

Dynamic capabilities of early-stage firms: Exploring the business of renting fashion

Marcus Adam¹, Jochen Strähle², Matthias Freise³

¹Reutlingen University, Germany, marcus.adam@reutlingen-university.de

²Reutlingen University, Germany, jochen.straehle@reutlingen-university.de

³Reutlingen University, Germany, matthias.freise@reutlingen-university.de

www.jsbs.org

Keywords:

Dynamic capabilities, Early-stage firms, Business models, Product Service Systems (PSS), Share economy, Fashion industry, Entrepreneurship, Servitization

ABSTRACT

In recent years the share economy has gained widespread success across different industries. Since small firms and new ventures obtain fewer resources, an increased focus on service allows them to differentiate and compete with cost pressure in traditionally manufacturing based industries. There still is a lack of understanding how these firms manage to successfully shift towards service-oriented business models. This paper adopts a dynamic capabilities approach to examine the particular microfoundations that underlie sensing, seizing and reconfiguring dynamic capabilities of early-stage service firms within a traditional retail market. The context of this study is the fashion industry. It is an ideal setting since it is characterized by severe competition, short life cycles, strong cost pressure and high volatility. There are few but increasing examples of entrepreneurial initiatives that try to compete by providing offers to resell, rent or swap clothes. Qualitative data of five early-stage fashion ventures is analyzed. Findings reveal that the ability to develop and maintain long-term relationships is essential. It has also been found crucial to acquire knowledge from external network partners, delegate tasks and share information. Furthermore, skills for interacting with customers and adopting consumer feedback are critical. This study provides empirical evidence of dynamic capabilities of early-stage firms and contributes to knowledge on the factors that facilitate servitization in traditionally manufacturing based industries. For practitioners, the presented microfoundations provide a framework of critical tasks that allow them to develop and maintain a service-oriented business model.

Introduction

In recent years the share economy has gained widespread success since it allows consumers to increase efficiency and reduce costs by sharing resources with each other (Botsman & Rogers, 2011). Prominent examples have been successfully put into practice, i.e. in the hotel (Airbnb), entertainment (Netflix) and transportation (Uber) industries. This has aroused interest of companies in traditionally manufacturing based industries since service-oriented concepts require fewer volumes of material for value creation and allow firms to differentiate (Adrodegari & Sacconi, 2017; Gebauer, Gustafsson, & Witell, 2011). Therefore, some companies have commenced to augment their traditional product offerings with complementary services or develop new business models based on the logic of permitting consumers temporary access to underutilized goods

(Botsman & Rogers, 2011; Stephany, 2015).

Car sharing concepts are among the most prominent and well investigated examples in research literature (Bardhi & Eckhardt, 2012; Firnkorn & Müller, 2011; Shaheen & Cohen, 2013; Shaheen, Cohen, & Roberts, 2006). In the mainstream fashion industry, an industry which is characterized by severe competition, short life cycles and high volatility (Armstrong, Niinimäki, Lang & Kujala, 2015a; Christopher, Lowson, & Peck, 2004; Gardetti & Torres, 2013), the share economy has yet to be anchored (Pedersen & Netter, 2015). However, there are few but increasing examples of entrepreneurial initiatives that adapt the idea of the share economy to the fashion industry by providing offers to resell, rent or swap clothes (Armstrong et al., 2015a; Pedersen, & Netter, 2015; Perlacia, Duml, & Saebi, 2016). Especially a mushrooming of small ventures that offer services to rent clothes can be observed (Pedersen & Netter, 2015).

While there is an increasing number of studies that examine the attitude of fashion consumers towards partic-

Journal of Small Business Strategy

2018, Vol. 28, No. 02, 49-67

ISSN: 1081-8510 (Print) 2380-1751 (Online)

©Copyright 2018 Small Business Institute®

APA Citation Information: Adam, M., Strähle, J., & Freise, M. (2018). Dynamic capabilities of early-stage firms: Exploring the business of renting fashion. *Journal of Small Business Strategy*, 28(2), 49-67.

ipating in service offers (Armstrong, Niinimäki, Kujala, Karell, & Lang, 2015b; Armstrong et al., 2015a; Lang & Armstrong, 2015; Lang, Armstrong, & Liu, 2016), little attention has so far been paid to investigating how such business models are developed at an early stage. For analytical purposes, such service-oriented business models can be assigned to the growing research field of Product-Service Systems (PSS). There still is a lack of understanding “why and how companies can have success in PSS development” (Tukker, 2015, p.87).

This paper examines the particular skills and organizational processes that enable early-stage firms to develop and implement renting services. For this purpose, the research field of dynamic capabilities provides an ideal approach. It departs from the central idea that competitive advantage originates from a firm’s unique bundle of resources and describes firms’ ability to respond to changing business environments by creating, extending and modifying valuable resources over time (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, & Winter, 2007).

In order to operationalize this relatively generic approach, dynamic capabilities can be disaggregated into three distinct types: *sensing* market opportunities, *seizing* market opportunities and continuously *reconfiguring* resources in order to maintain competitiveness (Teece, 2007). All types of dynamic capabilities are undergirded by “microfoundations” that comprise different organizational activities such as skills, processes and structures (Teece, 2007). Empirical studies on dynamic capabilities have so far mainly focused on established firms with mature organizational structures and a broad base of existing resources (Foss, Iakovleva, Kickul, Oftedal, & Solheim, 2012; McKelvie & Davidsson, 2009). In new ventures, capabilities differ from those of established firms since they have less access to resources and less rigid organizational structures (McKelvie & Davidsson, 2009; Wu, 2007; Zahra, Sapienza, & Davidsson, 2006). The purpose of this research is to identify the particular microfoundations that permit new ventures to develop and maintain service-oriented business models. This is done through systematically analyzing qualitative data of five early-stage fashion firms. It contributes to research on small firms since it provides empirical evidence on how early-stage ventures manage to reconfigure their relatively scarce resource base into expedient organizational processes and routines.

Even though this research is focused on fashion renting, findings are applicable to small service-oriented firms of other industries since results are discussed against the background of general PSS literature. Findings also address the need to strengthen the empirical foundation of dynamic capabilities research (Weerawardena & Mavondo, 2011)

and broaden its scope by applying the dynamic capabilities approach to early-stage firms. Furthermore, this paper adds empirical knowledge to PSS literature by illustrating the intra-organizational factors that allow firms to create and maintain a PSS business model. Finally, this article implies managerial implications. The identified microfoundations provide a detailed framework of critical tasks and particular skills that facilitate understanding and managing different organizational activities to leverage service-oriented business opportunities.

This paper is structured as follows. Following this introduction, a basic conceptual overview of dynamic capabilities and PSS is provided to establish the theoretical departure point of this study. Next, the particularities of renting concepts in the fashion industry – the context of this research – are explained. Thereafter, the methodology of this study is presented and analyzed data are discussed. This article terminates with a conclusion and future avenues of research.

Dynamic Capabilities

Dynamic capabilities describe the firm’s ability to respond appropriately and quickly to external changes (Teece, Pisano, & Shuen, 1997). They refer to organizational activities that change a firm’s current stock of resources and capabilities, and hence emphasize the mechanism of converting this bundle into output that provides value for the customer (Eisenhardt & Martin, 2000; Helfat et al., 2007; Winter, 2003; Zahra et al., 2006). In doing so, dynamic capabilities follow repeatable patterns (Helfat et al., 2007; Winter, 2003) and are intentionally applied for a specific purpose (Helfat et al., 2007; Winter, 2003; Zahra et al., 2006). They are future oriented meta-processes that enable firms to respond to changing business environments through purposefully creating, extending and modifying its base of resources (Helfat et al., 2007).

Firms may simultaneously exhibit many different dynamic capabilities that vary in strength and their intended purpose and operate successively or in combination (Helfat et al., 2007; Zahra et al., 2006). Teece (2007) categorizes dynamic capabilities into “sensing”, “seizing” and “reconfiguring”. “Sensing” describes the identification and assessment of market and technology opportunities through gaining knowledge about the internal and external business ecosystem. This involves evaluating customer needs, scanning technological developments, interpreting information and tapping potential collaborators such as suppliers and complementors (Teece, 2007).

“Seizing” refers to the ability to capture and take advantage of opportunities which implies delineating the business

model and assessing its potential to contributing to sustainable business growth. Relevant skills may be acquired or honed through arranging strategic alliances. (Teece, 2007). “Reconfiguring” describes the continuous renewal and alignment of tangible and intangible assets to maintain competitiveness.

Successful firms tend to become complacent and inertial over time (Leonard-Barton, 1992). As the business environment underlies changes, a firm’s current successful business model may be insufficient to benefit from emerging opportunities, even though they are sensed (Kindström, Kowalkowski & Sandberg, 2013). Therefore, firms need to constantly create, modify and extend their resources and capabilities base to realign their activities with the changing environment (Teece, 2007).

The distinct skills, processes, procedures, organizational structures, decision rules and disciplines that underpin “sensing”, “seizing” and “reconfiguring” are called “microfoundations” of dynamic capabilities (Teece, 2007). Consequently, microfoundations constitute the centerpiece of understanding the creation of competitive advantage. Investigating them allows conceiving the development and maintenance of organizational fitness on a detailed level (Kindström et al., 2013).

Product-Service Systems (PSS)

PSS combine marketable products and services to satisfy specific, so far unmet or even unknown customer needs (Baines, Lightfoot, Evans, Neely, Greenough, Peppard, & Wilson, 2007; Goedkoop, 1999; Mont, 2002a; Tukker & Tischner, 2006). From a PSS perspective companies cannot deliver value but only offer value propositions which are assembled by the customer with his own competencies to obtain an individual “value-in-use” (Lusch, 2006; Reynolds & Ng, 2015; Vargo & Akaka, 2009). For this reason value and customer satisfaction is always co-created, underpinned by customer integration and decoupled from material consumption (Grönroos, 2011; Lusch, 2006; Mont, 2002a). This implies that firms develop their specific value proposition by reconfiguring products and services within the broad spectrum of the sole sale of products and pure service offerings (Van Ostaeyen, Van Horenbeek, Pintelon, & Dufflou, 2013).

The degree to which products and services are proportionately combined can serve as groundwork for categorizing PSS. PSS that sell the use or functionality of a product are called *use-oriented PSS* (Tukker, 2004). Product ownership and responsibility remain at the provider (Tukker, 2015; Vezzoli, Kohtala & Srinivasan, 2014). This means that customer satisfaction is achieved through the particu-

lar function of a product rather than through its physical possession (Beuren, Gomes Ferreira, & Cauchick Miguel, 2013; Tukker, 2004). Use-oriented PSS include renting or sharing offers. Customers appreciate to save time and costs since they are exempted from administrative or monitoring tasks (Baines et al., 2007). For companies, PSS provide a potential source of improved competitiveness since they allow to differentiate, compete with cost pressure and enhance customer relationships (Baines et al., 2007; Gebauer et al., 2011; Mont, 2002b; Vezzoli et al., 2014). However, implementing use-oriented PSS requires a radical shift of strategy, business model and infrastructure of companies in traditionally manufacturing based industries and calls for the acquisition of new competences, knowledge and skills (Martinez, Bastl, Kingston, & Evans, 2010).

Companies in traditionally manufacturing based industries are less receptive to use-oriented PSS since this idea is incongruent with their established organizational routines (Vezzoli, Ceschin, Diehl, & Kohtala, 2015). While incumbent firms mainly perpetuate producing physical products, use-oriented PSS business models are more easily adopted by new ventures that lack existing patterns of thought and business practice (Cook, Bhamra, & Lemon, 2006).

Context: The Fashion Industry

The fashion industry is a mature, highly competitive and globalized market with short life cycles, high volatility of market demand, low predictability and high impulse purchasing (Bhardwaj & Fairhurst, 2010; Christopher et al., 2004; Taplin, 2006). To expand their current product range and respond to the newness of fashion trends, retailers have started to more frequently refresh their fashion lines by adding more phases to the existing seasons in a fashion calendar which constantly floods the market with new fashion lines at a low price (Black, 2010; Christopher et al., 2004; Fletcher, 2013; Gardetti & Torres, 2013). This development has further accelerated through the emergence of e-commerce which provides consumers the unrestricted ability to immediately buy clothes (Joung & Park-Poaps, 2013).

Due to quickly changing consumer taste, retailers may hold large amounts of unsold products at the end of selling season (Hausman & Thorbeck, 2010) or have to cope with an increasing number of returns that are no longer saleable (Shen & Li, 2015). This linear production model is vulnerable to increasing raw material costs. Use-oriented PSS provide one opportunity for fashion firms to cope with these challenges since they present a way to differentiate, diminish dependence on material and allow building vigorous customer relationships (Gebauer et al., 2011; Vezzoli et al., 2014). In the mainstream fashion industry it has yet to be

anchored (Pedersen & Netter, 2015). However, an increasing number of new ventures has started to provide offers to resell, rent or swap used clothes (Armstrong et al., 2015a; Pedersen & Netter, 2015; Perlacia et al., 2016). This paper examines early-stage firms that rent clothes. Renting is usually based on an agreement between two parties whereby one side obtains the right to use the rented item owned by the other side for a specific period of time (Moeller & Witkowski, 2010). Different types of fashion renting business models can be observed in the market that significantly differ in terms of value proposition, channels and cost-revenue streams (Perlacia et al., 2016). This study solely examines firms that directly rent clothes to customers for a certain period of time either for a fixed fee or a membership fee (e.g. monthly) via an online store. Fashion libraries that only rent clothes through a permanent physical store are not part of this study. Furthermore peer-to-peer renting (e.g. providers of online platforms) and B2B offers (e.g. renting providers of working clothes) are excluded.

Research on companies that offer fashion renting is so far limited to screening and analyzing business model archetypes (Pedersen & Netter, 2015; Perlacia et al., 2016). A sole business model analysis is, however, not sufficient to understand why and how companies can have success in developing such concepts. A dynamic capabilities approach appears appropriate to find out more about the factors that influence growth of entrepreneurial firms since it emphasizes activities and processes rather than the possession of resources (Ambrosini & Bowman, 2009). Empirical studies have so far mainly focused on established firms with a mature base of existing resources and structures (Foss et al., 2012; McKelvie & Davidsson, 2009). In new ventures, capabilities differ from those of already established firms since young firms have fewer resources and more flexible organizational structures (McKelvie & Davidsson, 2009; Wu, 2007; Zahra et al., 2006).

At the beginning, capabilities are generated from individuals who possess particular knowledge or experience and combine these capitals with financial or technological resources (Helfat & Peteraf, 2003). Capabilities may allow firms at an early stage to grow despite their scarce resource base since they can extract value from generally useless resources (Baker & Nelson, 2005). A dynamic capabilities approach can therefore allow a deeper understanding of the factors that influence growth of early-stage enterprises. This is of special interest regarding service-oriented business models in traditionally manufacturing based industries. They significantly differ from the traditional way of producing and selling and therefore require distinct capabilities (Gebauer et al., 2011; Martinez et al., 2010). In order

to better understand how small firms manage servitization in traditionally manufacturing based industries, this paper identifies the specific microfoundations that underlie dynamic capabilities of early-stage fashion renting firms.

Method

Qualitative research design

A qualitative research design is applied since the purpose of this study is to achieve a deeper understanding of a contemporary phenomenon at an early phase in its real life setting (Eisenhardt, 1989; Meredith, 1998; Yin, 2013). This approach is considered useful since dynamic capabilities are embedded in organizational routines and processes (Eisenhardt & Martin, 2000) which makes them difficult to identify and examine through quantitative research. Multiple case study methodology is chosen since this allows gaining insights from diverse perspectives and can lead to the development of new management theories (Eisenhardt & Graebner, 2007; Voss, Tsikriktsis, & Frohlich, 2002). Furthermore, multiple cases are considered to provide more reliable and testable results than single cases and hence increase generalizability of the research findings (Eisenhardt, 1989; Yin, 2013). As case studies are typically conducted in close interaction with practitioners, they present an ideal approach to investigate and gain managerially relevant knowledge (Gibbert, Ruigrok, & Wicki, 2008; Leonard-Barton, 1990).

Data sample and data collection

Homogeneous purposive sampling technique was applied. This means that cases were not randomly but systematically and deliberately selected based on similar characteristics or traits to achieve relative homogeneity of the sample (Maxwell, 2012). This provides more representativeness and comparability of the findings than a sample of the same size that comprises random or accidental variation (Gibbert et al., 2008; Maxwell, 2012). Cases were selected from companies that particularly provide fashion renting as their only business model.

First of all, a list of fashion renting companies was compiled based on internet research. Google research was used with searching words “fashion”, “renting” and “clothing” in English and German. In total, we detected 63 companies that rent clothes to customers through an online store. In a next step, we contacted all companies via email, phone and/or social media channel. In sum, eight replied and five offered to give us an anonymous interview. All of them are located in Europe, have less than 20 employees and are between two and five years in business. They provide renting

as only business model and are focused on an online shop. However, all companies have a small stationary store that serves a showroom. Clothes are not manufactured but pur-

chased from third parties.

The descriptive data of the five sample firms are illustrated in Table 1.

Table 1

Descriptive data of case companies

Company	Major scope of business	Target customer	Employees	Country	Role of respondent
A	Vintage; premium	Females; age 17-55+	1-10	Europe	Co-founder
B	Baby clothes	Parents (mothers)	1-10	Europe	Founder
C	Vintage; premium	Females; age 25-35	1-10	Europe	Founder
D	Premium	Females; age 20-45	10-20	Europe	Co-Founder
E	Premium; high-end	Females; age 20-40	10-20	Europe	Co-Founder

Given the exploratory nature of this study, five case studies may provide a substantial basis for analytical generalization (Eisenhardt, 1989). Semi-structured interviews were conducted to increase reliability of findings and ensure consistency across interviews (Gibbert et al., 2008; Yin, 2013). The interviews were held between March and June 2017. They were guided by a case study protocol to ensure reliability of this study (Yin, 2013). Open questions were posed driven by the necessity to explore a new field. The interviews lasted between 40 minutes and two hours and were held in English or German, dependent on the origin of the respective case company. All interview partners were founder or co-founder of the respective case company with three to four years in business. Three interviews were held by phone and two were conducted face-to-face at the case company's headquarters. All interviews were recorded and transcribed.

Teece's (2007) classification of dynamic capabilities into sensing, seizing and reconfiguring served as departure point for preparing the basic structure of the questionnaire. Interviewees were asked about their particular sensing, seizing and reconfiguring activities. When elaborating the questions, input from theoretical dynamic capabilities literature and measuring scales of dynamic capabilities was used. Since previous literature on firms' different sensing, seizing and reconfiguring processes points out a broad range of potential activities (Wilden, Gudergan, Nielsen, & Lings, 2013), literature on PSS was furthermore consulted to better attune questions to the particular nature of renting models. The questionnaire framework was furthermore supplemented by input from interdisciplinary scholars and practitioners (Gibbons, Limoges, Nowotny, Schwartzman, Scott, & Trow, 1994; Van de Ven & Johnson, 2006) in order to obtain complementary perspectives on the topic and construct validity of this study (Yin, 2013).

Since the way in which questions are worded is crucial for extracting the desired information (Merriam, 1998), the

gathered input was converted into appropriate questions in an iterative processes between the research team and associated practitioners. This procedure ensured that questions were articulated in respondents' familiar language which helps to avoid misunderstandings among interviewees and improve quality of data (Patton, 1990; Van de Ven & Johnson, 2006).

Even though identical questions were posed to all companies, the interviewees were given the possibility to freely add further explanations on their business activities. To avoid a potential informant bias and enhance construct validity through triangulation, additional data were analyzed. The stationary store of three case companies were visited on site to get a better understanding of their daily business activities and to get in touch with their customers. Furthermore, websites of the companies and reports or mentions in the print and online media were consulted.

Data Analysis

After collecting all data, each data set was analyzed following an abductive logic by departing from a theoretical pre-understanding that is further empirically elaborated. The aim of this process was to develop a deeper understanding of the new observed phenomenon and extent theory (Kovács & Spens, 2005). Abductive research refers to a process of developing typologies, social scientific descriptions and explanations from the way social actors describe their way of life (Ong, 2012). Instead of moving from data to theory or from theory to data, abductive research combines deduction and induction by moving back and forth between empirical data and literature (Suddaby, 2006). While deduction is an inference to a particular observation and induction is an inference to a generalization, abduction is an inference to an explanation (Ketokivi & Mantere, 2010).

The research departs from an existing theoretical framework but is not necessarily constrained by having to adhere to the previously developed theory (Dubois & Gadde,

1999). Even though it is important to enter into the research with knowledge of the basic literature, it is not needed to review all of the literature beforehand (Strauss & Corbin, 1990). This rather hinders the research process since the researcher is constrained by previously studied literature when explaining new phenomena (Dubois & Gadde, 1999).

Instead, the need for literature is created during an iterative research process that constantly shifts between the empirical and theoretical dimension. Theory is thus not invented at the beginning of the research nor is it just generated at the end (Blakie, 2010). Empirical data and existing literature are simultaneously evaluated and matched to se-

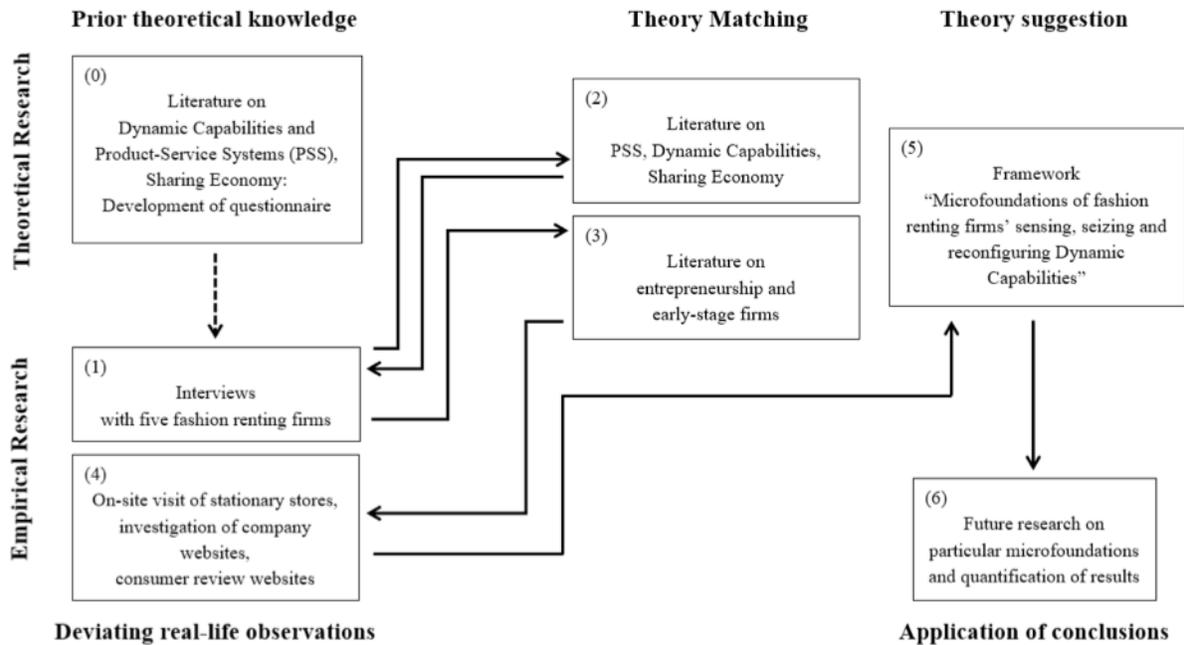


Figure 1. Abductive research approach. Adopted from Kovács & Spens (2005).

lect the best explanation (Ketokivi & Mantere 2010). This research process is illustrated in Figure 1.

In a first step, data from each firm were independently analyzed by systematically grouping the answers to questions on sensing, seizing and reconfiguring dynamic capabilities into individual themes. This procedure helped to become familiar with each sample firm as a stand-alone case and to identify the particular microfoundations of each firm. It also facilitated the subsequent cross-case comparison (Eisenhardt, 1989). A process of pattern matching across cases was applied next to extract similar and recurring microfoundations. This procedure furthermore increases internal validity (Eisenhardt, 1989; Yin, 2013).

In a next step, an iterative process of theory matching was applied by sequentially switching between the empirical data and theoretical contribution (Dubois & Gadde, 2002; Kovács & Spens, 2005). It turned out that literature on PSS, the sharing economy and dynamic capabilities is insufficient to fully explain the identified microfoundations. For this reason, literature on entrepreneurship and early-stage firms was additionally utilized to match with the empirical findings and give explanations for them. To further understand and enrich the preliminary framework of

microfoundations, the stationary stores of three case companies were visited on-site. This particularly helped to get a deeper understanding of how company and customers interact. Customers were involved into informal conversations to become familiar with their perspective on the case firms and their offers. Additionally, a thorough investigation of all case companies' websites, reports about the companies in print and online media and consumer review websites was carried out and confirmed our findings. The particular microfoundations that underlie sensing, seizing and reconfiguring capabilities of all sample firms are summarized in Table 2.

Discussion

Analysis revealed particular microfoundations that underlie sensing, seizing and reconfiguring capabilities of all sample firms (summarized in Table 2). The determined microfoundations are only meaningful for the purpose of this study if investigated firms are successful in their business activities. For this reason, all firms were asked if they are successful and what successful means for them. All respondents stated that their business is successful since they had run it for at least two years at the time of the inter-

Table 2

Microfoundations of Sensing, Seizing and Reconfiguring Dynamic Capabilities

Microfoundations of Sensing Dynamic Capabilities	
<hr/>	
Network development capability	
-	ability to develop and utilize relationships with entities outside the firm
-	sharing ideas
-	openness for improvement suggestions from external parties
-	discussing and reflecting ideas with close social contacts
-	conveying enthusiasm for the idea to close contacts
Network governance capability	
-	establishing contacts with fashion bloggers, artist, consultants, designers etc. to learn about the feasibility of the idea
-	relational skills to build up high-trust and amicable relationships
-	initial contacts through face-to-face meetings
-	asking openly and directly for advices, illustrating their idea in greater details and explaining the reason for the visit
-	exchange with competitors
-	uncomplicated straightforward demeanor
Empathic capabilities	
-	empathically observing consumers: demonstrate a deep understanding of customers' specific feelings, every day practices, desires and lifestyles
-	exchanging with consumers on a personal and amicable basis
-	encouraging consumers to disclose personal feelings and behavior
-	creating a relaxed atmosphere that makes customers feel comfortable
-	sharing similar values, needs and problems with customers
-	evaluating and incorporating gained knowledge on customers
<hr/>	
Microfoundations of Seizing Dynamic Capabilities	
<hr/>	
Ability to collaborate	
-	delegating specific tasks to third parties: focusing on core competencies
-	efficiently coordinating partnerships to obtain and assemble resources
-	purposefully selecting required partners required and establishing reliable and long-term cooperations
-	repeatedly working together on informal relationships with little bureaucratic administration and implicit, open-ended contracts
-	creating trust
Customer-focused communication	
-	finding the right words and ways to address skepticism
-	quickness, ability to interact promptly
-	reducing uncertainties: presenting motives, liabilities and benefits transparently
-	establishing and maintaining reciprocal lines of communication
Customer integration capabilities	
-	understanding existing consumer habits, influential factors of consumer satisfaction and major barriers for adopting novel solutions
-	close supplier-customer interaction and an early involvement of customers
-	continually seeking customer feedback: customer interaction as a natural and every day task.
-	absorbing, systematically evaluating and testing customer feedback for feasibility
-	relaxed and open-minded interaction with customers to gain honest feedback
<hr/>	
Microfoundations of Reconfiguring Dynamic Capabilities	
<hr/>	
Network Learning Capabilities	
-	creating new knowledge from external networks and sharing information
-	accepting knowledge spillovers
-	acquisition of knowledge through collaboration with universities
Governance and Orchestrating of PSS	
-	maintaining flat hierarchies to remain flexible
-	corporate culture based on a shared open-minded and passionate mindset
-	client-focused learning capabilities
-	episodic learning capabilities
-	ability to unlearn familiar routines
-	long-term orientation and promoting responsible fashion consumption

view. Furthermore, all firms are constantly growing and all respondents assume that their business has a great growth potential over the next few years. In the following, the particular microfoundations that underpin sensing, seizing and reconfiguring capabilities of the case firms are elaborated in greater detail.

Sensing

Network development capabilities. Developing a broad and supportive network has been determined as one of the most crucial activities of the investigated firms for sensing their business opportunity. Literature gives evidence that an entrepreneur's network is an essential factor for new ventures' likelihood to succeed (Greve & Salaff, 2003; Hite, 2005; Smith & Lohrke, 2008). Entrepreneurial firms at an early stage are constrained by limited resources, smallness and the liability of newness (Hite, 2005; Stinchcombe & March, 1965). Network ties with entities outside of the firm's boundaries may offset these constraints. They present important conduits of information and know-how and provide entrepreneurial firms access to useful information and resources (Hite, 2005; Hoang & Antoncic, 2003; Smith & Lohrke, 2008). All case companies started their entrepreneurial activities with a small stock of resources, little market knowledge and only a vague idea of their future business model. Network ties served as avenues through which case companies could get ideas, information and recognize entrepreneurial opportunities.

B: "I had this idea but was unsure how good it was and if it was feasible at all. It was actually the discussion with externals that showed me that I was on the right track and what else I could focus on. Their input at the very beginning was especially essential."

Case companies demonstrate a strong ability to develop and utilize relationships with entities outside the firm. This "networking capability" (Walter, Auer, & Ritter, 2006) allowed them to develop a network that continuously evolved over time. Research on how early-stage firms develop their network suggests that networking activities are an evolutionary process with exchange relationships transforming from essential dyadic ties into socioeconomic exchanges and multidimensional clusters of exchange processes (Hite, 2005; Hoang & Antoncic, 2003; Smith & Lohrke, 2008). Evidence from the case companies of this study confirms that entrepreneurs first explore business opportunities within a small circle of social contacts like family and close friends (Greve & Salaff, 2003; Hite & Hesterly, 2001; Hite, 2005; Larson & Starr, 1993). Entrepreneurial firms face

the risk of limited protection of their initial ideas and frequently feel uncomfortable committing themselves publicly to a particular endeavor (Greve & Salaff, 2003; Smith & Lohrke, 2008). Close, social ties served as an initial and safe platform for the case companies to gain new ideas.

B: "At the beginning I hesitated and was unsure. Family and friends encouraged me to proceed and also came up with their own suggestions for improvement. This broadened my view."

Close contacts furthermore served as departure point to expand the network and gather valuable insights (Hite, 2005). Case companies reported that discussions within their social circle triggered a snowball effect that allowed them tapping into the right partners whose expertise was crucial for exploring their business idea.

C: "When I talked to a close friend about my idea, he introduced me to a software developer he knows with whom I discussed the feasibility and costs for IT. This guy knew a fashion blogger who was extremely interested in the concept and well connected to designers. She invited me to a party where I got in touch with the first designers I started working with."

Entrepreneurs talk with more people during the early stage of their business development than in other phases (Greve & Salaff, 2003). This is especially significant regarding fashion renting since such business models break with the traditional industry practice of producing and selling. Exploring related market opportunities therefore requires competences, knowledge and skills that are not only new to the entrepreneurial firms but also to the industry as a whole. For this reason, literature on PSS highlights the importance of overcoming the reluctance of sharing information (Mont, 2002a). Case companies did not express concern about sharing their ideas and were open for improvement suggestions from external parties. They demonstrated strong abilities to discuss and reflect their ideas at an initial stage and conveyed their enthusiasm for their idea to their close contacts. As a result, received suggestions could be utilized to specify their initial ideas.

Network governance capabilities. Case companies demonstrate a specific ability to govern their network. They started with establishing contacts with fashion bloggers, artists, business consultants, designers and universities to find out more about the feasibility of their idea and to better attune their concept to market needs. Creating the willingness of outside parties to share their knowledge was a difficult but crucial challenge. In general, potential resource provid-

ers hesitate to transfer information or knowledge to entrepreneurial firms. They face risks resulting from information asymmetry and the absence of evidence of the entrepreneurial firm's activities and intention (Venkataraman, 1997; Tsai & Ghoshal, 1998; Smith & Lohrke, 2008). Moreover they demonstrate less awareness of potential advantages arising from collaborations since there are low immediate returns of invested time and resources (Bannerjee, Bielli, & Haley, 2016). However, when trust exists, uncertainty is reduced and individuals are more willing to share resources (Smith & Lohrke, 2008). Creating trust between partners is therefore a distinctive governance mechanisms that undergirds the establishment of network ties (Hite, 2005; Hoang & Antoncic, 2003).

Trust may evolve from an cognitive or emotional direction (Johnson & Grayson, 2005). Cognitive trust arises from an accumulated knowledge that allows predictability and reliability that the partner will meet his obligations (Lewis & Weigert, 2012). Trust that is rooted in human emotions is called "affective trust" (Johnson & Grayson, 2005; McAllister, 1995). This occurs if individuals feel genuinely concerned for their partners' welfare and are personally and emotionally involved into the relationship (Lewis & Weigert, 2012; McAllister, 1995; Smith & Lohrke, 2008). It implies that network ties are "relationally embedded" which means that they are embedded within social relationships (Hite, 2005; Uzzi, 1997).

Due to the lack of history and reputation, cognitive trust of potential partners was hardly achievable for the case companies. Therefore, affective trust was created through establishing initial face-to-face meetings with auspicious contacts during on-site visits of stores or through attendance at particular events. Relational skills imply openly explaining the purpose of the visit, illustrating the intended business idea in greater detail and genuinely expressing need for advices, input and first-hand experience. Uncomplicated and straightforward demeanor helped in building high-trust relationships on an amicable basis. Many of the initial relationships last until today and evolved into personal friendships.

E: "I believe that it is impossible to be happy in life when you completely separate business from personal life. I could not disguise myself and live most of my life with a mask. You spend so much time of your life with business – especially as an entrepreneur – that the lines between business and friendship become blurry. For us, it has always paid off to act naturally, be open-minded and respectful – and to talk a lot.

When we get in touch with partners for the first time, they acknowledge not only our idea but see that there are some exciting and enthusiastic personalities behind our business. This helps them to better understand our motivation and realize that we are trustworthy and honest. We are still in contact with most of our first contacts – even if we are not doing business together. But some have turned into friends and I am always happy to see or talk to them."

Competitors also serve as important source for sensing new service related offers (Johns & Storey, 1998; Pöppelbuß et al., 2011). Four case companies reached out to their national and international competitors to discuss the market, customer preference, financial and logistic processes. The fashion renting market is still in its infancy with moderate consumer interest (Armstrong et al., 2015a) and with only few firms considering implementation of fashion renting offers (Adam, Strähle, & Freise, 2017).

C: "I do not see them as competitors; the market should become big enough for all of us to remain in business."

Case companies agreed that more companies are actually needed to further develop and create the market. More and diverse renting offers could raise the awareness, stimulate the interest in fashion renting and contribute to overcoming consumers' uncertainties related to renting such as hygiene and quality of used clothing (Armstrong et al., 2015a; Armstrong et al., 2015b; Lang & Armstrong, 2015; Rexfelt & Hiort af Ornäs, 2009).

Empathic capabilities. Customer integration into the innovation process is important to minimize market risks (Enkel, Perez-Freije, & Gassmann, 2005). This is especially significant in the case of PSS since PSS place consumer needs in the center of value creation and aim on satisfying ultimate, so far unmet or even unknown customer needs (Baines et al., 2007; Tukker & Tischner, 2006). In a PSS context, companies only offer value propositions that are assembled by the customer with his own competencies to create an individual "value-in-use" (Lusch, 2006; Reynolds & Ng, 2015; Vargo & Akaka, 2009). It requires providers to inherently take the final functionality that fulfils customers' needs as the departure point of business development (Tukker & Tischner, 2006). Case companies empathically observe consumers to sense their business opportunity. They demonstrate a deep understanding of customers' context specific feelings, every day practices, desires and lifestyles. Exchange on a personal and amicable basis allows gather-

ing consumer information that go beyond their fashion preferences.

A: “We want to know what they do in their free time, what job they have, what lifestyle they live - this always gives us some idea of what they could like.”

Case companies demonstrate specific relational skills that encourage consumers to disclose personal feelings and behavior. When talking to customers, they create a relaxed atmosphere that makes customers feel comfortable and that their information is in safe hands. This is facilitated by the personal enthusiasm case company representatives attribute to their business idea. Their original idea stems from their personal desires and needs. Accordingly, their individual lifestyle is largely reflected in the preliminary value proposition presented to the customer. For this reason, customers and case company representatives share many similar values, needs and problems.

E: “We are at the same age as most of our customers, we watch similar TV series, visit the same places for vacation, have similar dreams, problems etc. This creates, of course, something like a bond. Many, many customers love to talk, have fun and laugh together with us. But I don't mainly regard them as customers. I rather see some fascinating personalities who I would love to get to know better. One customer just told me: ‘You do exactly what I had always wanted to do.’ I think this really shows that we are on the same page with our customers.”

This makes it easier to find common topics of conversation and discuss on an intimate basis. As a result, close, friendly and partially long-standing relationships with customers are maintained and an understanding of the particular customer needs is developed. Standardized and IT-supported processes support systematic analysis of gained information. The new knowledge is incorporated into the development of value propositions that addresses final customer needs.

Seizing

Ability to collaborate. Collaboration capabilities enable firms to supplement their own resources with those of other firms by building and utilizing network relationships (Walter et al., 2006). They ensure state-of-the art material and information flows that enable the firm to put their business opportunity into practice. This is especially important in a PSS context since PSS are the result of a value co-creation process within a collaborative partnership network (Cava-

lieri & Pezzotta, 2012; Maussang, Zwolinski, & Brissaud, 2009). Co-creating value for the customer is based on long-term cooperation and integration of partners, suppliers and customers into the development process (Gronroos, 2011; Prahalad & Ramaswamy, 2004). Hence, cooperative partnerships serve as decisive inputs for designing the entire service system (Lockett, Johnson, Evans, & Bastl, 2011). Case companies do not usurp all function but relinquish specific tasks to third parties which helps them to focus on their core competencies, reduce costs, save time and enhance quality. They purposefully delegate tasks to i.e. delivery, IT and accounting service providers. Partnerships are efficiently coordinated to obtain and assemble required resources.

D: “We do not have any programming knowledge or experience in how to develop a high-quality online shop. Of course, I could learn it and do it myself – it is probably not rocket science. But it would probably take me months to do it in a way that meets our quality standards. And who would run the business during that time? That does not make sense. We therefore asked an expert to do it and are super happy with his work. [...] Furthermore, we get assistance in accounting and help with legal questions and taxation. I want everything to be legally permissible and not have sleepless nights and be afraid of going to jail. This leaves us a lot of time and power that we need to further develop our business.”

Most case companies determine a broad assortment of high quality fashion items as key success factor for renting clothes. Fashion renting consumers prefer a wide variety of clothes and creative choices in their apparel selection that allows them keeping up with fashion trends at reasonable costs (Lang et al., 2016). It is therefore essential to permanently receive cheap and extraordinary clothes in order to constantly provide customers the experience of novelty, uniqueness and newness. This is achieved through reliable and long-term cooperations with various retailers and designers.

Literature suggests that PSS networks are more easily operated through relational rather than transactional exchange between network partners (Lockett et al., 2011). Case companies are skilled in purposefully selecting partners they need for establishing their business. They are repeatedly working together on rather informal relationships with little bureaucratic administration and conclude mostly implicit and open-ended contracts with their partners. This implies that their network mainly relies on relationships based on cognitive trust (Smith & Lohrke, 2008) which

makes creating trust among partners a substantial seizing activity. When trust exists, partners rely on the fulfillment of exchange obligations and that actions taken by each party are mutually acceptable. This reduces transactions costs for negotiation or monitoring (Jones, Hesterly, & Borgatti, 1997) which is relevant for entrepreneurial firms since they mostly do not dispose of substantial financial means.

E: “We are small and do neither have the financial means or knowledge to elaborate extensive contracts nor do we have the time for constantly monitoring the offers of our suppliers. Therefore, we try to handle business with our partners in the most unbureaucratic way possible.”

This requires relational skills such as communication ability, extraversion, conflict management skills, empathy, emotional stability, self-reflection, sense of justice and cooperativeness (Marshall, Goebel, & Moncrief, 2003). Our analysis furthermore reveals that case companies possess profound partner knowledge.

A: “I think we know all of our partners very well. We know their business but also the individuals behind it since we talk a lot with them and ask many questions. We try to simply be ourselves but always respect the particularities of each of our partner.”

This enables situation-specific management with each partner such as solution-oriented conflict management and stabilizes a firm’s position within the network (Walter et al., 2006).

Customer-focused communication. The success of fashion renting business models depends on consumer acceptance. Solution-based offers such as renting clothes contradict the prevalent norm of ownership and existing societal habits (Rexfelt & Hiort af Ornäs, 2009; Vezzoli, Ceschin, Diehl, & Kohtala, 2015). Self-identity, fashion trends and low costs are the major drivers for purchasing new clothes (Fisher, Cooper, Woodward, Hiller, & Goworek, 2008; Niinimäki, 2010).

Consumers who have become habitual with frequent consumption may balk at the absence of ownership instead of appreciating the benefits of convenience, financial savings and higher quality (Behrendt, Jasch, Kortman, Hrauda, Pfitzner, & Velte, 2003; Armstrong et al., 2015a; Vezzoli et al., 2015). Furthermore the hygiene of used products may become problematic (Catulli, 2012) which is particularly salient in the context of clothing that is worn close to the skin (Armstrong et al., 2015a).

Consumers may be skeptical about the provider’s motivation and lack confidence in the company to fully deliver the service (Armstrong et al., 2015a; Mont, 2004; Rexfelt & Hiort af Ornäs, 2009). Therefore, clarity of the entire service provision is important to reduce uncertainty. This implies clearly outlining liabilities and risks of each party and gain customers’ trust (Reim, Parida, & Örtqvist, 2015; Armstrong et al., 2015a). Consumer trust to rely on a service provider’s competence and reliability results from accumulated knowledge that allows predictions on the likelihood that the provider will meet his obligations (Johnson & Grayson, 2005). Case companies demonstrate the ability to understand and reduce customers’ uncertainty. They transparently outline their motives, liabilities and benefits for the customer. Reciprocal lines of communication are carried out via social media and personally.

B: “Communication works best through social media. But we also try to answer as many phone calls as possible. Talking with each other is still something different than writing digitally – still in times of social media. When people get to know us and the persons behind our business, they feel confident and trust us.”

Quickness and the ability to promptly interact with customers is an essential activity to reduce the complexity of the offer.

E: “We are living in a fast world; our customers live a fast life and want an immediate response. Waiting is not in line with their lifestyle. Also, renting of clothes is new and many people do not fully understand how that works and why they should do it. Of course, they have a lot of questions and want to know who we are – they are used to live fast and it would be inimical to our business, if we do not quickly respond to their inquiries.”

Customer integration. Customer integration has been recognized as critical factor for service innovation (Alam, 2006; Carbonell, Rodríguez-Escudero & Pujari, 2009; Cooper, 2001; Matthing, Sandén, & Edvardsson, 2004). Understanding existing consumer habits, influential factors of consumer satisfaction and major barriers for adopting novel solutions are substantial for successful PSS implementation (Grönroos, 2008; Rexfelt & Hiort af Ornäs, 2009; Vezzoli et al., 2015). This requires close supplier-customer interaction and an early involvement of customers into development, design and delivery of PSS (Baines et al., 2007).

Case companies are seeking continual customer feed-

back during the development and implementation stage. Customer interaction (Alam, 2006) is a natural and every day task for them. They are skilled in absorbing customer feedback which is mostly gained through their websites or social media. Input is systematically evaluated and tested for feasibility. Customers appreciate the feeling that they can actually contribute to the offer. Case companies with a physical store report that they create a relaxed atmosphere in their store that allows customers to have casual conversations, feel comfortable and enjoy a good time. If individuals perceive others to have values similar to their own, an environment conducive to trust development is given (Johnson & Grayson, 2005). The laid-back and open-minded interaction with customers allows gaining honest and meaningful suggestions.

E: “We all know the situation that we visit a restaurant, did not like the meal, politely say ‘yes, it was delicious, thank you and see you again’ but never show up again. We insistently seek to avoid that our customers behave like that. We do not want to seem arrogant or pretend to be perfect but create a climate that encourages consumers to directly provide us their honest feedback. And customers appreciate that their voice is heard. Their honest suggestions are vital for our business because otherwise we will have an offer or an assortment that nobody likes but everybody is telling us that we are doing a great job.”

Even though the idea may be initiated within the company, customer integration serves as catalysts of service innovation processes (Kuusisto & Riepula, 2011). It improves consumer acceptance and can lead to superior quality (Alam, 2002). Case companies confirm that adjustments that have been made jointly with the customers resulted in increased sales and client loyalty. Positive customer response furthermore encourages providers to proceed with the development and obtain the required resources (Kuusisto & Riepula, 2011).

C: “Collaborating with customers makes us personally feel more confident and shows us that we are on the right track. It is not only time but also a lot of money that we invest. Of course, there are still a lot of risks remaining but it gives us confidence to know that the idea is approved and supported by our clients. This considerably reduces our risk. And it also helps us to promote our business and attract other partners – because

we can refer to strong customer commitment and claim that this is exactly what the market demands for.”

The ability to integrate customers into development validates and internally confirms the business idea (Cooper, 2001).

Reconfiguring

Network learning capabilities. The reliance on network partners is not constrained to early stage activities (Johannisson, Alexanderson, Nowicki, & Senneseth, 1994) but also essential for learning and gaining knowledge. While sensing implies learning about the environment and market opportunities, creating, sharing and integrating knowledge are considered key activities to maintain success (Teece, 2007). For this purpose, companies expose themselves to a variety of external knowledge sources to reshape their competencies (Salunke, Weerawardena, & McColl-Kennedy, 2011; Weerawardena & McColl-Kennedy, 2002). Particularly in the context of PSS, effective information sharing across the PSS supply network with open innovation structures is required (Laperche & Picard, 2013; Lockett et al., 2011; Mont, 2004; Mont, 2002a).

A: “When we started we knew little about business and needed much support, especially in accounting, logistics and IT. Interestingly, very often the most valuable knowledge is offered for free. When we ask people, show interest and demonstrate high respect for their work, they often enjoy talking about it and explain everything in detail. It is the focal point of their lives and of course they feel flattered if you are interested in what they are doing all day long.”

Case companies also accept that their own know-how may leak out.

D: “We are even in exchange with our competitors. If we can avoid making the same mistakes they did and prevent others from making the same mistakes we did, it is beneficial for everybody. The market should become big enough for all of us.”

Knowledge is also acquired through collaboration with universities which are assumed to be important sources for corporate innovation (Johnson & Johnston, 2004; Ponds, van Oort, & Frenken, 2010). Case companies have permanent linkages to universities. Collaborations comprise joint research projects, seminars, dissertations, student papers, lec-

tures and academic initiatives that allow students applying their knowledge in a real-life context. Prospect for success of new firms tend to be higher in locations with geographic proximity to universities since this reduces knowledge acquisition cost (Audretsch, Lehmann, & Warning, 2005; del Barrio Castro & Quevedo, 2004). Case companies are connected to universities within their nearby environment with one company also attending an online study program.

C: “Knowledge is essential. We have enjoyed our studies and, in my opinion, there are no places with a higher accumulation of knowledge than universities. For us, as a small company that is somehow innovative, we are dependent on gaining new knowledge from outside because there is no blueprint that we can copy. And for universities, particularly for students, it is interesting to study a company that embarks upon new paths and apply the theory they learn to a real-life case. Our recent marketing campaign was completely developed by a group of students in the context of a seminar at their university.”

Governance and orchestrating of PSS. PSS implementation require service oriented mental model and a creative environment with unconstrained handling of mistakes (den Hertog, van der Aa, & de Jong, 2010; Kindström et al., 2013). Case companies are still small with very flat hierarchies and report that their culture is open-minded and friendly. Employees are described as friends who share a common mindset and are encouraged to bring in their ideas and talents which is general considered conducive to knowledge creation and sustainable competitive advantage (Sharkie, 2003). However, passion, staunchness and ego may prevent them from listening to customers and adjusting the offer to their particular needs (Onyemah, Pesquera, & Ali, 2013).

Founders and employees are highly passionate about their jobs and tasks but do not feel omniscient. Instead of putting the main focus on convincing prospective clients of their offer, business activities are built around customer feedback. This “client-focused learning” (Onyemah et al., 2013; Salunke et al., 2011) is utilized to purposefully reshape the offer to fit what clients actually want. All case companies have frequently modified their business model, i.e. in terms of payment conditions and membership, assortment or delivery service. This indicates the presence of episodic learning capabilities which allow companies to learn from past activities and subsequently adapt this knowledge to future activities (Salunke et al., 2011).

B: “We soon realized that there is so much useful knowledge out there and it is impossible to capture all the knowledge at one time. But we learn more and more over time, especially when we apply things. Looking back, I am a bit embarrassed of how naïve we were when we started.”

All founders of the case companies have a fashion background. Since renting contradicts the dominating fashion industry recipes, case companies also had to incorporate the ability to unlearn familiar routines (Matthyssens, Vandenbempt, & Berghman, 2006; Kindström et al., 2013). In order to quickly respond to fast changes of the environment, decisions need to be made quickly but remain coordinated (Teece, 2007). Decision-making is facilitated through the smallness of case companies but the final decision clearly assigned to particular persons. Some companies, however, express concerns that this may become more complicated to handle with future growth. PSS implementation also requires long-term planning (Mont, 2004).

Case companies are not focused on short-term profit and are aware that the mainstream market for renting fashion has yet to be developed. Four case companies mention sustainability as the major driver for their business activities and are engaged in different initiatives that promote responsible fashion consumption.

B: “With more knowledge on sustainability, acceptance of renting clothes will definitely increase. It will become the new normal but we have to work for that.”

Conclusion and Future Research

The objective of this paper was to enhance our understanding of microfoundations that underlie sensing, seizing and reconfiguring dynamic capabilities of early-stage service-oriented firms. Findings contribute to closing the academic gap of empirical knowledge on how companies manage to successfully implement PSS. Empirical studies on dynamic capabilities have so far mainly focused on established firms with a broad base of existing resources. By applying the dynamic capabilities approach to early-stage firms, this study strengthens the empirical foundation of dynamic capabilities research. It sheds light on particular microfoundations that allow new ventures to reconfigure their relatively scarce resource base into expedient organizational processes and routines.

For practitioners, the presented microfoundations provide a framework of critical tasks and skills that facilitate understanding and managing different organizational activities to leverage a service-oriented business model. This is

particularly important for small firms since they possess a smaller stock of resources than established firms. Findings highlight that appropriate skills for interacting with customers are essential. It requires the ability to listen to customers and understand their particular needs and it is vital to systematically absorb and adopt customer feedback.

Companies should proactively and continually seek customer feedback and make customer interaction a natural and every day task. Practitioners should be empathic and demonstrate a deep understanding of customers' specific feelings, every day practices, desires and lifestyles. For this reason, it is helpful to live a similar lifestyle and share similar values with customers and implement a quick and reciprocal communication with customers via social media. Furthermore, creating trust is essential to gain honest feedback and reduce consumer uncertainty. Solution-based offers contradict the prevalent norm of ownership and existing societal habits.

Consumers may be skeptical about the new offer. Practitioners should therefore try to exchange with customers on a personal and amicable basis and create a relaxed atmosphere that makes customers feel comfortable. This facilitates finding the right ways and word to address consumer skepticism. Furthermore, practitioners should focus on purposefully selecting partners and delegating specific tasks to focus on their core competences.

At the beginning, practitioners should discuss and reflect their initial ideas with close social contacts and be open for improvement suggestions. An uncomplicated and open mindset is conducive to getting in touch with valuable network partners and create informal, long-term and amicable relationships with little bureaucratic administration and implicit, open-ended contracts. It is furthermore critical to unlearn familiar routines, absorb new know-how and create an open-minded corporate culture. Relational capabilities and the willingness to learn are essential to acquire knowledge from external networks. Practitioners should not be afraid of spillovers and open to share information with network partners. It is helpful to acquire knowledge through collaboration with universities and exchange with competitors.

This research is limited to data of five cases. Future research could include more companies to provide quantitative evidence. Even though findings may be generalized since they are matched with general PSS literature, it would be helpful to investigate other industries and determine similarities or differences of the microfoundations. This study uses mainly data provided by the case companies. A potential informant bias can therefore not fully be excluded. More primary data from network partners or customers would enrich the findings of this study. A long-term observation of how customers and company interact could shed more light on how exactly firms manage to co-create value and

incorporate customer needs into the offer. Finally, it would be interesting to investigate how established companies in traditionally manufacturing based industries manage to innovate their business model towards solution-based offers since this requires a severe transformation of their existing corporate structure. This would be also interesting since they depart with a greater stock of resources.

References

- Adam, M., Strähle, J., & Freise, M. (2017). The interaction of Product-Service Systems (PSS) and Corporate Environmental Management (CEM) : Can PSS drive today's fashion industry towards more environmental sustainability? *Service Science*, 9(3), 235-249.
- Adrodegari, F., & Saccani, N. (2017). Business models for the service transformation of industrial firms. *The Service Industries Journal*, 37(1), 57-83.
- Alam, I. (2002). An exploratory investigation of user involvement in new service development. *Journal of the Academy of Marketing Science*, 30(3), 250-261.
- Alam, I. (2006). Service innovation strategy and process: A cross-national comparative analysis. *International Marketing Review*, 23(3), 234-254.
- Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews*, 11(1), 29-49. <https://doi.org/10.1111/j.1468-2370.2008.00251.x>
- Armstrong, C. M., Niinimäki, K., Lang, C., & Kujala, S. (2015a). A use-oriented clothing economy? Preliminary affirmation for sustainable clothing consumption alternatives. *Sustainable Development*, 24(1), 18-31.
- Armstrong, C. M., Niinimäki, K., Kujala, S., Karell, E., & Lang, C. (2015b). Sustainable product-service systems for clothing: Exploring consumer perceptions of consumption alternatives in Finland. *Journal of Cleaner Production*, 97, 30-39. <https://doi.org/10.1016/j.jclepro.2014.01.046>
- Audretsch, D. B., Lehmann, E. E., & Warning, S. (2005). University spillovers and new firm location. *Research Policy*, 34(7), 1113-1122.
- Baines, T. S., Lightfoot, H. W., Evans, S., Neely, A., Greenough, R., Peppard, J., & Wilson, H. (2007). State-of-the-art in product-service systems. *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 221(10), 1543-1552. <https://doi.org/10.1243/09544054JEM858>

- Baker T., & Nelson R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366.
- Bannerjee, S., Bielli, S., & Haley, C. (2016). *Scaling together: Overcoming barriers in corporate-startup collaboration*. London, UK: Nesta.
- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881–898. <https://doi.org/10.1086/666376>
- Behrendt, S., Jasch, C., Kortman, J., Hrauda, G., Pfitzner, R., & Velte, D. (2003). Eco-service development: Reinventing supply and demand in the European Union. *Management of Environmental Quality: An International Journal*, 14(3), 424–425.
- Beuren, F. H., Gomes Ferreira, M. G., & Cauchick Miguel, P. A. (2013). Product-service systems: A literature review on integrated products and services. *Journal of Cleaner Production*, 47, 222–231. <https://doi.org/10.1016/j.jclepro.2012.12.028>
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173. <https://doi.org/10.1080/09593960903498300>
- Black, S. (2010). *Ethical fashion and ecofashion*. Oxford: Berg.
- Blaikie, N. (2010). *Designing social research: The logic of anticipation* (2nd ed.). Cambridge: Polity.
- Botsman, R., & Rogers, R. (2011). *What's mine is yours: How collaborative consumption is changing the way we live*. London: Collins.
- Carbonell, P., Rodríguez-Escudero, A. I., & Pujari, D. (2009). Customer involvement in new service development: An examination of antecedents and outcomes. *Journal of Product Innovation Management*, 26(5), 536–550.
- Catulli, M. (2012). What uncertainty? Further insight into why consumers might be distrustful of product service systems. *Journal of Manufacturing Technology Management*, 23(6), 780–793. <https://doi.org/10.1108/17410381211253335>
- Cavalieri, S., & Pezzotta, G. (2012). Product-service systems engineering: State of the art and research challenges. *Computers in Industry*, 63(4), 278–288. <https://doi.org/10.1016/j.compind.2012.02.006>
- Christopher, M., Lawson, R., & Peck, H. (2004). Creating agile supply chains in the fashion industry. *International Journal of Retail & Distribution Management*, 32(8), 367–376. <https://doi.org/10.1108/09590550410546188>
- Cook, M. B., Bhamra, T. A., & Lemon, M. (2006). The transfer and application of product service systems: From academia to UK manufacturing firms. *Journal of Cleaner Production*, 14(17), 1455–1465.
- Cooper, R.G. (2001). *Winning at new products: Accelerating the process from idea to launch*. Cambridge, MA: Perseus.
- del Barrio Castro, T., & Quevedo, J. A. G. (2004). The geography of innovation: The effects of university research. *Documents de Treball (Facultat d'Economia i Empresa. Espai de Recerca En Economia), E04(120)*. Retrieved from <http://diposit.ub.edu/dspace/handle/2445/12035>
- den Hertog, P., van der Aa, W., & de Jong, M. W. (2010). Capabilities for managing service innovation: Towards a conceptual framework. *Journal of Service Management*, 21(4), 490–514. <https://doi.org/10.1108/09564231011066123>
- Dubois, A., & Gadde, L. E. (1999). Case studies in business market research - An abductive approach. In D. McLoughlin & C. Horan (Eds.), *Proceedings of the 15th Annual IMP Conference, University College, Dublin, 1999*.
- Dubois, A., & Gadde, L. E. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), 553–560.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32.
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121.
- Enkel, E., Perez-Freije, J., & Gassmann, O. (2005). Minimizing market risks through customer integration in new product development: Learning from bad practice. *Creativity and Innovation Management*, 14(4), 425–437.
- Firnkorn, J., & Müller, M. (2011). What will be the environmental effects of new free-floating car-sharing systems? The case of car2go in Ulm. *Ecological Economics*, 70(8), 1519–1528.
- Fisher, T., Cooper, T., Woodward, S., Hiller, A., & Goworek, H. (2008). *Public understanding of sustainable clothing*. A report to the Department for Environment, Food and Rural Affairs. London: Department

- for Environment, Food and Rural Affairs.
- Fletcher, K. (2013). *Sustainable Fashion and Textiles: Design Journeys*. New York, NY: Routledge.
- Foss, L., Iakovleva, T., Kickul, J., Oftedal, E., & Solheim, A. (2012). *The role of microfoundations in explicating dynamic capabilities: A case study of commercializing discontinuous innovation in the Norwegian petroleum sector*. Working paper. Available at: www.Uis.No/Getfile.Php/.../FossIakovlevaKickuOftedalSolheim.Docx.
- Gardetti, M. A., & Torres, A. L. (2013). *Sustainability in fashion and textiles: Values, design, production and consumption*. Sheffield, UK: Greenleaf Publishing.
- Gebauer, H., Gustafsson, A., & Witell, L. (2011). Competitive advantage through service differentiation by manufacturing companies. *Journal of Business Research*, 64(12), 1270–1280. <https://doi.org/10.1016/j.jbusres.2011.01.015>
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, 29(13), 1465–1474. <https://doi.org/10.1002/smj.722>
- Gibbons, M., Limoges, H., Nowotny, S., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
- Goedkoop, M. J. (1999). Product service systems, ecological and economic basics. *Report for Dutch Ministries of Environment (VROM) and Economic Affairs (EZ)*, 36(1), 1-122.
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22.
- Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, 20(4), 298–314. <https://doi.org/10.1108/09555340810886585>
- Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3), 279–301. <https://doi.org/10.1177/1470593111408177>
- Hausman, W., & Thorbeck, J. (2010). Fast fashion: Quantifying the benefits. In T. Cheng & T. M. Choi (Eds.) *Innovative quick response programs in logistics and supply chain management* (pp. 315–329). Berlin: Springer.
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Malden, MA: Blackwell Publishing.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997–1010. <https://doi.org/10.1002/smj.332>
- Hite, J. M., & Hesterly, W. S. (2001). The evolution of firm networks: From emergence to early growth of the firm. *Strategic Management Journal*, 22(3), 275–286.
- Hite, J. M. (2005). Evolutionary processes and paths of relationally embedded network ties in emerging entrepreneurial firms. *Entrepreneurship Theory and Practice*, 29(1), 113–144.
- Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship. *Journal of Business Venturing*, 18(2), 165–187. [https://doi.org/10.1016/S0883-9026\(02\)00081-2](https://doi.org/10.1016/S0883-9026(02)00081-2)
- Johannisson, B., Alexanderson, O., Nowicki, K., & Seneseth, K. (1994). Beyond anarchy and organization: Entrepreneurs in contextual networks. *Entrepreneurship & Regional Development*, 6(4), 329–356.
- Johne, A., & Storey, C. (1998). New service development: A review of the literature and annotated bibliography. *European Journal of Marketing*, 32(3/4), 184–251.
- Johnson, D., & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research*, 58(4), 500–507. [https://doi.org/10.1016/S0148-2963\(03\)00140-1](https://doi.org/10.1016/S0148-2963(03)00140-1)
- Johnson, W. H., & Johnston, D. A. (2004). Organisational knowledge creating processes and the performance of university-industry collaborative R&D projects. *International Journal of Technology Management*, 27(1), 93–114.
- Jones, C., Hesterly, W. S., & Borgatti, S. P. (1997). A general theory of network governance: Exchange conditions and social mechanisms. *Academy of Management Review*, 22(4), 911–945.
- Joung, H. M., & Park-Poaps, H. (2013). Factors motivating and influencing clothing disposal behaviours: Clothing disposal behaviours. *International Journal of Consumer Studies*, 37(1), 105–111. <https://doi.org/10.1111/j.1470-6431.2011.01048.x>
- Ketokivi, M., & Mantere, S. (2010). Two strategies for inductive reasoning in organizational research. *Academy of Management Review*, 35(2), 315–333.
- Kindström, D., Kowalkowski, C., & Sandberg, E. (2013). Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research*, 66(8), 1063–1073. <https://doi.org/10.1016/j.jbusres.2012.03.003>

- Kovács, G., & Spens, K. M. (2005). Abductive reasoning in logistics research. *International Journal of Physical Distribution & Logistics Management*, 35(2), 132–144. <https://doi.org/10.1108/09600030510590318>
- Kuusisto, A., & Riepula, M. (2011). Customer interaction in service innovation: Seldom intensive but often decisive. Case studies in three business service sectors. *International Journal of Technology Management*, 55(1/2), 171–186.
- Lang, C., & Armstrong, C. (2015). What's mine is yours: Does fashion leadership impede clothing renting and swapping? *Presentation at the Annual International Textile and Apparel Association Conference: Oral Presentations, Santa Fe, NM, 2015*.
- Lang, C., Armstrong, C. M., & Liu, C. (2016). Creativity and sustainable apparel retail models: Does consumers' tendency for creative choice counter-conformity matter in sustainability? *Fashion and Textiles*, 3(1), 24.
- Laperche, B., & Picard, F. (2013). Environmental constraints, Product-Service Systems development and impacts on innovation management: Learning from manufacturing firms in the French context. *Journal of Cleaner Production*, 53, 118–128. <https://doi.org/10.1016/j.jclepro.2013.03.047>
- Larson, A., & Starr, J. A. (1993). A network model of organization formation. *Entrepreneurship Theory and Practice*, 17(2), 5–16.
- Leonard-Barton D. (1990). A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multi sites. *Organization Science*, 1(3), 248–266.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal*, 13(S1), 111–125.
- Lewis, J. D., & Weigert, A. J. (2012). The social dynamics of trust: Theoretical and empirical research. *Social Forces*, 91(1), 25–31.
- Lockett, H., Johnson, M., Evans, S., & Bastl, M. (2011). Product service systems and supply network relationships: An exploratory case study. *Journal of Manufacturing Technology Management*, 22(3), 293–313.
- Lusch, R. F. (2006). Service-dominant logic: reactions, reflections and refinements. *Marketing Theory*, 6(3), 281–288. <https://doi.org/10.1177/1470593106066781>
- Marshall, G. W., Goebel, D. J., & Moncrief, W. C. (2003). Hiring for success at the buyer–seller interface. *Journal of Business Research*, 56(4), 247–255.
- Martinez, V., Bastl, M., Kingston, J., & Evans, S. (2010). Challenges in transforming manufacturing organisations into product-service providers. *Journal of Manufacturing Technology Management*, 21(4), 449–469. <https://doi.org/10.1108/17410381011046571>
- Matthing, J., Sandén, B., & Edvardsson, B. (2004). New service development: Learning from and with customers. *International Journal of Service Industry Management*, 15(5), 479–498.
- Matthyssens, P., Vandenbempt, K., & Berghman, L. (2006). Value innovation in business markets: Breaking the industry recipe. *Industrial Marketing Management*, 35(6), 751–761. <https://doi.org/10.1016/j.indmarman.2005.05.013>
- Maussang, N., Zwolinski, P., & Brissaud, D. (2009). Product-service system design methodology: From the PSS architecture design to the products specifications. *Journal of Engineering Design*, 20(4), 349–366. <https://doi.org/10.1080/09544820903149313>
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach*. Los Angeles, CA: Sage Publications.
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24–59.
- McKelvie, A., & Davidsson, P. (2009). From resource base to dynamic capabilities: An investigation of new firms. *British Journal of Management*, 20(s1), S63–S80. <https://doi.org/10.1111/j.1467-8551.2008.00613.x>
- Meredith, J. (1998). Building operations management theory through case and field research. *Journal of Operations Management*, 16(4), 441–454.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education. Revised and Expanded from "Case study research in education."* San Francisco, CA: Jossey-Bass Publishers.
- Moeller, S., & Wittkowski, K. (2010). The burdens of ownership: Reasons for preferring renting. *Managing Service Quality: An International Journal*, 20(2), 176–191. <https://doi.org/10.1108/09604521011027598>
- Mont, O. (2004). *Product-service systems: Panacea or myth?* Lund, Sweden: Lund University.
- Mont, O. (2002a). Clarifying the concept of product–service system. *Journal of Cleaner Production*, 10(3), 237–245.
- Mont, O. (2002b). Drivers and barriers for shifting towards more service-oriented businesses: Analysis of the PSS field and contributions from Sweden. *The*

- Journal of Sustainable Product Design*, 2(3–4), 89–103.
- Niinimäki, K. (2010). Eco-clothing, consumer identity and ideology. *Sustainable Development*, 18(3), 150–162. <https://doi.org/10.1002/sd.455>
- 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.
- Onyemah, V., Pesquera, M. R., & Ali, A. (2013). What entrepreneurs get wrong. *Harvard Business Review*, 91(5), 74–79.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Pedersen, E. R. G., & Netter, S. (2015). Collaborative consumption: Business model opportunities and barriers for fashion libraries. *Journal of Fashion Marketing and Management: An International Journal*, 19(3), 258–273. <https://doi.org/10.1108/JFMM-05-2013-0073>
- Perlacia, A. S., Duml, V., & Saebi, T. (2016). Collaborative consumption: Live fashion, don't own it-developing new business models for the fashion industry. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2860021
- Ponds, R., van Oort, F., & Frenken, K. (2010). Innovation, spillovers and university-industry collaboration: An extended knowledge production function approach. *Journal of Economic Geography*, 10(2), 231–255. <https://doi.org/10.1093/jeg/lbp036>
- Pöppelbuß, J., Plattfaut, R., Ortbach, K., Malsbender, A., Voigt, M., Niehaves, B., & Becker, J. (2011). Service innovation capability: Proposing a new framework. In Computer Science and Information Systems (FedCSIS). *2011 Federated Conference on Computer Science and Information Systems*, 545–551.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy & Leadership*, 32(3), 4–9.
- Reim, W., Parida, V., & Örtqvist, D. (2015). Product–Service Systems (PSS) business models and tactics – a systematic literature review. *Journal of Cleaner Production*, 97, 61–75. <https://doi.org/10.1016/j.jclepro.2014.07.003>
- Rexfelt, O., & Hiort af Ornäs, V. (2009). Consumer acceptance of product-service systems: Designing for relative advantages and uncertainty reductions. *Journal of Manufacturing Technology Management*, 20(5), 674–699. <https://doi.org/10.1108/17410380910961055>
- Reynolds, D., & Ng, I. C. (2015). Four axiomatic requirements for service systems research. In K. Kijima (Ed.), *Service systems science* (Vol. 2, pp. 69–81). Tokyo, Japan: Springer. Retrieved from http://link.springer.com/10.1007/978-4-431-54267-4_4
- Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2011). Towards a model of dynamic capabilities in innovation-based competitive strategy: Insights from project-oriented service firms. *Industrial Marketing Management*, 40(8), 1251–1263. <https://doi.org/10.1016/j.indmarman.2011.10.009>
- Shaheen, S. A., & Cohen, A. P. (2013). Carsharing and personal vehicle services: Worldwide market developments and emerging trends. *International Journal of Sustainable Transportation*, 7(1), 5–34.
- Shaheen, S., Cohen, A., & Roberts, J. (2006). Carsharing in North America: Market growth, current developments, and future potential. *Transportation Research Record: Journal of the Transportation Research Board*, 1986, 116–124.
- Sharkie, R. (2003). Knowledge creation and its place in the development of sustainable competitive advantage. *Journal of Knowledge Management*, 7(1), 20–31.
- Shen, B., & Li, Q. (2015). Impacts of returning unsold products in retail outsourcing fashion supply chain: A sustainability analysis. *Sustainability*, 7(2), 1172–1185.
- Smith, D. A., & Lohrke, F. T. (2008). Entrepreneurial network development: Trusting in the process. *Journal of Business Research*, 61(4), 315–322. <https://doi.org/10.1016/j.jbusres.2007.06.018>
- Stephany, A. (2015). *The Business of Sharing*. Basingstoke, UK: Palgrave Macmillan.
- Stinchcombe, A. L., & March, J. G. (1965). Social structure and organizations. *Handbook of Organizations*, 7, 142–193.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage Publications.
- Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy of Management Journal*, 49(4), 633–642.
- Taplin I. M. (2006). Restructuring and reconfiguration: The EU textile and clothing industry adapts to change. *European Business Review*, 18(3), 172–186.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*,

- 28(13), 1319–1350.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–476.
- Tukker, A. (2004). Eight types of product–service system: Eight ways to sustainability? Experiences from SusProNet. *Business Strategy and the Environment*, 13(4), 246–260. <https://doi.org/10.1002/bse.414>
- Tukker, A. (2015). Product services for a resource-efficient and circular economy – a review. *Journal of Cleaner Production*, 97, 76–91. <https://doi.org/10.1016/j.jclepro.2013.11.049>
- Tukker, A., & Tischner, U. (2006). Product-services as a research field: Past, present and future. Reflections from a decade of research. *Journal of Cleaner Production*, 14(17), 1552–1556. <https://doi.org/10.1016/j.jclepro.2006.01.022>
- Uzzi, B. (1997). Social structure and competition in inter-firm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35–67.
- Van de Ven, A. H., & Johnson, P. E. (2006). Knowledge for theory and practice. *Academy of Management Review*, 31(4), 802–821.
- Van Ostaeyen, J., Van Horenbeek, A., Pintelon, L., & Dufloy, J. R. (2013). A refined typology of product–service systems based on functional hierarchy modeling. *Journal of Cleaner Production*, 51, 261–276. <https://doi.org/10.1016/j.jclepro.2013.01.036>
- Vargo, S. L., & Akaka, M. A. (2009). Service-dominant logic as a foundation for service science: Clarifications. *Service Science*, 1(1), 32–41.
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in Entrepreneurship, Firm Emergence and Growth*, 3(1), 119–138.
- Vezzoli, C., Ceschin, F., Diehl, J. C., & Kohtala, C. (2015). New design challenges to widely implement ‘Sustainable Product–Service Systems.’ *Journal of Cleaner Production*, 97, 1–12.
- Vezzoli, C., Kohtala, C., & Srinivasan, A. (Eds.). (2014). *Product-service system design for sustainability*. New York, NY: Greenleaf Publishing.
- Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations & Production Management*, 22(2), 195–219. <https://doi.org/10.1108/01443570210414329>
- Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, 21(4), 541–567.
- Weerawardena, J., & McColl-Kennedy, J. R. (2002). New service development and competitive advantage: A conceptual model. *Australasian Marketing Journal*, 10(1), 13–23.
- Weerawardena, J., & Mavondo, F. T. (2011). Capabilities, innovation and competitive advantage. *Industrial Marketing Management*, 40(8), 1220–1223. <https://doi.org/10.1016/j.indmarman.2011.10.012>
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: Strategy, structure and environment. *Long Range Planning*, 46(1–2), 72–96. <https://doi.org/10.1016/j.lrp.2012.12.001>
- Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24(10), 991–995. <https://doi.org/10.1002/smj.318>
- Wu, L. Y. (2007). Entrepreneurial resources, dynamic capabilities and start-up performance of Taiwan’s high-tech firms. *Journal of Business Research*, 60(5), 549–555. <https://doi.org/10.1016/j.jbusres.2007.01.007>
- Yin. (2013). *Case study research: Design and methods*. London: Sage Publications, Ltd.
- Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: A review, model and research agenda. *Journal of Management Studies*, 43(4), 917–955.