

# Examining value propositions and innovation types of B2B offerings in the context of circular economy (Work in progress paper)

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## **Abstract:**

Understanding customer needs is the basis for developing resonating customer value propositions for innovations. While prevailing value creation logics shape firms' expectations and perceptions of value propositions, understanding these in contexts where value creation logics are changing is a key challenge for many firms. Creating resonating value propositions for innovative offerings is challenging, as they introduce technological and/or marketing discontinuities not only to the firm, but to the target customers as well. In order to understand how firms communicate the value of their innovations, we conduct a qualitative, structured analysis of customer value propositions in over 70 documented, innovation-driven business cases in the Circular Economy, an emerging and highly innovation driven context. By analyzing the communicated value outcomes of these value propositions, and the types of innovations that underlie them, we identify support for adopting a value proposition approach with a wide perspective on value outcomes for communicating the value of innovations, thus contributing to the increasing value proposition literature in industrial marketing.

## **Keywords:**

Value proposition; Innovation; Industrial Networks, Value creation, Circular Economy

# 1 Introduction

In the industrial marketing literature, value propositions (VPs) have a rich and long lasting history as communicating devices for the value of firms' offerings (Ballantyne et al., 2011; Lindgreen et al., 2012), and as strategic tools to facilitate a customer-oriented approach to value creation to and with the customers and stakeholders of firms (Chandler and Lusch, 2015). As communication devices, value propositions can be seen as a combination of value outcomes, ranging from economic benefits to improved sustainability (D'Antone et al., 2017; Payne et al., 2017), that *the supplier firm perceives that resonate with the target customer* (Anderson et al., 2006). Well-constructed value propositions attract customers to start business relationships with the supplier and therefore this aspect is relevant for firms that aim to remain competitive and survive in networks of business relationships. A special case for constructing value propositions are innovations, as they introduce newness to either the firm or the customers or both, and can be both an initializer for developing VPs and an important source of new VPs (Payne et al., 2017).

Value propositions thus play a key role in the innovation process, where the key objective is to introduce an invention to markets successfully. (Garcia and Calantone, 2002). In the innovation literature, the connection between the value proposition and innovation has traditionally been discussed from the perspective of the effect of market-orientation to the firm's innovativeness as either a driver for innovations that fulfil customer needs, or as an impediment to truly novel innovations due to lock-in to existing customers' preferences (see e.g. Im and Workman, 2004). This novelty can novelty can realize through different innovation types (see e.g. Garcia and Calantone, 2002). Research in the field of Industrial Marketing and Purchasing (IMP) has acknowledged that in order to be successful and contribute to value creation, firms introducing innovation to the market need to identify the network conditions of existing business networks (Håkansson and Snehota, 2006) and embed themselves into them (La Rocca and Snehota, 2014). The type of innovation can be a significant factor from this perspective (Covin et al., 2015).

While the literature on value propositions identifies innovations as a key sources of VPs (Payne et al., 2017), current VP research has mostly focused on examining how firms can innovate new VPs (Åkesson et al., 2016; Skålén et al., 2015). The value proposition and innovation concept have been studied together in the field of business models and business model innovation. However, this research stream has a wider perspective of the value proposition including the offering itself in the value proposition as well, rather than examining the value proposition as a communication device from supplier towards the customer (Foss and Saebi, 2016; Teece, 2010). Thus, *research on how value propositions facilitate the communication of the value of innovations is scant*. This is a major research gap, regarding that the necessity to develop new value propositions or modify existing ones is often driven by new innovations introduced to the firm (Payne et al., 2017). Consequently, the purpose of this study is to *explore how firms use VPs to communicate value outcomes of different types of innovations to customers*.

To address this, we examine the link between innovation types and value propositions in the emerging context of circular economy (CE). Business in the CE context highlights, for example, the use of recycled materials, reusing and sharing products, and offering maintenance and leasing services, and thus introduces fundamental changes to supply chains and furthermore business networks of industrial firms (Spring and Araujo, 2017). In general, CE has recently gained popularity among businesses and policymakers as a method for moving towards an economic system where, rather than overusing natural resources, materials and products are kept valuable longer through activities such as maintenance and

recycling (Esposito et al., 2018; Geissdoerfer et al., 2017). The move towards CE necessitates new innovations to existing processes and practices across firms, business networks and value chains (Franco, 2017; Spring and Araujo, 2017), and the offerings of firms in CE are prominently driven by innovations (Prieto-Sandoval et al., 2018). Thus in order to achieve the purpose of our study, we aim to answer the following two research questions 1) *What value outcomes do firms in CE include in their VPs*, and 2) *What types of innovations underlie the VPs of firms in CE?* By answering these research questions, we aim to extend the current understanding on how VPs facilitate communication of different types of innovations.

We address the research questions by reviewing and integrating VP, B2B and industrial marketing, and innovation literature (Garcia and Calantone, 2002; La Rocca and Snehota, 2014; Payne et al., 2017) to develop theoretical insights into the nature and forms VPs may potentially take when communicating the value of different innovation types. We draw empirical insights from a qualitative, exploratory multiple case study (Eisenhardt and Graebner, 2007), that includes a large set of 72 previously documented, and publicly available case studies of business models and formally expressed VPs of firms in CE. Our findings reveal that VPs of innovative firms in the context of CE communicate a broad range of value outcomes (economic, functional, environmental and social), combination of which varies based on the innovation types that underlie them. Overall, this study contributes to several priority areas in contemporary industrial marketing literature by i) integrating VP and innovation research (Payne et al., 2017). ii) analyzing and deconstructing explicitly stated VPs in the context of CE (Payne and Frow, 2014) and iii) extending current VP theories in terms of underlying innovation types and communicated value outcomes (Patala et al., 2016; Skålén et al., 2015). For managers and firms in CE; this study offers new insights on what kind of innovation types and value outcomes they should highlight in their VPs, and how to communicate these to various stakeholders and decision makers.

## **2 Theoretical background for examining value propositions and innovation types in CE**

The main contribution of this paper is to explore how firms use value propositions to communicate the value of their innovations to customers. In this section, we review literature on value propositions and innovations in order to derive an analytical framework for examining how value propositions communicate the value of different types of innovations. We also shortly describe the research context of circular economy.

### **2.1 The value proposition**

The value proposition is a central tool for suppliers for both communicating the value of their offering towards customers and for aligning the internal resources of the firm in a way that enables the firm to offer customers superior value (Payne et al., 2017). As such, the value proposition is both an external communication device and an internal managerial tool for firms. Value propositions in business markets act as invitations to enter into business relationships by communicating value outcomes towards customers. (Ballantyne et al., 2011) Internally, the value proposition enables suppliers to align their business in a customer-oriented way (Payne et al., 2008).

Externally, the firm's value proposition resembles an explicitly stated message that is communicated towards potential customers (Ballantyne et al., 2011). Parts of the value proposition literature has focused on the issue of how value propositions are constructed, which becomes extremely relevant

when value propositions are viewed as a communication tool. The approach of value drivers has been a prominent approach to identifying value in a business relationship in the industrial and B2B context (Lapierre, 2000). In the value driver approach, the focus is on the interaction and dialogue between the parties of the business relationship through which the value emerges, and as the customer determines the value, this research stream has adopted the customer perspective to value drivers (Ulaga, 2003). As the value proposition in our approach is a supplier determined and constructed communication device, we focus on the literature on the composition of value propositions by suppliers (Payne et al., 2017). The composition of a value proposition has been discussed from primarily two perspectives. The earlier method of construction of value propositions was based on the breadth of the value proposition, for which Anderson et al. (2006) propose three forms: all benefits, favorable points of difference (compared to competing products), and resonating focus (benefits to a certain target audience). Rintamäki et al. (2007) take a different perspective on the composition of a value proposition, diverting focus from the breadth of the value proposition message towards the depth of the value, i.e. the set of dimensions of value that the firm offers. Their value dimensions include economic, functional, emotional, and symbolic value.

One deficiency of the existing value dimensions perspective regarding the composition of value propositions is that the current literature focuses almost entirely on economic value aspects, while ignoring other value outcomes, such as positive environmental or social value that can emerge from the firm's offering (see e.g. Emerson, 2003). This approach is not sufficient in effectively communicating value to target customers as customers and stakeholders in contemporary markets are increasingly evaluating environmental and social outcomes too (Kotler, 2011; Porter and Kramer, 2011). This widening of perspectives on what drives value is already present in the emerging literature stream of sustainable value propositions (e.g. Patala et al., 2016), where economic, environmental and social value outcomes are all examined as part of the triple-bottom-line approach.

## **2.2 Innovation as a value proposition driver**

As discussed in the previous chapter, the composition of value proposition has been a focus area of the literature, including the types of value outcomes they communicate and breadth of the explicitly stated value proposition. As for the drivers of value proposition themselves, current literature mostly examines firms and customers from a resource and knowledge perspective, highlighting the need for knowledge on customers and the offering for the firm, and for the resources to fulfil the value proposition, as critical aspects underlying the value proposition (Payne et al., 2017). The innovation literature however opens up a new perspective towards looking at value proposition composition: from the perspective of the innovations type, as one aspect of successful innovation is that the innovation becomes adopted by customers and embedded into existing business networks (e.g. La Rocca and Snehota, 2014). Thus, to be successful, innovations need to help fulfilling resonating customer value propositions.

The nature of innovation in business markets has been a subject of debate in innovation literature. In their comprehensive literature review on technological innovation, Garcia and Calantone (2002) explicitly separate innovativeness of firms from innovation, adopting the 1991 OECD definition of innovation as *“an iterative process initiated by the perception of new market and/or new service opportunity for a technology based invention which leads to development, production, and marketing tasks striving for the commercial success of the invention.”* Thus, innovation includes both the technological development and the market introduction of an invention in an iterative process where the technological and marketing aspects of the innovation are further developed. From the focal firm's

perspective, technological newness leads to shifts in the technologies embedded in a product, R&D resources, and/or new production processes. Marketing newness implies that the firm needs to enter or create new markets, and/or needs to develop new marketing skills in order to move the innovation forward. From the customers perspective these same discontinuities apply, but these discontinuities are necessary shifts that need to happen in order for the customer to adopt the innovation. An important aspect of newness is that it is directly linked to the firm from whose perspective is taken, an innovation that introduces marketing discontinuities for one firm, might not introduce such for another. (Garcia and Calantone, 2002)

The type of innovation thus seems to be an especially interesting subject from the perspective of value propositions, which should communicate the value of the offering to target customers. Garcia and Calantone, (2002) introduce a typology of innovations based on the newness of the innovation to the firm and to their customers, and whether the innovation is technological or marketing oriented. When considering these aspects from the perspective of resonating value propositions, it could be considered that innovations that from a customers perspective are either a very small increment, or are very new, might require different approaches to value proposition construction. At least when examined from a perspective of market-orientation and product novelty, it seems that market oriented firms, those that from a value proposition perspective would be the best at developing resonating value propositions, generally develop less novel products (Im and Workman, 2004). While this result cannot directly be transferred to compare value propositions and innovation types, it suggests that a link between innovation and the market orientation embedded into the value proposition approach exists and should be studied further.

### **2.3 Circular Economy and innovation**

Circular Economy offers a promising context to explore the connection between innovation and value propositions, as the trend underlines the need to pull out the economic value of technological novelties and environmental gains. Circular economy (CE) has emerged as a more sustainable and potentially business friendly alternative to a linear economy across the globe and several academic disciplines (Esposito et al., 2018; Ghisellini et al., 2016; Merli et al., 2018; Ranta et al., 2017). In general, CE refers to a closed-loop, restorative, and regenerative economic system, which aims to optimize resource and waste usage by “slowing, closing, and narrowing material and energy loops” (Bocken et al., 2016; Geissdoerfer et al., 2017). The key advantage of CE is that it aims to “keep products, components and materials at their highest utility and value, at all times” (Webster, 2015, p. 16), and create long-lasting economic, environmental, and social outcomes to a broader social systems (Ghisellini et al., 2016). Thus, CE essentially promises to generate “more value, and for a longer period” for firms and society than traditional linear economy (Urbinati et al., 2017, p. 487). As CE becomes more embedded into public perception and more concretely in legislation, CE is introducing new market and new service opportunities for firms, and as a result, is a breeding ground for innovation.

### **2.4 Analytical framework**

In this chapter we derive an analytical framework with which to explore the value proposition as a facilitator of the value of innovations. From the value proposition literature, we adopt the approach of analyzing the type of value that is communicated in the value propositions. To factor in the identified shortcoming of previous value proposition literature that focuses overwhelmingly on economic value, we include the triple bottom line approach (Patala et al., 2016) to our value outcomes and combine them with the value established typology of Rintamäki et al. (2007). Since these two have overlap, for

example in both including the economic value outcomes as one type, and since the symbolic and emotional value have originally been developed in a consumer-driven context of retailing, we include economic, functional, environmental and social value outcomes in our analytical framework.

From the innovation literature, we adopt the established typology of Garcia and Calantone (2002). To accommodate the research context we do not take the full typology measures that include newness of technological and marketing aspects both on a macro and micro-levels. Rather, following the findings of La Rocca and Snehota (2014), we limit our analysis to the micro-level and examine the innovations newness from a technological and marketing perspective, and both from the viewpoint of the firm introducing the innovation and the customers that the value proposition is targeted towards.

Our analytical framework also combines the value proposition, which communicates how the firm believes its offering can create value to customers, with the innovation typology that considers the innovations newness from the customer's perspective. This approach could potentially generate new knowledge on whether firms construct value propositions with their customer's capability to adopt the innovation in mind, or whether the value proposition is constructed from the firm's perspective on the innovation.

### 3 Methodology

Since research on how value propositions communicate the value of innovations, our study takes an explorative approach to the subject. We employ a qualitative case study research design. Case studies have been established as well suited for theory-developing research (Eisenhardt, 1989), and thus are a good fit for studying the connection between innovation typologies and customer value propositions in the circular economy. We especially adopt the multiple case study design with a large number of cases in order to improve the generalizability of the study through an extensive set of cases (Yin, 2003).

Our data consists of 72 cases of business models and stated value propositions of firms in CE. The cases have been documented by circular economy experts at the Finnish Independence Fund SITRA with the objective of including a wide variety of innovative and interesting CE cases. Due to the focus on innovative firms, the original objective of case collection is well aligned with the objective of our research. In total, the database collected by SITRA contains over 100 cases crossing multiple industries. From these, we included only cases that were described as B2B. Furthermore, in January 2018 SITRA achieved The Award for Circular Economy Public Sector at The Fourth Annual Circulars competition organized by the World Economic Forum, which indicates reliability for the CE cases collected by them. A similar approach to data collection has previously also been employed by Urbinati et al. (2017) who analyzed cases collected by the Ellen MacArthur Foundation.

The data analysis proceeded in multiple stages. First, the stated value proposition of each case was coded using the value outcomes of economic, functional, environmental and social (Patala et al., 2016; Rintamäki et al., 2007) as a priori codes. Second, each case was coded using the innovation types proposed by (Garcia and Calantone, 2002) of discontinuity on technology and marketing aspects. To examine the effect in the business network, the innovation type was analyzed both from the perspective of the focal firm introducing the innovations as part of a solution, and the customer adopting the solution. For example, if the innovation was a new processing technology for processing industrial byproducts packaged into a turnkey plant solution and bundled with operations and maintenance

services, this was coded as both a technological and marketing for the focal firm. From the customers perspective this particular solution includes technological and marketing newness due to the new process implemented for processing byproducts, and due to the new marketing activities needed for selling the materials that the new process produces.

## **4 Preliminary results**

For preliminary results 21 cases were analyzed using the analysis framework developed in chapter 2. Seven examples of cases analyzed using the value outcomes, and innovations newness to the firm and to the target customer, are shown in table 1.

Case Firm	Customers	Innovation	Value proposition	Newness to customers
3 Step IT	Organizations with IT equipment	<p>"IT equipment life-cycle management as a service"</p> <p>A life-cycle management service that makes reusing old IT equipment easier. Service includes acquisition, management and repurposing. Over 95% of equipment can be reused, and the company is one of the largest sellers of used IT equipment in Europe.</p> <p><i>(Technological and marketing newness)</i></p>	<p>"The service offers an easy way for offices to have well-functioning IT equipment that is replaced as needed. Efficient life-cycle management saves IT costs and users' working time. The customer pays for use instead of ownership, which means that the costs are predictable and allocated across the actual useful life. Customers can opt for used computers, and responsible life-cycle management of IT equipment can be included in the company's environmental programme. The data security of old disposed equipment is guaranteed."</p> <p><i>(Economic, functional, and environmental value)</i></p>	<p>Outsourcing of IT equipment management. Switching from acquiring only new to also used IT equipment.</p> <p><i>(Technological newness)</i></p>
ABM Composite	Plastics product producers	<p>"biomaterial to replace oil-based plastics and composites"</p> <p>A biomaterial that can replace oil-based plastics and composites in demanding technical applications. Can reduce carbon footprint by as much as 60 to 80 per cent compared to oil-based products. The biomaterial is compostable, or can be broken down and reused as raw material. Sells the material to customers.</p> <p><i>(Technological newness)</i></p>	<p>"Many companies are aiming to reduce their dependency on fossil-based raw materials and cut down the carbon footprint of their products, and Arctic Biomaterials provides a solution for this aim. Customers can also capitalise on the responsibility aspect in their marketing activities."</p> <p><i>(Environmental value)</i></p>	<p>Substitution of current materials with a new, more environmentally friendly alternative. To fulfill the value proposition, use of responsible materials should be used in marketing.</p> <p><i>(Marketing newness)</i></p>
Aquazone	Agriculture, water treatment plants	<p>"turning waste water into soil-treatment materials and drinking water"</p> <p>Combination of existing technologies for turning waste water into soil-treatment materials and drinking water. Approaches developing countries through a new joint operations model with local partners.</p> <p><i>(Marketing newness)</i></p>	<p>"Aquazone's waste-water treatment technology and the soil-treatment material produced from sludge by Ekolannoite can increase the availability of clean water and farming possibilities in developing countries. Cleaning waste water and the soil-treatment material obtained from it allows self-sufficient farming and also improves the ability to live in difficult conditions. Plant operators in other countries can be trained at the education centre in Mikkelä."</p> <p><i>(Social value)</i></p>	<p>New technology investments for agriculture, improving sustainability and efficiency of farming.</p> <p><i>(Technological and marketing newness)</i></p>
Betulum	Agriculture, Paper producers, Oil drilling, Composite producers, chemical product producers	<p>"replacement for synthetic polymers from agricultural side streams"</p> <p>Technology for turning agricultural byproducts into polymer structures such as microfibers with properties equivalent to many technical polymers. The technology is patented. The firm's customers that use the patented technology often have direct sales channels to certain industrial customers. In addition to the license income, the firm also has the opportunity to sell fibres to customers that the producer does not have sales channels with.</p> <p><i>(Technological and marketing newness)</i></p>	<p>"The company's technology enables polymer replacements to be manufactured at a lower cost than traditional polymers. The raw material is not subject to the same price fluctuations as oil, which means prices are predictable for end customers. Companies that license Betulum's technology get better income from their side streams while the end users in different industries gain an environmentally friendly solution."</p> <p><i>(Economic and environmental value)</i></p>	<p>For agricultural customers: New technology for treating agricultural byproducts, opportunities to sell materials made from byproducts, to existing customers.</p> <p>For industrial customers: New, environmentally sustainable source for materials</p> <p><i>(Technological and marketing newness)</i></p>
BioGTS	Firms treating biowaste	<p>"scalable biogas and biodiesel plants"</p> <p>Scalable technology for turning biodegradable waste into renewable energy, vehicle fuels, and fertilisers.</p> <p>The plants are designed to the customer's waste volumes on a case by case basis and delivered on a turnkey basis. In addition to the plants, the company also provides operating and maintenance services.</p> <p><i>(Technological and marketing newness)</i></p>	<p>"The compact structure of the reactor offers low investment and operating costs to customers. The plant is easy to operate, and the process is highly efficient. Various types of organic raw materials can be used in the process. Thanks to its modular reactor, the plant's capacity can be increased as needed. The lead time is short and the plant typically pays itself back in two to five years. Customers can use the waste as energy and fertiliser."</p> <p><i>(Economic, functional value)</i></p>	<p>A new technology, but also allows customers to turn waste into a resource, opening possibilities to further sell those resources.</p> <p><i>(Technological and marketing newness)</i></p>
CrossLam	Construction industry	<p>"sustainable and comfortable wooden construction with CLT elements"</p> <p>Elements from cross-laminated timber (CLT) using a technology that allows the timber elements to replace load-bearing frame materials that are typically made of concrete and steel.</p> <p><i>(Technological newness)</i></p>	<p>"For the builder, constructing the frame of a building with CLT elements is considerably faster than using traditional, beam-based frames. Highly prefabricated CLT elements also help reduce risks related to weather changes during the construction period. CLT panels are also a cost-efficient and durable material. In addition, wood is much easier to work with as a material and serves also as a marketing factor because of its environmental sustainability. Studies show that residents in wooden apartment blocks find their homes more comfortable than those in concrete buildings."</p> <p><i>(Functional, environmental value)</i></p>	<p>Replacement of materials and new construction techniques. Potential for using environmental sustainability in marketing.</p> <p><i>(Technological, marketing newness)</i></p>
Fescon	Powerplant operators	<p>"more functional and long-lasting fluidised bed material from recycled raw material"</p> <p>A service agreement with customers where the customer pays for the amount supplied, a revenue logic that is widely used in the industry. The blast furnace cinder that is used as the raw material for the bed material is a by-product of the steel industry, and is readily available for the firm.</p> <p><i>(Technological newness)</i></p>	<p>"Thanks to the new fluidised bed material, there will be less erosion in the boilers of power plants. At the same time, the lifetime of individual fluidised beds and the intervals between changing them will lengthen. The bed material made of blast furnace cinder can also be used at higher temperatures than the bed material made of sand, in which case combustion is cleaner, and the process produces less bottom ash than before."</p> <p><i>(Functional value)</i></p>	<p>Substitutes an existing product and improves the process without much impact on the end-product or purchasing practices.</p> <p><i>(Technological newness)</i></p>

**Table 1:** Case descriptions for seven example cases from the sample.

First to answer the question "What value outcomes do firms in CE include in their VPs?" we identified the communicated value outcomes from the explicitly stated value propositions of each case. The value proposition column in table 1 contains the full stated value proposition from the cases, and beneath states the identified value outcomes from the case. In the initial sample, economic and environmental value outcomes appeared most often, with the distinction that while economic value outcomes came

from a variety of sources including cost reductions and new revenues sources, the environmental value most often came from the customer being able to embed environmental sustainability into their own marketing. Based on the value outcomes identified, groups of value proposition types started to emerge. The stated value propositions most often form a holistic value proposition, which includes economic, functional, and environmental value. Only three firms out of the analyzed 21 employed the traditional combination of purely economic and functional value.

Second, to answer the question: “*What types of innovations underlie the VPs of firms in CE?*” We examined the technological and marketing related novelty of innovations from the perspective of the firm and the target customer. Table 1 shows a few examples of the within-case findings of the innovation type, with newness from the firm’s perspective in the “Innovation” –column, and newness from the customer perspective in the “Newness to customers” –column. The value proposition groups identified were leveraged in this phase of the analysis to find emerging patterns that connect the VP type to the innovation type.

The preliminary findings imply that the VPs that communicate economic value outcomes introduce both technological and marketing innovations from the firm. In the case of the holistic VP group, the adoption of the offering is communicated to introduce only technological newness to the customer. Also, in any other composition of the value proposition except the holistic one, communicated environmental value outcomes are linked to marketing newness to the customer. The emerging patterns between innovation types and value proposition types are shown in table 2.

<b>Introduced innovation from the firm</b>	<b>Introduced newness to customers</b>	<b>Value Outcomes in VP</b>
The solution introduces technological and marketing innovations from the firm	Introduces technological newness to the customer	<i>Economic, functional, environmental</i>
The solution introduces technological and marketing innovations from the firm	Introduces both technological and marketing newness to the customer	<i>Economic, functional</i>
The solution introduces technological and marketing innovations from the firm	Introduces both technological and marketing newness to the customer	<i>Economic, environmental</i>
The solution introduces technological innovations from the firm	Introduces both technological and marketing newness to the customer	<i>Functional, environmental</i>
The solution introduces technological innovations from the firm	Introduces technological newness to the customer	<i>Functional</i>
The solution introduces technological innovations from the firm	Introduces marketing newness to the customer	<i>Environmental</i>
The solution introduces marketing innovation from the firm	Introduces both technological and marketing newness to the customer	<i>Social</i>

**Table 2:** Emerging patterns of innovation types and newness to customers as characteristics of value proposition types

## 5 Discussion and conclusions

Our findings reveal insights into firms use value propositions to communicate the value of different types of innovations to customers. One interesting result is the notion that the value propositions with the most depth from the value outcomes perspective also seem to promote offerings that introduce technological rather than marketing newness to the customers. This implies that the firms that have constructed their value propositions following the same guidelines that the value proposition literature promotes (Payne and Frow, 2014) also introduce offerings that from an innovation perspective can more conveniently be embedded into existing business networks (La Rocca and Snehota, 2014) due to introducing technological innovation which have less impact on the other stakeholders in the network than marketing innovations. Thus while value propositions have not before been promoted in innovation literature, the approach could have beneficial effects on the successful communication of the value of innovations. From the value outcomes perspective, our findings support recent literature (D'Antone et al., 2017; Patala et al., 2016) which advocates for communicating a more diverse set of value outcomes as benefits as opposed to overwhelmingly focusing on economic and functional benefits. In fact, only three of the firms in the preliminary sample of 21 firms limited their value proposition to these two value outcomes. This finding is also aligned with the recent implications from marketing and management literature (Kotler, 2011; Porter and Kramer, 2011) that firms are increasingly focusing on non-economic aspects of value as well.

Managerially, the findings imply that firms can benefit from adopting the value proposition approach in their communication of the value of the innovation, as aiming for a holistic value proposition supports a more market-oriented approach that can lead to the innovations being embedded into offerings that themselves are easier to embed into existing business networks (La Rocca and Snehota, 2014). When constructing value propositions, firms should also widen their perspective on which value outcomes to communicate, as only focusing on the economic and functional value outcomes could put their firms' offering to an unfavorable position compared to competing firms.

One limitation of the research is that all of the cases are derived from the CE field. While this allowed the identification of innovative firms and their value propositions, it could have highlighted the environmental value outcomes due to the sustainability aspect of CE. However, while environmental value outcomes did emerge, they did not seem like a descriptive factor for CE firms as many value propositions lacked the environmental outcomes entirely. Another limitation of the study is that the secondary nature of data did not allow confirmation to be made on the identified connection between the type of innovation and the value proposition. Confirming this connection would be a fruitful research avenue. Future research should also further identify why and how the value proposition approach helps the communication of the value of innovations to customers.

This study provided initial steps towards connecting the highly relevant innovation and value proposition research fields. Our preliminary findings suggest that adopting a value proposition approach can help in facilitating the value of innovations in industrial markets to be more market-oriented in practice, resulting to new offerings that are more likely to be successfully embedded in existing business networks. We also contributed to the value proposition literature by showcasing that VPs in industrial markets benefit from widening the perspective from purely economic and functional value outcomes to more symbolic value outcomes such as environmental and social as well. While our research results were derived from the emerging context of Circular Economy, they provide implications for

constructing value propositions for offerings that are driven by innovation and contribute to the foundation of successful business renewal.

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