

The impact of varying context on value cocreation: Polar cases of Western markets and bottom of the pyramid (BoP) energy companies

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The joint creation of value by multiple actors in an ecosystem lies at the very centre of many extremely successful firms. Not surprisingly, the study of mechanisms and processes of value cocreation has attracted researchers and practitioner's alike. However, although being a cornerstone of value cocreation, the impact of context on the latter has not been studied in depth and existing studies show mixed results. Therefore, this study employs a polar case study to understand which context factors influence value cocreation and uncover the underlying mechanism. The study draws on six cases from Western and five cases from bottom of the pyramid (BoP) markets within the energy sector.

We find that the lack of transparency, unilateral risk identification, actor heterogeneity, decentralization, institutionalized standards and incentive multiplicity significantly impact the processes and mechanisms of value cocreation. Interestingly we found, that contrary to common understanding the identified factors are harmful to meaningful interaction. These can have a positive impact and increase the potential for value cocreation in certain phases. We conclude with a revised concept of context-contingent interaction patterns for value cocreation.

1. Introduction

The potential of low-income or bottom of the pyramid (BoP) markets has lately been acknowledged by academics, politicians, and business leaders alike (Prahalad, 2012). The completely different sociocultural, ecological and business environment in these markets forces companies to reevaluate traditional views and approaches of doing business compared to Western markets (Schuster & Holtbrügge, 2014) and calls for refined innovation approaches. Thus, the rise of the BoP markets lead to a group of innovations that are specifically developed for resource-constrained customers primarily in emerging and developing markets (i.e. Good-enough and Frugal Innovation) (Zeschky, Winterhalter, & Gassmann, 2014) and the significance of innovations based on value that is co-created between companies, customers and other actors

gets revised. Not surprisingly, the BoP environment has attracted the interest value cocreation (VCC) research. The interest of academics to research value cocreation has been growing for years in various disciplines such as innovation management, service science and marketing as well consumer research. This phenomenon is seen as a game changer in doing business (Galvagno & Dalli, 2014). However, although the contextual nature of co-created value is widely acknowledged (Arnould, 2008) and directly addressed in one of the fundamental premises as ‘value creation is always uniquely and phenomenologically determined by the beneficiary’ (Vargo, 2008, p. 8), only little research focuses on the impact of the context on value cocreation practices. The understanding of contextual factors influencing the cocreation of value therefore becomes pivotal for the success of innovation and firms. Within the innovation management domain, research on value cocreation so far

only focuses on the customer-company interaction through technological, online and digital collaboration (Kohler, Matzler, & Füller, 2009) or individual consumers and communities collaborating with companies in Western markets (Kristensson, Matthing, & Johansson, 2008; van Doorn et al., 2010). Thus, the literature lacks insights on the influence of different contexts when studying VCC and innovating in VCC systems. However, authors point out that value cocreation at the BoP poses particular challenges due to its widely different contextual environment (Nahi, 2016). So far, the literature on VCC in the context of the BoP especially accentuates challenges of interaction (Hahn & Gold, 2014) and institutional arrangements (Vargo & Lusch, 2017). Despite, these findings that describe the elements of needed modifications for BoP contexts, literature stays vague on the impact and mechanisms and lacks empirical studies on the phenomenon. In this vein, we studied the influence of context on value cocreation practices to understand how value cocreation needs to be managed in the respective context. In order to do so, we employed a multiple case study approach with polar cases from Western markets and BoP in the energy sector. This focus on extreme cases within the same industry aims to achieve the highest possible inter-case comparability to single out contextual factors. We find six contextual factors that strongly impact the processes and mechanisms of value cocreation and show the impact of these factors on underlying interaction patterns. Therefore, this study lays a foundation for the phenomenon under investigation of contextual factors influencing value cocreation. Further, recommendations on the varying management approaches in different contexts are given. Also, it outlines a research agenda to empirically test the propositions introduced here. Studying these propositions in-depth will further help to understand the micro- and meso-level of value cocreation and the innovation of value cocreation systems.

2. Literature review

2.1 Value Cocreation and context

The question of how firms can create and capture value lies at the very centre of strategic management (Nickerson et al. 2007) and becomes a central aspect in innovation management (Prahalad & Ramaswamy, 2013). Most recent studies claim to open the perspective of value creation from a company perspective (e.g. product or business model innovation) to entire ecosystems of value creation (Clarysse et al. 2014; Gawer & Cusumano, 2014; West et al. 2014; Vargo, Wieland & Akaka, 2015). In these ecosystems, the perspective switches from individual disentangled value creation of unique parties to jointly created value by multiple actors through their interplay (Vargo & Lusch, 2017; Meynhardt, Chandler & Strathoff, 2016). In ecosystems value creation is described as being

inherently a co-process of actor-to-actor relationships (Vargo & Lusch, 2017). Actors integrate their resources through interaction while interaction is facilitated by institutional arrangements (Vargo & Lusch, 2016). Subsequently, value is not embedded in goods or objects (which rather masks the value creation), but in the use of the value proposition that are exchanged. Thus, value is always described as being uniquely phenomenologically determined by the beneficiary and value cocreation is extended from a mere co-production of goods and services to the use-phase (Ranjan & Read, 2016). With this view on joint value creation, the influence of contextual factors becomes critical as Akaka, Vargo and Schau (2015) point out ‘Value is always contextual because it is based on a phenomenological perspective and influenced by time, place and social surroundings as well as other environmental factors, including access to other internal and external resources’ (p.211) and following many scholars called for studies to empirically investigate the context sensitivity of value cocreation (Akaka, Vargo, & Schau, 2015; Siltaloppi & Nenonen, 2013; Holmqvist, Guest, & Grönroos, 2015; Voss et al., 2016). Currently, literature points towards two aspects of context that are thought to influence value cocreation; namely interaction and institutions.

Interaction

Interaction as key mechanism for value cocreation is frequently found to be context-dependent. Interactions take place in a unique setting of exchange relationships and involve actors with unique sets of experiences who perform activities with the help of common tools and unconscious routines (Vargo & Lusch, 2010; Payne, Storbacka, & Frow, 2008). This unique setting and experiences as contextual factors influence value cocreation. Ben Letaifa and Reynoso (2015) argue, that the specific context can impact an actor’s (social) roles in the value creation process. Moreover, certain contexts are found to favour frequent and active communication (Akhilesh, 2017) which fosters learning experiences and mutual understanding. Additionally, situational contextual factors can favour engagement per se (Storbacka et al., 2016). Consequently, these contexts enable to build up trust and ensure that high-quality knowledge is shared (Mahdizan, Mohd-Any & Hamzah, 2017). Therefore, the context itself can benefit the possibilities for value cocreation as it ensures high-quality interaction.

Institutions and institutional arrangements

The role of institutions and institutional arrangements in value cocreation is to coordinate and facilitate resource integration (Vargo & Lusch, 2016, 2017). *Shared* institutional arrangements define nested and overlapping ecosystems, pointing to the fact, that common institutions are influenced by higher order concepts such as context (Vargo & Lusch, 2017). Institutions as higher-level social structures and human context of interaction are thus found to guide value cocreation activities, enabling and constraining interaction at the same time (Vargo & Lusch, 2016, p. 6; Akaka, Vargo, & Wieland, 2017, p. 54). Context-specific aspects of institutions or

institutional arrangements encompass routinized practices, rules, meanings, historical patterns, symbols as well as thinking patterns and shape actors' roles, interaction and activities (Vargo & Lusch, 2016; Akaka, Vargo & Lusch, 2013; Cheung & McColl-Kennedy, 2015). On the other side, institutions are seen as mechanisms that are established by actors in order to manage stakeholders and guide value cocreation, for instance by aligning interests and coordinate communication (Lempinen & Rajala, 2014; Bessant, Lehmann & Moeslein, 2014; Gebauer & Reynoso, 2013; Belyaeva, 2016; Zhang & He, 2014). Next to that Lusch, Vargo and Gustafsson (2016) name structural factors, i.e. of geographic, informational or social nature to be influencing value cocreation. However, next to the identification of higher level factors, the specifics of how these play out is yet understudied.

2.2 Western markets, BoP and Energy Sector

The research question at hand aims to empirically single-out factors that influence value cocreation and *how* these factors impact it. We therefore try to maximize the contextual differences in cases while at the same time reduce the variability of the service offering under investigation. To achieve this, we focus on polar cases (Western markets versus bottom-of-the-pyramid) and on a commodity sector (energy) where the underlying value-generating object (electricity) is highly comparable. Specifically, the energy sector is chosen as it is a commodity and therefore the 'output' itself does not change between contexts and thus reveals context sensitive characteristics. Also, it is a ubiquitously needed resource, relevant in every context, as the access to energy significantly improves education and health and it generally contributes decisively to economic development (Birol, 2007; Kanagawa & Nakata, 2008; Kolk & Van den Buuse, 2012).

Overall, the contexts differ in many aspects. Service beneficiaries in BoP markets live in financial poverty, (Chikweche, 2013; Hart & Prahalad, 2002), but also with regard to politics, economy, society, culture and geography actors are constraint in their resources (Chikweche & Fletcher, 2012). With regard to energy sectors, the literature particularly outlines three context factors as main characteristic differences between BoP and Western markets, namely the performance of the energy sector, its transition as well as significant differences between rural and urban areas (Urban, Benders, & Moll, 2007).

First and most importantly, a lack of infrastructure and limited capacity leads to a low level of energy supply in BoP markets, characterised by energy shortages and a poor performance of local service offerors, e.g. due to technological and capital restrictions, chronic underfinancing and low consumer prices (Bhattacharyya & Timilsina, 2010; Birol, 2007; Urban, Benders, & Moll, 2007; Kanagawa & Nakata, 2008; Chikweche, 2013). Moreover, traditional means of generating energy are inefficient and harm the environment as well as people's health. (Birol, 2007). At the same time, the

sustainable development of energy systems is complicated owing to the existence of social and economic barriers that hinder the flow of investment and technology (Bhattacharyya & Timilsina, 2010; Urban, Benders, & Moll, 2007). Contrary to BoP markets, Western markets in industrialized countries are characterized by universal access to electricity and an efficiently working system with low losses of transmission and distribution. Second, BoP markets are characterised by the transition towards more modern lifestyles, including the higher demand for electrification (Bhattacharyya & Timilsina, 2010; Urban, Benders, & Moll, 2007). Moreover, the informal sector in BoP markets is as large as the formal sector and governments often not able to be actively involved in reliably shaping the industry, both posing significant challenges for offerors (Urban, Benders, & Moll, 2007; Kolk & Van den Buuse, 2012). Third, the energy sector in BoP markets confronts huge inter-market differences, e.g. between rural and urban areas, while there are no such differences found in Western market contexts (Urban, Benders, & Moll, 2007).

The two contexts of Western Markets versus BoP substantially differ in a variety of factors, which have been outlined as relevant context-characterizing factors, among others economics, policy, social-cultural structures, history, religion, social customs, level of economic development (Urban, Benders, & Moll, 2007; Bhattacharyya & Timilsina, 2010; Birol, 2007; Kanagawa & Nakata, 2008; Chikweche, 2013). Thus, Western market context and BoP market context constitute disparate settings. Therefore, they represent an ideal setting to investigate to which extent value cocreation mechanisms differ in polar contexts.

3. Methods

As both, value cocreation and innovation for the BoP context are emerging phenomena, with yet unclear underlying mechanism, we employ a multiple case study research design (Eisenhardt, 1989; Yin, 2009). We choose a polar design of BoP and Western markets to examine extreme or contrasting patterns. As 'context' itself is a rather fuzzy concept, the theoretical sampling of polar cases from the same industry aims to reveal relationships that otherwise could not be studied. We therefore draw on 11 cases, six cases from Western markets and five from the BoP context (see Table 1). To ensure a holistic understanding and a reinforcement of internal validity of research, a triangulation of multiple sources of data was conducted (Yin, 2003). According to Yin (1994), primary sources of data include interviews, documents, physical artefacts, archival records, as well as direct and participant observations. This cross-case analysis builds on in-depth interviews, internal documents and is complemented with publically available secondary research material.

Case	Market	Country	Main Operating Sector	Interviews+ follow ups
WM_A	Western Market	Germany	Renewable Energy, Trading, VPP	3+5
WM_BB	Western Market	Germany	Local utility	2+2
WM_C	Western Market	Germany	National utility	4+2
WM_D	Western Market	Germany	Local utility	1+3
WM_E	Western Market	Switzerland	Renewable Energy, VPP	1+1
WM_F	Western Market	Switzerland	Multi-National Utility, Transmission Grid, Trading	2+4
WM_G	Western Market	Germany	Technology provider	1+2
BoP_A	BoP Market	Kenya	Lighting technology provider	2+2
BoP_B	BoP Market	Kenya, Tanzania	Solar technology provider	3+2
BoP_C	BoP Market	Mozambique	Cooking technology provider	2+1
BoP_D	BoP Market	Tanzania	Swarm technology provider	2+2
BoP_E	BoP Market	Northern & Southern Africa	Wind power technology provider	1
BoP_F	BoP Market	India	Energy from crop	1

Table 1 Overview of Cases

The data was subsequently analysed by three researchers. For each case, the researchers independently prepared a paraphrased summary of the case, following Roser, DeFillippi and Samson (2013) for multi-case study analysis of value cocreation. In a second step, the independent case analyses were aggregated and organized around topics, which allows to draw precise comparisons between different factors (Yin, 1981).

4. Findings

4.1 Impact of the lack of transparency on value-in-use

Firstly, we find that the degree/lack of transparency in markets strongly influences the process of value cocreation – namely the development of value propositions.

We find that the degree of joint resource integration in the development of a value proposition significantly differs in the contexts under investigation. Case partners in Western markets frequently reported, that for them the target segments are easily identifiable, measurable and accessible. Thus, value proposition are fully developed by the focal firm and sought to be implemented in a top-down manner with the beneficiary. Resources are integrated into the provider sphere and the fine-tuning of these value propositions eventually takes place in a joint sphere of direct interaction with the service beneficiaries. In contrast, our data showed that in BoP markets, service offerors and beneficiaries define the value proposition in an iterative, joint, bottom-up process, resulting in high levels of joint resource integration before a value proposition is defined and offered.

Moreover, we find that the chronology and level of operand and operant resources integrated differ. Contrary to Western markets, actors in BoP markets integrate operant resources in the very beginning to create transparency. For instance, we found in multiple occasions that service offerors engage in knowledge sharing activities to acquire local knowledge by interviewing locals, doing extensive market research before prototyping and testing, while at the same time sharing their proposition-related knowledge with the beneficiaries. Therefore, and contrary to Western

markets, actors in BoP markets integrate high levels of operant resources before or at the same time as operand resources.

Proposition 1: In market contexts with a high lack of transparency, value propositions are developed by actors parallel integrating operand and operant resources in a joint sphere of collaboration, whereas in contexts of mutual market knowledge, value propositions are created rather one-sidedly in the provider's sphere.

4.2 Impact of unilateral risk identification capability on VCC potential

Secondly, we found that actors' risk included in the value proposition and the adequate identification thereof influences value cocreation activities.

In BoP markets, service offerors are mostly unfamiliar with specific local risk factors and their relative levels. Consequently, we found that conflicts, poor quality, late completion, poor cost performance are commonplace. Service offerors are confronted with a higher degree of meso-level risk than in Western markets, i.e. regarding the local acceptance of their value propositions, commonly subsumed under design risk or regarding the functioning of their value cocreation mechanisms in an unfamiliar environment, known as construction risk.

'Our advantage is indeed our regionality, the fact that we know our customers [...] I think it all depends on us delivering high quality throughout our value chain, [but also on the fact that we have] selected business customers who feel attached to us, with whom we collaborate with a different level of risk' (BoP_D)

'[Willingness to pay] is an unknown factor, because it cannot be more expensive than existing systems [...] this is a certain experiment as the purchasing power is very limited' (BoP_D)

On the contrary, offerors in Western markets, identify risk involved in the adaption of a value proposition, partly in collaboration with public institutions and within small pilot projects, and seek to understand the change brought by the value proposition, thereby determining risk involved. As risk factors as well as effective means of mitigation are commonly known among actors, service offerors know what they have to do, e.g. which activities are the most critical to engage in. Further, an important difference is that risk is almost entirely allocated to the offeror, minimizing risks for their counterparts.

'The process has to be easy, with not too much effort required and without them [as service beneficiaries] having to take risks' (WM_G)

'[Pricing one's service] is also about risk. Our sales people tend to say 'People you do not take any risks

at all' if they [service beneficiaries] start complaining as they have expected more [profits]' (WM_A)

Opposed to this, service offerors in BoP markets usually apply strategies to identify this aspect, which involves tight collaboration with the potential service beneficiaries. By involving consumers in their value proposition development, offerors seek to minimize the design and construction risks of value propositions not being accepted and ensure that system requirements, e.g. level of infrastructure or education, are met. On the other hand, as the downside risk for the service beneficiary in general is smaller, their willingness to engage in collaborative endeavours is higher and risk is shared between offeror and beneficiary. To conclude, risk factors are collaboratively identified, analysed and responded to during collaborative activities. Due to the massively collaborative nature of value creation, a higher degree of uncertainty and risk in the first stage is suggested to impact the lever of collaboration, thereby leading to more value cocreation opportunities.

Proposition 2: The potential for value cocreation increases with a lower degree to which risk can be identified, analysed and mitigated ad-hoc by the service offeror only.

4.3 Impact of beneficiaries' heterogeneity on the size of VCC networks

Thirdly, we found that the composition of actors and the relative context-induced heterogeneity influences value cocreation.

We found, that in BoP markets, contrary to Western markets, a continuous adaption of cocreation mechanisms is required due to heterogeneous routines as well as different sets of beneficiaries' operand resources like capital, distribution networks and endowments with operand resources such as skills, prior knowledge and trust. As value cocreation is thus bound to confined sizes of the network, service offerors first create independent local organizational spin-offs by investing high levels of operand resources in order to re-frame value propositions and to develop mechanisms and routines which are compatible with prevailing routines and lifestyles.

Therefore, in order to effectively scale in such a context, actors commonly focus on a set of guidelines, which can be transferred and individually filled with meaning in the respective context instead of scaling ready value propositions.

"I [service offeror] have worked in the communities and the only way to be really successful is by deeply analysing the social structures. For example in Tanzania, the Western part of the country is completely different from the Southern part. One cannot say, this [mechanism] is valid for Tanzania. There are local differences [...] our business model, as we it imagine, cannot be adapted 1:1. And that is what we respected [...] that is why we retreat from the market itself, he

[local partner] has to invest and take ownership, I offer him after-sale services [but he is running the business locally]" (BoP_D)

In Western markets, we find that beneficiaries have similar sets of operand resources in terms of experience and skills required to cocreate. Therefore, service offerors are able to scale their activities much faster by leveraging their existing operand resources, e.g. their IT platform.

'That [onboarding process of new service beneficiaries] is a relatively standardized process [...] we do have a conditions business model which takes the size of the plant, the provision of flexibility and technology into account' (WM_A)

'I think we seek to develop similar to how Amazon did, we are striving to become the platform for flexibility [...] Key performance indicator is how many plants I can manage on my platform. Therefore, you need the best technology to keep costs low when taking another plant up' (WM_G)

Customer acceptance and the compatibility with the context are nearly guaranteed, so that processes can be standardized and enlarging the network of co-creators comes at small marginal costs, is fast and is not limited to a certain type of beneficiary or network.

Proposition 3: In contexts of heterogeneous beneficiaries' sets of operand resources and institutionalized routines, value cocreation mechanisms are bound to confined sizes of networks.

4.4 Impact of decentralization on value co-production

Fourth, we find that the relative level of decentrality influences value cocreation efforts. In Western markets, the service offerors seek to manage processes centrally in a fully authorized way in order to increase efficiency. This implies that beneficiaries are encouraged to give up control in favour to the service offeror.

'Digitization created tools and opportunities, to access and control plants from a distance and to manage these plants [...] they [service beneficiaries] were feared in the beginning, as it [remote control unit] affects their plant, their baby. That is when we [service offeror] really had to invest a lot of effort to convince them [to let us control processes centrally]' (WM_A)

'Typically, nobody [of the service beneficiaries] wants to take care of anything and nobody wants to do the optimization [...] In the beginning, we offer you [the service beneficiary] decision-making support then we tell you when to switch on your plant so that you can push the button. And in the next step, we offer to autonomously do this ourselves. This all

depends on the customer' (WM_F)

In BoP markets, however, decentralized management is observed to go hand in hand with customer empowerment and offerors engaging as equal partners. Involving local beneficiaries is seen as key for success.

'Our [company's name] academy seeks to empower our customers [...] established an in-house training institute, taking care of the suitable preparation of our employees and contractors. [company's name] academy offers training courses to contractors, but also introduction training to all our staff and language courses for those who wish to improve their English skills or expat staff learning the local language such as Swahili' (BoP_B)

'The aim is that people can build and sustain their own solution in their local market [...] It is their job and they have to do it, they know it much better than we do. My business model of [name of value proposition] is centred around sales, in the sense of managing relationships with those local partners' (BoP_D)

Contrary to Western markets, actors in BoP markets are more willing to share control in favour of consumer empowerment and the consumer's desire to contribute to their role in cocreation activities. When beneficiaries learn to use, maintain, repair, and adapt the appliance to his or her unique needs, usage situation, and behaviours, there is more room for value-in-use experiences. We found this process to be positively influenced by a decentral management, that ultimately increase the value-in-use.

Proposition 4: *Decentrally managed value cocreation processes favour co-production roles of service beneficiaries which sets the ground for more holistic value-in-use experiences*

4.5 Role of institutionalized standards in creating value-in-use

Fifth, we find that the institutionalized standards moderate the possibilities for value cocreation. In Western markets we find that largely experienced energy service offerors operate in an environment of reliable and comprehensive energy supply. At the same time, energy service beneficiaries are generally familiar with the value propositions offered and can be regarded as experienced actors. In an environment where electricity supply has become an everyday routine, and minimum requirements for the value proposition have been institutionalized. For instance, the fact that energy supply should be available 24/7 all year around is expected to be standard in Western markets. Arguably, the number of potential user experiences for service beneficiaries is limited by a binary evaluation, an institutionalized thinking pattern prevailing in Western markets, where the performance is either in line with the

standard or not. The routine in this context therefore constrains value cocreation. Potential outcomes allow less room of interpretation and engagement in Western markets, as 'in line performance' is taken note of. However, simply meeting expectations does not necessarily evoke positive emotions in terms of conscious satisfaction

'There is no good or bad energy, there is energy or there is no energy [...] in the society it would not be accepted if availability is not 100%. That is why the price is the only decisive criteria [for the service beneficiary when selecting among offerors]' (WM_F)

Conversely, actors in BoP markets are suffering from 'energy poverty' characterised by historically low levels of electricity supply and low performing energy service offerors. Further, we find that service beneficiaries in BoP markets are unexperienced and thus more open to interpret value propositions in different ways due to the fact that neither implicit nor explicit quality standards have been established. Actors individually evaluate the value of the value proposition when interpreting its compatibility with and performance in their own individual context. That is why service offerors have the opportunity to develop value propositions which foster multi-dimensional evaluation experiences. Therefore, the contexts substantially differ in their institutionalized standards.

Proposition 5: *Value propositions in market contexts with a low level of institutionalized standards and thinking patterns fosters value-in-use experiences for service beneficiaries by offering a wider space to experience, personalize and relate to value propositions.*

4.6 Impact of incentives' multiplicity on VCC potential

Sixth, we find that actors in Western markets are solely financially incentivized to engage, contrary to actors in BoP markets whose incentives are multi-faceted. In Western markets service offerors' and beneficiaries' willingness to engage in value cocreation processes primarily routs in a joint interest for maximized profits.

'Financial incentives are still the most powerful ones, obviously, people want to earn money [...] as they invest in remote units and might be worried by higher maintenance costs [...] ultimately leading to the question, whether this [collaboration] is profitable?' (WM_A)

'The incentive to have more euros in the pockets at the end of the day is always there [...] this [financial incentive] is for sure the strongest incentive [for actors to participate]' (WM_D)
'Everyone [wants] more revenues for their plants. This always is the value-added' (WM_C)

In BoP markets, service offerors were primarily driven by non-financial incentives such as impact and vision, and beneficiaries were mainly incentivized by non-financial factors such as pride, independency and security.

'To develop this technology is our main motivator. We are all convinced to get away from fossil energy sources' (BoP_E)

'Anybody in the world [knows that] there is not a lot of money in biofuels. You [service offeror] do biofuels because you love it and you want to do it.' (BoP_C)

'I am proud to own my personal electricity source [...] At night, my family now has clean and bright lights - and we can even power a refrigerator' (BoP_B)

We find that actors' incentives significantly impact the way how actors interact for value cocreation. For instance, the more incentives an actor has, the more touchpoints to interact and collaborate evolved, and the more successfully value cocreation activities are performed. Moreover, a context favouring frequent and active communication fosters learning experiences and a mutual understanding, which both build up trust and ensure that high-quality knowledge is shared. Therefore, the number of incentives impacts value cocreation activities through the lever of intensified collaboration. Hence, the multiplicity of incentives in BoP markets leads to more collaboration between actors than in Western markets.

Moreover, we find that incentives impact the design of mechanisms, which guide interactions. In Western markets, where all actors seek to optimize profits, actors are incentivized to optimize interaction by designing goal-directed and efficient ways of interaction. Hence, mechanisms of value cocreation are clearly defined with instructions of when and how interaction should (not) take place, most of the processes running automatically. Thereby, the space for informal or experiential interaction was narrowed down to a minimum.

'Standardize, automate and minimize manual interaction, otherwise there are too many cases, this would not be profitable' (WM_F)

"Interaction is only happening, if required [...] e.g. that the wind energy plant operators [...] log off their plants if maintenance is conducted or malfunctions discovered, so that we know, that there is no electricity coming. This is done via our online portal' (WM_A)

Proposition 6: Contexts that favour multi-dimensionally incentivized behaviour to cocreate value, create more touchpoints and a wider space for interaction between actors.

5. Discussion

The impact of contextual factors on value cocreation seems to be characterized by the context's impact on the interaction between actors. This is consistent with the current understanding in the literature, as cocreation is defined 'as interaction that integrates different partners' knowledge and capabilities' (Nahi, 2016). Nahi (2016) for example outlines a twofold link of VCC and interaction, first, as VCC always encompasses interaction as it is of collaborative nature and second, interaction fosters relationships, which are in turn a foundation for exchange of services and integration of resources. This study at foremost reveals certain characteristics of context that enhance VCC. Surprisingly, these factors are commonly considered as harmful for meaningful interaction. Reflecting the propositions outlined and summarizing their indications for managing VCC can be extracted that initial (1) lack of transparency and (2) limited risk management capability rather act as VCC enabler than barrier as both factors strongly incentivize actors to collaborate more intensively together. While (3) heterogeneity is found to impede infinite scaling of the VCC network, heterogeneity also creates incentives for continuous collaboration with new service beneficiaries as the lack of transparency has to be constantly reduced, this favours a VCC friendly mindset of the offeror. Moreover, despite being more complex to manage and scale, a (4) decentralized organizational structure offers large opportunities to empower beneficiaries in the process. Thereby, their willingness to participate as well as the frequency and depth of personal interaction between service offeror and beneficiary are increased. Further, more value-in-use opportunities can be generated in BoP contexts, as more space for personalization, relationship and experience is created through the (5) interpretability of the value propositions. Lastly, the (6) multiplicity of incentives prevailing in BoP contexts creates more frequent interaction and increases an actors' willingness to participate in VCC processes. In general, this diversified view on interaction is also supported by recent studies that call attention to the need for enhanced interaction capabilities for value cocreation (Kazadi, Lievens & Mahr, 2015; Marco-Cuevas et al., 2014).

Summarizing, the interaction patterns between the studied context show different patterns. On the one hand, (Figure 1) clearly defined touchpoints, direct interaction

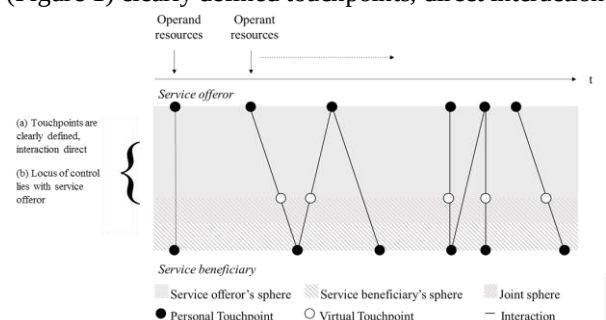


Figure 1 Interaction Patterns Type 1

and defined means of (virtual) communication are observed in Western market context opposed to a (Figure 2) multiplicity of touchpoints, highly iterative interaction patterns, large shares of indirect interaction

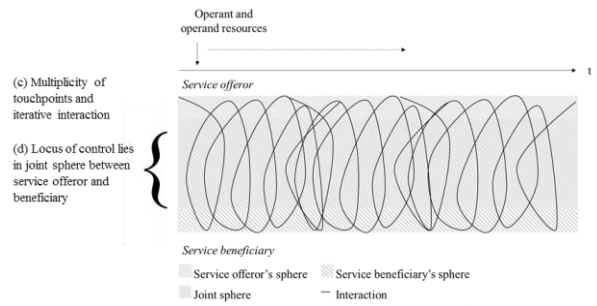


Figure 2 Interaction Pattern Type 2

and a variety of (multidimensional) communication channels in BoP market context. In other words, efficiency-driven point-to-point mechanisms face spontaneous and iterative interaction patterns. On the other hand, differences outlined refer to the locus of control. Furthermore, the joint sphere of interaction is commonly very limited and situated in a virtual space in Western market context, the joint sphere in BoP context is large and located in the community of the service beneficiaries. This enhanced sphere leads to a greater potential to co-create value.

6. Conclusions and Implications

In this paper, we have identified contextual factors that influence value cocreation activities. Namely, the lack of transparency, unilateral risk identification, actor heterogeneity, decentralization, institutionalized standards and incentive multiplicity. Furthermore, we identified *how* these factors influence value cocreation and introduced a revised conceptual understanding of interaction patterns for value cocreation contingent to context factors.

We therefore contribute to the literature in several ways. First, we follow several calls for a deeper empirical meso- and microlevel research into value cocreation (Nahi, 2016; Storbacka et al., 2016; Vargo & Lusch, 2017). By doing so we identify the underpinning mechanisms and lay first foundations for constitutive quantitative research. Furthermore, we deepen the understanding of the management of Frugal Innovations and the BoP context. This follows the call for further cross-fertilization of research on the context of BoP and more specifically Frugal Innovation with other disciplines (Kolk et al. 2014). On the other hand, our research moves towards a framework that helps managers to direct their cocreation efforts based on contextual factors. Based on the findings, we encourage research that deepens the understanding within the identified propositions. Especially, the highlighted link between institutional arrangements, interaction patterns and context from our point of view shows a promising avenue for further research. Moreover, breaking down the findings into wider managerial implications is a

necessary step following this this research.

Acknowledgments

We would like to thank the case partners for their openness and collaboration for sharing information. Further, we would like to thank Lara Mogge for her support and dedication throughout the development of this paper.

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