Corporate guests (aggregated business users)	consolidation of business functions (using one account for all business functions — reducing fragmentation)	Increasing variety and type of venues offered and personal account management (bespoke assistance with event planning)	Commission (%) from bookings and additional services
Third-party service providers	Additional exposure to the vast range of relevant customers and access to varied marketing tools	Listing on the platform and ensured continuous business (limiting the number of listed third-party service providers to maintain a balance between demand and supply)	Annual listing fee

Note: Activities and stakeholder groups highlighted in grey are specific to third phase while those unhighlighted were primarily taking place during previous phases but are cumulative and continue throughout

Table 12. Phase three 'extend' of HeadBox platform development: core activities and main stakeholder groups

5.1.4 Amplifying platform and stakeholders: Continuous innovation

During the fourth phase, HeadBox kept focusing on further widening the value it creates for its diverse stakeholders - creating an attractive platform (i.e., increasing stickiness) while exploring new revenue opportunities (i.e., increasing profitability of the platform). Core stakeholder groups - both new; the ones introduced throughout this phase and existing; the ones integrated during the previous phases - with corresponding value creation and capture related activities are summarised in Table 13 that integrates all phases (note that stakeholders and activities specific to phase four are highlighted in grey while stakeholders and activities specific to previous phases are kept unhighlighted). By focusing on the vertical and horizontal expansion of the platform, its size and complexity grew significantly, and HeadBox decided to focus on maintaining its full control without restricting its stakeholders by unnecessary standardization. From a technical perspective, HeadBox to maintain its speed and flexibility of innovation, but also to increase the technological manageability of the platform that was needed for continuously amplifying the value the platform creates for stakeholders and itself, the company had initiated the transition from monolithic to modular product-platform

architecture. While in the short-term - most notably in the early stages of platform development - "a monolithic architecture can outperform modular ones" (Tiwana, 2014, p.100), in the long term this architecture can significantly slow down platforms ability to continuously evolve (Kazan et al., 2018). In other words, HeadBox started to "break down the single monolithic product into isolated components. As the platform evolves, it tends to get bigger, until it hits the point when any changes or incremental improvements are slowing down because the risks grow with the size of the product which requires a lot of investment and effort into testing and managing that impact" (head of product). As highlighted in section 5.1.1., solving the industry inefficiencies through continuous innovation is in the heart of HeadBox's value proposition. In its ability to do so quickly and effectively ultimately lays its competitive advantage; therefore, the transition to modular architecture before even attempting to scale up was vital for maintaining its strategic direction.

"Our ability to spot problems and identify the solutions is very quick - we have to be able to also execute it. This is where I think that moving from monolithic to the modular structure will be the key. We will be able to do more stuff more quickly. Going modular will enable us to respond more quickly to the responses and data that we see from the customer and their needs and problems that need to be addressed. Our advantage will be in the ability to quickly execute and act on customer information and solving their problems."

(founder & CEO)

Besides moving away from monolithic architecture, during this phase, HeadBox also managed to extend its offering beyond its immediate platform ecosystem by introducing a payment engine (i.e., HeadBox widget) that besides being integrated into its platform, can also be used as a standalone product. In doing so, HeadBox helped its existing hosts to integrate all their bookings from across different channels. By having this level of real-time visibility into all venue bookings, HeadBox started developing dynamic pricing that benefited both hosts and guests. Furthermore, this payment engine could also function independently from the HeadBox's platform, which attracted venues that are currently not using the platform. Also, during this last phase, HeadBox started to see a significant increase in inbound inquiries. Initially, HeadBox had to approach venues (all venues are still being 'manually' approved and visited by the HeadBox team) to get them onto the platform, but now, these, including some well-known venues, are starting to come to HeadBox.

"Some venues were quite anxious about listing themselves on HeadBox as they did not know what we were about because they were quite precious about their brand and what has been really great, we have seen some of those venues actually re-approach us and say; now we know you are doing really well, we want to be involved."

(head of marketing)

To continuously amplify the value of its platform, the company, besides being able to design new and orchestrate existing interactions among the stakeholders, needs to monitor, maintain and improve the quality of its overall offering over time. The complexity of doing so increases not only with every new stakeholder group that is integrated into the platform but with every consequent stakeholder interaction. With sophisticated algorithms developed by HeadBox, each interaction between stakeholders provides a valuable opportunity to learn from and improve upon. In other words, HeadBox unifies and package the raw data into actionable insights that drive the real-time, continuous innovation of the broader platform offering.

"What we have started to do is to pass on rich data to host by offering them benchmarks on different factors and letting them see how they perform on these. So they can compare themselves with average, and that is a very valuable KPI [key performance indicator], especially when you start looking at average response times. You could say to the host that actually it takes you 24 hours to get back to the guests when they message you on instant messenger, and actually, the HeadBox average is 4 hours, and so on [...] this type of insights to a venue owner or manager is super valuable because it points them to the area of business that definitely needs to be improved on."

(head of marketing)

To keep the offering attractive for existing and new stakeholders over time, a part of the activities that HeadBox needs to orchestrate is not only continuously onboarding relevant stakeholders but also incentifying the existing ones to continuously innovate and improve upon their offering. Doing so can not only drive more business their way but also improve the overall value of the platform (i.e., raising the benchmark). As the benchmarks are getting higher, those well-performing stakeholders are getting better exposure or access to better services, and those that perform poorly often withdraw from the platform. The HeadBox aims to create and maintain a true meritocratic competition that is, to a large extent, self-governed with minimum intervention. By making the rules clear and fair and processes transparent, so

far, this has proved to be an effective way of orchestrating internal competition without exercising too much control.

"We are in the process of introducing an algorithmic search functionality that will reward guests, venue performance as a host. So, for example, if you have a better review, if your response time to messages is quicker and if you have a fully completed profile. If all of your photos are high resolution, you will get points within the algorithm, which will push you further up the search [this is a rather simplified view the algorithm is based on a large number of variables with different weighting]. For example, when someone searches for a meeting room in Shoreditch [London], the ones that respond quickly and have a complete profile are the ones that are shown first rather than the ones that are the closest [the basis of the proximity-based search]."

(head of sales)

Phase Four: Amplifying platform and stakeholders						
Aim	Systematically increase the value of the platform (both individual and collective) for stakeholders and the platform owner by enabling and orchestrating platform-wide continuous innovation. Increase the commitment of the stakeholders by establishing and growing the addicted core.					
Core activities →	Durania a stalich aldem in	Variantalahaldan ia	Monetizing			
Main stakeholder group ↓	Drawing stakeholders in (value creation)	Keeping stakeholders in (value creation)	opportunities (value capture)			
	Ability to easily search, book and pay for unique and creative spaces that	Maintaining free access to an easy-to-use digital platform	Ability to collect transactional data (no			
	meet wider needs; all in one place/platform	Increasing variety and type of venues offered	direct revenue)			
B2B guests (individual business users)	Accommodating	Enabling free access to basic third-party services	Ability to collect			
	stakeholders' existing processes and preferences (removing barriers to use the platform)	Introducing range of feedback mechanisms (merit-based competition among stakeholders) and increasing stakeholder engagement	richer data based on transactions, behavior, and engagement (not monetized)			
	Ability to access RT (real-time) pricing and	Continuous improvement of the	Ability to collect, unify and 'package'			

	availability data for all spaces	offering, functionalities and user experience (both online and offline)	rich data (transaction, behavior, engagement, and experience). Not monetized directly, but used for real-time decision making, innovation & improvements that drive quality of the offerings and the overall value of the platform.	
	Additional exposure to a	Free listing on the platform	Commission (%) from	
	vast range of relevant customers	Access to high-end tools to better present and sell spaces	the price paid by 'guests'	
	Accommodating stakeholders' existing preferences and processes (i.e., custom cancellation policy or flexible pricing)	Continuous improvement of available tools to help stakeholders to improve sales (i.e., 3D, virtual tours)	Additional revenue from paid placements (advertising) on generic venue collection pages	
Hosts (venue providers / space owners)		Premium listings on particular collection pages (not search based premium listing/inclusion)	Fixed fee for the provision of additional services (photography, 3D)	
		Ability to use dynamic RT (real-time) pricing		
	Continuously adding new features and functionalities to the platform (integrating additional services and stakeholders)	Ability to access and use unified RT (real-time) customer data	Fixed subscription fee to 'widget' (booking management add-on for venues). Monetizing data directly	
	Transparency, budget control, and convenience through consolidation of	Access to the unified corporate platform (dashboard)	Annual subscription fee to the corporate platform	
Corporate guests (aggregated business users)	business functions (using one account for all business functions – reducing fragmentation)	Increasing variety and type of venues offered	Commission (%) from bookings and additional services	

	Continuous improvement	Provision of RT (real-time) data	Commission (%) from 3rd party services	
	of the platform and functionality	Dedicated personal account management (bespoke assistance with event planning)		
Third-party service providers	Additional exposure to the vast range of relevant customers and access to varied marketing tools	Listing on the platform and ensured continuous business (limiting the number of listed third-party service providers to maintain a balance between demand and supply)	Annual listing fee	
		Ability to use dynamic pricing		
	Independent all-in-one	Ability to effectively manage the bookings and use dynamic pricing		
Independent hosts (using widget but not necessarily platform)	venue booking/pricing management tool for	Access to unified data from across all channels	Subscription fee	
	existing and independent hosts (those that are not using HeadBox platform)	High level of integration to HeadBox platform and other independent services (API based)		

Note: Activities and stakeholder groups highlighted in grey are specific to fourth phase while those unhighlighted were primarily taking place during previous phases but are cumulative and continue throughout

Table 13. Phase four 'amplify' of HeadBox platform development: core activities and main stakeholder groups

5.1.5 Scaling up: Internationalizing the platform

To avoid scaling up too early - which in the past has been detrimental to many platforms (e.g., Cherry, Exec, Prim, Tutorspree) - HeadBox through extending its stakeholder network (phase three) and amplifying the value that platform creates for stakeholders - within and beyond the boundaries of its platform ecosystem (phase four) - not only further increased the attractiveness of its platform, but importantly, it managed to develop additional revenue streams. This was achieved through effective orchestration of the platform that, to this day, is central to HeadBox's growing success.

"My growth strategy is to get a value proposition launched and grow strong in the UK and then move to other countries and eventually around the world. I feel that we have got the scalable model now, and when we get the UK to cash-break-even to profitability, we then have proof of our model, and then we can replicate this in multiple countries."

(founder & CEO)

The above quote is from HeadBox's founder and CEO Andrew Needham from late 2017, during which time the company was focusing on localizing its platform within the home market - most notably, London - before expanding to other UK cities. It took less than two years, and the company secured over £4 million of additional investment (the fundraising was led by Guinness Asset Management, bringing HeadBoxes total funding to £8.2 million) towards the end of 2018 to accelerate their expansion into Europe primarily focusing on Ireland, Netherlands, Germany, and France.

Throughout 2019, the company has been significantly expanding its workforce, establishing the international development team, and laying out strategic foundations for entering the European market. At the end of 2018, the company completed its expansion to Scotland (mainly Edinburgh and Glasgow), and in April 2019, HeadBox launched its platform in Ireland with the initial 800 spaces across Dublin, Cork, Galway, and Limerick and planning to launch its platform in Amsterdam, Berlin, and Paris by the end of the year 2019.

"Investors find our value proposition and business model very compelling; they often look at us with disbelieve that before we entered the market, there was no way to book, search and pay for venues online. For investors, the fact that our model and technology

is applicable in other industries but also that our model is scalable and applicable to different cities and countries is very compelling. We built our model to be very scalable, and this is our biggest advantage."

(head of marketing)

Before attempting to scale-up its platform, HeadBox focused on developing and strengthening its platform's addicted core (this is elaborated in the following section 5.2) by effectively orchestrating the value-driving mechanisms throughout all phases of its platform coevolution. Therefore, understanding these mechanisms is critical not only for deciphering how platform-based business models work, but more importantly, how to design and orchestrate them. In the following section (5.2 Case study analysis), I provide a comprehensive discussion of these mechanisms and how they were manifested and orchestrated in the case of HeadBox to continuously increase platform's stickiness (i.e., ability to attract and keep stakeholders) and profitability (i.e., ability to capture value) of the platform. As I further argue in chapter 6, using these mechanisms, we can not only describe how the majority of the multi-sided platforms in sharing economy work (e.g., Uber and Airbnb) but by adopting this lens, to a large extent, we can also attempt to explain the dismay of some of the well-known platforms (see section 6.2 Managerial implications).

5.2 Case study analysis: Stickiness-Profitability Compass

The first-order categories and second-order themes (see Figure 11 in chapter 4 Methodology) were used as a basis for the development of the *Platform Stickiness-Profitability Compass*, illustrated in Figure 13. This framework establishes the core criteria for platform viability: platform stickiness and platform profitability (second-order themes). This framework demonstrates the complementary, yet, independent relationship between the two. The platform *stickiness* is grounded in the concept of value – a value that the platform owner (i.e., orchestrator, central actor, hub firm, ecosystem integrator) can continuously create for its diverse stakeholders. For instance, by solving multiple stakeholder problems, the platform owner increases their commitment and loyalty to the platform, and thus, making it 'stickier.'

Essentially, the stickier the platform, the more stakeholders the platform owner can draw in and keep. In contrast to sunk cost (McAfee, Mialon & Mialon, 2010; Rong-Da Liang, Lee & Tung, 2014), stakeholders are not 'locked-in' by initial or cumulative monetary or other

investments. Quite the contrary, they are continuously motivated to add/create value for other stakeholders because the more they do so, the more they can capture for themselves. Many scholars (Staw, 1976, 1981; Arkes & Blumer, 1985) argue that the more stakeholders have already spent, the more likely they are to continue investing in the future even if they have not yet received the benefits. However, if the platform is considered 'sticky,' it is precisely because it provides almost immediate value for the stakeholder without prior investments (or commitment to invest in the future). Besides, stakeholders can leave the platform at any time without incurring any loss other than losing the opportunity to freely participate on the platform. This ability to switch to more feasible alternatives without forgoing any loss in investment is one of the main difficulties that platforms need to deal with. As shown in the case of HeadBox, instead of trying to lock-in their stakeholders by increasing their sunk costs over time, or making it difficult to switch - that essentially make platform offering less attractive - platform owner focused on creating and continuously increasing 'attractiveness' of its platform offering. In essence, stakeholders are drawn to the platform and motivated to stay rather than 'forced' to join and 'threaten' to incur a significant loss if they leave.

On the other hand, platform *profitability* is concerned with the platform owner's ability to capture the value that it enables and creates for multiple stakeholders (both monetary and non-monetary value). The main argument that I put forward is that the platform owner's efforts to increase the viability of a platform need to be targeted at both of these dimensions. For example, by solely focusing on increasing the platform's stickiness, the platform owner might create more value than it can capture, resulting in a reduced ability to profit from stakeholders (i.e., unrealized potential - see Bock & George, 2018). Equally, if the platform owner captures more value than it has created, it increases its short-term profitability; however, at the same time, it could decrease the platform's stickiness. As a result, existing stakeholders will start switching to alternatives. If no viable alternatives exist, such practice can trigger competitors to enter the market with a 'fairer' offering. Fewer new stakeholders will join the platform because this practice of maximizing value for itself at the expense of stakeholders will significantly decrease the perceived attractiveness of such a platform. Both of these scenarios are common during the early days of many SE businesses, but failing to achieve growth in both dimensions is detrimental to the platform's viability in the long-term. To accomplish this complementary growth, I have identified eight value-driving mechanisms that shape and directly impact platforms' stickiness and profitability over time. Because of their interrelated nature, these value-driving mechanisms are presented in pairs, where each stickiness mechanism has one corresponding profitability mechanism. In doing so, I contribute to establishing a missing link in the relationship between value capture and value creation by the

platform owner and other stakeholders within the platform ecosystem (Kohtamäki & Rajala, 2016; Reypens et al., 2016; Ritala et al., 2013).

Furthermore, the impact of each mechanism on its corresponding criterion (platform stickiness and profitability) is indicated from 'minimal' to 'high,' forming the basis for the establishment of four stakeholder dimensions (borderline, outer circle, inner circle, and addicted core). These dimensions correspond to the likelihood of stakeholders to not only be drawn into the platform but, also to remain with the platform owner over time (increasing stickiness), which in turn leads to increased platform profitability for the platform owner. The dimension borderline refers to the rather disengaged and indifferent stakeholders, who use the platform mainly for transactional purposes – which often happens during the initial phases of the platform's development, as demonstrated in the case of HeadBox. Platform stickiness and profitability are at their lowest. Both of these increase as more stakeholders are drawn to the outer circle and inner circle dimensions. These intra-dimensional transitions are characterized by an increase in stakeholders' engagement, commitment, and loyalty. In a SE platform, both profitability and platform stickiness reach their peak when more and more stakeholders are drawn further into the addicted core. In this dimension, stakeholders' involvement and commitment to the platform owner and other stakeholders are at their highest point. However, stakeholders' transition from the borderline to the addicted core is by no means part of the natural development of the platform. Instead, it is a well-designed process that is carefully crafted and managed by the platform owner (Müller-Seitz, 2012). In the case of HeadBox, I mapped out this progression (from borderline to addicted core dimension) to start taking place in the second coevolutionary phase of its platform development throughout the third and fourth phase (see Tables 11, 12 & 13) and it is more than likely to continue in the future. As demonstrated in this case, HeadBox, like many other platforms before, has firstly focused on two distinct groups of stakeholders (venues and guests) whom they initially provided with basic value - minimum viable product/platform (i.e., low stickiness) that was being monetized through a single revenue stream (i.e., limited profitability). However, over time, HeadBox by actively managing the identified eight value mechanisms was able to systematically extend its platform offering (starting in phase three). In doing so, HeadBox had managed to not only draw its stakeholders closer to the addicted core by continuously extending the value of its platform, but it also started to widen its abilities to profit from the platform by introducing additional revenue streams.

"I did not have these three revenue streams when I launched HeadBox.....well I only had one when I started, so you have to take a step back, learn and focus on driving that stickiness from all sides of the marketplace [platform]."

(founder and CEO)

Arguably, only very few platforms manage to develop the addicted core (see Täuscher & Kietzmann, 2017, who studied reasons for failures in sharing economy B2C platforms). However, doing so should be the ultimate goal of the platform owner. Given the dynamic and coevolutionary nature of multi-sided platforms, the development and continuous strengthening of the addicted core needs to be integrated into the platform's growth and innovation strategy and become part of its corporate DNA as demonstrated by HeadBox. Interestingly, while discussing the internationalization of platforms (one of the two additional research projects on which I continue collaboration with the company) during the regular research update in July 2019, I asked HeadBox's CEO about their corporate customer churn rate and the main reasons for it. With a smile, he responded: "I can't really tell you what the main reasons are because the number of business customers that left us since we have launched our corporate offering [about two years ago] is so low that we can't make any generalizable conclusions. I could possibly count those who left us on the one hand" (founder & CEO).

In the following sections of this chapter, I present eight dynamic mechanisms through which the platform owner can draw its stakeholders closer to the addicted core and hence, increase both stickiness and profitability of its platform.

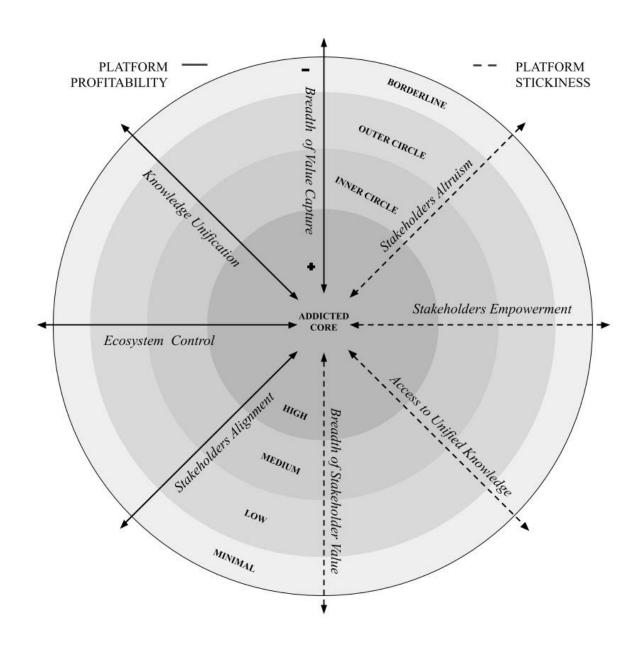


Figure 13. Platform Stickiness-Profitability Compass

5.2.1 Stakeholder alignment and stakeholder altruism

MINIMAL	Stakeholder A	Alignment	HIGH	HIGH ∢	Stakeholder A	Altruism	MINIMAL
Borderlines	Outer Circle	Inner Circle	Addict	red Core	Inner Circle	Outer Circle	Borderlines
5 - 0	PLATFORM P	ROFITABILITY	+	+	PLATFORM	STICKINESS	-

The value creation among different stakeholder groups within the sharing economy rests on the principles of shared values (Ouchi, 1979) and a mutual collaboration that promotes altruistic behavior (Hardy & Van Vugt, 2006) among stakeholders within the platform-ecosystem. In other words, stakeholders' commitment to the platform owner and one another (Anderson & Weitz, 1992) increases as a result, which leads to increased value and attractiveness of the platform (platform stickiness). However, for the platform owner to establish and benefit from stakeholders' altruistic behavior, it first needs to be able to align stakeholders' interests. In doing so, it eliminates partial conflicts (Gottschalg & Zollo, 2007) that are prevalent in multi-stakeholder networks (Freeman et al., 2010) - and encourages value co-creation within such network (Harrison & Wicks, 2013; Kazan et al., 2018; Leitão & Domenico, 2015; Turi, Domingo-Ferrer, & Sánchez, 2018; Vargo & Lusch, 2004). In turn, this requires a platform owner to invest less time and resources into attending to these differences and conflicts (indirectly increasing platform profitability). When stakeholders' interests are aligned and altruistic behavior supported, the process of value creation is not dependent only on the platform owner's abilities and resources. Instead, it becomes a shared responsibility of the entire network. Therefore, as identified in the case of HeadBox, the first value-driving mechanism that influences the platform's profitability and drives stakeholders closer to the addicted core is the platform owner's ability to align stakeholder interests and maintain this alignment over time. This ensures that, to some extent, all stakeholders are not only able to benefit from the platform owner's activities, but also the activities of other stakeholders within the platform (Gawer & Cusumano, 2014; Visnjic et al., 2016). Achieving this level of alignment resides in the platform owner's ability to seek out and address stakeholders' joint interests rather than focusing on the prioritization of one group of stakeholders over another. However, stakeholder interests are often 'in a partial conflict' (Freeman et al., 2010, p. 28). To sustainably increase and maintain platform profitability through stakeholder alignment, the platform owner needs to develop its offering in a way that adds value to multiple stakeholders within the platform. In the case of HeadBox, the evident demonstration of this was when in the third phase of its platform development, the company launched the 'widget.' This payment and venue management engine enabled hosts to integrate HeadBox's platform into their existing IT system, which allowed them to manage all their bookings from across all channels in one place. The widget also created more transparency and enabled guests to see real-time availability of the venues. Furthermore, given that the widget could function independently, venues that were not part of HeadBox's platform were also able to use it. This not only increased the attractiveness of its platform among this group of stakeholders, but it slowly started converting these independent users into engaged customers. Therefore, by adapting its offering, HeadBox managed to address the demands of different stakeholders with the single offering (guests and hosts) and also to draw in new stakeholders (independent venues), which would not be possible without first aligning the interests of its stakeholders.

"The booking and payment widget came when quite a lot of venues started asking us if they can integrate our software with what they have on their site. At the same time, guests were asking for real-time venue availability on the platform."

(head of marketing)

"The widget created additional revenues that we had not really thought about when we launched HeadBox."

(founder and CEO)

Furthermore, by creating value for multiple stakeholders through advancing the platform's offering, the platform owner can capture more value by seeking revenue from all stakeholders for whom it created value. By charging an annual subscription fee for using the widget and monetizing the data generated by this widget, HeadBox was able to develop an additional revenue stream and thus increase the profitability of the platform. Whether stakeholders decided to join HeadBox's platform or were just using the widget on a standalone website, the company, in addition to extra revenue, was able to collect all the information about the engagement, interaction and use of the widget. Doing so allowed HeadBox to continuously innovate its offering at a component level with an aim to maximize value for all existing stakeholders within the platform. However, pursuing activities/innovation that would only create value for one stakeholder group while destroying value for others were avoided. For example, for HeadBox, it is possible to charge an additional fee for allowing paid listings on its

venue search engine result page (similar to Google Adwords), but the HeadBox is firmly against this practice. While these paid listings would increase value capture opportunities from stakeholders who are willing to pay for inclusion and hence, create an additional revenue stream for HeadBox, pursuing this 'in-search advertising model' is not in the interest of all stakeholders.

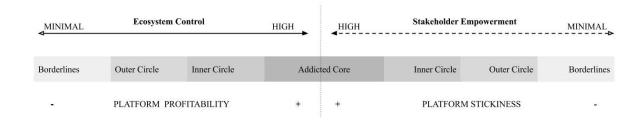
On the guest-side of the platform, stakeholders might start losing trust in HeadBox if it favors and promotes hosts that are on the top of the listing not because of their relevance or quality, but merely because they have paid to be there. Also, this can create conflict on the venue side where venues that work hard to keep improving the quality of their offering to organically rise in ranking (HeadBox is using an algorithm similar to Google that ranks venues based on the combination of multiple relevancy factors and performance indicators) are likely to feel cheated and demotivated by those that simply pay to leapfrog others.

"We would never do paid listing ... putting results at the top of the search results pages of the venues that have paid to be there just doesn't really sit in line with us. Hosts have the ability to improve their [organic] ranking and get themselves on the top of the search result pages, and this is what we are encouraging. But to improve their position, they will have to work for it – they will have to improve their response time, improve their profile, or make sure that their reviews reflect the services they offer."

(head of marketing)

By increasing stakeholder alignment, the platform owner is also able to establish some form of reciprocal relationship among its diverse stakeholders. However, to increase platform stickiness through this reciprocity, it is imperative for the platform owner to continuously reinforce stakeholder altruism, which leads to higher levels of cooperative behavior among stakeholders (Axelrod & Hamilton, 1981; Hardy & Van Vugt, 2006; Van Lange & Semin-Goossens, 1998). A high level of stakeholder altruism is essential for both, drawing in new stakeholders and keeping existing ones (Kumar et al., 2018). To achieve this, the platform owner needs to motivate stakeholders to actively participate in value co-creation activities (Visnjic et al., 2016). HeadBox focused on rewarding altruistic behavior by developing algorithms that enabled the establishment of a fully transparent merit-based competition where those who create more value for other stakeholders were rewarded by having, for example, a higher organic ranking, which in the case of hosts led to increased exposure and hence more value capture opportunities.

5.2.2 Ecosystem control and stakeholder empowerment



Orchestrating a multi-stakeholder network requires a more fluid approach than, for instance, management of internal processes (firm-level) or linear supply chains (Choudary et al., 2015). To achieve this fluidity, the platform owner needs to be able to empower all stakeholders, but at the same time maintain control of the platform (Elaluf-Calderwood et al., 2011; Wind et al., 2009). This will help the platform owner to lower the barriers to entry for stakeholders and make them feel like equal partners in the platform (i.e., by integrating their existing internal processes). As further argued by Wind et al. (2009), empowering stakeholders to drive changes and managing activities that are primarily related to the day-to-day functioning of the platform (Wind et al., 2009) will allow the platform actor to direct its attention towards maintaining a strategic control of the platform (Gawer, 2014; Scholten & Scholten, 2012). As demonstrated in the case of HeadBox, for the platform owner to draw stakeholders closer to the addicted core, it needs to focus on accommodating their rigid and often limited, existing internal processes without attempting to standardize and force stakeholders to comply. As argued by Edelman (2015, p. 97), "platforms must offer enough compatibility to showcase potential benefits, yet not so much that users delay switching to reap those benefits." In other words, the platform owner needs to empower stakeholders to allow them to drive changes, such as letting stakeholders introduce and enforce their own cancellation policies or pricing models that are compatible with their existing systems. In the case of HeadBox, the company recognizes, respects, and embraces their stakeholders' existing processes when designing new features of the platform, and innovating the existing ones. Doing so eliminates stakeholders' objections to joining and using HeadBox's platform in full (e.g., benefiting from all functionalities, not just some 'modular' services that this platform offers). For instance, to make the platform more attractive (and usable) for larger corporate stakeholders, HeadBox started investing in features around invoicing and workflows, to enable these stakeholders to pay by invoice as opposed to credit cards or digital

payments. Rather than 'forcing' the stakeholders to use a single method of payment, the company recognized that due to existing internal processes, this would be difficult for many stakeholders to adopt.

By standardizing some processes, the platform owner can arguably gain better control over its stakeholders, but, at the same time, it will create barriers to entry for many potential stakeholders. For example, HeadBox, during the third phase of its platform development, was quick to realize that its stakeholders' pricing models differed significantly. Hence, it started moving away from single standardized pricing (i.e., rental based on £ per hour), and instead, introduced flexible pricing models where stakeholders had full control over how they will charge their customers.

"The host of those spaces wants to sell that space by applying different price models. They can now buy the space by the hour, by the day, by minimum spend, by day hire, or pay per delegate. We were the first; it has never been done in the industry before, but this is what the venues want."

(founder and CEO)

In addition to accommodating stakeholders' current pricing models, HeadBox had applied a similar approach to its cancellation policy, which again was standardized at an early stage of its platform development (phase two). However, given the growing diversity of its stakeholders, and with them, the growing need to introduce, modify or grant exceptions to cancellation policies, the company gave full control of cancellation policies to the hosts instead of holding onto it themselves. HeadBox started empowering its stakeholders since the first phase of its development, and it continued to do so. As a result, the company was not only able to lower the barriers to entry, but essentially, make the platform easier to use. This increased the attractiveness of the platform for new stakeholders and strengthened the commitment of existing ones (increasing platform stickiness). By allowing stakeholders to take care of pricing, content, or cancellation policies, HeadBox could instead dedicate more time and resources on more strategic developments such as new services, quality control or stakeholder onboarding. These savings are directly reflected in increased platform profitability and better strategic focus.

This level of empowerment, reduced barriers to entry and allowed HeadBox to grow its platform without over-focusing and investing into standardization, giving the company more time to focus on the strategic aspect of its platform. Empowering stakeholders may create an impression that the platform owner will start losing control of the platform. However, as demonstrated by HeadBox, the platform owner can increase its platform control, while at the

same time increasing stakeholder empowerment. To do so, it needs to establish a technological infrastructure through which all processes can be monitored and optimized. This infrastructure also provides stakeholders with tools and processes to function more independently. As further uncovered, there are two facets to platform control. The first is operational control, where the platform owner is concerned with the day-to-day management of the booking process. In the case of HeadBox, operational control has mostly been delegated to stakeholders by empowering them to take care of these processes themselves - e.g., managing their listings, setting prices, and communicating directly with other stakeholders. The second type of control is related to the strategic management of the platform, and it is crucial for the platform owner to fully control this itself. The primary focus here is on maintaining the long-term viability of the platform by balancing supply and demand, stakeholder onboarding, integration and development, and optimization of a platform-wide offering. Successful onboarding at all ends of the market (i.e., hosts, guests, corporates, service providers) is key to the success of a platform-based business (Rochet & Tirole, 2003).

Furthermore, the platform owner needs to be able to avoid and manage the negative impact associated with the network effect (Boudreau & Jeppesen, 2015; Gawer & Cusumano, 2014; Moser & Gassmann, 2016; Van Alstyne et al., 2016). This is in line with the findings of Kumar et al. (2018), who stress the need for the platform owner to retain only those stakeholders that create sufficient value for the platform. For instance, each new venue is assessed by HeadBox to evaluate whether it meets the predetermined set of standards needed for joining the platform in the first place. By controlling the demand and supply, the platform owner onboards only those stakeholders that are beneficial for others (i.e., have a higher predisposition for reciprocal altruism). In doing so, the platform owner can fully control the quality of the offering (Evans & Schmalensee, 2010) without falling victim to network effects. This level of control is crucial for maintaining the long-term viability of the platform.

"We have a limited amount of suppliers in each category. If you have hundreds of suppliers, only a few get regular business, which will make our offering less appealing and for them less profitable."

(founder and CEO)

Quality needs to be controlled at all ends of the platform. As Kohler (2015, p. 74) suggests, the platform owner needs to be able to "create different feedback loops that encourage stakeholders to participate in the curation process through reporting, voting, or reviewing the core value unit." It is not only the platform owner that has obligations towards its

various stakeholders, but in the sharing economy, also stakeholders have obligations towards the platform owner and each other (Fassin, 2012; Freeman et al., 2010; Harrison & Wicks, 2013; Lankoski et al., 2016). For example, in the case of HeadBox, guests have to leave detailed feedback; otherwise, they are not able to use any other features or make future bookings through the platform. In essence, the curation is integrated into the core offering.

5.2.3 Knowledge unification and access to unified knowledge

MINIMAL	Knowledge Unification		HIGH	HIGH	Access to Unifie	d Knowledge	MINIMAL →
Borderlines	Outer Circle	Inner Circle	Addict	ed Core	Inner Circle	Outer Circle	Borderlines
	PLATFORM PR	OFITABILITY	+	+	PLATFORM S	TICKINESS	-

A critical form of value capture from the platform is through collecting, analyzing, and consequent unifying the data by the platform owner. This not only enables the platform owner to capture value by discovering emerging stakeholder needs but also to create value for its diverse stakeholders by providing access to the collected information. By doing so, stakeholders are essentially provided with an opportunity to improve the value they provide to other stakeholders within the network (Kohler, 2015). Opportunities for creating value are often uncertain, and the platform owner needs to actively search for such opportunities (i.e., getting access to unique information or resources) (Rumelt, 1984). For the platform owner to increase its ability to profit from its stakeholders, having a comprehensive understanding of their needs and interests, and how they evolve over time, is crucial for the long-term success of the platform. This can only be achieved through a continuous collection and analysis of stakeholder data from a range of sources (Dhanaraj & Parkhe, 2006; Möller & Svahn, 2009; Müller-Seitz, 2012). However, to benefit from this data, the platform owner needs to be able to unify it. The process of knowledge unification enables the platform owner to attribute data from diverse sources to a particular stakeholder. HeadBox, during the second phase of its platform development, has created a sophisticated framework that allows the company to unify knowledge across all data sources. The ability to unify knowledge often leads to the early

discovery of latent and emerging needs that can then be translated into additional revenue streams.

"Our data tracking framework utilizes augmented metadata that we now capture, track, and act upon. This is allowing us to unify data about customer acquisition across all channels, including offline."

(head of product)

"When we looked at our database, we realized that there were 10–15 people [individual accounts] from the same company using HeadBox that were often paying by using shared budgets. Based on this data, we launched the Corporate Dashboard, which broadened our reach and created an additional revenue stream."

(founder and CEO)

To increase the stickiness of the platform and facilitate innovation (both at the platform and stakeholder level) (Evans & Schmalensee, 2010), the platform owner must enable stakeholders to access unified knowledge. In the third phase of its platform co-evolution, HeadBox started to provide access to relevant real-time data to all of its stakeholders. In doing so, HeadBox started to drive continuous improvement within the entire platform and put itself into the position of a data hub. For example, over the course of its platform development, this unified data led to the introduction of flexible pricing, the launch of a widget, customized cancellation policies and integration of third-party suppliers (i.e., catering, music or venue dressing), which not only increased stickiness of the platform but also its overall profitability. Furthermore, for stakeholders to also benefit from this knowledge, it needs to be not only unified and accessible but also relevant to their evolving needs (Dhanaraj & Parkhe, 2006). It is the role of the platform owner to ensure that all stakeholders have access to the knowledge in a form that is digestible and actionable. To achieve this, HeadBox provides tailored data for each stakeholder. This way, stakeholders can not only gain insight into other relevant stakeholders within the platform (e.g., venues learning about guests' search behavior and preferences) but also can use this data to benchmark themselves on different factors (e.g., rating, response time, price), to evaluate their performance on these against others. This allows stakeholders to continuously improve and innovate their offering, which essentially leads to increased competitiveness and attractiveness of the overall platform's offering for both existing and new stakeholders.

This commitment to continuous improvement on the hosts' side has positively impacted guests' uptake and regularity at which they used HeadBox's platform. By giving stakeholders access to this unified knowledge, the platform owner can get them to take an active part in the innovation and co-creation of the offering, which in turn, increases both platform profitability and platform stickiness. HeadBox was not only able to monetize its data, and thus, increase its value capture opportunities but, by allowing full transparency for guests, and innovation opportunities for hosts, it has drawn both of these stakeholder groups closer to the addicted core (i.e., they have become more involved and committed), and hence, further increased the platform stickiness.

5.2.4 Breadth of value capture and the breadth of stakeholder value

MINIMAL	Breadth of Value Capture		HIGH	HIGH ⋖	Breadth of Stal	keholder Value	MINIMAL
Borderlines	Outer Circle	Inner Circle	Addict	ted Core	Inner Circle	Outer Circle	Borderlines
	PLATFORM PI	ROFITABILITY	+	+	PLATFORM STIG	CKINESS	<u>.</u>

Zhu and Furr (2016) postulate that while products produce only a single revenue stream, platforms, and other ecosystem-based business models can generate many. This is somewhat oversimplified because, for the platform owner to get closer to multiplying its revenue streams, it needs to be able to develop and support multiple types of value that its diverse stakeholder demand (Paquin & Howard-Grenville, 2013; Reypens et al., 2016). Therefore, continuously increasing stakeholder value is one of the main prerequisites not only for drawing stakeholders closer to the addicted core but also for attracting new ones to the platform. Doing so is crucial for increasing the platform's viability and should, therefore, be embedded in its core value proposition.

"Our value proposition drives everything. It drives our growth, and it is key to our strategy. Our purpose is the most important. We change and extend what we do and how we do it, but never the why."

(founder and CEO)

The platform owner, instead of growing the platform by focusing on increasing the number of stakeholders, should instead be concerned with broadening stakeholder value. For instance, throughout the third and fourth phases of its platform development, HeadBox focused on identifying and addressing the broader needs of the narrower market, rather than further widening up its existing stakeholder base (e.g., growing the number of venues or attracting more guests). For example, during the second phase, HeadBox focused on increasing the commitment and involvement of existing stakeholders through the provision of additional value (e.g., account management, bespoke services, additional payment options, private consultations), which led to significantly higher retention rate. As a result, many of the HeadBox's existing corporate clients started using HeadBox exclusively for all of their event needs, leading to an increased average spend and, thus, higher overall profitability. After HeadBox began to broaden its offering, many of their corporate stakeholders (i.e., those using the corporate dashboard), have decided to introduce HeadBox across their entire network (e.g., branches, subsidiaries, and HQs). In essence, HeadBox has become the one and only supplier through which these stakeholders were booking all venues and services, which led HeadBox to introduce comprehensive bespoke event management services for this stakeholder group. By doing so, HeadBox's platform started slowly shifting away from its 'sharing' origins and evolved into more ecosystem-based (i.e., ecosystem integrator), full solution provider. This was rather a natural (co)evolution of HeadBox's business model that resulted from its focus on continuously addressing the needs of a broader market.

For the long-term viability of ecosystem-based business models, it is crucial to always aim at addressing broader stakeholder needs instead of (over)exploiting the existing ones. Doing so will keep these BMs more flexible and evolvable. As argued by Wind et al. (2009, p. 313) platform owner sometimes needs to "sacrifice its own short-term interests to optimize the network—which benefits itself and its partners in the long run." By continuously extending the breadth of stakeholder value during the first two phases of the platform development, HeadBox started to see a significant increase in inbound inquiries. Initially, HeadBox had to approach and persuade some of the well-known and prestigious venues to get them onto the platform. However, during the third phase, these venues became more and more attracted to HeadBox and started approaching the company themselves.

"They [stakeholders] have different, varied needs, and we wanted to accommodate all those needs in one place, so we have to keep the breadth. When we talk about our offering, we always go beyond the very narrow need for space, and we try to accommodate all other possible needs that they can have."

(head of product)

Not only unclear or irrelevant value propositions are among the leading causes of platforms' premature dismay (Clemons, 2009; Täuscher & Kietzmann, 2017) but also their heavy reliance on an unsustainable monetization model that is often based on a single revenue stream (i.e., commission). Equally, as the platform owner continuously increases the breadth of stakeholder value, it needs to be able to benefit from creating this additional value (Bock & George, 2018) and hence also broaden its own value capture opportunities. As demonstrated in the case of HeadBox, instead of exploiting its commission-based revenue model, the company started focusing on the development of additional revenue streams before attempting to scale up (mainly throughout the phases three and four). They did this by increasing the breadth of value created for stakeholders. This not only led to increased platform stickiness but also improved the overall profitability of the platform. For example, in addition to commissions from bookings that HeadBox was relying on during the first phase of its platform development, it managed to introduce annual subscription fees (Corporate Dashboard and payment/booking engine - widget) and paid-for services for hosts (3D tours of venues) during the subsequent phases which created additional revenue streams, integrated more stakeholders into the platform, and ultimately led to 'stickier' offering.

"I like this idea of having three 'revenue legs' to a stool. I always like to think of it in this analogy because it means the chair with two legs would make you fall over. In the beginning, our revenue model was transaction-based only. Only later, we introduced additional revenue models. These [revenue streams] are all linked... the more venues we get, the more bookings we get, the more opportunities there are to sell marketing packages and drive revenue from those venues. Our revenue streams are all interconnected, but they are driven by different things. Say if one month we made x amount from commissions, that would not have a direct effect on the other revenue streams. If one month, we do not do enough venue sales, it does not mean we do not get enough marketing sales or subscriptions."

(founder and CEO)

It is important to note that all of these additional revenue models while being complementary, are not interdependent, which makes the platform even more viable in the

long term. HeadBox has created multiple revenue streams that are interconnected, but at the same time, they are entirely independent (i.e., losing one revenue stream would have no adverse impact on others). Once the platform owner establishes multiple revenue streams, the sharing economy platform is much easier to scale and expand internationally (Sundararajan, 2013). It is the platform owner's ability to continuously increase the breadth of value capture opportunities by addressing broader stakeholder needs that determine the profitability of its platform.

5.3 Conclusion

The role of the platform owner in developing a viable multi-sided platform resides in its ability to continuously explore, evaluate, and act upon emerging opportunities to create and capture value, as demonstrated in the case of HeadBox. In this chapter, I established two overarching dimensions, determining the overall viability of these ecosystem-based business models: profitability and stickiness. Further, I conceptualized their eight value-driving mechanisms to provide a more granular view of how these dimensions impact the coevolution of these BMs and how the platform owner can orchestrate them to reach the desired scale. In essence, it is precisely the platform owner's ability to continuously attend to and increase both of these dimensions that is the prerequisite for developing and sustaining these BMs over time.

Besides discussing the findings of this thesis in relation to the extant literature, in the following chapter, I also provide concise guidelines for practitioners on how to use the proposed Platform Stickiness-Profitability Compass to; 1) develop and orchestrate multi-sided platforms, and to 2) evaluate and benchmark different multi-sided platforms. Furthermore, the upcoming chapter also summarizes the theoretical contributions of this study and aims to provide future research direction and implications for academic and executive education curriculum development.

CHAPTER 6: Concluding discussion

6. Designing and orchestrating multi-sided platforms

The main aim of this research project was to abstract the underlying value-driving mechanisms of multi-sided platforms and examine how platform owners can orchestrate them to increase the viability of these otherwise short-lived (Cusumano et al., 2019; Täuscher & Kietzmann, 2017), ecosystem-based business models over time.

Drawing on the insights from the longitudinal case of HeadBox, I have first established five distinct phases through which multi-sided platforms coevolve. It should be noted that these phases could not be distilled down to precise time units and durations (i.e., phase one takes x number of months while phase three can take x months). However, the progression from one phase into another depends on the completion of phase-specific activities, processes, and interactions. It can be argued that many multi-sided platforms can remain 'stuck' in a particular phase, most notably in phase two (i.e., Delivering basic two-sided offering). While some can sustain themselves, many are likely to face their inevitable demise when attempting to scale up too early - usually skipping phases three and four (i.e., Extending vertically and horizontally & Amplifying platform and stakeholders) (Marmer et al., 2011). It cannot be generalized that multi-sided platforms would ultimately fail if they do not follow this five-phase trajectory within a particular time frame. However, it can be suggested that by attending to value-driving mechanisms and the activities specific to each phase, they can significantly improve their survival rate and essentially the viability of their multi-sided platforms. In this thesis, I have organized these five phases of platform coevolution into the iDEAS Platform Coevolution Phase model. To demonstrate its empirical origins, this model is used as a backbone for presenting the case study in chapter five (section 5.1 Case study background: Introduction to HeadBox), where each phase is illustrated through rich examples from the longitudinal case.

It was essential first to establish these coevolutionary phases - map out the activities and processes that governed value creation and capture in each phase - to derive their underlying regenerative mechanisms. These mechanisms are integrated into a multidimensional framework, *Stickiness-Profitability Compass* that, besides establishing the missing link between value creation and value capture in multi-stakeholder networks, forms the practical contribution of this thesis.

Aim and structure of the chapter

This chapter is divided into three main sections. In the first section, I elaborate on the theoretical contributions of this thesis by positioning them besides the articulated research gaps. In doing so, I further corroborate theoretical grounding for the introduced frameworks. Given the PDR direction that this research project took from the outset, the second part of this chapter deals with the thesis' contribution to advancing practitioners' understanding of multi-sided platforms. In addition, practical value and applicability of the Platform Stickiness-Profitability Compass were examined through a series of workshops with practicing managers, and this is further elaborated in section 6.2 Managerial implications. Lastly, considering the growing significance and impact of multi-sided platforms on our economy, besides providing directions for future research on this emerging phenomenon, I also present concise implications for the development of academic and executive education.

6.1 Theoretical contributions

This thesis responds to several calls for empirical examinations aimed at uncovering not only how the platform owner (i.e., hub firm, central actor, ecosystem integrator) can attract and keep stakeholders on the platform, but also how it can succeed over time - i.e., maintaining a viable platform in the long-term (Harrison & Wicks, 2013; Reypens et al., 2016). Furthermore, drawing on stakeholder theory and a longitudinal case of a B2B sharing economy platform - HeadBox, this thesis also further advances the literature on the sharing economy and establishes the missing connection between value creation and appropriation by a central actor in multi-stakeholder ecosystems. Therefore, the theoretical contribution of this thesis is threefold.

First, it contributes to scarce, but slowly emerging literature on network orchestration, which posits that the platform owner can deliberately influence and manage the development of a value network (Dhanaraj & Parkhe, 2006; Müller-Seitz, 2012) by designing and continuously orchestrating its value-creating, and value capturing activities and processes. This study, besides providing detailed empirical evidence of such deliberate actions, findings also shed more light on the impact of these actions on both platform stickiness and platform profitability over time. On these bases, I was able to further abstract regenerative mechanisms of value-creating and value-capturing activities and thus provide more insights into their dynamic and complementary relationship. It is important to note that these mechanisms were manifested throughout all five phases of the platform's coevolution. However, the extent and magnitude of their impact on platform stickiness and profitability varied during each phase and could only be examined using extended time horizons.

Therefore, this study further contributes to a neglected stream of research that focuses on mechanisms through which the platform owners can create and simultaneously appropriate value in multi-stakeholder networks (Dhanaraj & Parkhe, 2006; Nambisan & Sawhney, 2011; Perks et al., 2017). It further extends and builds upon prior studies that have highlighted the importance of linking the value creation efforts with the monetization opportunities developed and materialized by the platform owner (Parker et al., 2016). By adopting a longitudinal processual case study of HeadBox - a multi-sided platform that over-time was able to not only continuously increase the value created for its stakeholders but also to successfully monetize it - in this thesis, I contribute to establishing such links. I further argue that strategies for value creation and capture need to evolve almost simultaneously for the multi-sided platform to be viable in the long-term (i.e., without being reliant on continuous external funding from

investors). Essentially, platform owners need to be ambidextrous in their pursuit of increasing platform stickiness and profitability. In this thesis, I put forward eight value-driving mechanisms that impact these efforts. These are integrated into the Platform Stickiness-Profitability Compass, which presents these mechanisms in pairs (i.e., each stickiness mechanism has one corresponding profitability mechanism) and thus, further stressing their intertwined nature. Therefore, I argue that a platform owner needs to be able to maintain synergies between these dimensions in the long-term. Doing so will ensure that platform owner can continuously capture a proportion of a value it creates (i.e., increasing profitability) and that it can create enough value for its stakeholders to maintain and further increase their commitment to one another, and the platform owner itself (i.e., increasing stickiness).

As argued in this thesis, mechanisms facilitating (or hindering thereof) platform's stickiness include stakeholder altruism, stakeholder empowerment, access to unified knowledge, and breadth of stakeholder value. Furthermore, each platform stickiness mechanism has a complementary, yet independent, profitability mechanism: stakeholder alignment, platform control, knowledge unification, and breadth of value capture. Through these underlying value-driving mechanisms, the platform owner can monetize the value it creates for its stakeholders, and thus, increase the overall profitability of its platform over time.

It is evident from practice that too many of the once highly praised platforms that failed in their efforts to grow and scale (e.g., Guevara, Homejoy, Exec, Tutorspree, HelloParking, and Cherry)²¹ focused almost exclusively on continuously creating more value for their platform users - and somehow hoping that they will be able to monetize it in the future once they reach full scale (Marmer et al., 2011; Täuscher & Kietzmann, 2017). However, there are few examples of companies that did just this and became successful over time (e.g., Twitter and Youtube). But, there is one thing they all had in common; they were all very well funded by venture capitalists throughout the entire process. Therefore, they could sustain the significant losses caused by building and maintaining the critical mass of the platform without simultaneously developing sustainable revenue streams (i.e., no monetization, or heavy reliance on a single revenue stream that could not cover the costs associated with maintaining and growing the user-base). To increase the long-term viability - and arguably, resilience - of multi-sided platforms, platform owners need to focus on both; increasing their platform's stickiness, as well profitability throughout all five phases of their coevolution.

_

²¹ Guevara (P2P insurance); Homejoy (home-cleaning P2P marketplace); Exec (P2P platform for errands and small ad hoc jobs); Tutorspree (matching tutors and students) HelloParking (on-demand P2P sharing of parking spaces); Cherry, (on-demand car wash service - customers could park anywhere, check in online, and have their car washed where they left it).

Secondly, this thesis contributes to the existing research on stakeholder theory that has predominantly focused on responsibilities and obligations (mainly monetary) that the platform owner has towards its various stakeholders (Fassin, 2012; Freeman et al., 2010; Lankoski et al., 2016). Scholars contributing to stakeholder theory tended to categorize stakeholders based on the extent of their entitlement (i.e., how much of a claim they can exercise over focal firm's resources) (Miles, 2017), instead of their level of engagement, loyalty, and commitment to the focal firm and other stakeholders within the ecosystem. The former - somehow dominant conceptualization of stakeholders - limits our understanding of their changing roles in shaping firms and ecosystems. Under this view, stakeholders are primarily considered to be passive recipients of value (Harrison & Wicks, 2013; Lankoski et al., 2016). However, the latter conceptualization that this study puts forward allows for a more dynamic view of stakeholders, acknowledging their dynamic roles, relationships and ultimately their impact on each other and the broader ecosystem in which they coexist (Muzellec et al., 2015). To this end, the adoption of Critical Realist informed methodology can prove fruitful as it focuses on studying causal mechanisms that drive stakeholder relationships, behavior, and interactions and essentially govern the larger stakeholder network. This thesis provides foundations for adopting such methodology in studying multi-actor networks by aligning stakeholder theory and critical realism on their basic ontological and epistemological assumptions.

In the business ecosystems in general and sharing economy in particular, stakeholders are more than just passive recipients of value. They are its co-creators. As established in this thesis, their extent of co-creation and thus, their impact on the overall platform offering depends on their level of engagement and commitment to the platform owner and other stakeholders within the ecosystem. On these bases, I put forward four dynamic stakeholder dimensions; borderline, outer circle, inner circle, and addicted core. Adopting these dimensions allows us to understand stakeholders based on their actual and potential impact on the platform's overall value instead of their position within the supply chain, society, or extents of their entitlements. The latter approach tells us little about how stakeholders shape their ecosystems. At the same time, the former allows for a more dynamic view of stakeholders, which is essential for understanding how platforms and other multi-stakeholder networks coevolve.

As demonstrated in the case of HeadBox, for the platform owner to increase the value of its platform, and to expand its value capture opportunities, it needs to be able to establish and maintain a strong addicted core. For instance, in contrast to borderline, stakeholders in this dimension express considerably higher levels of engagement and commitment, and thus, positively influencing the quality, breadth, and relevance of the platform's offering. Therefore,

in this thesis, I further posit that to maximize the value of multi-sided platforms (for both stakeholders and itself), a platform owner needs to be able to turn disengaged stakeholders (borderline) into active and committed ones (addicted core).

As opposed to stakeholder' lock-in,' or incentive-driven short-term participation strategies aimed at attracting and keeping stakeholders - that rarely lead to increased stakeholder engagement and commitment to the platform in the long term - developing addicted core is instead concerned with establishing and continuously growing the overall attractiveness and shared value of a platform (i.e., increasing stickiness). This is attained over time - but not by restricting stakeholders' options, limiting their interactions, or increasing switching costs - but instead, by continuously enabling, creating, and maximizing value across the entire platform. To do so, the platform owner first needs to identify, then design, and successfully facilitate critical interactions among relevant stakeholders. However, this is not a one-time activity. Given the dynamic and coevolutionary nature of multi-sided platforms, these interactions need to be continuously orchestrated by the platform owner to maintain and further increase the shared value of its platform. As stated by Rong et al. (2015, p. 294), the power of platforms lies in their underlying mechanisms that "make it possible to transform a passive social network into an active value creation chain."

By providing insights into how a value is co-created in multi-stakeholder ecosystems and the role that focal firm plays in its continuous orchestration, this thesis responds to calls for adopting a more dynamic perspective in exploring the platform owner's management of its diverse stakeholders (Fassin, 2008, 2010; Harrison & Wicks, 2013; Lamberg et al., 2003; Lamberg et al., 2008; Muzellec et al., 2015) at a network, rather than an organization level (Stieb, 2008).

Finally, throughout this thesis, I extend and synthesize the prior literature on the sharing economy that has predominantly been built around a limited number of well-known case studies (mainly AirBnB and Uber) in the B2C and C2C markets (Mair & Reischauer, 2017; Richter, Kraus, & Syrjä, 2015). Drawing on empirical insights from a longitudinal case study of a company that introduced the first B2B sharing economy platform into the UK's event industry, I provide further evidence that the sharing economy also presents opportunities for businesses to share among themselves (Wosskow, 2014). Furthermore, a majority of contributions to sharing economy literature are largely fragmented, with different scholars attempting to conceptualize SE from the perspectives that are dominant in the particular research streams. For instance, scholars in the information systems domain tend to overemphasize the role of technology, while marketing scholars prioritize social and cognitive aspects of SE, and discourses in economics literature center around pricing and competition in

two-sided markets. Acknowledging the importance and significant value of these diverse research streams in advancing our understanding of SE platforms, in this thesis, I argue that these platforms exist at the intersection of economic, social, and technological contexts. By economy platforms as technology-enabled, reconceptualizing sharing boundary-spanning constructs, embedded in ecosystem context in which they continuously coevolve as a result of changing interactions and relationships within this ecosystem, it was also my ambition to ignite an interest among the research community to start considering these platforms from a more dynamic perspective. I hope that by integrating these contexts, I was not only able to provide a more nuanced and unified view of this phenomenon but also to inspire organization and management scholars to engage in more multidisciplinary research. By inviting our colleagues from the fields of information systems, economics, marketing, and psychology, together, we can start shedding more light on this emerging phenomenon that is slowly, but unquestionably, shaping our economy and society at large.

Even though multi-sided platforms are among the most valuable business models (Cusumano et al., 2019), insights into how they work are still missing in academic literature. Well-aware of their market potential but also their alarmingly short lifespan (Bock & George, 2018; Cusumano et al., 2019), practical insights into how multi-sided platforms work, how to design and orchestrate them, have been increasingly sought after by managers. By adopting a processual perspective in studying the initial development and continuous coevolution of the successful multi-sided platform, this thesis sheds more light not only on SE platforms in general but, more importantly, on how they work. Both the iDEAS model and Platform Stickiness-Profitability Compass can not only be used as foundations from which to embark on future scholarly explorations of this phenomenon but with a little creativity, and imagination managers can use them as roadmaps for designing, optimizing and orchestration multi-sided platform. While practical applications of these frameworks are elaborated in section 6.2 Managerial implications, the following subsections provide a more detailed discussion, serving as a concise summary, and even a reminder of some of the core arguments presented in this thesis.

6.1.1 Platform coevolution: Need for continuous orchestration

In this thesis, and, in line with the basic premise of stakeholder theory, I argued that multi-sided platforms should be understood and studied as dynamic multi-stakeholder networks (Fassin, 2008, 2010; Lamberg et al., 2008; Lamberg et al., 2003; Vargo & Lusch, 2011). These networks are characterized not only by constant changes in stakeholder base (i.e., new stakeholders are continually joining the platform, while some are leaving) but mainly by continuous shifts in power, influence, interests, or behavior of these stakeholders (Harrison et al., 2007). Therefore, I defined platform-based business models as ongoing coevolutionary processes, influencing, and influenced by changes in structures, relationships, and interactions among stakeholders who form them. These stakeholders not only shape the entire platform, but also their role in creating, delivering, and capturing value changes over time as a result of orchestration challenges faced by the platform owner (reflected through changes in governance, processes or structures), and contexts in which it operates (Friedman & Miles, 2006; Leitão & Domenico, 2015; Reypens et al., 2016; Täuscher & Kietzmann, 2017; Winn, 2001). These findings are consistent with critical realist ontology that considers structure and agency as separate yet interdependent (Ehret, 2013). As further posited by CR, the relationships among stakeholders are either necessary or contingent, but in multi-stakeholder ecosystems, relationships among diverse stakeholders change over time. It is precisely the coevolutionary changes in stakeholder base, platform structure, or governance that directly influence and often facilitates, or even prohibits different types of relationships to emerge among stakeholders within the platform. As the platform constantly coevolves, the platform owner needs to be able to continuously orchestrate relationships, interactions, and value exchanges among stakeholders to maximize its value over time (for stakeholders and itself). This means that the orchestration strategy cannot be static - based on rigid rules and structures - but instead, it should be closely aligned with the platform's underlying value-driving mechanisms that directly impact platforms' long-term viability. This level of alignment allows for a flexible, iterative, and proactive approach to orchestrating these ever-changing dynamic networks and thus allowing for their continuous 'renewal.' As argued by Smedlund and Faghankhani (2015, in press) platform's owner "capacity to renew the platform's offering is essential for platform evolution and growth." Thus, as demonstrated in this thesis, such renewal can only be maintained through continuous orchestration of the platform's coevolution. Doing so will ensure that a relevant value is being continuously created for all diverse stakeholders within the platform (Moser & Gassmann, 2016; Paquin & Howard-Grenville, 2013; Reypens et al., 2016). As

argued by Tiwana (2014, p.54), a "successful platform ecosystems don't just materialize and sustain themselves; they need a carefully thought-out roadmap to evolve." Arguably, once the platform offering becomes static, the platform owner begins to face the risk of stakeholder switching and increased competition (Smedlund & Faghankhani, 2015).

To mitigate this, the platform owner needs to ensure that its platform is becoming increasingly more valuable to its diverse stakeholders (Tiwana, 2014, p.37) and thus, focusing its orchestration strategies at driving up the platform's stickiness. While the appropriateness of particular orchestration strategies and approaches are determined by the platform's coevolutionary phase - as established through the iDEAS model in chapter five - they all need to establish synergies between two core value dimensions of multi-sided platforms; platform stickiness and platform profitability.

Furthermore, SE platforms are dynamic, and through the process of coevolution, the 'sharing' element of such platforms can get diluted in the process (Del Valle, 2018; Gyódi, 2019). This tendency was also observed in the case of HeadBox that coevolved from its initial sharing platform (i.e., being 'matchmaker' between venue owners and venue seekers) to the full-service event management platform. Arguably, this can be considered a natural transition that results from a platform owner's ability to integrate increasingly more diverse stakeholders from within and from beyond its immediate industry over time. Equally, as with any other businesses whose offering is continuously shaped by changes in the market, technology, or customers, so is the case with SE platforms. It would be naive to assume that their offering remains unchanged over time; however, given their coevolutionary nature, it can be assumed that it changes much faster than that of traditional businesses. Nevertheless, even if the sharing element weakens over time, the 'platform logic' (e.g., matchmaking) remains central to these ecosystem-based business models.

6.1.2 Platforms viability: Sticky and profitable

Too many platforms are heavily reliant on a single revenue stream with some, having no revenue stream altogether when scaling up (Täuscher & Kietzmann, 2017), which often leads to their quick demise (Cusumano et al., 2019). This single revenue stream, while might be profitable at a smaller scale, can prove to be risky and unsustainable (e.g., requiring continuous investment to stay afloat) once the platform begins to grow (Cusumano et al., 2019). Instead of

exploring additional revenue streams, many platforms either continue growing their user base or invest in increasing stakeholder value and hoping that in the future, they will be able to monetize it. While many deem network effects to be quintessential for the platform's growth, if not properly managed, these can often have adverse effects (Boudreau & Jeppesen, 2015; Gawer & Cusumano, 2014; Moser & Gassmann, 2016; Van Alstyne et al., 2016). If the platform grows its user base too rapidly, two scenarios are likely to occur. Firstly, if the platform owner fails to broaden the value it creates for diverse stakeholders, the value of the platform starts to get diluted with each additional stakeholders joining this platform (i.e., creating internal competition - see works of Li, Liu & Bandyopadhyay, 2010; and Sridhar, Mantrala, Naik & Thorson (2011) who discuss internal competition in greater detail). Secondly, if the platform owner fails to broaden the value it captures from the platform over time, it will become more and more expensive to deliver the value proposition for the quickly expanding stakeholder base.

Paradoxically, many successful platforms today are credited for, and used as prime examples of first building a large user base and then finding a way to monetize it when in reality, platforms like Facebook or Google, were developing their revenue streams alongside shaping and extending their MVP offering (focusing on both stickiness and profitability)²² during all phases, and in particular in the phase two and three (see chapter five, section 5.1.2 and 5.1.2), before scaling up and further extending the platform's offering. Equally, as in the case of HeadBox, these companies managed to establish synergies between the value they create and value they capture early on in their development and continue maintaining these synergies throughout the platforms' development and growth. Kohler (2015, p.81) captures this rather well by stating that "as a platform grows and the market environment changes, the value creation and capture processes need to continuously evolve." The long-term viability of a multi-sided platform does not solely reside in the platform owner's abilities to attract more stakeholders, but rather in strengthening their commitment to one another and the platform as a whole. This can be achieved by identifying and integrating only relevant stakeholders (Evans & Schmalensee, 2016; Kumar et al., 2018) to the platform, increasing their engagement and number and quality of interactions over time. By doing so, the platform will become stickier,

-

While Google launched its search engine in 1998, by 2000, it had introduced its advertising model to start monetizing its traffic before expanding its core offering. Interestingly, Facebook launched in 2004 and, in the same year, introduced 'flyers' (banner-style advertising sold to students and small companies targeting campus-based students averaging \$10-40 a day). This year, the company's turnover reached almost \$400 000, and its user-based was approaching half a million. For instance, in 2005 it introduced its first CPA (cost-per-acquisition) advertising model with Party Poker, Apple, and Victoria Secret being among its first clients. By the end of 2005, the revenue reached 6 million, and user-based increased by tenfold. In 2006 some large companies like Microsoft, Viacom, Google, and Yahoo were trying to acquire Facebook with the highest bid being £15 billion (Microsoft). In that year, Facebook reached almost £50 million in revenues and attracted over 12 million users to its platform. The company kept introducing additional services and integrating wider stakeholders (continuously increasing stickiness), but it was equally focusing on testing and introducing new revenue streams (increasing profitability).

and the platform owner's chances of turning passive stakeholders (i.e., borderline) into active and committed ones (i.e., addicted core) will significantly increase. Stakeholders within the addicted core are the most likely to invest their efforts and resources that are vital for extending the overall value of the platform (Kohler, 2015, p.71). In turn, this attracts additional stakeholders from outside the platform and draws the existing ones from the borderline or outer circle closer to the addicted core. However, as argued by Parker et al. (2016), a majority of the well-designed platforms create far more value for their stakeholders than these platforms can appropriate for themselves. Monetization "is one of the most difficult -and fascinating issues that any platform company must address" (Parker et al., 2016, p.108). Ironically, multi-sided platforms when compared to other non-ecosystem-based business models, are praised for their ability to develop multiple revenue streams (Chasin et al., 2018a; Zhu & Furr, 2016), and for this reason, some consider them to be the most valuable business models (Cusumano et al., 2019). However, "capturing value is often much more difficult than creating it" (Bock & George, 2018, p.80). While creating more value than being able to capture can be sustained in the short-term (e.g., early stages of phase two of the platform's coevolution as established in iDEAS model), platform owner must achieve a better balance and synergy between the two before attempting to scale up. For instance, Staykova and Damsgaard (2015) argue that if the platform owner is too late to do this, it can lose the competitive advantage it gained previously. Besides, maintaining the rapidly growing multi-sided platform without adequate revenue streams will, over time and without continuous investment, become too costly and ultimately unsustainable.

In this thesis, I argue that for platforms to be viable, the platform owner needs simultaneously focus on both; increasing value the platform creates for stakeholders (stickiness) as well as maximizing the value it captures for itself (profitability) throughout all five phases of the platform's coevolution. Given the somewhat abstract nature of these two value dimensions, and in response to Reypens et al. (2016) 's call for more insights into the relationship between the value capture and value creation within networks, I put forward eight value-driving mechanisms - that impact both platform owner's ability to create and capture value in multi-stakeholder networks - to shed more light on how to develop and successfully orchestrate these ecosystem-based business models.

While many scholars who study multi-sided platform, to a large extent, focus on some aspects of designing and orchestrating these platforms (e.g., solving a 'chicken and egg problem,' technological infrastructure, platform control or stakeholder trust) it rarely leads to a more coherent understanding of how these platforms coevolve. Therefore, by firstly conceptualizing the coevolutionary phases of a multi-sided platform, and then abstracting the

underlying mechanisms, that to different extents and magnitude, manifested themselves during all these phases, this thesis provides holistic accounts of not only how multi-sided platforms coevolve, but importantly, puts forward the mechanisms that drive this coevolution.

To allow for a more granular and dynamic understanding of these business models, all mechanisms are integrated into a Platform Stickiness-Profitability Compass that forms the practical contribution of this thesis. This framework, instead of identifying the order, pace, sequence, duration, or frequency of value-driving events, activities and processes - which is fairly common for processual models - integrates their dynamic underlying mechanisms. In line with critical realist methodology, this processual framework is a result of a higher level of abstraction aimed at establishing generative mechanisms, rather than redescribing concrete empirically observable activities and processes, that took place during different phases of platform's coevolution. These processes, events, and activities were, however, studied and used to establish the proposed framework. The main aim of this thesis was not only to identify core coevolutionary phases of multi-sided platforms (integrated into iDEAS process model) but, more importantly, to flesh out their underlying mechanisms on which basis we can attempt to understand how platforms work and coevolve over time. In other words, Stickiness-Profitability Compass is a dynamic processual model that captures all eight value-driving mechanisms on a spectrum (i.e., high to low) and thus allows for examining the viability of platform (i.e., extent of stickiness and profitability) through all five phases of its co-development.

To my best knowledge, this is one of the first coherent tools (i.e., applicable across multiple lifecycle phases) for designing and orchestrating networked business models. Currently, the majority of managers restore to using popular business model tools such as Nine Block Business Model Canvas (or its variations) (Osterwalder & Pigneur, 2010) when tasked with managing, designing, or redesigning business models.

While such tools provide traditional businesses with a better understanding of their existing or envisioned business models, they can be somewhat limiting when applied to ecosystem-based business models, and arguably, could even hinder our comprehension of them because "much of what makes traditional organizations efficient is precisely what can stifle innovation in large-scale ecosystems comprised of many independent firms" (Tiwana, 2014, p.12). Therefore, we need a new set of tools that are more appropriate for understanding, designing, and orchestrating these networked business models. The framework that I put forward in this thesis is one of my first attempts to not only contribute to the development of such tools but also to provide the necessary groundwork and inspire other scholars to join me in this endeavor. Rather than centering this tool around platform's building blocks - which

Choudary et al. (2015) capture rather well in their seminal work on platform's architecture - I aimed to uncover mechanisms through which to operationalize and orchestrate these platforms. While tools focused on business model architecture tell us what business models are made of, their ability to explain how they operate is limited.

Many business model innovation initiatives rarely make it beyond the ideation stage because companies struggle with understanding how to implement their envisioned business models. The tools they use do not provide them with an understanding of business models' dynamics, but rather reduce the business models only to their static parts. Arguably, these are easier to comprehend in the early stages of business model innovation (e.g., ideation); however, they fail to provide a sufficient strategic roadmap for actually implementing and sustaining these business models over time. Thus, my main aim was to create such a roadmap by integrating dynamic value-driving mechanisms into a coherent framework, supporting both design and ongoing orchestration of multi-sided platforms and hopefully other ecosystem-based business models. While this framework was developed empirically based on a longitudinal case study of the successful multi-sided platforms HeadBox, I argue that, to a different extent, can be used in designing and orchestrating other networked business models and innovation ecosystems (I further discuss this in section 6.4, in which, I set the future research directions) that share many similarities with multi-sided platforms (de Reuver et al., 2018). In the following section, I elaborate on the practical application of the proposed framework and present the results from the field-test of its applicability conducted among practicing managers.

6.2 Managerial implications

Along with contributing to stakeholder theory and extending the emerging debate on the sharing economy and multi-stakeholder ecosystems, this thesis also posits several implications for managers. As postulated by Freeman (1984), a firm's success depends on the attention that managers pay to stakeholders' needs and interests. Based on findings from the longitudinal case of HeadBox, I have developed a Platform Stickiness-Profitability Compass that can guide managers in identifying, addressing, and profiting from these needs and interests over time. This framework offers several applications that practitioners can explore.

First, managers can use this framework as a roadmap for the development and continuous orchestration of multi-sided platforms. Plenter et al. (2017) posit that platform-based businesses in the sharing economy have a high failure rate, and this is often due to the discord between the value they create and the value they can capture (Clemons, 2009; Parker et al., 2016). However, by adopting the proposed framework, managers can significantly improve the viability of their multi-sided platforms over time by focusing their orchestration strategies at simultaneously increasing their platforms' stickiness and profitability. This means that managers can not only establish but also leverage the synergies among value creation and value capture activities. Second, advisors and investors can use this framework as a diagnostic tool for identifying gaps in value capture and value creation opportunities in multi-sided platforms they are advising or are considering investing in. By using this framework, both managers and potential investors can quickly evaluate and benchmark the current performance of a particular platform against all eight dynamic mechanisms. For instance, doing so will enable practitioners to; identify strengths and weaknesses of theirs or competitors' platforms/BMs, establish focus and priorities, aid the development of strategies and actions needed for addressing the current situation, or setting targets and benchmarks.

Furthermore, in the case of investors, the use of Platform Stickiness-Profitability Compass can lead to a more accurate evaluation of otherwise difficult-to-evaluate business models that multi-sided platforms often are. Lastly, applicability and the use of the proposed framework can be extended beyond the SE context because of the similarities in dynamics and processes that SE platforms share with different multi-stakeholder networks. Therefore, managers from all businesses that serve diverse stakeholder groups (e.g., innovation networks, industry platforms, or even traditional supply chains) can, to a different extent, use this framework to increase the stickiness and profitability of their offering through effective and

more strategic stakeholder management. While each industry and essentially each different stakeholder group has its own peculiarities, the framework provides a foundation from which to study and understand such groups. Opportunities for creating value are often uncertain, and managers need to actively engage in a search for such opportunities (Rumelt, 1984). Therefore, I believe that this framework will be a valuable addition to many managers' toolbox. To my best knowledge, there are no widely-accepted managerial frameworks for designing and orchestrating multi-sided platforms or other ecosystem-based business models thereof. The proposed Platform Stickiness-Profitability Compass is the first business model framework that considers and focuses on how to leverage the complementary yet independent relationship between two core components of any business model - value creation and value capture dimensions. To identify its core strengths and weaknesses, this framework was field-tested in workshop settings with nine practicing managers. The main aim was to evaluate the framework's practicality (e.g., ease of use and relevance) for designing and orchestrating multi-sided platforms, as well as its use for benchmarking and understanding the viability of existing platforms. To do the former, during the workshops, managers were asked to directly apply this tool in dissecting their current business models and then use it to envision the new one (or use it to uncover and explore innovation opportunities of the existing business model). During the second half of the workshop, once the managers became more familiar with the tool, they were provided with a case study (Note: case study was based on short initial narrative delivered by workshop facilitator, and a participants' independent search for additional information to avoid bias) of failed start-up and tasked to use the Platform Stickiness-Profitability Compass to create a post mortem of this company. I elaborate on both workshop tasks in the following subsections in which I further discuss the practical application of the framework.

6.2.1 Tool for design and continuous orchestration of multisided platforms

In essence, the Platform Stickiness-Profitability Compass acts as a roadmap for designing and orchestrating multi-sided platforms. To avoid widening the growing gap between academic research and its relevance for managerial practice (Alvesson & Sandberg, 2011; Davenport & Markus, 1999), I have thus assessed the usefulness, applicability, and the overall relevance of this framework among practicing managers. I discuss the general format,

participating informants, and execution of these workshops in chapter 4 Methodology, and within this, and the following section (6.2.2), I thus, present a concise discussion based on the observations and feedback received from managers participating in the framework assessment workshops.

Firstly, the Platform Stickiness-Profitability Compass allows managers to understand the multi-sided platforms from dynamic (i.e., coevolutionary processes and activities) rather than static perspective (building blocks), enabling them to prioritize interactions and value creation-capture activities rather than specific resources and capabilities when designing and growing these business models. As argued by Van Alstyne et al. (2016) and Choudary et al. (2015), stakeholder interactions are critical for every multi-sided platform and, as such, should be central to every well-functioning platform. Furthermore, by understanding the core value-driving mechanisms of multi-sided platforms, managers can ensure that the overall offering continually evolves to reflect the changing and evolving needs of its broader ecosystem. Achieving this level of 'evolvability' is hardly possible by using static tools that promote the resource-capability view. Given the quickly changing and interconnected business environment, lagging behind the customers can prove deadly for many companies, particularly those that operate in industries that are prone to, or being already disrupted by digital platforms (e.g., content, transport, hospitality, finance, healthcare). Therefore, this 'ecosystem-centric' value approach to innovation and platform growth that is central to the Platform Stickiness-Profitability Compass aids platform's evolvability and its long-term viability (Elaluf-Calderwood, Eaton, Sørensen & Yoo, 2011; Tiwana, 2014). Platform "evolvability means the capacity to do things in the future that it was never originally designed to do" (Tiwana, 2014). The Platform Stickiness-Profitability Compass forces managers to shift their thinking from the realms of resources and current organizational capabilities to generative value-driving mechanisms of their business models. While managers participating in the workshop appreciated the complexity and broad focus of this framework, several criticisms over its rather abstract nature were voiced. The framework, rather than being prescriptive, requires a certain level of creativity to be used effectively. In other words, this framework does not act as a map, but rather it should be viewed as a compass; it does not tell managers what the best strategy or course of action is, but it instead assists them with establishing one. Following on this analogy, the map can only be used in a single territory and at a fixed scale whereas compass can be used anywhere to not only help us determine where we are (our starting point) and where we want to go (destination) but also to help us maintain and/or alter our course of travel over time. Nevertheless, all managers in the workshop, to a large extent, were able to use this tool to plot their current company's position, identify value gaps (difference between value it currently creates and capture and the future potential), and explore strategies through which to accelerate their growth, maintain or alter their strategic direction in the near term. Results from this workshop are summarized in Figure 14, which depicts the performance of two companies that took part in the workshop (Company A - Servitizing manufacturer and Company B - Digital platform), using the Platform Stickiness-Profitability Compass.

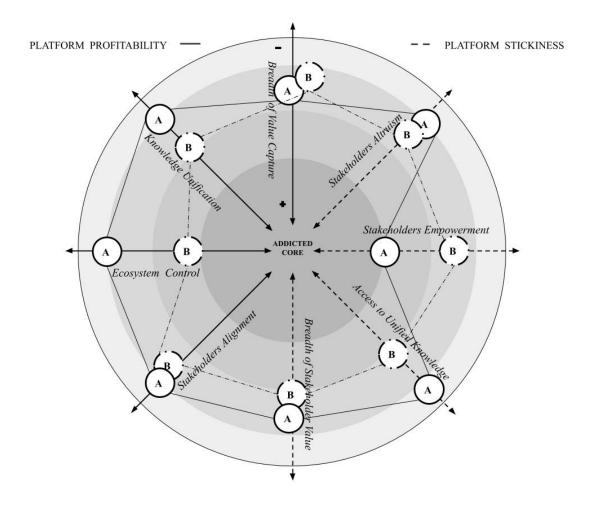


Figure 14. Platform Stickiness-Profitability Compass: Evaluating the current situation of two companies (based on the workshop)

The main limitation of this framework was the lack of quantifiable measurements that managers from both participating companies lacked. Questions such as; How do I know 'how far' on the stakeholder altruism dimension we are? How do I know that we are getting closer or farther over time?; were voiced by participating managers. Admittedly, if the framework is used at the national level to evaluate like-for-like viability of different multi-sided platforms, this could be considered a significant drawback of this framework. However, each platform not only is embedded in changing contexts but also the broader industry in which they operate has different dynamics. Therefore, Platform Stickiness-Profitability Compass does not aim to offer a universal measure of platform's viability, but rather it lets each platform owner set benchmarks and specific quantitative measures and KPIs (key performance indicators) to reflect its existing situation and the envisioned strategy. To establish these benchmarks, the platform owner needs first to determine what the 'addicted core' looks like (envisioned or based on the actual data) on each dimension and then assess its current situation. The difference between the addicted core and the current position then determines the distance that the platform needs to travel to reach its strategic goal. As the platform's ecosystem continuously coevolves also the platform owner needs to regularly review, and if required, alter its course. For companies, it is imperative to accurately, and with a certain level of ambition, evaluate and establish what the addicted core looks like before developing or altering their platform orchestration strategy. As can be seen in Figure 14, both company A and company B have plotted their business models' performance on a relatively similar position (note: both companies took part in this exercise independently, in different workshop groups, and on different days). However, their vision of what constitutes the addicted core, and their strategic direction significantly differed (see Table 14 & 15 that complements Figure 14). Therefore, to use the Platform Stickiness-Profitability Compass effectively, managers need to consider it to be more like a compass than a map.

Ideation workshop: Establishing current starting point and a near future destination				
Short description of the task →	In sentence our two describe what your ideal addicted core looks like and what is your current performance. How committed, loyal and engaged are your core customers/stakeholders and partners?			
Addicted core - "The ideal situation"		Our current performance / direction - 'The starting point'		
Company A (Servitizing Manufacturer)	Company B (Digital Platform)	Company A (Servitizing Manufacturer)	Company B (Digital Platform)	
Our 'addicted core' customers are loyal and committed to our PSS (product-service systems) offerings. These customers want to have a long-term relationship with us. They willingly share their production, R&D, and usage data with us in real-time. They provide us with access to their partners and the wider supply chain. Our suppliers and partners are proactive and invested in our and our customers' success. Both sides (customers and suppliers) want to be sure that their long-term success is our highest priority.	Users in our addicted core use exclusively our platform for all their bus journey bookings (and associated services) They regularly help us to improve our offering and are always excited to try new features and services that we and our partners introduce to the platform. Our supply-side [bus companies and supplementary services] of the market switched away from using their own websites and exclusively uses our platform to not only drive business their way but also for facilitating payments and customer management.	The current offering is not fully integrative (focused only on a particular aspect of a complex service) and does not provide a 'full' solution to our customers' requirements. We still have more-less transactional relationships with many of our partners, which prohibits us from establishing larger joint projects. We understand the current needs of our customers well, but we struggle to keep up with the change - they rarely involve us in or even inform us about their future developments. Currently, we struggle to attract new and motivate existing suppliers and partners to join and help us grow our servitization ecosystem.	While we see an increasing number of repeat purchases among our 'bookers' many still use traditional brokerage companies to book and manage their bus travel. In addition, only a small number of supply-side [mainly bus companies] has entirely switched from their own booking website and rely solely on our platform. While we have access to a vast amount of data, we are yet to find a way to monetize it further and use it for developing more services. So far, our strategy has focused almost exclusively on onboarding 'bookers' and bus companies without innovating and further improving the existing offering.	

Table 14. Platform Stickiness-Profitability Compass: Establishing addicted core and mapping current performance (based on the workshop)

Ideation workshop: Strategic responses to eight value-driving mechanisms				
Short description of the task → Increasing platform stickiness and profitability ↓	Based on the prior evaluation (starting point) of your current situation and the ideal 'addicted core' (destination) what can you do now to: 1) drive more stakeholders to your platform / offering and how you can create more value for your stakeholders (direction of travel) by focusing on the four underlying 'stickiness' mechanisms; and 2) to maximize the value captured by platform (i.e., maximizing and leveraging existing revenue streams, developing new ones or monetizing existing or future features of the platform or product) in the immediate and medium-term to create a necessary foundations for better evolvability of your platform / PSS (product-service systems) offering.			
	Strategic direction: Company A (Servitizing Manufacturer)	Strategic direction: Company B (Digital Platform)		
Stakeholder altruism - Stakeholder alignment	Pilot small joint project to start integrating core customers with our suppliers and partners - slowly building up the relationship among the network of partners based on small initial commitment.	Introduce algorithms to maintain and reduce the internal competition among bus companies - combined travel, equal access to relevant bookers, price flexibility, reducing price competition, and promote merit-based competition among bus operators and suppliers.		
Stakeholder empowerment - Ecosystem control	Audit rigidities in our processes that are based on our tight control of the PSS offering development and delivery. Extend mandate of our suppliers, customers and partners. Re-develop infrastructure to increase transparency and monitoring rather than full control of all activities.	Increase interactions between bus operators and bookers but ensure that bookers are incentified enough not to go direct but instead use the platform to do and manage all their bus bookings. Introduce more flexibility and extend the level of control of bus companies over the digital content, pricing, and customer management. Facilitate better communication and co-operation among bus companies and supplemental service providers.		
Access to unified knowledge - Knowledge unification	Provide relevant and actionable data to each supplier and customer. Develop a dashboard that integrates all data sources into one - shift from providing data to delivering insights. Increase the number of data points by adjusting current infrastructure and incentifying stakeholders to share their data (demonstrate the value of this during the pilot program).	Digitalize and integrate offline data points to gain a more holistic understanding of bookers when combined with digital data points. Better utilize machine learning to identify trends and predict future actions, price sensitivity, and purchase intent. Further, develop and monetize access to 'all-in-one' data dashboards provided for bus companies and partners - add additional layers of customization (e.g., optional add ons)		
Breadth of stakeholder value - Breadth of value capture	Monetize data once unified and packaged in a relevant and appropriate form. Integrate more products and services into to PSS	Expand the offering for bookers by providing /integrating additional services (e.g., journey management tool, digital travel planners) as add ons or		

(full-scale servitization) to get a stronger foothold in customers business ecosystems. Identify and integrate additional partners and suppliers who could add more value to the current customers or contribute to developing new advanced services to attract customers from other verticals (based on shared revenue or access fee). subscription-based. Drive more business for bus companies and supplemental service providers by extending the customer base (travel agencies, corporate transports or school contracts)

Table 15. Platform Stickiness-Profitability Compass: Determining future strategic direction (based on the workshop)

Furthermore, managers need to factor-in their own context and industry-specific benchmarks and only then decide on how to measure their progress and results of their orchestration strategies. Admittedly, more work is needed in this area and exploring how other tools can supplement the iDEAS Platform Coevolution Phase model, and Platform Stickiness-Profitability Compass in designing and orchestrating multi-sided platforms is just one of these areas that could benefit from further exploration. Furthermore, it could be equally interesting to undertake a more rigorous and systematic evaluation of these tools by using them for re-designing and orchestrating several diverse multi-sided platforms over an extended time-period, or testing them with a larger sample of participants²³.

On the positive side - after completing these workshops - the majority of the participating managers acknowledged their view of the business model has altered as a result of using these frameworks for the initial ideation of their business model design and innovation. Instead of focusing on business models' building blocks and how to change them (each informant was very familiar with this approach) workshop participants started to consider multi-stakeholder business models in the realm of processes, activities, and interactions that are central to creating, facilitating and capturing value in the immediate, medium and long-term. Although frameworks themselves were perceived and criticized for being too abstract and vague at the beginning of the workshops, many participants found this approach to be more flexible, creative, and above all, more actionable in comparison to resources and capabilities-centric approach when attempting to design, re-design and innovate ecosystem-based business models. It is worth mentioning that the aim of the workshop was not

_

²³ I am currently in discussion with a small number of companies that are interested in applying this tool commercially to optimize their ecosystem orchestration strategy.

to directly compare the iDEAS Platform Coevolution Phase model and Platform Stickiness-Profitability Compass to any other existing tools but rather to assess their usefulness *per se.*

6.2.2 Platform evaluation and benchmarking tool

While the iDEAS Platform Coevolution Phase model can be used for better understanding the lifecycle of multi-sided platforms, from practitioners' perspective, it sets out the main considerations for designing and orchestrating these platforms throughout each phase to maximize their viability over time. As argued by Evans and Schmalensee (2016, p.36), "the opportunity for a multi-sided platform, ordinarily arises when frictions keep market participants from dealing with each other easily and directly." Therefore, when developing or shifting to these business models, organizations need to identify key inefficiencies and asses their significance (phase 1). For the platform to be able to attract the initial user base, it needs to be solving a problem that is 'big enough' (Evans & Schmalensee, 2016, p.164). Arguably, many platforms fail just because they focus on addressing the wrong inefficiencies and frictions, or facilitating interactions that are not needed nor valued by their stakeholders (yet). Only when the critical frictions are identified the organizations should attempt to develop their MVP through which they can deliver the initial/basic two-sided offering that facilitates and orchestrate these critical interactions among relevant stakeholder groups (phase 2). However, "just starting a two-sided platform and securing customers on both sides wouldn't be enough [but] the platform would also have to nurture a healthy ecosystem around it." Evans & Schmalensee, 2016,p.112). Therefore, after the initial two-sided platform is established, it is paramount to further focus on extending this ecosystem, both horizontally (integrating stakeholders from complementary yet distinct markets) and vertically (integrating supplementary stakeholders from within the same industry or supply chain), to increase its value and attractiveness for existing and new stakeholders (phase 3). In doing so, it can not only increase stakeholder value but also develop additional revenue streams to sustain the exponential growth through amplifying its 'wide' and 'deep' stakeholder network (phase 4). Extending and amplifying the size and value of the platform are continuous activities that are central to the platform's profitability and stickiness and, thus, need to be constantly orchestrated to not only reach the desired scale (phase 5) but to maintain and increase the platform's viability over time.

Managers can use this iDEAS Platform Coevolution Phase model in conjunction with Platform Stickiness-Profitability Compass to not only design and orchestrate their own business models but also use them as lenses through which to evaluate other ecosystem-based business models (e.g., mapping out value gaps in competitors' business models, assessing growth potential and viability of companies in which they consider investing in or, monitoring disruptive industry entrants). To appraise the usefulness of these tools in evaluating other ecosystem-based business models, managers participating in the workshops (from both, company A & B) were tasked to use them to establish the post mortem of one of the highly praised platforms that went bankrupt in 2016. The results of this exercise are summarized in Table 16. As expected, participants found it easier to explain the platform's failure retrospectively than when tasked with using the tools to envision the new strategy for their respective organizations. They produced a relatively consistent and accurate analysis of the case company Yeloha, and many suggested that while the tools cannot be used for a direct like-for-like comparison of several different platforms, they both provide a useful framework for assessing platforms' orchestration and growth strategies. Furthermore, participants appreciated that the Platform Stickiness-Profitability Compass, in particular, allowed them to get more in-depth insights into outside companies by making them shift their focus from the immediately visible resources, specific stakeholders, partnerships or products and services, to the mechanisms that govern their creation and emergence.

Evaluation workshop: Examining why a formerly successful start-up failed			
Short description of the task →	Firstly, establish phases through which the platform coevolved and then attempt to analyze its performance in light of all eight value-driving mechanisms.		
Company: Yeloha			
About the case company →	Based in the USA (Boston), Yeloha offered a digital platform that allowed for the sharing of solar energy between "sun hosts" and "sun partners." People who wanted to use solar energy no longer needed to have solar panels installed on their roofs (many lived in apartments, shared or rented accommodation where subsidized installations of solar panels were not possible). The company described itself as an "Airbnb for solar energy" and in its promotional materials claimed that "similar to the way Airbnb hosts put their extra room to work, Yeloha's Sun Hosts put their roof to work for both personal gain and to make a positive impact." Essentially, the company aimed to create a decentralized grid for sharing electricity. Founded in 2014 and dissolved in May 2016.		
Platform lifecycle	Position in iDEAS phase model: between phases two and three.		
stage →	Without fully developed two-sided platform (phase two) with clearly defined		

Platform stickiness - profitability mechanisms ↓	industry frictions and inefficiencies that the company aims to solve (phase one), Yeloha attempted to extend its offering horizontally and vertically (phase three). Diagnosis: Scaling-up too early	
Stakeholder altruism - Stakeholder alignment	To overcome the initial financing problems the company started to integrate large-scale solar supply companies into its network, however, they could not find common ground and establish alignment in their vision which was not only in conflict with the platform owner (Yeloha) but essentially with the large part of its ecosystem. The company underestimated the importance of aligning the goals and interests of its broader network. Without this, they were unable to increase their involvement and commitment to the platform (i.e., draw them into the addicted core).	
Stakeholder empowerment - Ecosystem control	The company was not able to control the strategic aspects of its ecosystem. Besides the difficult-to-influence solar energy caps imposed by regulators, the Yeloha overfocused on tightly controlling the operational aspects of its platform at the expense of establishing its strategic influence. The company was heavily reliant on external investment with a large proportion of this money being consumed in operational aspects of the platform.	
Knowledge unification and access to unified knowledge	They had access to a vast amount of data (the company initially launched as a data-provision company), but the Yeloha was not able to monetize and utilize the data beyond offering simplified energy usage comparison dashboards for its users.	
Breadth of value capture - Breadth of stakeholder value	By being heavily reliant on 3rd parties to finance the solar installations without their support, the company was unable to unlock the additional revenue streams. Instead of exploring other opportunities, Yeloha kept investing in developing this infrastructure itself to continue creating value for its growing network, leading to an unsustainably high cash-burn rate. Instead of focusing on its core value proposition and exploring different mechanisms through which to monetize it first, the company started moving in too many different directions and while thinking it was creating additional value (i.e., perceived value creation), Yeloha was essentially alienating its stakeholders - the value instead of being channeled into its core market first was increasingly spread across large stakeholder base until it became too diluted.	

Table 16. Using Platform Stickiness-Profitability Compass to establish post mortem of Yeloha (based on the workshop - insights from company A and B are combined into an overall narrative)

Of course, the demise of many platforms is influenced by a combination of factors, and distilling them down to only a few could pose a significant limitation. However, many of the factors that contributed to this demise are arguably a direct manifestation of the platform owner's orchestration of its platform's underlying value-driving mechanisms. Therefore managers need to pay close attention to these mechanisms and attempt to integrate them into their platform's growth and innovation strategy. With changing stakeholders within the platform, the increasing number of interactions, and coevolving relationships among them, it is paramount for the platform owner to actively orchestrate these mechanisms to mitigate possible shortcomings and take advantage of opportunities at both dimensions- stickiness, and profitability - in the short, medium and long-term.

6.2.3 Implications for curriculum development

Last but not least, adopting an educator's perspective, I would like to draw attention to the impact of the findings from this thesis on curriculum development. As educators, we have a great responsibility not only to the students themselves but also to the broader society because teaching is the one profession that creates all other occupations. It is precisely business schools and their curriculum that influence and shapes the future business leaders, policymakers, regulators, managers, and above all, a large proportion of the professional workforce. However, as argued by Parker (2018), many business schools in their teaching continue to maintain its rather narrow focus on a single economic model and the established management and organization theories. In other words, business schools "tend to exclude ideas and practices that do not fit easily into the classification system that has been established" (Parker, 2018, p.37). While the principles underlying the multi-sided platforms "have been around for thousands of years, business schools did not teach classes on how to start or run businesses that help different parties get together to exchange value. Economists did not have a clue how these businesses worked. In fact, the companies that reduced these market frictions charged prices and adopted other strategies that economic textbooks insisted no sensible business would do" (Evans & Schmalensee, 2016, p.8.) For instance, as further argued by Evans and Schmalensee (2016), "what is still taught in most economics textbooks and in most MBA courses, completely ignores indirect network effects and the consequences of interdependent demand" (Evans & Schmalensee, 2016, p.32). By educating students and business executives on the alternative economic models for growth, business schools can not only 'demystify' these

models but, more importantly, equip the future leaders with relevant tools and in-depth understanding of how to embrace and manage them. Doing so could lead to more progressive and effective policies, better use and management of resources, and improved wellbeing of the society at large. I believe that the foundations laid out in this thesis provide a good starting point and offer enough insights into sharing economy and, importantly, the ecosystem-based business models that can be integrated into both academic and executive education. I hope that this research will stimulate constructive debate among educators and ignite more interest in redesigning and enriching the current curriculum with alternative economic models, orchestration strategies, and networked business models.

6.3 Limitations and future research

I acknowledge that the present study has several limitations that provide areas for future research. Findings from this thesis are limited to a single case, and therefore, I recommend future research to adopt methods that could enhance the statistical generalizability of these findings and assess their application to different settings. While in this thesis I examine multi-sided platforms operating in the sharing economy, due to their similarity to other multi-stakeholder networks (e.g., business ecosystems, industry platforms or industry platforms) (De Reuver et al., 2018), to different extents, the core findings should be applicable beyond the context of the sharing economy. Therefore, it could be argued that similar value-driving mechanisms underlie all these ecosystem-based business models; however, the extent to which they are manifested and influence the viability of different types of ecosystems could vary greatly. I would like to see future studies taking up this challenge and investigate similarities and differences among underlying value-mechanisms for different kinds of multi-stakeholder networks/ecosystems. Future empirical studies could also try to validate both iDEAS Platform Coevolution Phase model and Platform Stickiness-Profitability Compass and extend them to include moderating factors for the identified value-driving mechanisms, quantitative measures, and KPIs (key performance indicators). In the case of HeadBox, the development of the initial addicted core took around two years, and I believe that this timeframe is contingent upon a combination of different factors that can also be fleshed out in future studies.

These studies can find inspiration in the iDEAS Platform Coevolution Phase model to further explore these factors and attempt to establish timelines for each phase. Adopting a single case study approach in this thesis did not allow me to study such a timeframe, and how it differs (i.e., antecedents, processes, event, time), among different platforms or within multiple contexts. Arguably, appropriate timing in developing and growing platform-based businesses is critical (Staykova & Damsgaard, 2015; Tilson et al., 2012) yet, we know little about this phenomenon. Staykova and Damsgaard (2015) postulate that timing and orchestration of activities and processes that drive innovation and platform growth are of equal importance to market entry timing. To shed more light on how the timing of platform expansion impacts its competitiveness and long-term viability will require the adoption of a processual approach. I hope that throughout this thesis - by synthetizing pioneering works of Ann Langley, Geoff Easton, and John Mingers and the seminal works of Roy Bhaskar and Andrew Sayer - I have provided a sound ontological groundings, and methodological guidance for researchers who decide to study processes, activities and underlying mechanisms of ecosystem-based business models and other complex systems. Another exciting avenue for future research, requiring a processual approach will be to study why and how SE platforms shift away from 'sharing' to becoming more commercially focused over time (Del Valle, 2018; Gyódi, 2019). Examining the antecedents of such transition could prove valuable for advancing our understanding of how these networked business models work.

In recent years, we have been witnessing how leading organizations started to shift away from controlling linear value chains - to deliver products and services - to developing complex solutions by attracting and integrating a vast network of collaborators into their emerging ecosystems (De Reuver et al., 2018; Sørensen, De Reuver & Basole, 2015). Therefore, future studies that adopt a network perspective (Aarikka-Stenroos & Ritala, 2017; Aarikka-Stenroos et al., 2017; Anggraeni et al., 2007) in studying organizational phenomena (e.g., business model, coevolution, dynamic relationship between value creation and capture, design, and orchestration of multi-stakeholder networks) could not only further advance academic knowledge, and benefit practicing managers but also provide solid foundations for the advancements and the long-overdue re-design of academic and executive curriculum. I hope that throughout this thesis, I have ignited more interest in advancing not only our knowledge of multi-sided platforms in sharing economy but also other ecosystem-based business models and multi-stakeholder networks. Furthermore, given the co-evolutionary nature of these complex and dynamic systems, research questions related to the effectiveness of different stakeholder management and engagement strategies, and their impact on multi-sided platforms overall growth in various contexts, could lead not only to theoretical contributions to stakeholder theory but also provide valuable insights for practicing managers. According to Harrison et al. (2015), "currently, there is a lot of interest in stakeholder engagement strategies among scholars and practitioners" (p.865), because of their growing involvement in, and impact on firms' performance and long-term success (Harrison & Wicks, 2013). Although this thesis argues that interactions among stakeholders are central to value-creation and value-capture in networks, it does not offer any concrete stakeholder engagement strategies. To address these shortcomings, future studies could aim at establishing such strategies by taking the starting point in identified value-driving mechanisms.

While in this thesis, I have identified and argued the existence of strong links between the dynamic mechanisms that drive platform stickiness and profitability, future studies can investigate the importance of achieving and maintaining a balance between the two. In particular, studies examining the impact of balance-imbalance between stickiness and profitability, in short, medium, and long-term, will be of particular interest. Such studies can provide the necessary foundations for further studies that could propose and examine the effectiveness of different 'value-balancing' strategies on ecosystem innovation and growth.

Lastly, I hope that by adopting the PDR approach in this thesis and demonstrating its role in designing and conducting empirical research, I have inspired researchers to seek out and fill practical gaps that are equally, if not even more important, for advancing the field of management and organization studies. Doing so will allow us to advance not only the scholarly understanding of management and organizations but also produce relevant knowledge for practitioners. In doing so, we can start narrowing down the relevance gap between academia and practice (Parker, 2018; Sandberg & Alvesson, 2011; Schwarz & Stensaker, 2014, 2016) that has been steadily widening since 1970s (Cummings 1983; Daft & Lewin, 1990; Miner, 1984; Susman & Evered, 1978).

7. References

Aarikka-Stenroos, L., & Lehtimäki, T. (2014). Commercializing a radical innovation: Probing the way to the market. *Industrial Marketing Management*, *43*(8), 1372–1384.

Aarikka-Stenroos, L., & Ritala, P. (2017). Network management in the era of ecosystems: Systematic review and management framework. *Industrial Marketing Management*, *67*, 23–36.

Aarikka-Stenroos, L., Jaakkola, E., Harrison, D., & Mäkitalo-Keinonen, T. (2017). How to manage innovation processes in extensive networks: A longitudinal study. *Industrial Marketing Management*, *67*, 88–105.

Abbott, A. (2001). Time matters: On theory and method. University of Chicago Press.

Abdelkafi, N., Makhotin, S., & Posselt, T. (2013). Business model innovations for electric mobility—What can be learned from existing business model patterns?. *International Journal of Innovation Management*, *17*(01), 1340003.

Academy of Management Discoveries (2018). *Special Issue: Business models, ecosystems, and society in the sharing economy.*

Achtenhagen, L., Melin, L., & Naldi, L. (2013). Dynamics of business models–strategizing, critical capabilities and activities for sustained value creation. *Long Range Planning*, 46(6), 427-442.

Ackroyd, S., & Karlsson, J. C. (2014). Critical realism, research techniques, and research designs. pp. 22-45. In *Studying organizations using critical realism: A practical guide*. Edwards, P. K., O'Mahoney, J., & Vincent, S. (Eds.). OUP Oxford.

Acquier, A., Daudigeos, T., & Pinkse, J. (2017). Promises and paradoxes of the sharing economy: An organizing framework. *Technological Forecasting and Social Change*, *125*, 1-10.

Adegbesan, J. A., & Higgins, M. J. (2011). The intra-alliance division of value created through collaboration. *Strategic Management Journal*, *32*(2), 187-211.

Adner, R. (2017). Ecosystem as structure: an actionable construct for strategy. *Journal of Management*, *43*(1), 39-58.

Afuah, A. (2003). Redefining firm boundaries in the face of the Internet: Are firms really shrinking?. *Academy of Management Review*, *28*(1), 34-53.

Afuah, A. (2014). Business model innovation: concepts, analysis, and cases. Routledge.

Agle, B. R., Donaldson, T., Freeman, R. E., Jensen, M. C., Mitchell, R. K., & Wood, D. J. (2008). Dialogue: Toward superior stakeholder theory. *Business Ethics Quarterly*, *18*(2), 153-190.

Ahuja, R., & Lyons, R. C. (2017). The silent treatment: LGBT discrimination in the sharing economy. *No. tep1917, Trinity College Dublin, Department of Economics, Dublin.*[Google Scholar].

Argyris, C. (1976). Single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 363-375.

Arkes, H. R., & Blumer, C. (1985). The psychology of sunk cost. *Organizational behavior and human decision processes*, *35*(1), 124-140.

Alves, H., Fernandes, C., & Raposo, M. (2016). Value co-creation: Concept and contexts of application and study. *Journal of Business Research*, *69*(5), 1626-1633.

Alvesson, M., & Sandberg, J. (2011). Generating research questions through problematization. *Academy of Management Review, 36*(2), 247–271.

Altmann, E., & Tripsas, M. (2015). *Product-to-platform transitions: Organizational identity implications.* In: C. E. Shalley & M. A. Hitt , & J. Zhou (Eds.), The Oxford handbook of creativity, innovation, and entrepreneurship (pp. 379–394). Oxford: Oxford University Press.

Amberg, M., & Schröder, M. (2007). E-business models and consumer expectations for digital audio distribution. *Journal of Enterprise Information Management*, *20*(3), 291-303.

Amis, J. M., & Silk, M. L. (2008). The philosophy and politics of quality in qualitative organizational research. *Organizational Research Methods*, *11*(3), 456-480.

Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, *22*(6–7), 493-520.

Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, *53*(3), 41.

Amshoff, B., Dülme, C., Echterfeld, J., & Gausemeier, J. (2015). Business model patterns for disruptive technologies. *International Journal of Innovation Management*, *19*, 1540002.

Ancona, D. G., Goodman, P. S., Lawrence, B. S., & Tushman, M. L. (2001). Time: A new research lens. *Academy of Management Review*, *26*(4), 645-663.

Ancona, D. G., Okhuysen, G. A., & Perlow, L. A. (2001). Taking time to integrate temporal research. *Academy of Management Review*, *26*(4), 512-529.

Anderson, E., & Weitz, B. (1992). The use of pledges to build and sustain commitment in distribution channels. *Journal of Marketing Research*, 29(1), 18-34.

Andreini, D., & Bettinelli, C. (2017). *Business Model Innovation: From Systematic Literature Review to Future Research Directions.* Springer.

Andrew, J. P., & Sirkin, H. L. (2006). *Payback: Reaping the rewards of innovation*. Harvard Business School Press.

André Cavalcante, S.A. (2013). Understanding the impact of technology on firms' business models. *European Journal of Innovation Management*, *16*(3), 285-300.

André Cavalcante, S. A. (2014). Designing business model change. *International Journal of Innovation Management*, *18*(02), 1450018.

André Cavalcante, S. A., Kesting, P., & Ulhøi, J. (2011). Business model dynamics and innovation:(re) establishing the missing linkages. *Management Decision*, *49*(8), 1327-1342.

Anggraeni, E., Den Hartigh, E., & Zegveld, M. (2007, October). Business ecosystem as a perspective for studying the relations between firms and their business networks. In *ECCON* 2007 Annual Meeting (pp. 1-28).

Apte, U. M., & Davis, M. M. (2019). Sharing Economy Services: Business Model Generation. *California Management Review*, *61*(2), 104-131.

Araujo, L., & Easton, G. (2012). Temporality in business networks: The role of narratives and management technologies. *Industrial Marketing Management*, *41*(2), 312-318.

Arend, R. J. (2013). The business model: Present and future—beyond a skeuomorph. *Strategic Organization*, *11*(4), 390-402.

Argyris, C. (1976). Increasing leadership effectiveness. New York: Wiley.

Arnould, E. J., & Rose, A. S. (2016). Mutuality: Critique and substitute for Belk's "sharing". *Marketing Theory*, *16*(1), 75-99.

Armbruster, H., Bikfalvi, A., Kinkel, S., & Lay, G. (2008). Organizational innovation: The challenge of measuring non-technical innovation in large-scale surveys. *Technovation*, *28*(10), 644-657.

Aspara, J., Hietanen, J., & Tikkanen, H. (2010). Business model innovation vs replication: financial performance implications of strategic emphasis. *Journal of Strategic Marketing*, *18*(1), 39-56.

Aspara, J., Lamberg, J. A., Laukia, A., & Tikkanen, H. (2013). Corporate business model transformation and inter-organizational cognition: The case of Nokia. *Long Range Planning*, 46(6), 459-474.

Astley, W. G., & Van de Ven, A. H. (1983). Central perspectives and debates in organization theory. *Administrative Science Quarterly*, 245-273.

Avital, M., Andersson, M., Nickerson, J., Sundararajan, A., Van Alstyne, M., & Verhoeven, D. (2014, January). The collaborative economy: a disruptive innovation or much ado about nothing?. In *Proceedings of the 35th International Conference on Information Systems; ICIS 2014* (pp. 1-7). Association for Information Systems. AIS Electronic Library (AISeL).

Axelrod, R., & Hamilton, W. D. (1981). The evolution of cooperation. *Science*, *211*(4489), 1390–1396.

Baden-Fuller, C. (2008). Editorial. Long Range Planning, 41, 1-2.

Baldwin, C. Y., & Woodward, C. J. (2009). *The architecture of platforms: A unified view.* In A. Gawer (Ed.), Platforms, Markets and Innovation. Cheltenham, UK: Edward Elgar Publishing.

Barbu, C. M., Florea, D. L., Ogarcă, R. F., & Barbu, M. C. (2018). From ownership to access: How the sharing economy is changing the consumer behavior. *Amfiteatru Economic*, *20*(48), 373-387.

Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, *39*(4), 881–898.

Barnes, S. J., & Mattsson, J. (2016). Understanding current and future issues in collaborative consumption: A four-stage Delphi study. *Technological Forecasting and Social Change, 104,* 200-211.

Barney, J. B. (1986). Strategic factor markets: Expectations, luck and business strategy. *Management Science*, *42*, 1231-1241.

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, *27*(6), 643-650.

Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2011). The future of resource-based theory: revitalization or decline? *Journal of Management*, *37*(5), 1299-1315.

Bartlett, C. A., & Ghoshal, S. (1989). Managing across borders. *Harvard Business school press, Boston, MA*.

Bartlett, C. A., & Ghoshal, S. (1992). What is a global manager? Harvard Business School.

Bartlett, C. A., & Ghoshal, S. (2002). *Managing across borders: The transnational solution*. Harvard Business Press.

Bartunek, J. M. (2007). Academic-practitioner collaboration need not require joint or relevant research: Toward a relational scholarship of integration. *Academy of Management Journal*, *50*(6), 1323-1333.

Bartunek, J. M., Rynes, S. L., & Ireland, R. D. (2006). What makes management research interesting, and why does it matter? *Academy of Management Journal*, 49(1), 9-15.

Bauwens, M., Kostakis, V., & Pazaitis, A. (2019). Peer to peer. University of Westminster Press.

Belk, R. (2007). Why not share rather than own?. *The Annals of the American Academy of Political and Social Science*, *611*(1), 126-140.

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, *67*(8), 1595–1600.

Bell, E., & Bryman, A. (2007). The ethics of management research: an exploratory content analysis. *British journal of management*, *18*(1), 63-77.

Bellman, R., Clark, C. E., Malcolm, D. G., Craft, C. J., & Ricciardi, F. M. (1957). On the construction of a multi-stage, multi-person business game. *Operations Research*, *5*(4), 469-503.

Berghman, L., Matthyssens, P., & Vandenbempt, K. (2006). Building competences for new customer value creation: An exploratory study. *Industrial Marketing Management*, *35*(8), 961-973.

Berry, L., & Maricle, K. E. (1973). Consumption without ownership: Marketing opportunity for today and tomorrow. *MSU Business Topics*, *21*(1), 33-41.

Bhaskar, R. (1978). A realist theory of science. Atlantic Highlands.

Bhaskar, R. (2008). Dialectic: The pulse of freedom. Routledge.

Bhaskar, R. (2013). A realist theory of science. Routledge.

Brinkmann, S., & Kvale, S. (2005). Confronting the ethics of qualitative research. *Journal of constructivist psychology*, *18*(2), 157-181.

Birkinshaw, J., Crilly, D., Bouquet, C., & Lee, S. Y. (2016). How do firms manage strategic dualities? A process perspective. *Academy of Management Discoveries*, *2*(1), 51–78.

Birkinshaw, J., Hamel, G., & Mol, M. J. (2008). Management innovation. *Academy of Management Review*, *33*(4), 825-845.

Bizzi, L., & Langley, A. (2012). Studying processes in and around networks. *Industrial Marketing Management*, *41*(2), 224-234.

Blaikie, N. (2007). *Approaches to social enquiry: Advancing knowledge*. Cambridge: Polity Press.

Blaikie, N. (2010). *Designing social research: The logic of anticipation* (2nd ed.). Cambridge: Polity Press.

Blumer, H. (1954). What is wrong with social theory? *American Sociological Review*, 19(1), 3-10.

Blundel, R. (2007). Critical realism: a suitable vehicle for entrepreneurship research, pp.49-78. In *Handbook of qualitative research methods in entrepreneurship*. Neergaard, H., & Ulhøi, J. P. (Eds.). Edward Elgar Publishing.

Bochner, A. P. (2000). Criteria against ourselves. *Qualitative Inquiry*, *6*(2), 266-272.

Bock, A. J., & George, G. (2018). *The business model book: Design, build and adapt business ideas that thrive.* London: Pearson Education Limited.

Bock, A. J., Opsahl, T., George, G., & Gann, D. M. (2012). The effects of culture and structure on strategic flexibility during business model innovation. *Journal of Management Studies*, *49*(2), 279-305.

Botsman, R. (2013). The sharing economy lacks a shared definition. Fast Company, 21, 2013.

Botsman, R., & Rogers, R. (2011). What's mine is yours: How collaborative consumption is changing the way we live. New York: HarperCollins Business.

Boudreau, K. J., & Jeppesen, L. B. (2015). Unpaid crowd complementors: The platform network effect mirage. *Strategic Management Journal*, *36*(12), 1761–1777.

Bourgeois III, L. J. (1979). Toward a method of middle-range theorizing. *Academy of Management Review*, *4*(3), 443-447.

Bowen, G. A. (2006). Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods*, *5*(3), 12-23.

Breidbach, C. F., & Brodie, R. J. (2017). Engagement platforms in the sharing economy: conceptual foundations and research directions. *Journal of Service Theory and Practice*, *27*(4), 761-777.

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, *14*(3), 252-271.

Bryman, A. (2004). Social research methods (2nd ed.). New York: Oxford University Press.

Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies.* WW Norton & Company.

Bucher, E., Fieseler, C., Fleck, M., & Lutz, C. (2018). Authenticity and the sharing economy. *Academy of Management Discoveries*, *4*(3), 294-313.

Bucher, E., Fieseler, C., & Lutz, C. (2016). What's mine is yours (for a nominal fee): Exploring the spectrum of utilitarian to altruistic motives for Internet-mediated sharing. *Computers in Human Behavior*, *62*, 316–326.

Bucherer, E. (2011). Business model innovation-guidelines for a structured approach. Shaker.

Bucherer, E., Eisert, U., & Gassmann, O. (2012). Towards systematic business model innovation: lessons from product innovation management. *Creativity and Innovation Management*, *21*(2), 183-198.

Burrell, G. & Morgan, G. (1994). *Sociological Paradigms and Organisational Analysis*. Arena Publishing.

Burtch, G., Carnahan, S., & Greenwood, B. N. (2018). Can you gig it? An empirical examination of the gig economy and entrepreneurial activity. *Management Science*, *64*(12), 5497-5520.

Caillaud, B., & Jullien, B. (2003). Chicken & egg: Competition among intermediation service providers. *RAND Journal of Economics*, 309-328.

Campbell, D. T. (1975). III. "Degrees of freedom" and the case study. *Comparative Political Studies*, 8(2), 178-193.

Campbell, D. T. & Stanley. (1963). Experimental and quasi-experimental designs for research.

Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*, *42*(3), 294-320.

Canato, A., Ravasi, D., & Phillips, N. (2013). Coerced practice implementation in cases of low cultural fit: Cultural change and practice adaptation during the implementation of six Sigma at 3M. *Academy of Management Journal*, *56*(6), 1724–1753.

Cannon, S., & Summers, L. H. (2014). How Uber and the sharing economy can win over regulators. *Harvard Business Review*, *13*(10), 24–28.

Casadesus-Masanell, R., & Ricart, J. E. (2010). From strategy to business models and onto tactics. *Long Range Planning*, *43*(2), 195-215.

Cenamor, J., Sjödin, D. R., & Parida, V. (2017). Adopting a platform approach in servitization: Leveraging the value of digitalization. *International Journal of Production Economics*, *192*, 54-65.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research.* Sage Publications Ltd, London.

Chasin, F., von Hoffen, M., Cramer, M., & Matzner, M. (2018)^a. Peer-to-peer sharing and collaborative consumption platforms: a taxonomy and a reproducible analysis. *Information Systems and e-Business Management*, *16*(2), 293-325.

Chasin, F., von Hoffen, M., Hoffmeister, B., & Becker, J. (2018)^b. Reasons for Failures of Sharing Economy Businesses. *MIS Quarterly Executive*, *17*(3), 185-199.

Cheng, M. (2016). Sharing economy: A review and agenda for future research. *International Journal of Hospitality Management*, *57*, 60-70.

Cherry, C. E., & Pidgeon, N. F. (2018). Is sharing the solution? Exploring public acceptability of the sharing economy. *Journal of Cleaner Production*, *195*, 939-948.

Chesbrough, H. (2007). Business model innovation: it's not just about technology anymore. *Strategy & Leadership*, *35*(6), 12-17.

Chesbrough, H. W. (2007)^a. Why companies should have open business models. *MIT Sloan Management Review*, 48(2), 22.

Chesbrough, H. (2010). Business model innovation: opportunities and barriers. *Long Range Planning*, *43*(2), 354-363.

Cheng, M., & Foley, C. (2018). The sharing economy and digital discrimination: The case of Airbnb. *International Journal of Hospitality Management*, *70*, 95-98.

Choudary, S. P., Parker, G. G., & Van Alystne, M. (2015). *Platform Scale: How an emerging business model helps startups build large empires with minimum investment.* San Francisco: Platform Thinking Labs.

Clauss, T., Breitenecker, R. J., Kraus, S., Brem, A., & Richter, C. (2018). Directing the wisdom of the crowd: the importance of social interaction among founders and the crowd during crowdfunding campaigns. *Economics of Innovation and New Technology*, *27*(8), 709-729.

Clemons, E. K. (2009). Business models for monetizing internet applications and web sites: Experience, theory, and predictions. *Journal of Management Information Systems*, *26*(2), 15–41.

Codagnone, C., Biagi, F., & Abadie, F. (2016). The passions and the interests: Unpacking the sharing economy'. *Institute for Prospective Technological Studies, JRC Science for Policy Report.*

Cohen, B., & Kietzmann, J. (2014). Ride on! Mobility business models for the sharing economy. *Organization & Environment*, *27*(3), 279-296.

Collier, A. (1994). Critical realism: an introduction to Roy Bhaskar's philosophy. London: Verso.

Colombo, M. G., Franzoni, C., & Rossi-Lamastra, C. (2015). Internal social capital and the attraction of early contributions in crowdfunding. *Entrepreneurship Theory and Practice*, *39*(1), 75–100.

Comes, S., & Berniker, L. (2008). Business model innovation. From strategy to execution, 65-86.

Constantinides, P., Henfridsson, O., & Parker, G. G. (2018). Introduction—Platforms and infrastructures in the digital age.

Constantiou, I., Marton, A., & Tuunainen, V. K. (2017). Four Models of Sharing Economy Platforms. *MIS Quarterly Executive*, *16*(4), 231-251.

Cook, T. D., & Campbell, D. T. (1979). The design and conduct of true experiments and quasi-experiments in field settings. In *Reproduced in part in Research in Organizations: Issues and Controversies*. Goodyear Publishing Company.

Cooper, D. R., & Schindler, P. S. (2006). Marketing research. New York: McGraw-Hill/Irwin.

Cooper, R. G., & Kleinschmidt, E. J. (1986). An investigation into the new product process: steps, deficiencies, and impact. *Journal of Product Innovation Management*, *3*(2), 71-85.

Cormican, K., & O'Sullivan, D. (2004). Auditing best practice for effective product innovation management. *Technovation*, *24*(10), 819-829.

Cornelissen, J. P. (2017). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed. *Journal of Management Studies*, *54*(3), 368-383.

Corsaro, D., Ramos, C., Henneberg, S. C., & Naudé, P. (2012). The impact of network configurations on value constellations in business markets—The case of an innovation network. *Industrial Marketing Management*, *41*(1), 54-67.

Coryn, C. L., Noakes, L. A., Westine, C. D., & Schröter, D. C. (2011). A systematic review of theory-driven evaluation practice from 1990 to 2009. *American Journal of Evaluation*, *32*(2), 199-226.

Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). Blockchain technology: Beyond bitcoin. *Applied Innovation*, *2*(6-10), 71.

Crow, G., Wiles, R., Heath, S., & Charles, V. (2006). Research ethics and data quality: The implications of informed consent. *International Journal of Social Research Methodology*, *9*(2), 83-95.

Cruickshank, J. (Ed.). (2003). Critical realism: The difference it makes. Routledge.

Cucculelli, M., & Bettinelli, C. (2015). Business models, intangibles and firm performance: evidence on corporate entrepreneurship from Italian manufacturing SMEs. *Small Business Economics*, *45*(2), 329-350.

Cummings, L. L. (1983). The Logics of Management. *Academy of Management Review*, *8*(4), 532-538.

Cusumano, M. A. (2015). How traditional firms must compete in the sharing economy. *Communications of the ACM*, *58*(1), 32–34.

Cusumano, M. A., & Gawer, A. (2002). The elements of platform leadership. *MIT Sloan Management Review*, *43*(3), 51.

Cusumano, M.A., Gawer, A. & Yoffie, D.B. (2019). *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power.* New York: HarperCollins Publishers.

Daft, R. L., & Lewin, A. Y. (1990). Can organization studies begin to break out of the normal science straitjacket? An editorial essay. *Organization Science*, *I*(1), 1-9.

Damanpour, F. (1987). The adoption of technological, administrative, and ancillary innovations: Impact of organizational factors. *Journal of Management*, *13*(4), 675-688.

Damanpour, F., & Evan, W. M. (1984). Organizational innovation and performance: the problem of organizational lag. *Administrative Science Quarterly*, 392-409.

Dass, M., & Kumar, S. (2014). Bringing product and consumer ecosystems to the strategic forefront. *Business Horizons*, *57*(2), 225–234.

Davenport, T. H., & Markus, M. L. (1999). Rigor vs. relevance revisited: Response to Benbasat and Zmud. *MIS Quarterly*, 19-23.

Davies, H. (2006). Improving the relevance of management research: evidence-based management: design science or both. *Business Leadership Review*, *3*(3), 1-6

De Cock, C., & Sharp, R. J. (2007). Process theory and research: Exploring the dialectic tension. *Scandinavian Journal of Management*, *23*(3), 233-250.

Delbridge, R., & Edwards, T. (2013). Inhabiting institutions: Critical realist refinements to understanding institutional complexity and change. *Organization Studies*, *34*(7), 927-947.

Demil, B., & Lecocq, X. (2010). Business model evolution: in search of dynamic consistency. *Long Range Planning*, *43*(2), 227-246.

Demil, B., Lecocq, X., Ricart, J. E., & Zott, C. (2015). Introduction to the SEJ special issue on business models: business models within the domain of strategic entrepreneurship. *Strategic Entrepreneurship Journal*, *9*(1), 1-11.

De Reuver, M., Sørensen, C., & Basole, R. C. (2018). The digital platform: a research agenda. *Journal of Information Technology*, *33*(2), 124-135.

De Stefano, V. (2015). The rise of the just-in-time workforce: On-demand work, crowdwork, and labor protection in the gig-economy. *Comparative labor Law & Policy Journal*, *37*, 471-504.

Dhanaraj, C., & Parkhe, A. (2006). Orchestrating innovation networks. *Academy of Management Review*, *31*(3), 659–669.

Diniz, E. H., Siqueira, E. S., & van Heck, E. (2019). Taxonomy of digital community currency platforms. *Information Technology for Development*, *25*(1), 69-91.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, *20*(1), 65–91.

Dreyer, B., Lüdeke-Freund, F., Hamann, R., & Faccer, K. (2017). Upsides and downsides of the sharing economy: Collaborative consumption business models' stakeholder value impacts and their relationship to context. *Technological Forecasting and Social Change*, *125*, 87-104.

Dubois, A., & Araujo, L. (2007). Case research in purchasing and supply management: Opportunities and challenges. *Journal of Purchasing and Supply Management*, *13*(3), 170-181.

Dubois, A., & Gadde, L. E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, *55*(7), 553–560.

Dubois, A., & Gadde, L. E. (2014). Systematic combining: A decade later. *Journal of Business Research*, *67*(6), 1277–1284.

Duffell, N. (2014). Wounded Leaders - British Elitism and the Entitlement Illusion: A Psychohistory. London: Lone Arrow Press.

Dyer Jr, W. G., & Wilkins, A. L. (1991). Better stories, not better constructs, to generate better theory: A rejoinder to Eisenhardt. *Academy of management review*, *16*(3), 613-619.

Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). Management research. Sage.

Easton, G. (1995). Case research as a methodology for industrial networks: a realist apologia. In *IMP Conference (11th)* (Vol. 11). IMP.

Easton, G. (2002). Marketing: A critical realist approach. *Journal of Business Research*, 55(2), 103-109.

Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, *39*(1), 118–128.

Eaton, B., Elaluf-Calderwood, S., Sørensen, C., & Yoo, Y. (2015). Distributed tuning of boundary resources: the case of Apple's iOS service system. *MIS Quarterly: Management Information Systems*, *39*(1), 217-243.

Eckhardt, G. M., & Bardhi, F. (2015). The sharing economy isn't about sharing at all. *Harvard Business Review*, *28*(1).

Edelman, B. (2015). Does Google leverage market power through tying and bundling? *Journal of Competition Law & Economics*, 11(2), 365-400.

Edelman, B., Luca, M., & Svirsky, D. (2017). Racial discrimination in the sharing economy: Evidence from a field experiment. *American Economic Journal: Applied Economics*, 9(2), 1-22.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1246–1264.

Ehret, M. (2013). Emergence of business markets—A critical realist foundation. *Industrial Marketing Management*, *42*(3), 316-323.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, *14*(1), 57–74.

Eisenhardt, K. M. (1991). Better stories and better constructs: The case for rigor and comparative logic. *Academy of Management Review*, *16*(3), 620-627.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25-32.

Eisenmann, T. R., Parker, G., & Van Alstyne, M. (2009). Opening platforms: how, when and why?. *Platforms, markets and innovation*, *6*, 131-162.

Elaluf-Calderwood, S. M., Eaton, B. D., Sørensen, C., & Yoo, Y. (2011, October). Control as a strategy for the development of generativity in business models for mobile platforms. In *2011 15th International Conference on Intelligence in Next Generation Networks* (pp. 271-276). IEEE.

Elkington, J. (2012). *The Zeronauts: Breaking the Sustainability Barrier*. Oxon: Routledge.

Entrepreneurship Theory and Practice (2019, forthcoming). Special Issue: The Sharing Economy: Entrepreneurial Discovery and Creative Destruction Across Countries.

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the sharing economy: The role of personal photos in Airbnb. *Tourism Management*, *55*, 62–73.

Euchner, J., & Ganguly, A. (2014). Business model innovation in practice. *Research-Technology Management*, *57*(6), 33-39.

Evans, D. S. (2003). Some empirical aspects of multi-sided platform industries. *Review of Network Economics*, *2*, 191–209.

Evans, D. S. (2013). Economics of vertical restraints for multi-sided platforms. *University of Chicago Institute for Law & Economics Olin Research Paper*, (626).

Evans, D. S., Hagiu, A., & Schmalensee, R. (2008). *Invisible engines: how software platforms drive innovation and transform industries.* MIT press.

Evans, D. S., & Schmalensee, R. (2010). Failure to launch: Critical mass in platform businesses. *Review of Network Economics*, *9*(4), Article 1.

Evans, D. S., & Schmalensee, R. (2016). *Matchmakers: The new economics of multisided platforms.* Harvard Business Review Press.

Evans, P. C., & Gawer, A. (2016). The rise of the platform enterprise: a global survey.

Fareshare (2018). *Our Impact - More than meals*. Retrieved 22 July 2018 from http://fareshare.org.uk/what-we-do/our-impact/

Fassin, Y. (2008). Imperfections and shortcomings of the stakeholder model's graphical representation. *Journal of Business Ethics*, *80*(4), 879–888.

Fassin, Y. (2010). A dynamic perspective in Freeman's stakeholder model. *Journal of Business Ethics*, *96*(1), 39.

Fassin, Y. (2012). Stakeholder management, reciprocity and stakeholder responsibility. *Journal of Business Ethics*, *109*(1), 83-96.

Fairclough, N. (2005). Peripheral vision: Discourse analysis in organization studies: The case for critical realism. *Organization Studies*, *26*(6), 915-939.

Fairclough, N., Jessop, B., & Sayer, A. (2002). Critical realism and semiosis. Alethia, 5(1), 2-10.

Fehrer, J. A., Woratschek, H., & Brodie, R. J. (2018). A systemic logic for platform business models. *Journal of Service Management*, *29*(4), 546-568.

Feldman, D. (2004). What are we talking about when we talk about theory? *Journal of Management*, *30*(5), 565-567.

Fendt, J., Kaminska-Labbé, R., & Sachs, W. M. (2008). Producing and socializing relevant management knowledge: re-turn to pragmatism. *European Business Review*, *20*(6), 471-491.

Ferlie, E., & McNulty, T. (1997). "Going to market": Changing patterns in the organisation and character of process research. *Scandinavian Journal of Management*, *13*(4), 367-387. Fisman, R., & Luca, M. (2016). Fixing discrimination in online marketplaces. *Harvard Business School*.

Fleetwood, S., & Ackroyd, S. (Eds.). (2004). *Critical realist applications in organisation and management studies* (Vol. 11). Psychology Press.

Ford, D. (2011). IMP and service-dominant logic: Divergence, convergence and development. *Industrial Marketing Management*, *40*(2), 231-239.

Foss, N. J., & Saebi, T. (2017a). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, 43(1), 200-227.

Foss, N. J., & Saebi, T. (2017b). Business models and business model innovation: Between wicked and paradigmatic problems. *Long Range Planning*.

Foss, N. J., & Saebi, T. (2018). Business models and business model innovation: Between wicked and paradigmatic problems. *Long Range Planning*, *51*(1), 9-21.

Frankenberger, K., Weiblen, T., Csik, M., & Gassmann, O. (2013). The 4I-framework of business model innovation: A structured view on process phases and challenges. *International Journal of Product Development*, *18*(3-4), 249-273.

Freeman, R. E. (1984). Strategic management: A stakeholder approach. Boston: Pitman.

Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.

Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success.* New Haven, CT: Yale University Press.

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art.* Cambridge: Cambridge University Press.

Freeman, R. E., Harrison, J. S., & Zyglidopoulos, S. (2018). *Stakeholder Theory: Concepts and Strategies*. Cambridge University Press.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization Science*, *15*(3), 364-369.

Frenken, K., & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, *23*, 3-10.

Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. Oxford: Oxford University Press.

Fu, W., Wang, Q., & Zhao, X. (2018). Platform-based service innovation and system design: a literature review. *Industrial Management & Data Systems*, *118*(5), 946-974.

Gassmann, O., Frankenberger, K., & Csik, M. (2014). *The Business Model Navigator: 55 Models That Will Revolutionize Your Business.* Harlow: Pearson Education Limited.

Gassmann, O., Frankenberger, K., & Sauer, R. (2016). *Exploring the field of business model innovation: New theoretical perspectives.* Springer.

Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research Policy*, *43*(7), 1239-1249.

Gawer, A., & Cusumano, M. A. (2008). Platform Leaders. *MIT Sloan Management Review*, 68-75.

Gawer, A., & Cusumano, M. A. (2014). Industry platforms and ecosystem innovation. *Journal of Product Innovation Management*, *31*(3), 417–433.

Gawer, A., & Henderson, R. (2007). Platform owner entry and innovation in complementary markets: Evidence from Intel. *Journal of Economics & Management Strategy*, *16*(1), 1-34.

Geissinger, A., Laurell, C., & Sandström, C. (2018). Digital Disruption beyond Uber and Airbnb—Tracking the long tail of the sharing economy. *Technological Forecasting and Social Change*.

George, G., (2014). Rethinking management scholarship. *Academy of Management Journal*, *57*(1), 1-6.

George, G., & Bock, A. J. (2011). The business model in practice and its implications for entrepreneurship research. *Entrepreneurship Theory and Practice*, *35*(1), 83-111.

Gephart Jr, R. P. (2004). Qualitative research and the Academy of Management Journal.

Gerom, T. (2013). The share economy. Forbes Magazine, 11 February, No. 1, 58–66.

Gerstner, L. V. (2002). Who says elephants can't dance?: inside IBM's historic turnaround. Harper Information.

Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, *29*(13), 1465-1474.

Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis* (Vol. 241). Univ of California Press.

Girotra, K., & Netessine, S. (2013). OM forum—business model innovation for sustainability. *Manufacturing & Service Operations Management*, *15*(4), 537-544.

Girotra, K., & Netessine, S. (2014). *The risk-driven business model: Four questions that will define your company.* Harvard Business Press.

Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology The Journal Of The British Sociological Association*, *12*, 27-49.

Gobble, M. M. (2014). Charting the innovation ecosystem. *Research-Technology Management*, *57*(4), 55–59.

Goffin, K., Åhlström, P., Bianchi, M., & Richtnér, A. (2019). Perspective: State-of-the-Art: The Quality of Case Study Research in Innovation Management. *Journal of Product Innovation Management*, *36*(5), 586-615.

Gottschalg, O., & Zollo, M. (2007). Interest alignment and competitive advantage. *Academy of Management Review*, *32*(2), 418-437.

Graham, M., Hjorth, I., & Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, *23*(2), 135-162.

Grant, R. (2012). Rejuvenating a mature journal: Charles Baden-Fuller's editorship of Long Range Planning, 1999-2010. *Long Range Planning*, 45(2), 91-100.

Grassmuck, V. R. (2012). The sharing turn: Why we are generally nice and have a good chance to cooperate our way out of the mess we have gotten ourselves into. In *Cultures and ethics of sharing / Kulturen und Ethiken des Teilens.* W. Sützl, F. Stalder, R. Maier, & T. Hug (Eds.), Innsbruck: Innsbruck University Press.

Grinyer, A. (2002). The Anonymity of Research Participants: Assumptions, Ethics and Practicalities. *Social Research Update, 36.*

Grönroos, C., & Helle, P. (2010). Adopting a service logic in manufacturing: Conceptual foundation and metrics for mutual value creation. *Journal of Service Management*, *21*(5), 564-590.

Gummesson, E., & Gustavsson, B. (2007). Case study research. *The principles of knowledge creation: Research methods in the social sciences*, 87.

Guttentag, D. (2015). Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector. *Current Issues in Tourism*, *18*(12), 1192–1217.

Gyódi, K. (2019). Airbnb in European cities: Business as usual or true sharing economy?. Journal of cleaner production, 221, 536-551.

Habibi, M. R., Kim, A., & Laroche, M. (2016). From sharing to exchange: An extended framework of dual modes of collaborative non ownership consumption. *Journal of the Association for Consumer Research*, *1*(2), 277–294.

Hagiu, A. (2014). Strategic decisions for multisided platforms. *MIT Sloan Review.* Retrieved 16 March 2018 from

https://sloanreview.mit.edu/article/strategic-decisions-for-multisided-platforms/

Hagiu, A., & Spulber, D. (2013). First-party content and coordination in two-sided markets. Management Science, 59(4), 933-949.

Hagiu, A., & Wright, J. (2015). Multi-sided platforms. *International Journal of Industrial Organization*, *43*, 162-174.

Halinen, A., Medlin, C. J., & Törnroos, J. Å. (2012). Time and process in business network research. *Industrial Marketing Management*, *41*(2), 215-223.

Halinen, A., & Törnroos, J. Å. (2005). Using case methods in the study of contemporary business networks. *Journal of Business Research*, *58*(9), 1285-1297.

Halinen, A., Törnroos, J. Å., & Elo, M. (2013). Network process analysis: An event-based approach to study business network dynamics. *Industrial Marketing Management*, *42*(8), 1213-1222.

Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the association for information science and technology*, *67*(9), 2047-2059.

Hambrick, D.C. (2007). The field of management's devoting to theory: too much of a good thing? *Academy of Management Journal*, *50*(6), 1346-1352.

Hamlin, C. L. (2004). *Beyond relativism: Raymond Boudon, cognitive rationality and critical realism.* Routledge.

Hansen, M. T., & Birkinshaw, J. (2007). The innovation value chain. *Harvard Business Review*, 85(6), 121.

Hardy, C. L., & Van Vugt, M. (2006). Nice guys finish first: The competitive altruism hypothesis. *Personality and Social Psychology Bulletin*, *32*(10), 1402–1413.

Harrison, J. S., Bosse, D., & Phillips, R. A. (2007). Stakeholder theory and competitive advantage. In *Academy of Management Proceedings*, 2007(1), 1–6.

Harrison, J. S., Freeman, R. E., & Abreu, M. C. S. D. (2015). Stakeholder Theory As an Ethical Approach to Effective Management: applying the theory to multiple contexts. *Revista Brasileira de Gestão de Negócios*, *17*(55), 858-869.

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Business Ethics Quarterly*, *23*(1), 97–124.

Hatch, M. J., Schultz, M., & Skov, A.-M. (2015). Organizational identity and culture in the context of managed change: Transformation in the Carlsberg group, 2009–2013. *Academy of Management Discoveries, 1*(1), 58–90.

Hedman, J., & Kalling, T. (2003). The business model concept: theoretical underpinnings and empirical illustrations. *European Journal of Information Systems*, *12*(1), 49-59.

Heinrichs, H. (2013). Sharing economy: a potential new pathway to sustainability. *GAIA-Ecological Perspectives for Science and Society*, 22(4), 228-231.

Helfat, C. E., & Raubitschek, R. S. (2018). Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems. *Research Policy*, *47*(8), 1391-1399.

Hellwig, K., Morhart, F., Girardin, F., & Hauser, M. (2015). Exploring different types of sharing: A proposed segmentation of the market for 'sharing' businesses. *Psychology & Marketing*, *32*(9), 891–906.

Hinings, C. R. (1997). Reflections on processual research. *Scandinavian Journal of Management*, *13*(4), 493–503.

Hitt, M. A., Boyd, B. K., & Li, D. (2004). The state of strategic management research and a vision of the future. In *Research methodology in strategy and management* (pp. 1-31). Emerald Group Publishing Limited.

Hitt, M. A., & Greer, C. R. (2012). The value of research and its evaluation in business schools: Killing the goose that laid the golden egg?. *Journal of Management Inquiry*, *21*(2), 236-240.

Horton, J. J., & Zeckhauser, R. J. (2016). *Owning, using and renting: some simple economics of the" sharing economy"*(No. w22029). National Bureau of Economic Research.

Howard, B. (2016). What does the sharing economy and good housekeeping have in common? *Forbes.* Retrieved 16 March 2018 from

https://www.forbes.com/sites/billeehoward/2016/07/22/what-does-the-sharing-economy-good-housekeeping-have-in-common/#732c40092f0a

Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods.

Hughes, J. A., & Martin, P. J. (1997). Understanding classical sociology, i Sharrock

Hullova, D., Laczko, P., & Frishammar, J. (2019, in press). Independent distributors in servitization: An assessment of key internal and ecosystem-related problems. *Journal of Business Research*.

Hunt, S. D. (1992). For reason and realism in marketing. Journal of Marketing, 56(2), 89-102.

Iansiti, M., & Levien, R. (2004). *The keystone advantage: What the new dynamics of business ecosystems mean for strategy, innovation, and sustainability.* Boston: Harvard Business School Press.

IBM Corporation (May, 2008). The enterprise of the future: IBM global CEO study.

IBM Institute for Business Value (January, 2016). Redefining Competition: Insights from the Global C-suite Study – The CEO perspective.

IBM Institute for Business Value (November, 2015) Redefining Boundaries: Insights from the Global C-suite Study.

Ijiri, Y., & Simon, H. A. (1964). Business firm growth and size. *The American Economic Review*, 77-89.

Industrial Marketing Management (2013). Special Issue: Business Models - Exploring value drivers and the role of marketing, 42(5).

International Journal of Innovation Management (2013). *Special Issue: Business Model Innovation, 17*(1).

Jaakkola, E., & Hakanen, T. (2013). Value co-creation in solution networks. *Industrial Marketing Management*, *42*(1), 47-58.

Jawahar, I. M., & McLaughlin, G. L. (2001). Toward a descriptive stakeholder theory: An organizational life cycle approach. *Academy of Management Review*, *26*(3), 397-414.

Järvensivu, T., & Törnroos, J. Å. (2010). Case study research with moderate constructionism: Conceptualization and practical illustration. *Industrial Marketing Management*, *39*(1), 100-108.

Jeppesen, S. (2005). Critical realism as an approach to unfolding empirical findings. *Journal of Transdisciplinary Environmental Studies*, *4*, 1-9.

Johnson, M. S. (2003). Designating opponents in empirical research: The rhetoric of "interestingness" in consumer research. *Marketing Theory*, 3, 477–501.

Johnson, M. W. (2010). *Seizing the white space: Business model innovation for growth and renewal.* Harvard Business Press.

Johnson, P., Buehring, A., Cassell, C., & Symon, G. (2006). Evaluating qualitative management research: Towards a contingent criteriology. *International Journal of Management Reviews*, *8*(3), 131-156.

Kasprowicz, T. (2016). The emergence and development of a sharing economy. *4Liberty Review*, 4-17.

Kassan, J., & Orsi, J. (2012). The legal landscape of the sharing economy. *Journal of Environmental Law & Litigation*, *27*, 1–20.

Karami, A., Rowley, J., & Analoui, F. (2006). Research and knowledge building in management studies: An analysis of methodological preferences. *International Journal of Management*,

Karimi, J., & Walter, Z. (2016). Corporate entrepreneurship, disruptive business model innovation adoption, and its performance: The case of the newspaper industry. *Long Range Planning*, 49(3), 342-360.

Kathan, W., Matzler, K., & Veider, V. (2016). The sharing economy: Your business model's friend or foe?. *Business Horizons*, *59*(6), 663-672.

Katz, V. (2015). Regulating the sharing economy. *Berkeley Technology Law Journal*, *30*(4), 1067-1126.

Kazan, E., Tan, C. W., Lim, E. T., Sørensen, C., & Damsgaard, J. (2018). Disentangling digital platform competition: The case of UK mobile payment platforms. *Journal of Management Information Systems*, *35*(1), 180-219.

Kenis, P., & Knoke, D. (2002). How organizational field networks shape interorganizational tie-formation rates. *Academy of Management Review*, *27*(2), 275–293.

Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, *32*(3), 61.

Kenney, M., & Zysman, J. (2019). Work and value creation in the platform economy. *Work and Labor in the Digital Age (Research in the Sociology of Work, Volume 33). Emerald Publishing Limited*, 13-41.

Khurana, R. (2010). From higher aims to hired hands: The social transformation of American business schools and the unfulfilled promise of management as a profession. Princeton University Press.

Kilduff, M. (2006). Editor's comments: Publishing theory. *Academy of Management Review*, *31*(2), 252-255.

Kim, W. C., & Mauborgne, R. (1999). Creating new market space. *Harvard Business Review*, 77(1), 83-93.

Kim, W. C., & Mauborgne, R. (2005). Blue ocean strategy: from theory to practice. *California Management Review*, 47(3), 105-121.

Kochan, T. A., & Rubinstein, S. A. (2000). Toward a stakeholder theory of the firm: The Saturn partnership. *Organization Science*, *11*(4), 367–386.

Kohler, T. (2015). Crowdsourcing-based business models: how to create and capture value. *California Management Review*, *57*(4), 63-84.

Kohtamäki, M., & Rajala, R. (2016). Theory and practice of value co-creation in B2B systems. *Industrial Marketing Management 56*, 4-13.

Koopman, C., Mitchell, M., & Thierer, A. (2014). The sharing economy and consumer protection regulation: The case for policy change. *Journal of Business Entrepreneurship & Law*, *8*, 529-546.

Kraus, S., & Giselbrecht, C. (2015). Shareconomy: The disruptive business model of sharing. *ZfKE Magazine for SMEs and Entrepreneurship, 63* (1), 77-93.

Kraus, S., Richter, C., Brem, A., Cheng, C, & Chang, M. (2016). Strategies for reward-based crowdfunding campaigns. *Journal of Innovation & Knowledge, 1*(1), 13-23.

Kumar, V., Lahiri, A., & Dogan, O. B. (2018). A strategic framework for a profitable business model in the sharing economy. *Industrial Marketing Management*, *69*, 147-160.

Kvale, S. (1996). *Interviews - An introduction to qualitative research interviewing.*Thousand Oaks, CA: Sage.

Laamanen, T., Pfeffer, J., Rong, K., & Van de Ven, A. (2018). Editors' introduction: Business models, ecosystems, and society in the sharing economy. *Academy of Management Discoveries,* 2 (2).

Laczko, P., Hullova, D., Needham, A., Rossiter, A-M., & Battisti, M. (2019). The role of a central actor in increasing platform stickiness and stakeholder profitability: Bridging the gap between value creation and value capture in the sharing economy. *Industrial Marketing Management*, 76, 214-230.

Lamberg, J. A., Pajunen, K., Parvinen, P., & Savage, G. T. (2008). Stakeholder management and path dependence in organizational transitions. *Management Decision*, 46(6), 846–863.

Lamberg, J. A., Savage, G. T., & Pajunen, K. (2003). Strategic stakeholder perspective to ESOP negotiations: The case of United Airlines. *Management Decision*, *41*(4), 383–393.

Lambert, S. C., & Davidson, R. A. (2013). Applications of the business model in studies of enterprise success, innovation and classification: An analysis of empirical research from 1996 to 2010. *European Management Journal*, *31*(6), 668-681.

Lamberton, C. P., & Rose, R. L. (2012). When is ours better than mine? A framework for understanding and altering participation in commercial sharing systems. *Journal of Marketing*, 76(4), 109–125.

Lange, K., Geppert, M., Saka-Helmhout, A., & Becker-Ritterspach, F. (2015). Changing business models and employee representation in the airline industry: A comparison of British airways and Deutsche Lufthansa. *British Journal of Management*, 26, 388–407.

Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, *24*(4), 691-710.

Langley, A. (2007). Process thinking in strategic organization. *Strategic Organization*, *5*(3), 271-282.

Langley, A., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, *56*(1), 1-13.

Langley, A., & Truax, J. (1994). A process study of new technology adoption in smaller manufacturing firms. *Journal of Management Studies*, *31*(5), 619-652.

Langley, A., & Tsoukas, H. (Eds.). (2016). *The SAGE handbook of process organization studies*. Sage.

Lankoski, L., Smith, N. C., & Van Wassenhove, L. (2016). Stakeholder judgments of value. *Business Ethics Quarterly*, *26*(2), 227–256.

Lappi, T., Haapasalo, H., & Aaltonen, K. (2015). Business Ecosystem Definition in Built Environment Using a Stakeholder Assessment Process. *Management (18544223)*, *10*(2), 110-129.

Lavie, D. (2006). The competitive advantage of interconnected firms: An extension of the resource-based view. *Academy of Management Review*, *31*(3), 638-658.

Layder, D. (1998). Sociological practice: Linking theory and social research. Sage.

Leitão, S. D. S., & Domenico, S. M. R. D. (2015). Looking at Organizational Change Through the construction and reconstruction of the underpinning values of the organization through interactions among stakeholders. *Revista Brasileira de Gestão de Negócios*, *17*(55), 959-986.

Le Jeune, S. (2016). The sharing economy. Доступно на.

Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value creation and value capture: a multilevel perspective. *Academy of Management Review*, *32*(1), 180-194.

Letaifa, B. S. (2014). The uneasy transition from supply chains to ecosystems: The value-creation/value-capture dilemma. *Management Decision*, *52*(2), 278–295.

Levitt, T. (1974), Marketing for Business Growth, New York: McGraw-Hill

Li, S., Liu, Y. and Bandyopadhyay, S. (2010). Network effects in online two-sided market platforms: a research note. *Decision Support Systems*, *49*(2), 245-249.

Linder, J. C., & Cantrell, S. (2001). Five business-model myths that hold companies back. *Strategy & Leadership*, *29*(6), 13-18.

Lindgreen, A., & Wynstra, F. (2005). Value in business markets: What do we know? Where are we going? *Industrial Marketing Management*, *34*(7), 732-748.

Linz, C., Zimmermann, A., & Müller-Stewens, G. (2017). *Radical business model transformation: Gaining the competitive edge in a disruptive world.* Kogan Page Publishers.

Long Range Planning (2010). Special Issue: Business Models, 43(2-3).

Long Range Planning (2013). Special Issue: Managing Business Models for Innovation, Strategic Change and Value Creation, 46(6).

Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, *14*(2), 139-161.

Lowe, S., & Rod, M. (2018). Business network becoming: Figurations of time, change and process. *Industrial Marketing Management*, *68*, 156-164.

Lutz, C., & Newlands, G. (2018). Consumer segmentation within the sharing economy: The case of Airbnb. *Journal of Business Research*, *88*, 187-196.

Maglio, P. P., & Spohrer, J. (2013). A service science perspective on business model innovation. *Industrial Marketing Management*, *42*(5), 665-670.

Mahoney, J. (1994). FOCUS: Stakeholder responsibilities: Turning the ethical tables. *Business Ethics: A European Review*, *3*(4), 212-218.

Mair, J., & Reischauer, G. (2017). Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. *Technological Forecasting and Social Change*, *125*, 11–20.

Magretta, J. (2002). Why business models matter. Harvard Business Review.

Makadok, R., & Coff, R. (2002). The theory of value and the value of theory: Breaking new ground versus reinventing the wheel. *Academy of Management Review. 27(1)*, 10-13.

Makkonen, H., Aarikka-Stenroos, L., & Olkkonen, R. (2012). Narrative approach in business network process research—Implications for theory and methodology. *Industrial Marketing Management*, *41*(2), 287-299.

Malhotra, A., & Van Alstyne, M. (2014). The dark side of the sharing economy... and how to lighten it. *Communications of the ACM*, *57*(11), 24-27.

Management and Organization Review (2018). *Special Issue: Business Model Innovation in Transforming Economies (Forthcoming)*.

Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., & Mahajan, D. (2016). Independent work: Choice, necessity, and the gig economy. *McKinsey Global Institute*, *2016*, 1-16.

Marcos-Cuevas, J., Nätti, S., Palo, T., & Baumann, J. (2016). Value co-creation practices and capabilities: Sustained purposeful engagement across B2B systems. *Industrial Marketing Management*, *56*, 97-107.

Markides, C. C. (2013). *Game-changing strategies: How to create new market space in established industries by breaking the rules.* John Wiley & Sons.

Marmer, M., Herrmann, B. L., Dogrultan, E., Berman, R., Eesley, C., & Blank, S. (2011). Startup genome report extra: Premature scaling. *Startup Genome*, *10*, 1-56.

Marriott International, Inc. (2017) Annual Report. Retrieved from: https://marriott.gcs-web.com/static-files/057a8ela-a5c5-4c20-a51c-0b20bf8a0bcl

McAfee, R. P., Mialon, H. M., & Mialon, S. H. (2010). Do sunk costs matter?. *Economic Inquiry*, 48(2), 323-336.

McColl-Kennedy, J. R., Vargo, S. L., Dagger, T. S., Sweeney, J. C., & Kasteren, Y. V. (2012). Health care customer value cocreation practice styles. *Journal of Service Research*, *15*(4), 370-389.

McGrath, R. G. (2010). Business models: A discovery driven approach. *Long range planning*, 43(2), 247-261.

Mero-Jaffe, I. (2011). 'Is that what I said?'Interview transcript approval by participants: an aspect of ethics in qualitative research. *International Journal of Qualitative Methods, 10*(3), 231-247.

Meyer, S. B., & Lunnay, B. (2013). The application of abductive and retroductive inference for the design and analysis of theory-driven sociological research. *Sociological research online*, *18*(1), 86-96.

Miller, K. D., & Tsang, E. W. (2011). Testing management theories: critical realist philosophy and research methods. *Strategic Management Journal*, *32*(2), 139-158.

Miles, J. A. (2012). *Management and organization theory: A Jossey-Bass reader* (Vol. 9). John Wiley & Sons.

Miles, M. B., & Huberman, A. M., (1994). *Qualitative data analysis: An expanded sourcebook.* Sage.

Milano, C., Cheer, J. M., & Novelli, M. (2018). Overtourism: a growing global problem. *The Conversation*, *18*.

Miles, S. (2017). Stakeholder theory classification: A theoretical and empirical evaluation of definitions. *Journal of Business Ethics*, *142*(3), 437-459.

Miller, S. R. (2016). First principles for regulating the sharing economy. *Harvard Journal on Legislation.*, *53*, 147.

Miner, J. B. (1984). The Validity and Usefulness of Theories in an Emerging Organization Science. *Academy of Management Review*, *9*, 296-306.

Mingers, J. (2003). A classification of the philosophical assumptions of management science methods. *Journal of the Operational Research Society*, *54*(6), 559-570.

Mingers, J. (2015). Helping business schools engage with real problems: The contribution of critical realism and systems thinking. *European Journal of Operational Research*, *242*(1), 316-331.

Mingers, J. (2016). *Systems Thinking, Critical Realism and Philosophy: A confluence of ideas.*Oxon: Routledge.

Mingers, J., Mutch, A., & Willcocks, L. (2013). Critical realism in information systems research. *MIS Quarterly*, *37*(3), 795-802.

Mitchell, D., & Coles, C. (2003). The ultimate competitive advantage of continuing business model innovation. *Journal of Business Strategy*, *24*(5), 15-21.

Mocker, M., & Fonstad, N. O. (2017). How AUDI AG is Driving Toward the Sharing Economy. MIS Quarterly Executive, 16(4).

Mohr, L. B. (1982). Explaining organizational behavior. Jossey-Bass.

Moore, J. F. (1993). Predators and prey: a new ecology of competition. *Harvard Business Review*, 71(3), 75-86.

Moore, J.F. (1996). *The Death of Competition: Leadership & Strategy in the Age of Business Ecosystems.* New York: Harper Business.

Moore, J. F. (1998). The rise of a new corporate form. Washington Quarterly, 21(1), 167-181.

Moore, J. F. (2006). Business ecosystems and the view from the firm. *The Antitrust Bulletin*, *51*(1), 31-75.

Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: toward a unified perspective. *Journal of Business Research*, *58*(6), 726-735.

Möhlmann, M. (2015). Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour*, *14*(3), 193–207.

Möller, K., & Halinen, A. (2017). Managing business and innovation networks: From strategic nets to business fields and ecosystems. *Industrial Marketing Management*, *67*, 5–22.

Möller, K., & Svahn, S. (2009). How to influence the birth of new business fields: Network perspective. *Industrial Marketing Management*, *38*(4), 450–458.

Moser, D., & Gassmann, O. (2016). *Innovating platform business models*. XXVII ISPIM Innovation Conference 2016, Porto, 2016.

Mulgan, G., & Albury, D. (2003). Innovation in the public sector. *Strategy Unit, Cabinet Office*, 1-40.

Munoz, P., & Cohen, B. (2017). Mapping out the sharing economy: A configurational approach to sharing business modeling. *Technological Forecasting and Social Change*, *125*, 21-37.

Muzellec, L., Ronteau, S., & Lambkin, M. (2015). Two-sided Internet platforms: A business model lifecycle perspective. *Industrial Marketing Management*, *45*, 139–150.

Müller-Seitz, G. (2012). Leadership in interorganizational networks: A literature review and suggestions for future research. *International Journal of Management Reviews*, *14*(4), 428–443.

Nambisan, S., & Sawhney, M. (2011). Orchestration processes in network-centric innovation: Evidence from the field. *Academy of Management Perspectives*, *25*(3), 40–57.

Ng, I. C. L., Ding, D. X., & Yip, N. (2013). Outcome-based contracts as new business model: The role of partnership and value-driven relational assets. *Industrial Marketing Management*, 42, 730-743.

Normann, R., & Ramirez, R. (1993). From value chain to value constellation: Designing interactive strategy. *Harvard Business Review*, *71*(4), 65-77.

Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, 18, 187-206,

Ocasio, W. (2011). Attention to attention. Organization Science, 22(5), 1286-1296.

Ong, B. K. (2012). Grounded Theory Method (GTM) and the Abductive Research Strategy (ARS): a critical analysis of their differences. *International Journal of Social Research Methodology*, *15*(5), 417-432.

Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2011). Crowd-funding: transforming customers into investors through innovative service platforms. *Journal of Service Management*, *22*(4), 443-470.

Osiyevskyy, O., & Dewald, J. (2015). Explorative versus exploitative business model change: The cognitive antecedents of firm-level responses to disruptive innovation. *Strategic Entrepreneurship Journal*, 9, 58–78.

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers.* John Wiley & Sons.

Ouchi, W. G. (1979). A conceptual framework for the design of organizational control mechanisms. *Readings in Accounting for Management Control*. 63-82.

Owyang, J., & Samuel, A. (2015). The new rules of the collaborative economy. *Vision Critical*, *28*.

Paquin, R. L., & Howard-Grenville, J. (2013). Blind dates and arranged marriages: Longitudinal processes of network orchestration. *Organization Studies*, *34*(11), 1623-1653.

Parente, R. C., Geleilate, J. M. G., & Rong, K. (2018). The sharing economy globalization phenomenon: A research agenda. *Journal of International Management*, *24*(1), 52-64.

Parker, M. (2018). Shut down the business school. London: Pluto Press

Parker, G. G., & Van Alstyne, M. W. (2005). Two-sided network effects: A theory of information product design. *Management Science*, *51*(10), 1494-1504.

Parker, G., & Van Alstyne, M. (2017). Innovation, openness, and platform control. *Management Science*, 64(7), 3015-3032.

Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). *Platform revolution: How networked markets are transforming the economy and how to make them work for you.* New York: WW Norton & Company.

Parmentier, Guy, and Romain Gandia. "Redesigning the business model: from one-sided to multi-sided." *Journal of Business Strategy* 38, no. 2 (2017): 52-61.

Perks, H. (2005). Specifying and synchronising partner activities in the dispersed product development process. *Industrial Marketing Management*, *34*(1), 85-95.

Perks, H., Kowalkowski, C., Witell, L., & Gustafsson, A. (2017). Network orchestration for value platform development. *Industrial Marketing Management*, *67*, 106–121.

Perren, R., & Kozinets, R. V. (2018). Lateral exchange markets: how social platforms operate in a networked economy. *Journal of Marketing*, *82*(1), 20-36.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource–based view. *Strategic Management Journal*, *14*(3), 179-191.

Peters, L. D., Pressey, A. D., Vanharanta, M., & Johnston, W. J. (2013). Constructivism and critical realism as alternative approaches to the study of business networks: Convergences and divergences in theory and in research practice. *Industrial Marketing Management*, *42*(3), 336-346.

Pettigrew, A. M. (1992). The character and significance of strategy process research. *Strategic Management Journal*, *13*(S2), 5-16.

Pettigrew, A.M. (1997). What is a processual analysis? *Scandinavian Journal of Management,* 13(4), 337-348.

Piekkari, R., Plakoyiannaki, E., & Welch, C. (2010). 'Good' case research in industrial marketing: Insights from research practice. *Industrial Marketing Management*, *39*(1), 109-117.

Piscicelli, L., Cooper, T., & Fisher, T. (2015). The role of values in collaborative consumption: Insights from a product-service system for lending and borrowing in the UK. *Journal of Cleaner Production*, *97*, 21–29.

Plenter, F., Fielt, E., Hoffen, M., Chasin, F., & Rosemann, M. (2017). Repainting the business model canvas for peer-to-peer sharing and collaborative consumption. In *Proceedings of the 25th European Conference on Information Systems* (ECIS), 2234–2249, ISBN 978-989-20-7655-3.

Pohle, G., & Chapman, M. (2006). IBM's global CEO report 2006: business model innovation matters. *Strategy & Leadership*, *34*(5), 34-40.

Powell, J. H., & Swart, J. (2010). Mapping the values in B2B relationships: A systemic, knowledge-based perspective. *Industrial Marketing Management*, *39*(3), 437-449.

Prasad, B. D. (2008). Content analysis. Research Methods for Social Work, 5, 1-20.

Priem, R. L., Li, S., & Carr, J. C. (2012). Insights and new directions from demand-side approaches to technology innovation, entrepreneurship, and strategic management research. *Journal of Management*, *38*(1), 346-374.

Priem, R. L., Wenzel, M., & Koch, J. (2018). Demand-side strategy and business models: Putting value creation for consumers center stage. *Long Range Planning*, *51*(1), 22-31.

Querbes, A. (2018). Banned from the sharing economy: an agent-based model of a peer-to-peer marketplace for consumer goods and services. *Journal of Evolutionary Economics*, *28*(3), 633-665.

Quintens, L., & Matthyssens, P. (2010). Involving the process dimensions of time in case-based research. *Industrial Marketing Management*, *39*(1), 91-99.

Rahim, N., Lepanjuuri, K., Day, F., Piggott, H., Hudson R., Lubian, K. (2017). Research on the sharing economy. HMRC report 453.

Reed, M. (2005). Reflections on the 'realist turn' in organization and management studies. *Journal of Management Studies*, 42(8), 1621-1644.

Reischauer, G., & Mair, J. (2018). How organizations strategically govern online communities: Lessons from the sharing economy. *Academy of Management Discoveries*, *4*(3), 220-247.

Reypens, C., Lievens, A., & Blazevic, V. (2016). Leveraging value in multi-stakeholder innovation networks: A process framework for value co-creation and capture. *Industrial Marketing Management*, *56*, 40–50.

Richter, C., Kraus, S., Brem, A., Durst, S., & Giselbrecht, C. (2017). Digital entrepreneurship: Innovative business models for the sharing economy. *Creativity and Innovation Management*, 26(3), 300–310.

Richter, C., Kraus, S., & Syrjä, P. (2015). The shareconomy as a precursor for digital entrepreneurship business models. *International Journal of Entrepreneurship and Small Business*, *25*(1), 18–35.

Ritala, P., Agouridas, V., Assimakopoulos, D., & Gies, O. (2013). Value creation and capture mechanisms in innovation ecosystems: a comparative case study. *International Journal of Technology Management*, *63*(3-4), 244-267.

Ritter, M., & Schanz, H. (2018). The sharing economy: A comprehensive business model framework. *Journal of Cleaner Production*.

Rochet, J. C., & Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the European Economic Association*, *1*(4), 990–1029.

Rochet, J. C., & Tirole, J. (2006). Two-sided markets: A progress report. *RAND Journal of Economics*, *37*(3), 645–667.

Rong, K., Wu, J., Shi, Y., & Guo, L. (2015). Nurturing business ecosystems for growth in a foreign market: Incubating, identifying and integrating stakeholders. *Journal of International Management*, *21*(4), 293–308.

Rong-Da Liang, A., Lee, C. L., & Tung, W. (2014). The role of sunk costs in online consumer

decision-making. Electronic Commerce Research and Applications, 13(1), 56-68.

Rothwell, R. (1994). Towards the fifth-generation innovation process. *International Marketing Review*, *11*(1), 7-31.

Rumelt, R. P. (1984). Towards a strategic theory of the firm. In R. B. Lamb (Ed.), *Competitive Strategic Management*. Englewood Cliffs, NJ: Prentice-Hall (pp. 556–570).

Ryan, A., Tähtinen, J., Vanharanta, M., & Mainela, T. (2012). Putting critical realism to work in the study of business relationship processes. *Industrial Marketing Management*, *41*(2), 300-311.

Rynes, S. L. (2007). Afterword: To the next 50 years. *Academy of Management Journal*, *50*(6), 1379-1383.

Rynes, S. L., Bartunek, J. M., & Daft, R. L. (2001). Across the great divide: Knowledge creation and transfer between practitioners and academics. *Academy of Management Journal*, *44*(2), 340-355.

R&D Management (2014). Special Issue: Business Model Innovation, 44(3).

Samavi, R., Yu, E., & Topaloglou, T. (2009). Strategic reasoning about business models: a conceptual modeling approach. *Information Systems and e-Business Management*, 7(2), 171-198.

Sandberg, J., & Alvesson, M. 2011. Ways of constructing research questions: Gap-spotting or problematization? *Organization*, 18, 23–44.

Sandberg, J., & Tsoukas, H. (2011). Grasping the logic of practice: Theorizing through practical rationality. *Academy of Management Review*, *36*(2), 338-360.

Santos, F., Pache, A. C., & Birkholz, C. (2015). Making hybrids work: Aligning business models and organizational design for social enterprises. *California Management Review*, *57*(3), 36-58.

Santos, J., Spector, B., & Van der Heyden, L. (2015). Toward a theory of business model change. Business Model Innovation. *The Organizational Dimension*, 43-63.

Sarasvathy, S.D. (2007). *Effectuation: Elements of Entrepreneurial Expertise*. Edward Elgar Publishing Ltd.

Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Perspectives*, *5*(2), 61-75.

Sayer, A. (1992). Method in social science: A realist approach. Psychology Press.

Sayer, A. (2000). Realism and Social Science. London: SAGE Publications.

Schneider, S., & Spieth, P. (2013). Business model innovation: Towards an integrated future research agenda. *International Journal of Innovation Management*, *17*(01), 1340001.

Scholten, S., & Scholten, U. (2012). Platform-based innovation management: directing external innovational efforts in platform ecosystems. *Journal of the Knowledge Economy*, *3*(2), 164-184.

Scholz, T., & Schneider, N. (Eds.). (2017). *Ours to hack and to own: The rise of platform cooperativism, a new vision for the future of work and a fairer internet.* OR books.

Schor, J. B. (2015). The sharing economy: reports from stage one. *unpublished paper, Boston College*.

Schor, J. B. (2016). Debating the sharing economy. *Journal of Self-Governance and Management Economics*, 4(3), 7-22.

Schor, J. B., & Attwood–Charles, W. (2017). The "sharing" economy: labor, inequality, and social connection on for–profit platforms. *Sociology Compass*, *11*(8), e12493.

Schor, J. B., & Fitzmaurice, C. J. (2015). 26. Collaborating and connecting: the emergence of the sharing economy. *Handbook of research on sustainable consumption*, *410*.

Schumpeter, J. A. (1934). The theory of economic development. Cambridge. MA: Harvard.

Schwab, K. (2016). The fourth industrial revolution. New York: Crown Publishing Group.

Schwarz, G., & Stensaker, I. (2014). Time to take off the theoretical straightjacket and (re-) introduce phenomenon-driven research. *The Journal of Applied Behavioral Science*, *50*(4), 478-501.

Schwarz, G. M., & Stensaker, I. G. (2016). Showcasing phenomenon-driven research on organizational change. *Journal of Change Management*, *16*(4), 245-264.

Seale, C. (1999). Quality in qualitative research. Qualitative Inquiry, 5(4), 465-478.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach.* Hoboken, NJ: John Wiley & Sons.

Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199-207.

Shaughnessy, H. (2016). Harnessing platform-based business models to power disruptive innovation. *Strategy & Leadership*, 44(5), 6-14.

Sinfield, J. V., Calder, E., McConnell, B., & Colson, S. (2012). How to identify new business models. *MIT Sloan Management Review*, *53*(2), 85-90.

Sirgy, M. J. (2002). Measuring corporate performance by building on the stakeholder model of business ethics. *Journal of Business Ethics*, *35*(3), 143-162.

Slee, T. (2015). Airbnb data collection: Methodology and accuracy. *Site de Tom Slee. En ligne:* http://tomslee.net/airbnb-data-collection-methodology-and-accuracy.

Smedlund, A., & Faghankhani, H. (2015). Platform orchestration for efficiency, development, and innovation. In *System Sciences (HICSS)*, 2015, 48th Hawaii International Conference on System Sciences IEEE,1380-1388.

Sminia, H. (2009). Process research in strategy formation: Theory, methodology and relevance. *International Journal of Management Reviews*, *11*(1), 97-125.

Smith, K.G., & Hitt, M.A. (2005). *Great minds in management: The process of theory development.* Oxford: Oxford University Press.

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. (2010). Business model innovation through trial-and-error learning: The Naturhouse case. *Long Range Planning*, *43*(2), 383-407.

Souto, J. E. (2015). Business model innovation and business concept innovation as the context of incremental innovation and radical innovation. *Tourism Management*, *51*, 142-155.

Sørensen, C., De Reuver, M., & Basole, R. C. (2015). Editorial: Mobile platforms and ecosystems. *Journal of Information Technology, 30,* 195-197.

Spieth, P., Schneckenberg, D., & Ricart, J. E. (2014). Business model innovation—state of the art and future challenges for the field. *R&D Management*, *44*(3), 237-247.

Sprague, R. (2015). Worker (mis) classification in the sharing economy: Trying to fit square pegs into round holes. *ABA Journal of Labor & Employment Law, 31*(1), 53-76.

Sridhar, S., Mantrala, M.K., Naik, P.A. and Thorson, E. (2011). Dynamic marketing budgeting for platform firms: theory, evidence, and application. *Journal of Marketing Research*, *48*(6), 929-943.

Srnicek, N. (2017). Platform capitalism. John Wiley & Sons.

Stampfl, G. (2015). *The process of business model innovation: an empirical exploration.* Springer.

Stampfl, G. (2016). *The Process of Business Model Innovation*. Springer Fachmedien Wiesbaden.

Starkey, K., & Madan, P. (2001). Bridging the relevance gap: Aligning stakeholders in the future of management research. *British Journal of Management*, *12*, p3-26.

Staykova, K. S., & Damsgaard, J. (2015). The race to dominate the mobile payments platform: Entry and expansion strategies. *Electronic Commerce Research and Applications*, *14*(5), 319-330.

Staw, B. M. (1976). Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational behavior and human performance*, *16*(1), 27-44.

Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review*, *6*(4), 577-587.

Stephany, A. (2015). The business of sharing: Making it in the new sharing economy. Springer.

Stieb, J. A. (2009). Assessing Freeman's stakeholder theory. *Journal of Business Ethics*, *87*(3), 401-414.

Strategic Entrepreneurship Journal (2015). *Special Issue: Business models within the domain of strategic entrepreneurship, 9*(1).

Strauss, A., & Corbin, J. (1994). Grounded theory methodology. *Handbook of qualitative research*, *17*, 273-85.

Suddaby, R. (2006). From the editors: What grounded theory is not.

Sueli dos Santos, L. & De Domenico. "Looking at Organizational Change Through the construction and reconstruction of the underpinning values of the organization through interactions among stakeholders." *Revista Brasileira de Gestão de Negócios* 17, no. 55 (2015): 959-986.

Sundararajan, A. (2013). From Zipcar to the sharing economy. *Harvard Business Review*. Retrieved 16 March 2018 from https://hbr.org/2013/01/from-zipcar-to-the-sharing-eco

Sundararajan, A. (2016). *The sharing economy: The end of employment and the rise of crowd-based capitalism.* Cambridge, MA: The MIT Press.

Susman, G. I., & Evered, R. D. (1978). An assessment of the scientific merits of action research. *Administrative Science Quarterly*, *23*, 582-603.

Sutherland, W., & Jarrahi, M. H. (2018). The sharing economy and digital platforms: A review and research agenda. *International Journal of Information Management*, *43*, 328-341.

Svejenova, S., Planellas, M., & Vives, L. (2010). An individual business model in the making: A chef's quest for creative freedom. *Long Range Planning*, *43*(2), 408-430.

Sztompka, P. (1991). *Society in action: The theory of social becoming.* University of Chicago Press.

Täuscher, K. & Kietzmann, J. (2017). Learning from failures in the sharing economy. *MIS Quarterly Executive*, *16*(4), 253–264.

Team, T. (2018). As a rare profitable unicorn, Airbnb appears to be worth at least \$38 billion. *Forbes, May, 11.*

Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2), 172-194.

Teece, D. J. (2017). Dynamic capabilities and (digital) platform lifecycles. In *Entrepreneurship, Innovation, and Platforms* (pp. 211-225). Emerald Publishing Limited.

Technological Forecasting and Social Change (2017). Special Issue: Promises and paradoxes of the sharing economy.

Technological Forecasting and Social Change (2019, forthcoming). *Special Issue Technological Innovations to Ensure Confidence in the Digital World.*

Thomas, L. D., Autio, E., & Gann, D. M. (2014). Architectural leverage: Putting platforms in context. *Academy of Management Perspectives*, *28*(2), 198–219.

Tidd, J., Bessant, J., & Pavitt, K. (2005). Managing innovation: Integrating technological, market and organizational change (3rd ed.). Chichester, UK: John Wiley & Sons, Ltd.

Tilson, D., Sørensen, C., & Lyytinen, K. (2012, January). Change and control paradoxes in mobile infrastructure innovation: the Android and iOS mobile operating systems cases. In *2012* 45th Hawaii International Conference on System Sciences (pp. 1324-1333). IEEE.

Timmers, P. (1998). Business models for electronic markets. *Electronic Markets*, 8(2), 3-8.

Tiwana, A. (2014). *Platform Ecosystems : Aligning Architecture, Governance, and Strategy.* Elsevier Inc.

Tourish, D. (2013). *The dark side of transformational leadership: A critical perspective.* Routledge.

Tripsas, M., & Gavetti, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal*, 1147-1161.

Trenz, M., Frey, A., & Veit, D. (2018). Disentangling the facets of sharing: a categorization of what we know and don't know about the sharing economy. *Internet Research*, *28*(4), 888-925.

Tsang, E. W., & Kwan, K. M. (1999). Replication and theory development in organizational science: A critical realist perspective. *Academy of Management Review*, *24*(4), 759-780.

Tuttle, D. B. (1997). A classification system for understanding individual differences in temporal orientation among processual researchers and organizational informants. *Scandinavian Journal of Management*, *13*(4), 349-366.

Turi, A. N., Domingo-Ferrer, J., & Sánchez, D. (2018). Problems in the undertakings of the collaborative economy: Co-utile solutions. In *Co-utility*. Domingo-Ferrer, J. & Sánchez, D. (Eds). Cham: Springer.

Van Alstyne, M. W., Parker, G. G., & Choudary, S. P. (2016). Pipelines, platforms, and the new rules of strategy. *Harvard Business Review*, *94*(4), 54-62.

Van Arnum, P. (2012). Manufacturing Capacity-Sharing Model: Merck & Co. and MedImmune LLC. *Pharmtech.com*, *8*(*4*). Retrieved 22 July 2018 from http://www.pharmtech.com/manufacturing-capacity-sharing-model-merck-co-and-medimmune-llc-0

Van de Ven, A. H. (2007). Engaged scholarship: A guide for organizational and social research: A guide for organizational and social research. Oxford: Oxford University Press.

Van de Ven, A. H., Ang, S., Arino, A., Bamberger, P., LeBaron, C., Miller, C., & Milliken, F. (Eds.). (2015). Welcome to the academy of management discoveries (AMD).

Van de Ven, A. H. (1990). *Longitudinal methods for studying the process of entrepreneurship* (No. 147). Strategic Management Research Center, University of Minnesota.

Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review*, *20*(3), 510-540.

Van de Ven, A. H., & Poole, M. S. (2005). Alternative approaches for studying organizational change. *Organization Studies*, *26*(9), 1377-1404.

Van Hoek, R., Aronsson, H., Kovács, G., & Spens, K. M. (2005). Abductive reasoning in logistics research. *International journal of physical distribution & logistics management.*

Van Lange, P. A., & Semin-Goossens, A. (1998). The boundaries of reciprocal cooperation. *European Journal of Social Psychology, 28*, 847–857.

Van Maanen, J., Sørensen, J. B., & Mitchell, T. R. (2007). The interplay between theory and method. *Academy of Management Review*, *32*(4), 1145-1154.

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, *68*(1), 1-17.

Vargo, S. L., & Lusch, R. F. (2011). It's all B2B... and beyond: Toward a systems perspective of the market. *Industrial Marketing Management*, 40(2), 181-187.

Vendrell-Herrero, F., Parry, G., Bustinza, O. F., & Gomes, E. (2018). Digital business models: Taxonomy and future research avenues. *Strategic Change*, *27*(2), 87-90.

Venkatraman, N., & Henderson, J. C. (2008). Four vectors of business model innovation: Value capture in a network era. *From strategy to execution*, 259-280.

Visnjic, I., Neely, A., Cennamo, C., & Visnjic, N. (2016). Governing the city: Unleashing value from the business ecosystem. *California Management Review*, *59*(1), 109–140.

Von Krogh, G., Rossi-Lamastra, C., & Haefliger, S. (2012). Phenomenon-based research in management and organisation science: When is it rigorous and does it matter? *Long Range Planning*, 45(4), 277-298.

Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, *17*(9), 1333-1357.

Walker, B., & Haslett, T. (2002). Action research in management—Ethical dilemmas. *Systemic Practice and Action Research*, *15*(6), 523-533.

Weaver, K., & Olson, J. K. (2006). Understanding paradigms used for nursing research. *Journal of advanced nursing*, *53*(4), 459-469.

Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2011). Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies*, *42*(5), 740-762.

Wicks, U. (1989). *Picaresque narrative, picaresque fiction: a theory and research guide.* Greenwood Pub Group.

Wind, Y. J., Fung, V., & Fung, W. (2009). Network orchestration: creating and managing global supply chains without owning them. In *The network challenge: strategy, profit, and risk in an interlinked world.* Kleindorfer, P.R., Wind, Y., Wind, Y.J., Gunther, R.E. (Eds.). New Jersey: Wharton School Publishing.

Winn, M. I. (2001). Building stakeholder theory with a decision modeling methodology. *Business & Society*, 40(2), 133-166.

Wirtz, B. W., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business models: Origin, development and future research perspectives. *Long Range Planning*, 49(1), 36-54.

Wolfe, R. A., & Putler, D. S. (2002). How tight are the ties that bind stakeholder groups? *Organization Science*, *13*(1), 64-80.

Wosskow, D. (2014). *Unlocking the sharing economy: An independent review.* London: Department for Business, Innovation and Skills. Retrieved 16 March 2018 from http://collaborativeeconomy.com/wp/wp-content/uploads/2015/04/Wosskow-D.2014.Unlocking-the-UK-Sharing-Economy.pdf

Yin, R. K. (2003). Case study research: design and methods, Applied social research methods series. *Thousand Oaks, CA: Sage Publications, Inc.*

Yin, R. K. (2009). How to do better case studies. *The SAGE handbook of applied social research methods*, *2*, 254-282.

Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, *19*(3), 321-332.

Yoffie, D.B., Gawer, A. & Cusumano, M.A. (2019). A study of more than 250 platforms a reveal why most fail. *Harvard Business Review*.

Yu, H. (2017). Marriott and Hilton stay ahead of the sharing economy, proving that Airbnb is not the Uber of hotels. *Forbes*. Retrieved 16 March 2018 from https://www.forbes.com/sites/howardhyu/2017/02/16/marriott-and-hilton-stay-ahead-of-the-sharing-economy-proving-that-airbnb-is-not-the-uber-of-hotels/#381c5f3776b3

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *Journal of Marketing Research*, *54*(5), 687–705.

Zhu, F., & Furr, N. (2016). Products to platforms: Making the leap. *Harvard Business Review*, 94(4), 72-78.

Zott, C., & Amit, R. (2007). Business model design and the performance of entrepreneurial firms. *Organization Science*, *18*(2), 181-199.

Zott, C., & Amit, R. (2008). The fit between product market strategy and business model: implications for firm performance. *Strategic Management Journal*, *29*(1), 1-26.

Zott, C., & Amit, R. (2010). Business model design: an activity system perspective. *Long Range Planning*, *43*(2), 216-226.

Zott, C., Amit, R., & Massa, L. (2011). The business model: recent developments and future research. *Journal of Management*, *37*(4), 1019-1042.

8. Appendices

Appendix 8.1 Participant information sheet

Doctoral Researcher: Pavel Laczko
Portsmouth Business School,
Postgraduate Centre,
University of Portsmouth, Portland Building,
Portland Street, Portsmouth, PO1 3AH.
Tel: 07863473074

Email: pavel.laczko@gmail.com



Participant Information Sheet

Title of project: Designing, orchestrating and internationalizing multisided platforms in the digital economy

REF: PLPI 17

I would like to invite you to take part in this research project. Joining the study is entirely voluntary and anonymous (unless you wish otherwise). Firstly, I would like to present you with the rationale

for this study and what it would mean for your organization as a participant. I will go through this information sheet with you and answer any questions you may have during our initial call/meeting. This process can take about 5 minutes. Please feel free to discuss this with colleagues and contact me if any points seem unclear.

What is the purpose of this research?

This study focuses on studying how multisided platforms work and evolve over time - from early inception and design, through localization to the internationalization of the platform.

Current industry knowledge and also the extant academic literature on platform-based business models are young and considerably fragmented. There are no studies that examine how these platforms evolve and how to manage this evolution.

Why has my company been invited?

Your company is developing/have developed successful multi-sided platforms and I am interested to learn more about your approach and experience and to observe and study how your platform evolves over time.

Does my company have to take part?

It is up to you to decide whether to participate in the study. If your company agrees to take part, I will ask you to sign a consent form on behalf of the company. I will then ask you to help me to identify and contact relevant people within the company to participate in this research project.

Participation in this research is purely voluntary, and both the company and individual participants may withdraw at any stage before the data analysis stage. Participants are under no obligation to participate, and there will be no negative consequences if they withdraw.

What will happen to the company and our staff if we take part?

Individual participants (employees from your company) will be asked to take part in a 'one-to-one' semi-structured interviews to express their personal experiences and views on the subject matter. A list of open-ended questions will be asked to the interviewees, and the questions might be changed slightly from one interview to another depending on the response of the interviewees and role within your company. There will be several interviews/discussions/interactions with your employees however, I will always accommodate their preference in terms of time and location of the interview. All discussions will be conducted in a very informal, friendly and relaxed way.

The organization consent form emphasizes that the information collected might be shared with authorized people for academic purposes - view-only access and it is a subject to the NDA (non-disclosure agreement). Collected data (recorded interviews, copies of documents) will be transferred to a computer, and all files will be encrypted and password-protected. The consent also includes that the information collected will be saved securely as it might be needed for future academic publications (i.e., journal articles, book chapters, conference presentations) by Pavel Laczko (collected data will not be accessible to any third party). As soon as the research and publications are completed all data will be erased.

Neither your company (unless you wish to - subject to prior arrangement) nor any participants from your company will be identified by name or job title in any future reports, and none of the responses provided will be reported in a form that can be used to identify the particular participant (unless they wish to - subject to prior arrangement).

What will the company and staff have to do?

If the company decides to accept this invitation and returns the signed consent form (e-signature or signed and scanned copy), I will contact you to arrange dates and times to conduct the initial research interview with your colleagues. Once other individual participants have been identified and contacted, I will arrange a convenient time and place to meet with them (or remotely) for the interviews/discussions. Please share this information sheet with your colleagues (I will, however, inform them about the research and their role in it during the individual interviews and seek their verbal consent to participate).

What are the possible disadvantages and risks of taking part?

To my knowledge, there are no significant risks of taking part in this research. Participants involved in the research will be asked to commit a small amount of time to the research study (approximately 1 hour per interview, plus additional time to help with gathering additional information, etc.) over a longer period of time. All interviews will be organized to minimize disruption to the work of participants and arranged to best suit their needs.

All data collected will be held securely to ensure the confidentiality of the company and its teams and will not be shared or made available to any third party (as per the NDA agreement)

Will your participation in the study be kept confidential?

While taking and storing notes and summaries, all data will be anonymized to remove reference to individual and company names, products, and specific locations (unless you agree to disclose them). All companies and individual participants will be given a specific code, which will be used in place of names to identify transcripts. Care will be taken to preserve the anonymity of individual respondents when reporting back to the company's gatekeepers by presenting only anonymized data (removing names and job titles - focus on a general conceptualized observation rather than specific examples). Furthermore, researchers will strictly adhere to the organization's NDA (non-disclosure agreement).

What will happen if you don't want to carry on with the study?

As a volunteer, you can withdraw from participation in the study at any time, without giving a reason if you do not wish to (this right can be exercised by both the company and individual participants). If you do withdraw from the study after some data have been collected, you will be asked if you are content for the data collected thus far to be retained and included in the study. If you prefer, the data collected can be destroyed and not included in the study. Once the research has been completed, and the data analyzed, it will no longer be possible for you to withdraw your data from the study.

What will happen to the results of the research study?

The results of the study will be published in a Ph.D. thesis and available at the University's library. It is also planned that the results will be presented and contribute to academic journal articles, book chapters, and academic conference presentations, which again, will be available via the library's electronic resources. You will not be identifiable from the results in any document (unless you wish to). Once the research and the publications are completed all data collected will be deleted.

Who has reviewed this study?

Research at the University is reviewed by an independent group of people, called the Research Ethics Committee, to protect your interests. This study has been reviewed and given a favorable opinion by the Portsmouth Business School Research Ethics Committee.

Further information and contact details

If you would like further information about this project, please contact the researcher:

Pavel Laczko

Tel: +447863473074, Email: pavel.laczko@gmail.com

LinkedIn: https://www.linkedin.com/in/pavellaczko/

Thank you for taking the time to read this document. Hopefully, it has answered all of your questions, but if not please get in touch. If you decide to participate in this research you will be given a copy of this information sheet to keep and you will be asked to sign a consent form on behalf of the company.

Appendix 8.2 Participant consent form

Pavel Laczko
Portsmouth Business School,
Postgraduate Centre,
University of Portsmouth, Portland Building,
Portland Street, Portsmouth, PO1 3AH.

Tel: 07863473074

Email: pavel.laczko@myport.ac.uk



Research Consent Form (Organizations)

Title of project: Designing, orchestrating and internationalizing multisided platforms in the digital economy

By signing this form I agree to and acknowledge the following:

- I confirm that I have read and understood the Participant Information Sheet REF: PLPI_17
 for the above study. I have had the opportunity to consider the information, ask questions
 and have these answered satisfactorily.
- 2. I understand the participation of our company is voluntary and that the company or any employee is free to withdraw at any time without giving any reason, up to the point where the data is being analyzed.

3. I agree to interviews being recorded (notes and/or audio), and to being quoted, using my

original words, in reports of the research. The quotes are anonymized (e.g. Participant 1

said " ... "), unless you wish otherwise (this is up to a prior agreement with each

participant)

4. I agree that some information collected during the study can be shared with authorized

people for academic purposes (view-only access and subject to NDA) but will not be

shared or made accessible in any form to any third parties.

5. I agree with the data I contribute will be stored securely, until all academic publications

(Ph.D. thesis, journal articles, book chapters, and conference presentations) have been

completed.

6. On behalf of the company, I agree to take part in the above study

Name of Organisation:

Date:

Signature (on the behalf of)

Name of person taking consent: Pavel Laczko

Date:

Signature: Imak Juice



Appendix 8.3 PBS Research Ethics Committee review

3 May 2017

Pavel Laczko
PhD Student, SEI
Portsmouth Business School

Dear Pavel

Study Title:	Business Model Innovation – Barriers, Enablers and Processes: Exploratory study in Fast-Moving-Consumer-Goods (FMCG) Sector
Ethics Committee reference:	E446

Thank you for submitting your documents for ethical review. The Ethics Committee was content to grant a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, revised in the light of any conditions set, subject to the general conditions set out in the attached document, and with the following stipulation:

The favourable opinion of the EC does not grant permission or approval to undertake the research. Management permission or approval must be obtained from any host organisation, including University of Portsmouth, prior to the start of the study.

Summary of any ethical considerations:

Documents reviewed

The documents reviewed by Sara Thorne [LCM] + PBS Ethics Committee:

Document	Version	Date
Ethics application	1	10 Mar 17
Invitation letter	1	10 Mar 17
Participant information sheet	1	10 Mar 17
Interview questions	1	10 Mar 17
Participant information sheet [organisations]	1	10 Mar 17
Consent form	1	10 Mar 17
Invitation letter	2	11 Apr 17
Participant information sheet	2	11 Apr 17
Consent form	2	11 Apr 17
Interview questions	2	11 Apr 17

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements set out by the University of Portsmouth.

After ethical review

Reporting and other requirements

The attached document acts as a reminder that research should be conducted with integrity and gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Notification of serious breaches of the protocol
- Progress reports
- Notifying the end of the study

Feedback

You are invited to give your view of the service that you have received from the Faculty Ethics Committee. If you wish to make your views known please contact the administrator, Christopher Martin.

Please quote this number on all correspondence: E446
--

Yours sincerely and wishing you every success in your research

Chair

for the same of th

Email:

Enclosures: "After ethical review – guidance for researchers"

Copy to:

Dr Chris Simms