Assessing value creation in digital innovation ecosystems:

A Social Media Analytics approach

Abstract

This paper explores the creation of value through the interactions of consumer and professional stakeholders in digital innovation ecosystems. We examine this by applying the methodological approach of Social Media Analytics (SMA) which is an interdisciplinary approach that seeks to combine, extend and adapt methods for analysing social media data. By utilising the SMA framework to track user-generated contents published on social media platforms, we assess how consumer and professional stakeholders associate value to Storytel, a new entrant in the Swedish publishing industry that is offering digital subscription service for streaming audiobooks. Drawing from a dataset of 2,633 user-generated contents, our findings illustrate the value-creating practices in which stakeholders in Storytel's ecosystems associate value to Storytel's digital innovation. Our findings further highlight that the value-creating practices arising from the interactions of consumer and professional stakeholders in social media give rise to the hybridisation of value, where multiple forms of value categories merge in the studied case. This study contributes to extant literature on management of innovation and information systems by (i) shedding light on how value is created by examining value-creating practices as a result of the interactions between stakeholders and (ii) examining the resulting merging of value categories within digital innovation ecosystems and thus exploring the hybridisation of value.

***Keywords**: value creation; value category; hybridisation; value-creating practices; digital innovation ecosystem; social media analytics; stakeholder interactions*

Introduction

Organisations must create value for their success and survival (Adner and Kapoor, 2010; Tantalo and Priem, 2016). The topic of value creation, referring to the relative amount of value that contributes to the utility of the final good or service to end users (Lepak et al., 2007; Bowman and Ambrosini, 2000; Pagani, 2013), has gained considerable attention in extant literature (Grönroos and Voima, 2013). The process of value creation itself needs to consider the nature of value categories. Thus, a key distinction ought to be made in terms of value creation and value categories. In the literature, value categories refer to the attributes of value in terms of, for example, functional, social and emotional value (Sweeny and Soutar, 2001). These underlying value categories subsequently contribute to value creation.

Parallel to the evolvement of literature on value creation, a growing number of organisations have created digital innovation in terms of new products and service offerings. Such organisations use digital technologies to create value and provide great significance and benefits to the economy (Yoo et al., 2010). Digital innovation not only alters individual businesses and their business models but also entire innovation ecosystems (Adner and Kapoor, 2010; Loebbecke and Picot, 2015). In the case of digital innovation, value is created by organisations from their activities and interactions with stakeholders. These interactions occur within the digital innovation ecosystems of specific market, regulatory and environmental contexts within which the organisations operate. The term 'innovation ecosystem' arises from an early concept of a natural ecosystem comprising of elements that function together to maintain an equilibrium state (Suseno and Standing, 2018). Moore (1996: 26) highlights a business ecosystem as "an economic community supported by a foundation of interacting organisations and individuals - the organisms of the business world." In much the same way, a digital innovation ecosystem models the interactions and relationships between organisations and stakeholders, in creating new products and services using digital technologies in order to

create value. Indeed, the accelerating pace of change means that success through innovation is about disruption in many forms and, perhaps most importantly, in terms of how value is created within the ecosystems.

Despite an implicit assumption of the importance of stakeholder interactions in digital innovation ecosystems, the role of interactions between stakeholders for value creation has not been widely discussed in the digital entrepreneurship and innovation literature (Grönroos and Voima, 2013). Extant studies are mainly focused on how firms create value on their own, such as those examining factors that facilitate value creation (e.g. Lan et al., 2017; Zwass, 2010). With a focus on the firm's side when discussing value creation, existing studies are still limited in two major ways.

First, *how* value is created as a result of stakeholder interactions remains unclear and specific practices to create value remain underspecified (Lepak et al., 2007; Tantalo and Priem, 2016). Sorensen and Drennan (2017) argue that extant research has neglected to examine value-creating practices in social media-based communities, indicating the limited empirical studies on value-creating practices. Moreover, the changing character of value resulting from the growth of the digital economy (Kumar and Reinartz, 2016) highlights the fact that value is no longer static and that there is a possibility of multi-dimensional value-creating practices in the context of digital innovation (Sánchez-Fernández and Iniesta-Bonillo, 2007). Thus, empirical assessments are needed with regard to examining value-creating practices for value creation as a result of the interactions between stakeholders.

Second, existing literature in the innovation management and Information Systems (IS) literature also lacks empirical studies of assessing value categories. Value categories, predominantly examined in the marketing/consumer behaviour literature, are related to the different value that customers have of a certain product and/or service. Despite research on value categories particularly in the marketing/consumer behaviour literature, our understanding

is still limited in terms of how to integrate the diverse value categories. As Velamuri et al. (2011: 27) note, a "systematic integration of the diverse value-creating concepts" and a "systematic empirical assessment" of how value categories can lead to value creation, is certainly needed.

To fill the research gaps, this paper aims to explore how value is created through new value-creating practices and the merging of value categories as a result of the interactions of stakeholders in digital innovation ecosystems. We do so by applying the methodological approach of Social Media Analytics (SMA) which is an interdisciplinary approach that seeks to combine, extend and adapt methods for analysing social media data (Stieglitz et al., 2014, 2018). By utilising the associated Social Media Analytics framework for the purpose of social media tracking, data preparation and data analysis, we analyse how users of social media associate value to Storytel. It has emerged in the Swedish capital, Stockholm, which is internationally renowned for its vibrant start-up scene (Davidson, 2015). Storytel is a new entrant in the Swedish publishing industry, offering digital innovation in the form of a digital subscription service providing unlimited access to streamed audiobooks. Storytel enjoys a considerable growth rate by continuously interacting with a wide range of stakeholders taking part in its ecosystem. Storytel's digital innovation ecosystem highlights the interactions between Storytel and its stakeholders, those in the consumer domain and others in the professional domain, in creating value from its digital innovation. Drawing from collected empirical material of 2,633 user-generated contents, our findings reveal the multi-dimensional practices arising from the interactions of stakeholders drawn both from the consumer and professional domains of Storytel's digital innovation ecosystems. The continuous interactions of the consumer and professional stakeholders in social media then give rise to the hybridisation of value as multiple forms of value categories merge within Storytel's digital innovation ecosystems.

Our study provides two main contributions to extant literature on the management of innovation and IS. First, the study sheds light on how value is created by examining value-creating practices as a result of the interactions between stakeholders. Second, we contribute by examining the resulting merging of value categories within digital innovation ecosystems and thus exploring the hybridisation of value.

The remainder of this paper is structured as follows. We first provide a review of digital entrepreneurship and digital innovation with a specific focus on value creation and the different value categories presented in extant literature. Following this, we elaborate on our method of SMA, including the procedures for data collection and analysis. We then present our results in the context of consumer and professional domains of stakeholders and the interactions between them. We then outline our discussion of findings with our contributions and implications, and finally conclude with limitations and directions for future research.

Theoretical background

Digital entrepreneurship and digital innovation

Research in the field of entrepreneurship has increasingly acknowledged the importance of digital entrepreneurship in the field of IS (Del Giudice and Straub, 2011). Digital entrepreneurship facilitates the exchange, transfer and acquisition of knowledge through the use of technology to initiate new ways of doing business. Information technology (IT) systems through web-based platforms facilitate peer-to-peer activities which then enable digital entrepreneurs to offer new and unique combinations of resources (Amit and Zott, 2001). The increasingly connected IT systems thus provide mechanisms for the evolution of digital infrastructure, especially in terms of adoption, innovation and scaling (Henfridsson and Bygstad, 2013), as well as the use of social media (Jarvenpaa and Tuunainen, 2013). The promises of powerful digital technology and IT infrastructure systems further enable digital

entrepreneurs to rapidly scale their innovation through data-driven operation, instant release, and swift transformation (Huang et al., 2017). Such speed, flexibility and scale of innovation from digital entrepreneurship activities essentially create market opportunities, innovation and value creation for the business and society (e.g., Antonopoulou et al., 2016).

The digital economy has also facilitated the growth and popularity of new digital innovation such as crowdsourcing, collaborative sharing economy, on-demand online services and virtual markets (e.g., Amit and Zott, 2001; Bauer and Gegenhuber, 2015). Such changes in the business model and value proposition create disruption (Christensen, 2006; Christensen et al., 2015) and present challenges for both start-ups and incumbent organisations (Ansari et al., 2015). Many start-ups, as new entrants, protect their knowledge using intellectual property (IP) and patents through a number of open innovation relationships (Zobel et al., 2016). Similarly, incumbent firms continuously innovate to discourage competitive entry by new entrants and to maintain their market position (Aghion et al., 2009). One of the ways in which they do this is through co-creating with customers as stakeholders to better engage them in the consumption and delivery of product or service offerings (Grönroos and Voima, 2013; Payne et al., 2008; Vargo et al., 2008). In this context, stakeholders collaborate, consume and demand services whilst also creating user-generated contents in social media, which essentially presents both opportunities and challenges for organisations (Dong and Wu, 2015). However, value from digital innovation that is created with and among stakeholders still represents an under-explored issue, requiring more studies in the digital arena (Kumar and Reinartz, 2016; Sánchez-Fernández and Iniesta-Bonillo, 2007; Velamuri et al., 2011).

Value creation and digital innovation

Value creation in the digital economy is particularly challenging given the fact that rivals may easily replicate or substitute firms' resources or offerings (Amit and Zott, 2001).

Driven by the Internet and the advancement of technology, many organisations have shifted their mindset from simply being the providers of products and services to becoming the facilitators of open innovation and collaboration for new ideas as well as innovation in the digital economy (Chesbrough, 2003; Fleming and Waguespack, 2007; Rayna and Striukova, 2015). Within the marketing literature, several studies have outlined that customers as stakeholders have increasingly become co-creators of value (Vargo and Lusch, 2004) instead of simply being passive end recipients of service provision (Prahalad and Ramaswamy, 2004). They are also increasingly using social media to discuss ideas about products, services or processes (Aral et al., 2013; Di Gangi et al., 2010), generating a wealth of user-generated contents in the process (Benthaus et al., 2016; Dong and Wu, 2015). This implies that value from digital innovation is increasingly created through social media interactions between stakeholders within the ecosystems. This view of value creation suggests the dynamic interactions between firm and stakeholders (Tantalo and Priem, 2016; Wieland et al., 2016) rather than value simply being created by the firm.

Appendix 1 highlights existing studies on value creation drawn from the innovation and information management as well as marketing literature. Extant studies on value creation are largely focused on the *what* aspect of value creation from the firm's perspective such as examining factors that facilitate value creation (e.g., Lan et al., 2017; Sorensen and Drennan, 2017; Zwass, 2010), outlining the different business models for value creation (e.g., Coombes and Nicholson, 2013; Grönroos and Voima, 2013, Payne et al., 2008; Stockburger-Sauer et al., 2016), and identifying the social and environmental dimension of value creation (e.g., Alberti and Varon Garrido, 2017; Lichtenthaler 2017; Zahra and Wright, 2016).

For instance, in consideration of the factors that facilitate value creation, the study by Lan et al. (2017) indicates the various factors such as self-efficacy, cognition of duty, anticipation of rewards and time, that facilitate value creation in the sharing economy. As

another example, in terms of studies that examine the business models for value creation, the study by Ketonen-Oksi et al. (2016) is focused on service-dominant business model as the basis of value creation. Studies examining the social and environmental dimension of value creation highlight the integration between economic (commercial), social (not for profit) and environmental value. Similarly, Alberti and Varon Garrido (2017) highlight the importance of combining social, economic and environmental value perspectives. Others are more focused on social enterprises and social value where firms are driven to solve social problems (Kroeger and Weber, 2014; Ridley-Duff, 2008; Short et al., 2009; Zahra and Wright, 2016).

The fourth identified research theme deals with the categories of value (see Appendix 1). Within this theme, studies are focused on the assessment of value categories that are created when stakeholders jointly create value with the firm and when they interact with other stakeholders in the ecosystems. However, existing studies examining value categories are not as extensive in the innovation management and IS literature in comparison to those found in the marketing literature. Even within the marketing field, studies that are focused on understanding value categories for value creation ignore "the broader and systemic nature of co-creation processes" (Wieland et al., 2016: 210) in that value is somewhat assumed to flow from the firms to the customers, rather than jointly created by the actors participating in the process of value creation. The perspective of value creation thus needs to move away from sequential and linear flow to a "more complex and dynamic exchange systems of actors (i.e. service ecosystems)" (Wieland et al., 2016: 211) where the interactions between stakeholders within the ecosystem need to be considered. In addition, the majority of the studies in the innovation management and IS literature are also either conceptual or literature reviews, consequently presenting theoretical as well as empirical and practical gaps. The following section is devoted to value categories and how they potentially merge due to the interactions of stakeholders within digital innovation ecosystems.

Value categories in value creation

By addressing a combination of different value categories, a firm can provide a unique product/service for its customers. Several studies within marketing literature have highlighted the concept of value categories. Sheth et al. (1991a, 1991b) indicated that value can be categorised as functional, social, emotional, epistemic, and conditional. Functional value is related to the perceived utility from the offering's functional or physical attributes such as the reliability, durability, and price. Social value is related to the association of the offering with one or more specific social groups in terms of demographic or socioeconomic clusters. The emotional value is related to the perceived utility of the offering that can arouse affective states or feelings. Epistemic value is related to the offering's capacity to arouse curiosity, create novelty, or even to increase knowledge. Finally, conditional value is related to a specific situation, for example Christmas cards being purchased during the Christmas festive season.

Similarly, Holbrook (1996) discussed a typology of consumer value as being based on three dichotomies: (i) extrinsic versus intrinsic, (ii) self-oriented versus other-oriented, and (iii) active versus reactive. Extrinsic value is related to a means-end relationship where consumption is about accomplishing a certain aim or purpose whereas intrinsic value is related to the consumption experience as an end in itself. Self-oriented value is related to consumption for one's own self, versus other-oriented value whereby consumption is for the sake of someone else. Finally, active value involves the physical offering or manipulation of the tangible or intangible offering such as driving a car or solving a puzzle, while reactive value stems from appreciating or responding to the consumption experience, such as examining an abstract painting.

Sweeny and Soutar (2001) indicated that value can be viewed in terms of being functional, social, and emotional. Functional value is essentially about the quality or performance of the product and/or service delivery, or how well the product or service fulfils

the needs and desires of customers. In addition, functional value is about the utility derived from that product and/or service offering, in other words, whether it is value for money. Social value is related to the utility derived from the 'ability' of the product and/or service to enhance one's self-concept. Emotional value is related to how the product or service offering makes the customers feel. The perception of functional, social, and emotional value essentially reflects the qualitative aspects of the product and/or service offerings in the eyes of consumers (Oden and Daly, 1996).

Mathwick et al. (2001) further indicated the importance of experiential value that is based on intrinsic value such as aesthetics and playfulness as well as extrinsic value such as service excellence and customer return on investment. Similarly, Lee and Overby (2004) indicated value as being based on utilitarian value (including price savings and time savings) as well as experiential value that includes entertainment, visual experience, and interaction.

We argue that value creation from digital innovation can be explained in terms of new ways to distinguish different value categories. Our theoretical framework, mirroring extant literature, is presented in Figure 1. Stakeholders create value with the firm and they also continuously interact with other stakeholders within the digital innovation ecosystem. These interactions potentially lead to new value-creating practices. Value categories are then likely to merge as a result of the new value-creating practices. This relationship between stakeholder interaction, value-creating practices and value categories (as the key components of value creation) is largely unexplored, particularly in the context of digital innovation. For example, what type of practice is related to the emotional value? Similarly, what is the practice that could exhibit functional value? We argue that the value-creating practices associated with each value category are likely to be multi-dimensional. Through these multi-dimensional value-creating practices (or multi-dimensional practices herein) arising from the interactions of stakeholders within the digital innovation ecosystem, the various value categories will then become closely

intertwined. This provides theoretical arguments for the hybridisation of value (Bonaccorsi and Giannangeli, 2006; Deodhar et al., 2012; Velamuri et al., 2011) where value categories merge within the digital innovation ecosystem.

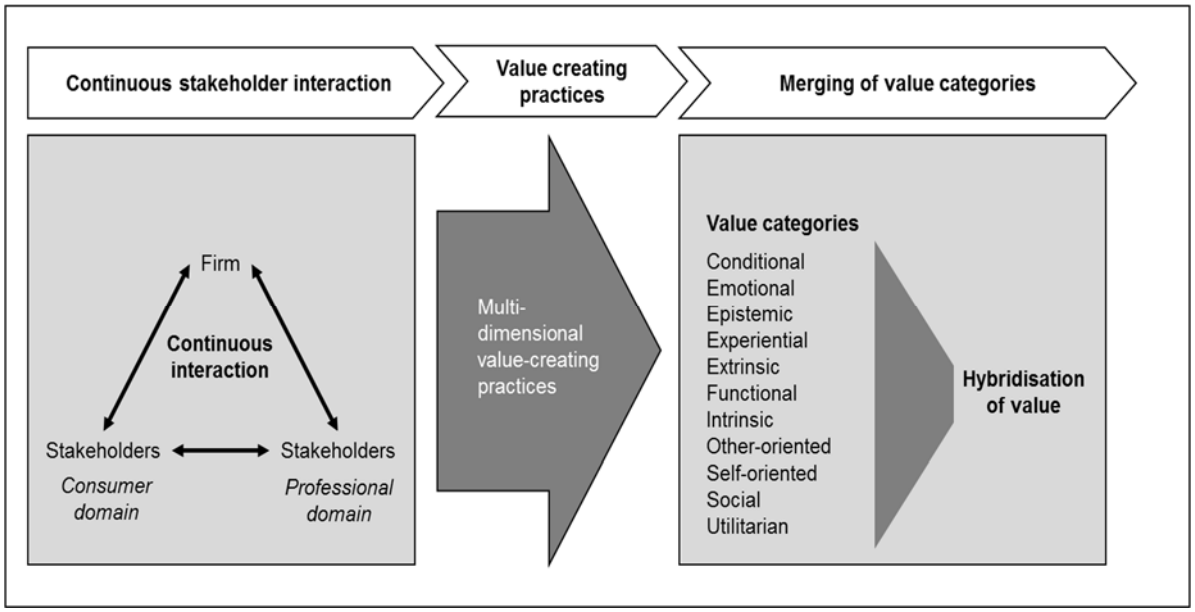

Figure 1. Framework of value creation and the multi-dimensionality of value-creating practices in digital innovation ecosystem

Method

To explore multi-dimensional practices and how different value categories are merged through the interactions of stakeholders in digital innovation ecosystems, user-generated contents drawn from social media platforms were used as the empirical scope. Data collection in social media has become increasingly popular and methods associated with analysing social media have also evolved considerably in recent years in close alignment to the continuous 'restructuring' of the social media landscape (Kozinets, 1998; Stieglitz et al., 2014).

One of these methods is *Social Media Analytics* (SMA). SMA is an interdisciplinary approach that seeks to combine, extend and adapt methods for analysis of social media data (Stieglitz et al., 2014, 2018). When applying SMA, the Social Media Analytics framework is

utilised, consisting of three steps: (1) social media tracking, (2) data preparation, and (3) data analysis. Due to the inter-disciplinary orientation of SMA, it has been argued to "provide other disciplines – including IS – with methodological foundations for their social media-related research" (Stieglitz et al., 2014: 95). The inter-disciplinary character of SMA has enabled its traction within fields such as IS (Akter et al., 2016; Brant et al., 2017; Chang et al., 2017; Gandomi and Haider, 2015) and innovation management (Laurell & Sandström, 2016, 2017, 2018; Moe and Schweidel, 2017). In addition, it allows scholars from different disciplines to draw from the approach and adapt it to specific purposes in terms of how social media tracking, data preparation and data analysis are designed. In fact, the SMA approach has also been utilised in recent literature to assess digital innovation (Laurell & Sandström 2016, 2017, 2018). Taken together, SMA is therefore relevant in this study for analysing how different stakeholders within the digital ecosystems associate different value categories vis-à-vis digital innovation.

In order to utilise SMA for the purpose of exploring value creation and the multi-dimensional practices, a suitable empirical case needed to be identified. This was carried out with the help of two guiding criteria. First, the case needed to be centred on digital innovation as its product/service provision, representing what Flyvbjerg (2006) refers to as a critical case, i.e., cases "having strategic importance in relation to the general problem" (Flyvbjerg, 2006: 229; Welch et al., 2011). Second, the case also needed to attract engagement from social media users in terms of ensuring Kozinets' (2010) six evaluation criteria for a specific research object suitability in terms of relevancy, activity, interactivity, substantiality, heterogeneity, and data-richness.

One example of such an empirical setting can be found in Sweden and the Swedish capital, Stockholm. During the last two decades, Sweden's substantial investments in IT have generated high levels of internet penetration and sophisticated use of digital technology among

its 10 million inhabitants (e.g. Davidsson and Findahl, 2016). This is arguably one reason why Sweden (and its capital Stockholm) has become one of Europe's most vibrant start-up hubs with several digital innovation successes such as Spotify, Klarna and iZettle (Davidson, 2015). These successes partly explain why Sweden's start-up scene currently exhibits many international initiatives. Stockholm is also regarded as second only to Silicon Valley in terms of hosting billion-dollar start-ups (Temperton, 2017). The empirical setting of Sweden is therefore relevant due to the active interactions between start-ups and stakeholders, as well as the numerous digital innovation activities.

One case drawn from this particular empirical setting of Stockholm, Sweden, was selected for the study at hand. Storytel, a digital subscription service offering streaming audiobooks, was founded in 2005. Since its inception, Storytel has exhibited a considerable growth rate, and in 2015, the company reached an annual turnover of €22 million. The subscription model is similar to other subscription services such as Spotify, with users being allowed unlimited access to all available books for a monthly subscription fee. Storytel also has agreements with almost all publishers in Sweden, and consequently, it can offer its customers almost every published book title as an audio book as soon as it is available. In addition, Storytel publishes its own books under the name Storyside, and is currently in the process of internationalising their business. Therefore, the case in question arguably represents a critical case (Flyvbjerg, 2006) vis-à-vis the research question at hand, due to the fact that it is characterised by its digital innovation offering, an international ambition that potentially expands the firm's ecosystems, and a wide range of stakeholders from both the consumer and professional domains. As such, Storytel is unique in comparison to other digital innovation service providers in terms of the scale, scope and speed of growth as well as the continuous interactions of stakeholders within its ecosystems. Such an empirical setting thus provides data richness (Flyvbjerg, 2006).

After the case of Storytel had been drawn, the SMA framework presented by Stieglitz et al. (2014) and its associated steps related to social media tracking, data preparation and data analysis were thereafter utilised for the study at hand. In the following sub-sections, details on how each step was carried out is reported.

Social media tracking

The tracking stage was carried out in two subsequent steps. In the first step, the method for data collection, i.e. the tracking approach and the tracking method, was designed. In terms of the tracking approach, a SMA researcher has three main alternatives of approaches depending on the defined goal of the research: using either the keyword-, actor- or URL-related approach (Stieglitz et al., 2014, 2018). The actor-related approach was chosen for this study for two main reasons. First, this study is concerned with the ways in which multi-dimensional practices and how different value categories are merged through the interactions of stakeholders in the digital innovation ecosystems. Second, in our particular case we focused our empirical setting within the specific context of Storytel.

In terms of the associated tracking method, the lack of standardised ways to gain access to user-generated contents across platforms in the social media landscape represents one of the main challenges that SMA researchers face in terms of data collection. The researcher can utilise either APIs (Application Programming Interfaces) or RSS / HTML parsing as means for collecting data (Stieglitz et al., 2014). For the present study, APIs were chosen as the means of data collection with the help of a service called Notified. As with similar services available for researchers and practitioners, the user first enters one or a set of keywords. After the keyword or a set of keywords has been entered, the service captures user-generated contents published on a diverse set of social media platforms in real-time, from Twitter, Instagram, Facebook,

blogs, forums and YouTube. The captured data in terms of both structured (e.g. account details) and unstructured data (e.g. content of social media posts) is thereafter stored in a database.

In the second step, data collection commenced. This was carried out by entering the keyword "Storytel" into the service interface of Notified on the 1st September 2016. Data was thereafter collected up until the 30th November 2016. This generated an original dataset amounting to 2,885 social media posts, covering a time period of three months. The gathered data only contains user-generated contents written in Swedish or user-generated contents written in English posted by Swedish users. The rationale for doing so is twofold. First, filtering the data collection process to a specific language and user origin allows for a more focused approach. This is important as certain keywords tend to have several connotations in different languages, and these words can be either infrequent or common in the everyday vocabulary of different languages. User-generated contents including the particular keyword of Storytel was assumed to have a relatively high degree of relevance in relation to the context of the study. Second, with Sweden being frequently considered as one of the countries that frequently tops the global rankings of digital technology usage and high-speed Internet access, data collection from the Swedish social media posts is relevant as the country's social media landscape is particularly vibrant, heterogeneous, and rich with lots of activities and interactivities (e.g. Findahl and Davidsson, 2015). As such, data collection in this context meets Kozinets' (2010) evaluation criteria.

Data preparation

Following data collection, the data was pre-processed prior to data analysis. In line with the Social Media Analytics framework, this is carried out by manually removing spam as well as reviewing whether collected data relates to the phenomenon which the researcher intends to

study (Stieglitz et al., 2014). After reviewing the dataset, 252 user-generated contents in the dataset that related to other phenomena than the ones sought after, were identified. These contents were then excluded from the dataset, resulting in the remaining amount of 2,633 user-generated contents distributed across different social media platforms. Table 1 presents the distribution of user-generated contents across a number of social media platforms.

Table 1. User-generated contents posted across social media platforms

Social media	**N**	**%**
Blog	445	16.9%
Facebook	375	14.2%
Forum	95	3.6%
Instagram	882	33.5%
Twitter	836	31.8%
Total	**2633**	**100%**

Data analysis

Following the data preparation step, the researcher is then to decide on the analysis approach and associated data analysis methods. In terms of the analysis approach, the Social Media Analytics framework (Stieglitz et al., 2014) provides a relatively broad range of alternatives in terms of whether structural attributes, sentiments, or topic- and trend-related patterns should be assessed. In terms of the data analysis methods, a relatively broad array of alternatives is also available. A regression analysis, social network analysis, sentiment analysis, content analysis, or trend analysis can be selected, depending on the research question guiding the researcher, and also in relation to considering whether static data analysis (e.g. the co-occurrence of specific keywords) or dynamic data analysis (e.g. how issues are evolving over time) is suitable vis-à-vis the research question. As the present study was designed for the purpose of exploring multi-dimensional practices and how different value categories merge, content analysis (Silverman, 2006) was chosen as the data analysis method. More specifically, content analysis was applied in three associated steps in terms of: 1) identifying and categorising stakeholders within the context of Storytel's digital innovation ecosystem, 2)

identifying practices in which the identified stakeholders took part, and 3) assessing the ways in which different value categories identified in extant literature became integrated within the identified practices.

In the first step, stakeholders were identified and categorised based on whether they exhibited consumer or professional traits, i.e. belonging to the consumer or professional domain of Storytel's digital innovation ecosystems. This was carried out by primarily reviewing the structured data of the collected dataset, i.e. the account details of each and every user present in the dataset. Whether individual users belonged to the consumer or professional domain emerged quite distinctively throughout the review. More specifically, professional stakeholders tended to use official accounts, i.e. accounts explicitly associated to publishing houses, writers as well as Storytel itself. With regards to stakeholders in the consumer domain, unstructured data in terms of the social media posts these consumer users published, tended to provide strong indications of the category they belonged to. This is evident when, for example, consumers detailed how they appreciated a particular audiobook which they currently listened to. However, in cases when the distinction was hard to make, each such case was reviewed in further detail by studying, for example the Twitter bios of individual users.

Following the identification and categorisation of users into the consumer or professional domain of Storytel's digital innovation ecosystems, the second step was about reviewing the total materials a second time to identify practices in which consumer and professional stakeholders took part. This was carried out by analysing each user-generated content to inductively identify practices, i.e. "recognisable […] repeated sequences of activity" (Warde, 2014: 292), manifesting in the material. This analysis initially resulted in 13 identified practices which emerged quite distinctly based on how stakeholders in social media took part in repeated sequences of activity. An additional iteration of coding was then done, focusing attention on how the practices manifested among consumer and professional stakeholders

respectively. Following this review showing the different practices that were enacted differently in the consumer and professional domain, a final total of 16 practices were drawn and coded across the material. Thereafter, content analysis was carried out by reviewing the frequency and share of the identified practices within the ecosystems. In so doing, the relative proportions of practices across the consumer and professional domains were assessed.

Following the identification of practices in which consumer and professional stakeholders took part, the third and final step involved reviewing the identified practices with regards to how value categories became integrated within these practices in the digital innovation ecosystems. More specifically, this analysis was guided by the different value categories identified in extant literature in terms of: 1) Functional, social, emotional, epistemic, and conditional value (Sheth et al., 1991a, 1991b); 2) Extrinsic versus intrinsic value and self-oriented versus other-oriented value (Holbrook, 1996); 3) Functional, social, and emotional value (Sweeny and Soutar, 2001); and 4) Experiential value and utilitarian value (Mathwick et al., 2001; Lee and Overby, 2004). Based on the associated value categories, each identified practice was then reviewed individually with the aim of assessing which value categories could be identified within each practice. This was carried out by reviewing the total amount of user-generated content associated to each practice and by practice-by-practice mapping to carefully assess as to whether specific value categories were identified within each of the practices.

Findings

Table 2 presents the multi-dimensional value-creating practices and illustrative data examples identified across the consumer and professional domains. Table 3 presents the distribution of frequency and share of each practice and how these practices are interrelated to extant value categories for each respective stakeholder domain.

Table 2. Stakeholder domains, multi-dimensional value-creating practices and illustrative data examples

Domain	Multi-dimensional value-creating practices	Description	Data example
Consumer domain	Reading experience	User-generated content focusing on the reading experience in close relation to actual reading.	"Fell for the cover and the title #coffeewithmusic # kabusabooks #storytel so now some evening reading"
	Story experience	User-generated content focusing on the story experience.	"I really cannot stop listening to this book. It is so damn good!!! #ThRabbitHunter #Kepler #Larskepler"
	Contextualising the reading experience	User-generated content focusing on contextualising the reading experience.	"Perfect weather for running today. It was +3 degrees and almost no wind. With Storytel in my ears, the kilometres swished past"
	Book suggestions	User-generated content requesting book suggestions.	"Now I need your help [...] Need tips on feelgood books or epic novels. Is tired of detective stories and want to rest a little from them for a while. Please, help me out #storytel #feelgood"
	Book recommendations	User-generated content offering book recommendations.	"Today's reading tips. A strong story about a very tough upbringing. Maybe a Christmas gift #storytel #readingtips #relaxation #neverstopwalking"
	Community	User-generated content focusing on communal aspects of book consumption.	"Till next time #Bokbubblarna will met up, we will read a Christmas book. I have chosen to listen to #ItMustHaveBeenTheMistletoe by #JudyAstley [...] #Storytel"
Professional domain	Company	User-generated content focusing on Storytel.	"Storytel, the largest audio book publisher in Sweden, bought the venerable Norstedts, founded in 1823. The buyer is much younger, was founded in 2005."
	Application usage experience	User-generated content focusing on the technical user experience associated with using Storytel.	"@storytel I listened to half of "Drive" by Daniel H. Pink. Now it says that the book is no longer avaiable on Storytel? Please explain."
	Application	User-generated content focusing on the value or relative value of the application vis-a-vis competitors.	"I'll test Storytel, and really hope I'll get hooked"
	Application usage experience	User-generated content focusing on the technical user experience associated with using Storytel.	"Very odd. The book is still there. Launch the app, if problems persist - write to support@storytel.com"
	Company	User-generated content focusing on Storytel.	"Storytel continues working with their publishing division"
	Community	User-generated content focusing on communal aspects of book production.	"Have you checked with Storytel? They surely publish it if you record it on a audio file for them."
	Book recommendations	User-generated content offering book recommendations.	"For those of you who have @storytel, #ASongFromTheSea is now available as an e-book"
	Book suggestions	User-generated content requesting book suggestions.	"All tips and wishes are welcome to support@storytel.com. Nice Monday!"
	Competitions	User-generated content focusing on competitions associated to the usage of Storytel.	"Now you can win a pair of classic Nike Cortez and the founder of Nike Phil Knights' autobiography 'Shoe Dog'. Visit the Storytel blog to find out more!"
	Contextualising the reading experience	User-generated content focusing on contextualising the reading experience.	"Why not listen to Christmassy stories when baking and doing another Christmas preparations? In the app, you will find lots of Christmassy books and moreover, we will start two Christmas calendars tomorrow."

Table 3. Stakeholder domains, value categories, and multi-dimensional value-creating practices

Domain	Value category (Sheth et al., 1991a, 1991b)	Value category (Holbrook, 1996)		Value category (Mathwick et al., 2001; Lee and Overby, 2004)	Value category (Sweeny and Soutar, 2001)	Multi-dimensional value-creating practices	Frequency	Share
		Extrinsic vs. Intrinsic	Self-oriented vs. Other-oriented					
Consumer domain	Emotional value	Extrinsic value	Self-oriented value	Experiential value	Emotional value	Reading experience	130	4.9%
						Story experience	431	16.4%
	Conditional value					Contextualising the reading experience	420	16.0%
	Epistemic value				Social value	Book suggestions	43	1.6%
			Other-oriented value			Book recommendations	247	9.4%
	Social value					Community	95	3.6%
	Functional value		Self-oriented value		Functional value	Company	252	9.6%
						Application usage experience	104	3.9%
Professional domain		Intrinsic value	Self-oriented and Other-oriented value	Utilitarian value		Application	112	4.3%
		Extrinsic value	Self-oriented value	Experiential value		Application usage experience	31	1.2%
						Company	239	9.1%
	Social value		Other-oriented value		Social value	Community	175	6.6%
	Epistemic value					Book recommendations	303	11.5%
						Book suggestions	6	0.2%
						Competitions	23	0.9%
	Conditional value				Emotional value	Contextualising the reading experience	22	0.8%
Total							**2,633**	**100.0%**

The consumer domain

The consumer domain was identified to include nine multi-dimensional practices based on which value is created by consumer stakeholders. In total, 1,830 user-generated contents were coded in the consumer domain which together amounts to 69.5 percent of the total material. Three practices are primarily related to consumer experiences: the story experience, the contextualisation of reading experience, and the reading experience. These altogether represent 53.6 percent of the total user-generated contents within the consumer domain. Even though all the three practices are associated with actual experiences, they differ in their contexts. The first practice of 'story experience' is related to how stories are associated to books, regardless of whether those books are currently 'consumed' or recently 'consumed'. The second practice focuses on the context of the experience, while the third practice is related to the current ongoing reading experience. Three examples from these respective multi-dimensional practices were published on the 13th September 2016, 21st November 2016, and 14th November 2016:

> *"This is one of the best books I've read in a long time. A history lesson like no other, even if only a single year. But what year it was - in 1971."*
>
> *"How to survive two days on Ullared a month before Christmas? Well, by @storytel_se. If you have an exciting detective story in the ears, the focus is on the eyes while looking for bargains. All sounds and rattling is gone and the brain stays calm. So there. Now I have offered my best survival tip."*
>
> *"Here I am lying and listen to @thereselindgren book "Sometimes I do not feel so good" on #Storytel."*

In addition to these practices, the three other practices of 'book suggestions', 'book recommendations' and 'community' represent 21.0 percent of the total material within the consumer domain. Rather than depicting the contextual experience, these three value-creating

practices are all more explicitly social in their orientation. While the practices of 'book suggestions' and 'book recommendations' tend to reach out to other users of social media, the value-creating practice of 'community' is instead focused on ways in which users collectively take part in book consumption. Examples from these three value-creating practices were published on the 29th November 2016, 28th September 2016 and 8th September 2016 respectively:

> *"If you like handball you will love this! I love handball, and I love king @ljubomirvranjes and I love this book! #booktips #storytel #handball."*
>
> *"I need #booktips, gladly any #reality-based #book or something real exciting. Not detective stories. #storytel."*
>
> *"Book clubs are good in so many ways. You get a motivation boost by reading towards a "deadline"[…] Discussing books are also a great way to get more out of reading and thereby be inspired to learn more. In addition, book clubs combine two essential activities: reading and have coffee with your friends."*

Table 3 also exhibits how the identified multi-dimensional practices are associated with different value categories. As shown in Table 3, these value-creating practices integrate several value categories together. For example, in the practice of 'contextualising the reading experience' found in the consumer domain, the presented data example in Table 2 states *"Perfect weather for running today. It was +3 degrees and almost no wind. With Storytel in my ears, the kilometres swished past"*. As illustrated in Table 3, this practice does not solely relate to one particular value category but also includes several value categories such as emotional value, experiential value, self-oriented value, extrinsic value and conditional value. This highlights the fact that these multi-dimensional practices that arise from the interactions between stakeholders in social media give rise to the hybridisation of value where multiple forms of value categories merge.

The professional domain

The professional domain was identified to include eight distinct multi-dimensional practices based on the value created by professional stakeholders. In total, 803 user-generated contents were identified that together amounts to 30.5 percent of the total material. Similar to the consumer domain, the four multi-dimensional practices of 'community', 'book recommendations', 'book suggestions' and 'contextualising the reading experience' are also evident in the professional domain which together represent 63.0 percent of the total material of user-generated contents within the professional domain. The practice of 'community' is devoted to discussions between professional actors such as writers, publishers and Storytel, and one example of this was published on the 20th September 2016:

> *"We are at Norstedts on Riddarholmen this morning and are eating breakfast while listening to the author Anna Jansson; creator of Maria Wern, Emil Wern and goddesses of destiny. @norstedts_forlag #storytel #audiobook #authormeetup #breakfast #annajansson #mariawern #norstedts."*

In terms of 'book recommendations', this practice is more explicitly related to the marketing and promotion of new book releases. This is the situation where several actors, such as Storytel, the publishing firms and the writers, partake in recommending different books. An example of book recommendation was published on the 27th September 2016:

> *"Now it has been released, Leffe and Caroline Grimwalkers book "In love and war". On Storytel from today. *Start listening immediately*."*

The third practice, 'book suggestions', is more related to market research for potential books or book categories that might be in demand among Storytel's users. Storytel is the actor that most prominently appears within the book suggestions practice. An example of how book suggestions manifest was published on the 12th November 2016:

"So fun that so many of you appreciate our book recommendations! Now we wonder, of course, if you miss reading tips on perhaps a specific genre? Maybe you want to recommend a writer who resembles your favourite author? We want to know more! Feel free to comment. #booktips #whatdoyouwannalistento #storytel #audiobooks #books."

Similar to how the contextualisation of reading experiences manifests in the consumer domain, this practice is also evident in the professional domain. Among the material coded within this practice, user-generated contents are both more explicitly and implicitly commercially-oriented as compared to those found in the consumer domain. Two examples were published on the 11th October 2016 and 11th November 2016:

"Imagine a sunny autumn day, with a cozy book playing in your headphones, a fresh wind kissing your nose while you sip a good coffee. Does not that sound great? # whystorytel #audiobook #storytel."

"Sunday is Father's Day! Why not give dad breakfast in bed and a Storytel gift certificate? With thousands of stories available direct on your mobile phone, neither traffic jams nor snow shovelling will be boring. Have a nice weekend!."

Within the professional domain, the 'competition' practice is also present that essentially is about encouraging consumers to take part in promotional or marketing activities to not only entice them, but to also retain them with Storytel. For this 'competition' practice, Storytel and other professional actors such as the publishers were identified in the material. Two examples were published on the 29th November 2016 and 3rd November 2016:

"Now you can win a pair of classic Nike Cortez and Phil Knights, the founder of Nike, autobiography "drive". Visit the Storytel blog to find out more!"

"How do you find tomorrow's best sellers? The publishing house North Chapter is testing new ways through a campaign where the public can nominate their favourite

writer from northern Sweden. The publisher will thereafter do their best to persuade the most popular person to write and publish a book."

When taken together, the professional domain also exhibits multi-dimensional value-creating practices, and these identified practices in the professional domain further integrate several value categories as illustrated in Table 3. For instance, in the practice of 'contextualising the reading experience' found in the professional domain, the presented data example in Table 2 states, *"Why not listen to Christmassy stories when baking and doing another Christmas preparations? In the app, you will find lots of Christmassy books and moreover, we will start two Christmas calendars tomorrow"*. As illustrated in Table 3, this example once again does not solely relate to one particular value category but is also related to several value categories. In contrast to the consumer domain, however, the professional domain includes other value categories that go beyond experiential value and emotional value but also other-oriented value and conditional value, suggesting once again the merging of value categories (see Table 3).

Consumer and professional domain interactions

In terms of how the consumer and professional domains interact, the three value-creating practices in terms of 'application', 'application usage experience' and 'company' span across both the consumer and professional domains. This suggests that these three multi-dimensional practices are particularly interactive in their character. In terms of the practice relating to the 'application' (see Table 3), the consumer domain highly dominates with 96.4 percent of the total entries. Within this practice, discussions about the application are centred around different performance measures such as price, the available range of books and its relative performance compared to other competitors. One example encompassing these application features was published on the 29th September 2016:

"I use Storytel which I think is OK range of books for an OK price. However, I think in general the Swedish writers are overrated, especially Swedish crime writer, so therefore, I am also using the American service Audible and have done so for some years."

In contrast to the 'application' practice, the 'application usage experience' is also evident in both the consumer domain and professional domain. While user-generated contents drawn from the consumer domain tend to be of a reviewing nature or seeking to understand how to operate the application, the user-generated contents drawn from the professional domain are focused on helping consumers use the application and also guiding them in terms of how new features can be utilised for a better user experience. Two related examples to illustrate this practice were published on the 8th November 2016 and 28th November 2016:

"@storytel really miss the chapter divisions in your audiobooks! Especially when the preface contains spoilers ... iTunes has this function, why do not you have it?"

"Good question and recommendation! Any tips / advices are welcome to support@storytel.com. Have a nice Monday!"

In terms of the 'company' practice, user-generated contents are focused on Storytel as the company and the news associated with it. In both the consumer and the professional domains, the most frequently recurring topic is related to the rapid expansion of Storytel as well as its performance on the stock market. Two examples of how company news is discussed in the consumer and professional domains, as well as two examples of how the company's stock performances are mentioned, were published on the 10th November 2016 and 1st November 2016 as well as on the 20th September and 6th September 2016 respectively:

"Nice that everything is going so well for Storytel! #audiobook #storytel #swedishstart-ups #companies #innovation."

"Storytel starts making audio books in Arabic, half a million Arabic-speaking people in Sweden is the potential target group."

"The best story in Storytel is the company itself."

"Storytel is looking at acquisitions and to invest."

When taken together, the multi-dimensional practices of 'application', 'application usage experience', and 'company' also encompass different value categories to include functional value, intrinsic value, self-oriented and other-related values as well as utilitarian value, suggesting the hybridisation of value where multiple forms of value categories merge (see Table 3).

Discussion

With regards to assessing value creation in digital innovation ecosystems, the presented findings illustrate how stakeholders, drawn from the consumer and professional domains, integrate different value categories through multi-dimensional value-creating practices, when interacting in social media.

The understanding of value creation has been centred on the firm, i.e. on factors that facilitate value creation primarily focusing on a firm's perspective. Our results highlight that value creation in digital environments is based on the interactions between stakeholders (Kumar and Reinartz, 2016). In our case, stakeholders are those from the consumer and professional domains (Grönroos and Voima, 2013; Wieland et al., 2016). Our findings show that the multi-dimensional practices that are explicitly social in their orientation in both the consumer and professional domains represent a large share of the total material in both categories. These indicate that Storytel's stakeholders arguably utilise the interactive features of social media to articulate their experiences while also matching their own preferences to

suitable experiences. In light of these results, this study offers two main theoretical contributions.

First, extant literature has provided a limited understanding of *how* value is created in digital environments and how specific value-creating practices are applied (Lepak et al., 2007; Tantalo and Priem, 2016). The multi-dimensional practices identified in the current study provide initial evidence for the suggestion raised by Sorensen and Drennan (2017) in that value-creating practices in digital innovation ecosystems are dynamic and based on stakeholder interactions. By empirically assessing value-creating practices in the setting of digital innovation ecosystems, we illustrate the dynamic multi-dimensionality of value-creating practices within Storytel's digital innovation ecosystems. In this way, we contribute to the advancement of theory and practice particularly in the field of innovation management and IS.

Second, we also illustrate how these multi-dimensional practices are associated with the different value categories, where our findings indicate the merging of value categories, or the hybridisation of value. Given the relatively broad array of value categories and the multi-dimensional practices found in the empirical material, it is clear that value creation in digital innovation ecosystems is underpinned by the hybridisation of value (Velamuri et al., 2011), as different users perceive and articulate different value categories and practices. The boundaries separating value categories found in extant literature are therefore becoming increasingly blurred. Through continuous interactions between stakeholders in social media, multi-dimensional practices can thus be understood as catalysts for the hybridisation of value where multiple forms of value categories merge within the ecosystems. Thereby, we contribute to expanding the relatively sparse literature on value categories in digital innovation ecosystems and demonstrate that a clear distinction between different value categories might no longer be feasible. Instead, we observe a shift towards the hybridisation of value in digital innovation ecosystems.

The presented results drawn from both the consumer and professional domains also indicate empirical evidence for the different value categories based on extant literature (Holbrook, 1996; Mathwick et al., 2001; Lee and Overby, 2004; Sheth et al., 1991a, 1991b; Sweeny and Soutar, 2001). Interestingly, the intrinsic, extrinsic, utilitarian and functionally related value are more evident in practices which are more interactive where both consumers and professionals find ways of understanding, enhancing and developing the associated functionally-oriented values of the digital innovation. With regards to the consumers' perception of the emotional, epistemic, extrinsic, experiential and socially oriented multi-dimensional practices of book suggestions, book recommendations and community, these practices are also found within the professional domain. For example, the articulation of consumers' associated experiences when consuming audiobooks often tends to be highly emotional, similar to that experienced by the professionals whereby writers often express their emotional feelings with each release of their audiobooks. As such, the interactions between the consumer and professional domains highlight an interplay between these stakeholders, facilitating further interactions for value creation in the digital innovation ecosystems.

These insights also provide practical implications for companies operating in a digital environment in terms of how to assess value creation in digital innovation ecosystems. First, our findings across the consumer and professional domains can help companies to assess their value creation beyond the present commercial value. The growth of businesses operating in the digital environment indicates the need to think of new ways to assess value creation in digital innovation ecosystems. The findings of the study provide knowledge for practitioners with a different way to look at value creation in terms of exploiting the different value categories of stakeholders. Second, the dynamic character of value-creating practices also prompts businesses to consciously assess how they can provide value in terms of their product and/or service offerings to their stakeholders. The multi-dimensional value-creating practices indeed

highlight the many different ways practices can potentially create value in the setting of digital innovation ecosystems.

Conclusion

In this paper, we have explored how value is created through multi-dimensional practices and the hybridisation of value as a result of the interactions of stakeholders in digital innovation ecosystems. Applying the methodological approach of Social Media Analytics (SMA), our findings reveal how stakeholders in social media, drawn from both the consumer and professional domains, associate a wide array of value categories to Storytel's digital innovation. Our findings suggest that the boundaries separating value categories found in extant literature are becoming increasingly blurred due to multi-dimensional value-creating practices. Through the interaction between stakeholders, multi-dimensional practices act as catalysts for the hybridisation of value where multiple forms of value categories merge and become diffused within the digital innovation ecosystems.

Notwithstanding these insights into value creation, we identify two main limitations of the study and future research directions. First, this study utilised user-generated contents in social media to assess value creation. Due to the fact that SMA is limited to capturing the ways in which value creation takes place in the specific setting of social media, this represents as natural limitation of the method in question. Second, as our empirical setting is limited to Storytel's digital innovation ecosystem in the context of Sweden, our results on multi-dimensional value-creating practices cannot be generalised to all digital innovation ecosystems. Although the case has been chosen in relation to Flyvberg's (2006) notion of a critical case, further applications of SMA in examining value creation in different industry settings or digital innovation ecosystems would add to the generalisation of the results. Future

research in examining value creation in different contexts and international comparisons in assessing the different ways in which value is created from digital innovation, could thus be conducted by drawing on multiple data sources. This will enable us to further understand the complexity of value creation within the digital innovation ecosystems.

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Appendix 1. Literature review on value creation

Authors	Title	Journal	Main insights
Research theme 1: Factors facilitating value creation			
Amit and Zott (2001)	Value creation in e-business	Strategic Management Journal	Value creation model in e-business based on 4 major value drivers: efficiencies, complementarities, lock-in and novelty
Dong and Wu (2015)	Business value of social media technologies: Evidence from online user innovation communities	Journal of Strategic Information Systems	How firms deal with user-generated ideas matters for value creation, instead of collecting the ideas
Laitinen (2004)	Nonfinancial factors as predictors of value creation: Finnish Evidence	Review of Accounting and Finance	Non-financial factors such as organisational characteristics and strategy as good predictors of value creation in technology firms
Lan et al. (2017)	Enabling value co-creation in the sharing economy	Sustainability	Factors influencing value co-creation in the sharing economy: self-efficacy, cognition of duty, anticipation of rewards, time
Ruël and van der Kaap (2012)	E-HRM usage and value creation: Does a facilitating context matter?	German Journal of Research in Human Resource Management	Impact of context factors
Sorensen and Drennan (2017)	Understanding value-creating practices in social media-based brand communities	The Service Industries Journal	Need to examine value-creating practices in social media-based communities
Zwass (2010)	Co-creation: Toward a taxonomy and an integrated research perspective	International Journal of Electronic Commerce	Taxonomic framework for co-creation Motivators in co-creation
Research theme 2: Business models for value creation			
Coombes and Nicholson (2013)	Business models and their relationship with marketing	Industrial Marketing Management	Co-creation of value between multiple stakeholders, business models communicate a story about value creation
Grönroos and Voima (2013)	Critical service logic: Making sense of value creation and co-creation	Journal of the Academy of Marketing Science	Conceptualisation of value creation spheres
Nenonen and Storbacka (2010)	Business model design: Conceptualising networked value co-creation	International Journal of Quality and Service Sciences	Effectiveness of business model in value co-creation defined by the internal configurational fit between all business model elements and the external configurational fit between provider's and customers' business models
Payne et al. (2008)	Managing the co-creation of value	Journal of the Academy of Marketing Science	Framework on how customers engage in the co-creation of value
Prahalad and Ramaswamy (2004)	Co-creation experiences: The next practice in value creation	Journal of Interactive Marketing	Firm-consumer interaction with co-creation experiences as the basis of value creation
Stockburger-Sauer et al. (2016)	Value co-creation at its peak: The asymmetric relationship between coproduction and loyalty	Journal of Service Management	Optimum level of coproduction at which value derived is the highest
Vargo et al. (2008)	On value and value co-creation: A service systems and service logic perspective	European Management Journal	Value is fundamentally derived and determined in use (integration and application) rather than in exchange (output and price)

Research theme 3: Exploring the social and environmental dimensions of value creation			
Alberti and Varon Garrido (2017)	Can profit and sustainability goals co-exist? New business models for hybrid firms	Journal of Business Strategy	New business model for hybrid social ventures, where social, environmental and economic value are integrated
Kenter et al. (2015)	What are shared and social values of ecosystems?	Ecological Ecosystems	Framework of shared/social values across five dimensions: value concept, provider, intention, scale, and elicitation process
Kroeger and Weber (2014)	Developing a conceptual framework for comparing social value creation	Academy of Management Review	Framework for comparing social value creation, assessment needs to be different from commercial value creation
Kuckertz and Wagner (2010)	The influence of sustainability orientation on entrepreneurial intentions: Investigating the role of business experience	Journal of Business Venturing	Impact of sustainability orientation on entrepreneurial intentions, but influence vanishes with business experience
Lichtenthaler (2017)	Shared value innovation: Linking competitiveness and societal goals in the context of digital transformation	International Journal of Innovation and Technology Management	Shared value innovation
Porter and Kramer (2011)	Creating shared value	Harvard Business Review	Blurring of the profit/non-profit boundary and the emergence of shared value
Ridley-Duff (2008)	Social enterprise as a socially rational business	International Journal of Entrepreneurial Behavior & Research	Typology of social enterprises based on social rationality: non-profit, more than profit, corporate social responsibility, multi-stakeholder cooperative
Short et al. (2009)	Research in social entrepreneurship: Past contributions and future opportunities	Strategic Entrepreneurship Journal	Conceptual articles outnumber empirical studies, empirical efforts often lack formal hypotheses and rigorous methods
Zahra and Wright (2016)	Understanding the social role of entrepreneurship	Journal of Management Studies	Need to rethink and redefine the social value added of entrepreneurial activities to society, five pillars for the evolving social role of entrepreneurship
Research theme 4: Value categories			
Holbrook (1996)	Customer value – A framework for analysis and research	Advances in Consumer Research	Typology of consumer value based on three dichotomies: (i) Extrinsic vs. intrinsic, (ii) self-oriented vs. other-oriented, (iii) active versus reaction
Kumar and Reinartz (2016)	Creating enduring customer value	Journal of Marketing	Synthesises existing findings in the customer value literature
Lee and Overby (2004)	Creating value for online shoppers: Implications for satisfaction and loyalty	Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior	Value can be utilitarian and experiential
Mathwick et al. (2001)	Experiential value: Conceptualisation, measurement and application in the catalog and internet shopping environment	Journal of Retailing	Experiential value based on intrinsic value such as aesthetics and playfulness as well as extrinsic value such as service excellence and customer return on investment.
Sánchez-Fernández and Iniesta-Bonillo (2007)	The concept of perceived value: A systematic review of the research	Marketing Theory	Systematic review of value categories
Sheth et al. (1991)	Why we buy what we buy: A theory of consumption values	Journal of Business Research	Value being categorised as functional, social, emotional, epistemic, and conditional
Sweeny and Soutar (2001)	Consumer-perceived value: The development of a multiple item scale	Journal of Retailing	Value perceived by customers can be functional, social and emotional