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Topic: *Value propositions*

Rethinking value proposition tools for living labs

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Purpose: This paper considers how well the living lab approach and recent theoretical developments around the concept of value are incorporated into three managerial tools for creating value propositions.

Approach: Using abductive reasoning, the descriptions of the tools were analysed as cultural texts, as language-in-use in a social context.

Findings: In the context of the living labs approach, the Value Proposition Builder™ seems to conflict with the ideas and premises of user-centric innovation processes. In Value Proposition Canvas, the co-creation aspect is rather vague as the enterprise and its offerings are presented as creators of value for the customer. Thus, this tool somewhat contradicts the living lab approach. The People Value Canvas is aligned with the service-dominant logic and the premises of living labs. However, all three tools largely neglect a deeper acknowledgement of the role of the wider context, the service ecosystem, and the role of networked actors as resource integrators. Moreover, none of the tools explicitly point out the role of enterprises as intermediaries in constructing invitations for value co-creation.

Originality/value: The paper contributes to the SDL and living labs literature by analysing different value proposition tools that have not been analysed before such as the Value Proposition Builder and the People Value Canvas which are relevant for academics as well as practitioners. By identifying the absent elements of S-D logic from managerial value proposition tools the paper gives guidelines how to develop the tools especially in the context of living labs to advance enterprise competitiveness.

1. Introduction

As living labs have become instruments for user involvement in various development and research activities, the academic interest in living labs has increased. Interest has mainly focused on the methodologies used in living lab settings during the co-creation and testing phases (e.g. Almirall *et al.* 2012), whereas tools developed as part of the commercialisation of the innovation have received less academic attention. This is against a backdrop where living labs are seen as a means for strengthening European competitiveness and growth (Peltomäki, 2008). Alongside the increase in usage of living labs in user involvement and co-creation, active theoretical discussions have taken place around value and value co-creation, especially the new theoretical perspectives opened up by Vargo and Lusch (2004) in their seminal work on service-dominant logic. This paper further details how theoretical discussions around service-dominant logic connect to living labs, by focusing on the one hand on the value concept and on the other on managerial tools used to build value propositions.

This article takes a closer look at three tools for building value propositions. The aim is to analyse the tools from the point of view of the living lab approach and the service-dominant logic focusing on the concept of value. The analysis highlights the gaps and bridges between managerial and conceptual contexts and meanings, while also giving suggestions on how the tools and their usage could be developed further. The paper provides a theoretical basis for reflections and a deep analysis of value within managerial tools and adds a further perspective to discussion on value and value propositions. The managerial contribution gives insights into creating new managerial tools that take account of recent perspectives on value and value proposition, leading to a more holistic view that incorporates an understanding of the service ecosystem into the managerial model via the living lab framework.

In the first part of the article we present the ongoing discussion around the living lab. Second, we examine the nature of value and follow it up with elaborations on the development of value propositions. We then introduce our research design and the three tools for building value propositions that will be analysed in the paper. Thereafter we present the results of the analysis. Finally, we discuss how to develop the tools in terms of building value propositions especially in the context of living labs.

2. Living labs as innovation platforms

Although researchers have had lively discussions about living labs for a decade, there is no consistent definition for the concept (see e.g. Schuurman et al., 2012a; Leminen, 2013 for reviews of the definitions). However, scholars have agreed on the main characteristics of living labs: 1) users as co-creators in innovation processes, 2) experimentation in a real-life context, and 3) multi-stakeholder involvement.

In a living lab, users are considered as equal partners with all other actors involved in co-creation processes during the whole lifecycle of innovation, not just in testing or in field trials. In a living lab they act as subjects in their own everyday contexts, unlike objects or informants in test beds in controlled environments (Ballon et al., 2005). Thus by involving users in explorative processes in real-life environments, living labs enable negotiating novel meanings for products and services (Almirall and Wareham, 2011). The importance of social practices and norms in driving innovation has been acknowledged by several living lab researchers (Turkama, 2010, Almirall et al., 2012, Schuurman et al., 2012b).

Living labs have been thought of as innovation networks (Nyström et al. 2014) and co-creation ecosystems (Westerlund and Leminen, 2011), while emphasizing the multi-actor involvement in the innovation process. Companies, public agencies, universities, institutes, users and other stakeholders form public-private-people partnerships (4Ps), all collaborating for creation, prototyping, validating, and testing of new technologies, services, products and systems (Westerlund and Leminen, 2011).

In addition to the above-mentioned characteristics, Schuurman and colleagues (2013) have proposed that a multi-methodological approach and a medium- to long-term research frame as further defining elements of living labs. Moreover, they maintain the living lab infrastructure as an essential element that refers to both material (physical networks, user devices, research equipment) and immaterial infrastructure (end-users, stakeholders, the environment).

3. The nature of value

A conceptualisation of value is at the heart of discussions on the service-dominant (S-D) logic, being present in several of the grounding premises. Elaborations on the meaning of value and the locus of its creation have emphasised either use or exchange value interchangeably, and respectively the

consumer's/user's or producer's role in its creation (Vargo et al., 2008; Vargo and Lusch, 2011; Ng and Smith, 2012; Honkanen, 2014). Key perspectives to emerge have centred on value-in-exchange, value-in-use and value-in-context. Value-in-context has been analysed as value in a social context and value in the context of networks.

Value-in-exchange has been the focus of most economic discussions for centuries, with Adam Smith (1776) already emphasising in his seminal work the meaning of value as exchange (Ng and Smith, 2012; Lusch and Vargo, 2014). In a similar way, the traditional marketing literature, coming from a production-oriented perspective, has understood value in terms of value delivery, where value is packaged into an object produced by the provider (Vargo and Lusch, 2004; Heinonen et al., 2013). Value has thus been seen as something tangible or easily measurable (Heinonen et al., 2013), having been defined in terms of "exchange-value" (Vargo and Lusch, 2004). These conceptualisations lead to a construct that is rather objectified and static.

In the traditional goods-centred dominant logic, value is determined by the producer, and the role of the customer is to be a passive buyer (Helkkula et al., 2012) or the recipient of goods, thus the recipient of the value that the producer delivers (Vargo and Lusch, 2004). Thus the meaning of value in value-in-exchange is based on the differentiated roles of producers/enterprises creating value and consumers consuming it (Vargo and Lusch, 2012). This perspective is in line with the view of value creation in the context of value chains (Porter, 1985), where each producer adds value to the product along the value creation chain, whereas the consumer's role is to be the recipient of that value, being only a passive participant in the value exchange activity (Ordanini and Parasuraman, 2012).

In contrast, conceptualising value as value-in-use gives the consumer a role in the creation of value and its meaning (Vargo and Lusch, 2004). Value is thereby understood to be determined by the beneficiaries through the process of use (Grönroos, 1994). Thus the beneficiary (consumer or other actor) becomes an active participant and emphasis in the value creation moves away from producers/enterprises towards the actor experiences of the consumer/beneficiary (Prahalad and Ramaswamy, 2004). Thus, the meaning of value becomes personalised and unique. This perspective builds on the ideas of Holbrook (1999), with value seen as a relativistic, interactive and preference experience, where value creation is a collective process and value experiencing is in turn understood to be an individualistic process. In essence, there is no value until an offering is used, since experience and perception are essential to value determination (Vargo and Lusch, 2006). The co-created nature of value implies that value creation is interactional (Vargo and Lusch, 2008).

Although the S-D logic emphasises value-in-use, Heinonen et al. (2013) criticise the approach for its short-term timeframe, proposing instead a longitudinal experience perspective that stresses value as part of the customer's dynamic reality, recognising value as existing before, during, and after customer experiences, as part of a customer's cumulated life and reality. It has even been suggested that the imaginary future experience constructs value (Helkkula et al., 2012).

In the previous literature on value-in-use, value has sometimes been narrowly understood to be merely utilitarian or functional (Vargo et al., 2010) or it has been interpreted too simply as individualised value, irrespective of the context (Edvardsson et al., 2011). As a result, in the subsequent S-D logic discussions, value-in-use has been re-conceptualised as value-in-context. In 2008, Vargo made the suggestion that the term value-in-use be replaced by the term value-in-context, to reflect the fact that value is always uniquely and phenomenologically determined by the beneficiary.

Customer experience (or value-in-use) is always influenced by the customer's internal and external context (Helkkula et al., 2012; Heinonen et al., 2013), and therefore value is situational (Holbrook,

2006). Edvardsson and colleagues (2011) agreed on the contextual nature of value, contending that value should be further delineated as value-in-social-context, since value is a social construction; it has a collective and an intersubjective dimension (see also Helkkula et al., 2012). They claim that value is shaped by social forces, is reproduced in social structures, and can be asymmetric for the actors involved. Likewise, Vargo and Lusch (2014) maintain that the institutions – norms, rules, symbols, and so on – created by the actors make joint value creation possible. Moreover, Grönroos and Voima (2013) conclude that the context—whether social, physical, temporal, and/or spatial—determines the experience of value-in-use. Value-in-context also captures the emphasis of all actors being resource integrators participating in value co-creation within a (social) context that influences the co-creation practices and meanings of value (Edvardsson et al., 2011).

The networked nature of value has recently gained more and more attention. The customer's value creation process is influenced by a wider customer network or ecosystem, which consists of other customer-related actors (e.g. family, friends), beyond the enterprise's control (Grönroos and Voima, 2013). One of the basic premises of the S-D logic (Vargo and Lusch, 2008) is that all social and economic actors are resource integrators, which implies the context of value creation is networks of networks, as consumption/usage is about integrating resources acquired from different sources into a usage process. In one of their most recent articles Vargo and Lusch (2014, p. 2–3) point out that the dynamic, interdependent, networked nature of value creation (i.e. co-creation) among actors implies the service ecosystem rather than individual (e.g. the enterprise) or dyadic actors (e.g. enterprise–customer) is the appropriate unit of analyses for understanding value creation.

It is worth highlighting that both living labs and the service-dominant logic have similar foundational premises. When we compare the key premises of value viewed through the service-dominant approach and the premises of living labs, we notice striking similarities; both emphasize the notions of multiple actors (stakeholders), connection to a context; values, norms and practices – real-life; and seeing each actor as a co-creator in the joint processes.

4. The value proposition concept

Building on the deepened understandings on value, especially value-in-context, we shall next elaborate further the discussion on building value propositions. We shall first give a short overview of definitions on value propositions followed by value propositions with value-in-context perspective, especially concentrating on value propositions in service ecosystems building on the work of Frow and colleagues (2014).

It has been claimed that value proposition thinking is at the heart of any value-focused organization, since it sharpens the way organizations work by focusing activity to serve customers profitably (Barnes et al., 2009). The definition of value proposition has changed over the last two decades (see e.g. Frow et al., 2014) as understanding of the customer's value creation processes has deepened. Frow and colleagues (2011, 2014) have noted that most research on value propositions has focused on the narrow customer-enterprise perspective. However, some exceptions can be found: the recruitment market, internal market, referral market, influence market, and supplier and alliance market value propositions (Frow and Payne, 2011).

Popular text books written by both academics and consultants mostly rely on rather enterprise-centric definitions of value propositions. In fact, the study by Anderson and colleagues (2006) revealed that most managers in Europe and the USA equate their list of benefits to their value proposition, without much concern for their customers and competitors. In most enterprise-centric value propositions, customers are seen as recipients of value; e.g. Lanning (1998) defines a value proposition statement as

the articulation of the measurable value of the experience that a customer will get from an offering where value equals benefits minus costs. Likewise in the well-known Business Model Canvas (Osterwalder and Pigneur, 2010), the value proposition describes the bundle of products and services that create value for a specific customer segment. Although Anderson and colleagues (2006) use the concept 'customer value proposition', they maintain that the enterprise's offerings provide value to target markets and customers.

The discussion around S-D logic (Vargo and Lusch, 2004, 2008) has led to growing interest in redefining the value proposition concept. In their seminal article in 2004, Vargo and Lusch argued that enterprises can only make value propositions, but the consumer must determine the value and participate in creating it through the process of co-production. Later this premise was slightly modified: The enterprise cannot deliver value, but only offer value propositions (Vargo and Lusch, 2008, p. 7).

Lusch and Vargo (2014, p. 188) have since advanced their thinking on value propositions: as all actors are resource integrators and part of the service ecosystem, they also engage in creating value propositions. Value propositions can be seen as invitations to participate in value co-creation processes. Thus the role of enterprises becomes one of an intermediary. Based on the understanding of the co-created nature of value, Grönroos (2011) argues that the enterprise can engage in customers' value fulfilment during direct interactions, and thus the enterprise is no longer restricted to making value propositions only. Thus the roles of actors become manifold and each might participate in the value proposition creation, as well as value creation. This reflects the value-in-use view, or even more so the value-in-context perspective. Similarly, Frow and colleagues (2014, p. 340) define the value proposition concept in the broader context of a service ecosystem as follows: a dynamic and adjusting mechanism for negotiating how resources are shared within a service ecosystem. Reciprocal and co-created value propositions evolve through three broad stages: value propositions to customers, to key actors and within the service ecosystem.

The later discussions emphasised the service ecosystem as the context for building value propositions. Service ecosystem moves away from understanding value creation or building value propositions as step-by-step activities, i.e. value chains (Porter, 1985) or distinct actions in interaction, i.e. value networks (e.g. Möller, 2013) and rather towards seeing the process as collaborative interactions between multiple stakeholders or actors simultaneously building a multitude of value propositions, alternative "futures" that may or may not become actualised. The service ecosystem as such is a value creating system where the actors cannot create value or value propositions in isolation. Nor are service ecosystems themselves isolated systems, but are rather interconnected in multiple ways, both between and within systems (Frown et al., 2014; Lusch and Vargo, 2014, p. 182-188). The building of value propositions is continuous, as the service system itself is dynamic in creating and re-creating needs continuously (Lusch and Vargo, 2014, p. 187).

On the other hand, value propositions are seen as strategic tools, a means of communicating between actors. How then can enterprises in their role as intermediaries, as proposed by Lusch and Vargo (2014, p. 188), orientate to this value proposition co-creation and how do the existing tools respond to this need?

5. Three tools for building value propositions – research design

In this section we introduce three tools for building value propositions: The Value Proposition Builder™ by Barnes and colleagues (2009), the Value Proposition Canvas by Osterwalder (2012), and the People Value Canvas by Wildevuur and colleagues (2013). The inclusion criteria for these tools were popularity of usage of the tools, as well as good linkages to the topics of this manuscript: value, value propositions, and living labs. The tool by Barnes and colleagues (2009) was chosen because it builds on the seminal

pioneering work of Lanning (1998) and thus brings into the analysis aspects from the early discussions; moreover, it is widely available through Wikipedia, where it is described as a tool for building value propositions, and thus can be seen as well known. The Value Proposition Canvas has rapidly gained high attention as it builds on the well-known framework of the Business Model Canvas (Osterwalder and Pigneur, 2010). Osterwalder (2012) suggests working with the canvas in an iterative manner, revising the value proposition after experimenting and testing, and thus the tool is aligned with the process-like nature of product and service development in living labs. The People Value Canvas represents the user-centric innovation approach, and the tool itself was developed in the context of living labs.

We adopt a cultural perspective in our analysis (Moisander and Valtonen, 2006), which entails seeing managerial tools as cultural texts, looking at them as language-in-use in a social context. The analysis proceeded by outlining the premises, key stages, and questions contained in each tool, before continuing on to identify the meaning of value, and value propositions accordingly. For each tool separately, we carefully scanned and re-scanned the tools as cultural texts in an abductive manner. Table 1 provides a comparison of the results and the analytical path.

5.1. Value Proposition Builder™

The Value Proposition Builder™ by Barnes, Blake, and Pinder (2009, p.30-31) is a six-step iterative process (see Figure 1). According to Barnes and colleagues (2009, p.62), a value proposition defines how an offering will benefit a market segment or customer, and at what cost. The suggested market analysis (ibid, p.62–63) begins with enterprise-centric questions like “Where does our organization figure in the marketplace? Is it where we want to be? Which markets or customer types offer the best opportunities for profitable growth?” This is followed by more customer-centric questions like “What are the customer needs? What keeps them awake at night? What are their points of pain? What risks do the customers perceive when choosing our organization?”

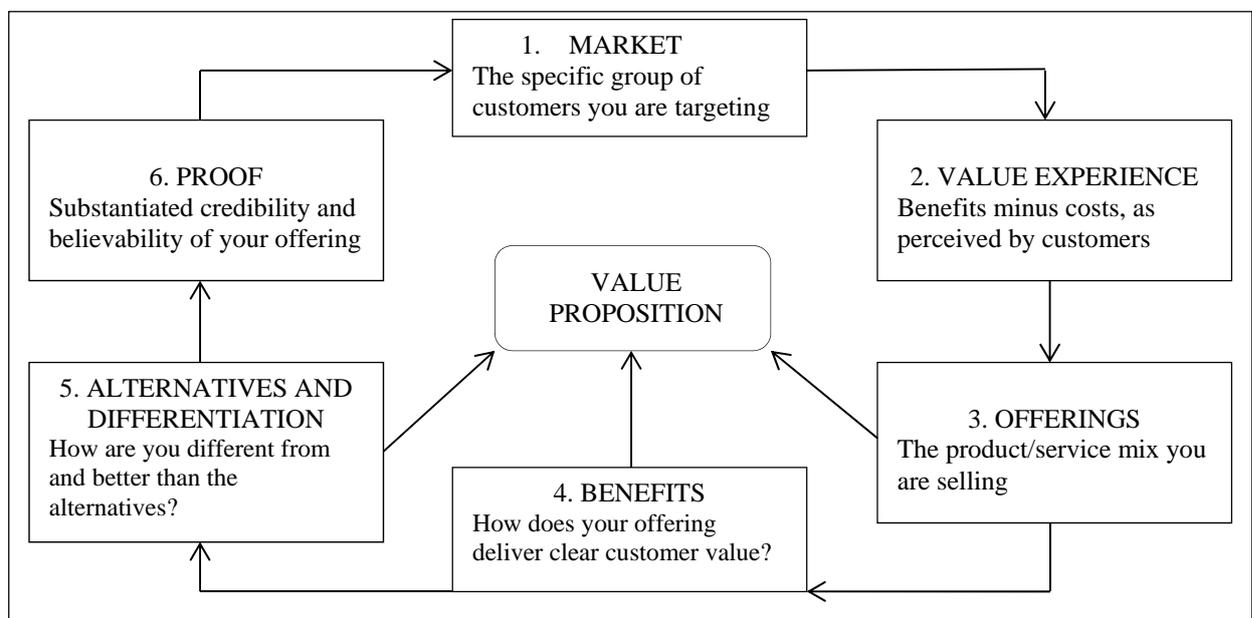


Figure 1. The Value Proposition Builder™ (Barnes et al., 2009, p.31)

The suggested questions (ibid, p.73) on value experience (step 2) focus on the experience gained when purchasing and using the present offerings on the market: What are the most important factors when your customers are looking to purchase (product /service)? What do you value beyond price/cost?

The third step concentrates on current offerings that have to be categorized and mapped to the Value Pyramid™, which consists of four layers: component (bottom), offer, solution, and co-created value (top) (ibid, p.83). Barnes and colleagues (2009, p.87) strongly emphasize that the benefits (the fourth stage) should be based closely on experiences of value by customers and staff. The core of the analysis of benefits is the so-called benefits-map presenting the core service, and its expected, augmented, and potential benefits (ibid, p.88).

Barnes and colleagues (2009, p.94) argue that enterprises are not competing against each other’s offerings but against their value propositions. For the customer, “do it yourself” or “do-nothing” are alternatives, too. All the suggested questions to be answered at the fifth step are producer-driven, e.g.: Which alternatives can deliver the best value to my customers? Are any of my competitors able to deliver this value cheaper, faster, and better than my organisation? What makes my organisation different from and better than my competition?

The last step of the Value Proposition Builder™ deals with backing up the value proposition with relevant, substantiated proof (ibid, p.101-102). The following techniques are recommended for use when providing evidence for the claims: case studies, books, articles, customer testimonials, and value calculators (total cost of ownership, TCO, or return on investment, ROI, or cost-benefit, C-B).

5.2. The People Value Canvas

The aim of the People Value Canvas (PVC) tool is to help build value propositions during user-centric service development processes. The PVC consists of nine building blocks, describing the input that has to be provided to establish the value proposition (Wildevuur et al. 2013, p.137). The understanding of people is the key issue in the PVC: the user is the expert on his own life and experience and should be driving the development process. The first five building blocks present the user insights gained through ethnographic studies and co-creation sessions with the users (see Figure 2).

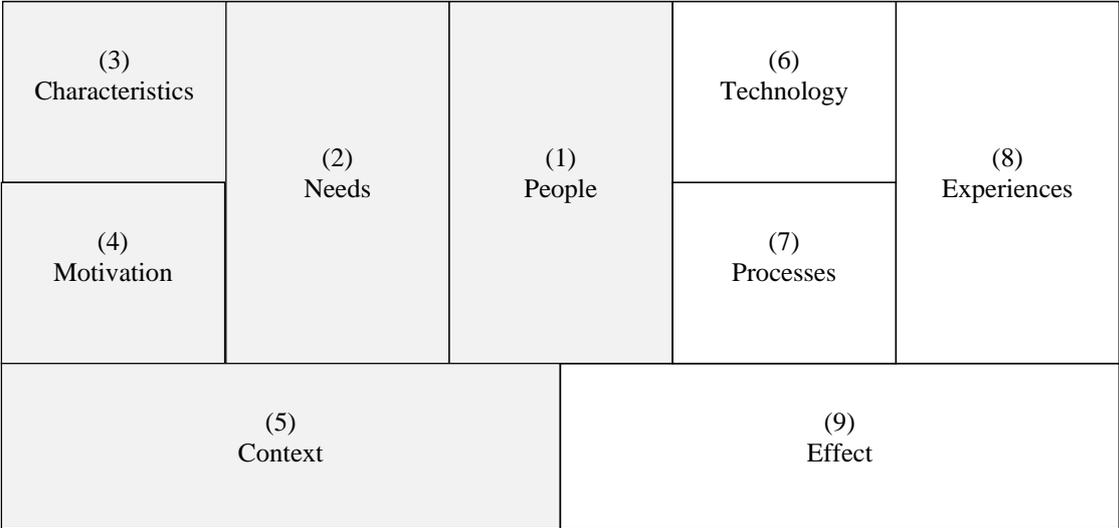


Figure 2. The People Value Canvas (Wildevuur et al., 2013, p.135)

The first building block, People (1), introduces the main characteristics of the target group presented as portraits—much like a persona, which is a common interaction design tool—that anchors the differences within the identified user needs. They function as vehicles for empathy and identification, visual depictions of knowledge, and representations of certain market segments (Wildevuur et al. 2013, p.152).

The next building blocks of the PVC—that is, Needs, Characteristics, Motivation, and Context—provide further insights about the users. The outcome-driven innovation approach maintains that the proper definition of ‘customer need’ becomes clear when the job is the unit of analysis. A job is defined as fundamental goals customers are trying to accomplish or problems they are trying to solve in a given situation (Ulwick and Bettencourt, 2008). Needs (2) relate to how well the customer is getting a job done.

The contents of the Characteristics block are not only limited to the attributes of the users. It answers questions like ‘In what ways are they active and connected? What kind of competences do they have? What fears? What dreams?’ Motivation is what drives a person to behave in a certain way, and is a crucial component in setting and reaching goals. Motivations shed light on individual aspirations, and what people value. In the PVC, Context (5) refers to the everyday context of the user where the jobs will be accomplished. Important contextual factors are, for example, the user’s living situation, place of living, his social networks, access to resources, surroundings, time, climate, etc. (Wildevuur et al., 2013, p.142-143).

The right-hand side of the PVC focuses on the major issues related to solutions and effects (Wildevuur et al., 2013, p.162-163). When reaching for a technological solution, the main issues to be addressed are: What technological options are relevant? How will technology respect the user feeling safe/socially accepted/connected/in a flow? At first glance, the questions related to the building block Processes (7) are simple. However, the solutions have to be based on a holistic understanding of the process from the user’s point of view: How will the user be introduced to the intervention? How will the user be supported in its usage? Is support desirable?

The Experiences (8) component refers to the value-in-use at the very moment when the user starts using the innovation, encounters service providers, other users, and artefacts related to the usage. Designing for experiences means paying attention to both the user within his networks and the entire ecosystem within which the application or service is located. The accumulation of positive experiences and high quality interactions lays the ground for the long-term effects: What will be the long term impact on the user’s own narrative? How will the intervention contribute to their potential? How will it affect societal issues?

5.3. The Value Proposition Canvas

The Value Proposition Canvas has been developed as a plug-in-tool for the Business Model Canvas by Osterwalder in 2012. It zooms in on two blocks of the Business Model Canvas, the value proposition and the customer segment (see Figure 3). The aim of the Canvas is to match the needs and the jobs-to-be-done of the customer segment and the value proposition of the enterprise, and thus achieve the product–market fit or the problem–solution fit. (Osterwalder, 2012; Osterwalder et al., 2014).

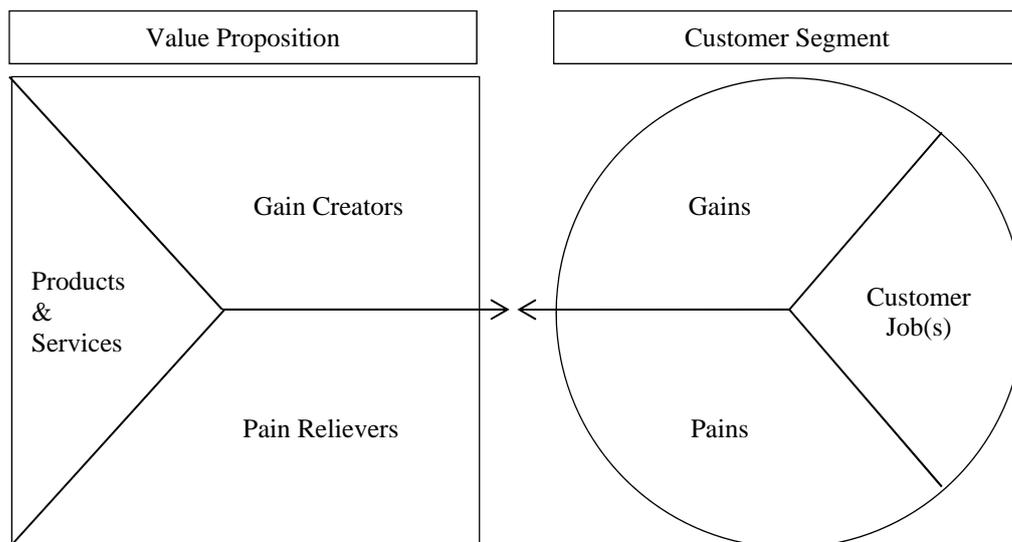


Figure 3. The Value Proposition Canvas (Osterwalder, 2012)

The first task is to describe what customers are trying to get done by identifying the functional, social, and emotional jobs that customers are trying to get done and the basic needs customers are trying to satisfy. Some of the jobs are performed by customers as buyers, some as co-creators, and some as transferers. Each job is ranked according to its significance to the customer, and how often it occurs is also described (ibid, 2012).

The next focus is on the pains: negative emotions, undesired costs and situations, risks that customers experience or could experience before, during, and after getting the job done. When analysing the pains, the negative experiences customers have while using the current solutions are listed, as well as any barriers that keep the customers from adopting the offerings already on the market. Finally, the pains are ranked according to the intensity they represent for customers, while the frequency of their occurrence is also estimated. The third stage in the analyses of the customer segment is the identification of all the gains – the benefits – the customer expects, desires, or would be surprised by. This includes functional utility, social gains, positive emotions, and cost savings. Each benefit is ranked according to its relevance to the customer. Additionally the frequency of the gain is indicated (ibid, 2012).

The building of the value proposition starts with listing all the products and services of the enterprise that help the customer complete either a functional, social, or emotional job, or help him/her satisfy basic needs. All the offerings are ranked according to their importance to the customer. Pain relievers describe how the enterprise's products and services alleviate customer pains, and gain creators describe how the enterprise's products and services create customer gains. The pain relievers and gain creators sum up how the enterprise's offerings create value (ibid, 2012).

6. Discussion

The first tool, Value Proposition Builder™, seems to represent mainly the premises of the goods-centred dominant logic. Value is embedded in the offerings of the enterprise, and they deliver value to the customer. Co-created value is only mentioned as one type of offering by the enterprise. However, the second stage, value experience, focuses on the experiences of the customer when purchasing and using the current offerings. Hence, both value-in-exchange and value-in-use are taken into consideration. The Value Proposition Builder™ has been developed to help build value propositions for the current product or service mix. It is rather difficult to see how it could be used in the context of user-centric innovation

processes in living labs, as the dynamic and collaborative aspects of the iterative service or product development are missing from the tool.

The second tool, the People Value Canvas, is a tool for building value propositions for a new offering, as a need for this kind of tool was discovered during a user-centric innovation process. It can be used when building value propositions for the current offerings, though customer insights have to be based on recently conducted ethnographic studies and co-creation sessions with customers.

The premises of the People Value Canvas are aligned both with the S-D logic and living labs. The PVC clearly focuses on value-in-use instead of value-in-exchange. Customer experience and the context of value creation are thoroughly discussed when filling in the Canvas. The last building block, Effect, covers the longitudinal perspective, as proposed by Heinonen and colleagues (2012).

The networked nature of value is partly taken into consideration in the seventh building block of the PVC, that of Process. The understanding of users as resource integrators seems to be even less evident. Moreover, the developers of the PVC do not describe the interactional nature of the value creation, although interaction is implicit in the building blocks of Technology and Process.

The third tool, the Value Proposition Canvas was launched to accompany the process of testing, learning, and pivoting by experimenting with the most basic product prototype imaginable (Osterwalder, 2012). Hence it seems to coincide with one of the defining elements of living labs: experimentation in a real-life context. Although many of the elements of the Canvas follow the S-D logic, one of its basic foundational propositions is aligned with the G-D logic: the enterprise and its offerings are the creators of value for the customer. Thus this tool contradicts the living lab understanding of users as co-creators of value. However, the emphasis is on value-in-use. The time-frame in the analyses of the customer segment covers the past, present, and future.

The context of the usage of the potential offering, i.e. the context where the customers are trying to get jobs done, will probably be thoroughly analysed when identifying the jobs, as well as the pains and gains related to them. The anticipated experience of value-in-use (the pain relievers and the gain creators in Figure 3) is analysed only from the point of view of the current and prototype versions of the enterprise's offerings. The word "anticipated" refers to the instruction given by the developers of the Canvas: "Ask yourself" (Osterwalder, 2012). The first sketch of the Value Proposition Canvas is based on the extant knowledge and beliefs of the enterprise. Feedback from customers will be gathered when testing the Minimum Viable Product (Ries, 2011). However, users are mostly regarded as objects in the test or as informants in the interviews (Osterwalder et al., 2014).

The left-hand side of the Value Proposition Canvas focuses on the dyad of the two actors, the enterprise and the customer. The multi-stakeholder or service ecosystem perspective is missing from the value proposition building process that has been suggested by Osterwalder and colleagues (2014). Table 1 highlights the findings of the analyses of these three tools.

Table 1. The nature of value in the three tools for building value propositions in living labs

<i>Aspect of value</i>	Value Proposition Builder™	People Value Canvas	Value Proposition Canvas
Creator of value	Mainly producer	Co-created by the producer and the user	Mainly producer
Focus on value-in-exchange or value-in-use	Both are considered, more emphasis on value-in-exchange	Value-in-use	Value-in-use
Experiential nature of value	Value experience is one of the stages; understood as a rather static concept	Yes, strong emphasis on user's perception of value/user experiences	Yes, strong emphasis on customer gains and pains (i.e. value) perceived in use
Short- or long-term perspective	Mainly rather short-term perspective	Both are considered	Both are considered
Contextual nature of value	Missing	The physical, temporal, and spatial context of value-in-use and social networks of the user are considered	Social context of value creation is considered, but value is not understood as socially constructed
Networked nature of value	Missing	Partly taken into consideration	Missing
Understanding of users as resource integrators	Missing	Missing	Missing
The multi-stakeholder/service ecosystem perspective in value creation	Missing	Mentioned but not properly elaborated	Missing

7. Summary and conclusions

We wish to emphasise that value and value creation are understood as interactional and contextual, and they are shaped by social forces and norms, and influenced by a wider actor network or ecosystem. All social and economic actors (including users) are seen as resource integrators, implying that consumption is about integrating resources acquired from different sources. Hence acknowledging the importance of context and the key role of the service ecosystem is vital when developing managerial tools for building value propositions in living labs. Furthermore we wish to highlight that the defining elements of living labs are aligned with the premises of the service dominant logic.

In the paper, the most recent insights on value and value creation were used to reflect on the three tools developed for enhancing and structuring the value proposition building process. We presented the Value Proposition Builder™ (VPB) by Barnes and colleagues (2012), the People Value Canvas (PVC) by Wildevuur and colleagues (2013), and the Value Proposition Canvas (VPC) by Osterwalder (2012). The first, the Value Proposition Builder™, falls within the scope of the traditional paradigm, and thus it conflicts with the ideas and premises of the user-centric innovation processes in the context of living labs.

The second tool, the People Value Canvas, does reflect the S-D logic and the users as designers - approach (van Dick et al., 2011). The value proposition built while utilising the PVC relies heavily on the knowledge gained using methods of applied ethnography and co-creation. The building process is

iterative: the input into the PVC is modified based on consecutive interactions with users. We can conclude that the PVC aligns with the foundational ideas of a living lab, although the multi-stakeholder perspective has not been fully elaborated on in this tool.

The third tool, the Value Proposition Canvas, somewhat contradicts the living lab approach, as the enterprise and its offerings are seen as creators of value for the customer. Overall, the co-creation aspect is rather vague or at least remains implicit in the VPC. A recent study by Coorevits and Schuurman (2014, p.14) concluded that “the Value Proposition Canvas did not provide an extra value for researchers and practitioners in a Living Lab environment”.

Each of the tools seems to neglect a deeper acknowledgement of the role of the wider context, the service ecosystem, and the role of networked actors as resource integrators. The understanding of customers as resource integrators is an especially important perspective, and yet it is missing in most of the present conceptualisations of value propositions. We maintain that the understanding of actors as resource integrators has thus far been rather implicit in the living lab discussions. Hence it needs to be further elaborated on by living lab researchers.

Moreover, none of the tools explicitly point out the role of enterprises as intermediaries in building invitations for value co-creation. Therefore we propose looking into how living labs is a means to include the service ecosystem into managerial tools. As an example, the European Network of Living Labs (ENoLL) has defined a living lab as “a real-life test and experimentation environment where users and producers co-create innovations in a trusted open ecosystem that enables business and societal innovations” (<http://openlivinglabdays14.com/>). Based on our theoretical discussion and the results of our analyses, we would suggest that the words “users and producers” be replaced by “all actors” (c.f. the notion of “public-private-people-partnerships as proposed by Westerlund and Leminen, 2011). From the point of view of value propositions, we propose that living labs are seen as platforms to invite all the actors of the service ecosystem into a continuous co-creation of value propositions.

The theoretical contribution of this paper is to build on key discussions in the conceptualizations of value and value propositions and to point out that managerial tools neglect the networked nature of value co-creation within service systems. We especially wish to highlight the importance of steering the discussion from an emphasis on the customer–producer interaction and towards the service ecosystem and its institutional, social nature. Following in the path of Edvardsson and colleagues (2011) and Frown and colleagues (2014), we suggest investigating discussions of the concept of practice in management literature as further avenues for research, as well as the practices of innovators and managers in the service ecosystems.

A living lab as an open ecosystem offers an excellent environment to study and develop value proposition tools further so as to embed the missing perspectives identified in this paper, leading hopefully to the construction of more user-centric value propositions that simultaneously consider the whole service ecosystem as a space for negotiating resource sharing. Moreover, value propositions should be built both for customers and other actors involved in value co-creation in the context of a living lab.

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