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Citation of the published version: Martti Lindman Kyösti Pennanen Jens Rothenstein Barbara Scozzi Zsuzsanna Vincze , (2016),"The value space: how firms facilitate value creation", Business Process Management Journal, Vol. 22 Iss 4 pp. 736 – 762 http://dx.doi.org/10.1108/BPMJ-09-2015-0126

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1. Introduction

The creation of value is of crucial importance for the success of a firm operating in the business-to-consumer market (Ravald and Grönroos, 1996; Slater, 1997; Lusch and Vargo, 2006; Martelo Landroguez et al., 2013). Nevertheless, value is "perhaps the most ill-defined and elusive concept in service marketing and management" (Grönroos and Voima, 2013). The literature indeed shows that there is neither generally accepted definition of value (Parasuraman, 1997; Woodall, 2003; Khalifa, 2004; Priem, 2007; Lindgreen et al., 2012) nor of value creation. The conceptual ambiguity is probably due to the range of research fields (e.g. marketing, management) interested in value creation as well as of perspectives (e.g. customer's vs. firm's perspective) and streams of research (e.g. goods vs. service-dominant logic) dealing with it. For example, as to the research streams, the goods-dominant logic, traditionally adopted both in the marketing and management field, in recent years was outreached by the Service-Dominant Logic of marketing (SDL). Based on SDL value is created by customers whereas firms only offer value propositions (Vargo et al., 2008, Terblanche, 2014). Recently, the firm's role has been re-examined: firms serve as value facilitator by creating potential value and may also co-create value through direct interaction with customers (e.g. Grönroos, 2011a; Grönroos and Voima, 2013; Smaliukiene et al., 2015). SDL does not sufficiently clarify how that happens. As stated in Grönroos and Voima (2013), the roles of firms and customers in value creation remain "analytically unspecified".

To address the analytical indeterminateness and understand how firms really work, Langley (2009) suggests to create more "actionable" frameworks based on process theory.

Recent studies emphasize the need to further investigate value creation as a process (e.g. Payne et al., 2008; Edvardsson et al., 2012; Hsieh Chung and Ho, 2012; Grönroos and Voima, 2013;

Gummerus, 2013). The need to think of it as a process is not new. In the eighties the literature in the field of organization, strategy and operations management recognized value creation as a process and emphasized the relevance of another dimension of analysis, i.e. value creation activities (e.g. Porter, 1985; Borys and Jemison, 1989). The concept of activity is at the core of process theory (e.g. Mohr, 1982; Markus and Robey, 1988). During the years, the process thinking has attracted an increasing number of scholars and practitioners (e.g. Crowston, 2003, Langley, 2009), many of them working in the field of business processes management (e.g. Weske, 2012). To this regard, it is noteworthy the increased attention showed by scholars working in such a field towards marketing (and CRM initiatives) topics (Sidorova and Isik, 2010).

This paper contributes to addressing the analytical indeterminateness of value creation by investigating the firm's role in the value creation process. By adopting the process theory, the "value creation activity model", a categorization of the activities that firms carry out to facilitate the creation of value is developed. To associate each identified activities to the value type and source a firm would like to leverage on, the value creation activity model is then integrated into a revised version of a value creation framework, originally created by Smith and Colgate (2007). The final result is the "value space", an actionable framework within which different dimensions (activity, source and type) of value creation are integrated into a cohesive whole. To achieve such a result, a literature review and a multiple case study on 65 European firms in the furniture industry were carried out. Based on that, the activities carried out by firms were identified and the value space, both a theoretically-based and practical framework, developed. The systematic categorization of firms' activities and their subsequent integration into a value creation framework are a missing piece in terms of understanding value creation. Based on process theory, the framework contributes to the development of a more holistic and "actionable" view on the role of firms in the value creation process shading lights on the activities firms carry out to create value. The practical relevance of the framework is to support managers in describing and analyzing the potential value creation activities carried out by their firm (descriptive purpose), to assess the consistency among such activities and the firm's intended value proposition (reflective purpose) as well as to support the generation of new potential value creation opportunities, i.e. the identification of new combinations of value creation activities, sources and types (generative purpose). Finally, companies could submit the analyses generated with the support of the framework to their customers so as to assess if the potential value they tried to generate was actually transformed by customers into real value.

By facilitating process analysis as well as process innovation, the framework can support both exploitative and explorative business process management (Kohlborn et al., 2014) in relation to the value creation process.

The paper is organized as follows. First, an introduction on process theory and a review of the literature on value creation are reported. Then, the research methodology is presented and the value space framework discussed. Finally, conclusions and some recommendations for further research are drawn.

2. Process theory

A process is a set of interdependent activities performed to achieve a defined business outcome (e.g. Harrington, 1991). Process theory explains how such an outcome develops through a sequence of events and activities (Mohr, 1982; Markus and Robey, 1988). As reported in Crowston (2003), process theory is often discussed in opposition to variance theory which comprises *i*) the development of variables and propositions to link them and *ii*) the propositions' empirical test, usually by the means of statistical approaches. Variance theory thus predicts the level of dependent variables from the level of independent variables. On the other end, process theory requires the identification of *i*) process events and activities and *ii*) interdependences among them.

Langley (2009) argues that the two theories are complementary because: "variance-theory help us understand what works - on average - across large samples, something that process research cannot provide. And yet, without knowledge of process, variance knowledge is very hard to use: the how is missing". The representation of reality as a set of activities embodies a richer description of how firms actually achieve a specific outcome (e.g. Van de Ven and Poole, 1990; Pentland, 1995; Crowston, 1997). Such a richer description is particularly useful when a theoretically-based and practical tool to support managers is to be developed, as is the case of this paper.

At the time of its conceptualization, process theory focused on processes leading to exceptional outcomes (Mohr, 1982). Today, also consistently with the studies developed in the field of business process management (e.g. Weske, 2012), process theory is also adopted to study processes regularly performed by firms. Particularly relevant for the present paper is the work developed by Malone, Crowston and Herman (2003) which aims at laying "the foundation for a systematic and powerful method of organizing and sharing business logic" by focusing on the concepts of activity and processes. A relevant part of the study dealt with the definition of the MIT Business Activity Model, a model of "everything that goes in a business" (p. 231). Similarly, in this paper, the "value creation activity model", a categorization of value creation activities, i.e. a model of activities carried out by firms to create potential value, is developed. The identified activities are carried out by firms to facilitate the creation of value by customers, which is why they are considered as source of potential value. To develop the "value space", the value creation activity model is then integrated into a revised version of the value creation framework, originally created by Smith and Colgate (2007).

3. Literature review

The literature on value creation is wide and multidisciplinary. In this Section the main contributions are reviewed. The end of the Section discusses the value creation activities, which - the authors argue - are a missing piece in the extant value creation frameworks.

3.1 Value creation: definitions and research streams

The existence of several definitions of value is probably due to the subjectivity and ambiguity of the concept which also evolves over time (Khalifa, 2004; Lindgreen and Wynstra, 2005; Lindgreen et al., 2012). Holbrook (1996, p. 138) for example defines customer value as "an interactive relativistic preference experience". Consistently, some scholars argue that customers, with their perceptions, rather than suppliers with the offered products, are those who determine whether value is created or not (e.g. Grönroos, 1997; Ballantyne and Varey, 2006; Lusch and Vargo, 2006; Grönroos, 2011a; Grönroos and Voima, 2013; Smaliukiene et al., 2015). The early goods dominant logic of marketing states that value is something added to products in the production process and captured at points of exchange (i.e., price, value-in-exchange). Normann and Ramirez (1989) and Ramirez (1999) were the first to discuss the concept of co-production as a way to make innovative value creation opportunities emerge. Since that, the creation of value by firms and customers has received enormous interest among researchers due to the rise of Service Dominant Logic (SDL) of marketing (Lusch and Vargo, 2006; Cova and Salle, 2008; Edvardsson et al., 2012). The SDL literature considers that value can only be created once different actors' resources are integrated while resources as such do not carry value (e.g. Vargo and Lusch, 2011; Akaka et al., 2013; Chandler and Lusch, 2015).

The present study focuses on firms as actors who make activities so as to facilitate resource integration.

3.2 Value creation frameworks

In the last decades, several value creation typologies and frameworks have been developed, mainly in the marketing field (Woodruff, 1997). Table 1 summarizes the main frameworks, their focus and limits.

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Though the scope and the perspectives vary, the frameworks reported in the literature are based on two main value creation dimensions, namely *i*) types of (perceived) value by customer and *ii*) sources of value. As shown in Table 1, a framework which integrates the two dimensions is proposed by Smith and Colgate (2007). For all the combinations of value source and type, short explanations and examples are provided. For example, the value source "information" provides cost/sacrifice value by helping consumers making more informed and faster decisions; functional/instrumental value by informing and educating customers; experiential/hedonic value by advertising creatively; symbolic/expressive value by drawing associations and interpreting meanings. The attention devoted in the paper to this specific framework is justified by several reasons. First, it is built on the strengths of previous studies and addresses most of the limits reported in Table 1. Second, it integrates several value types with relevant value sources (including information, interaction and purchase environment) so trying to provide an holistic view of value creation. Finally, it involves reference to some value creation activities (those discussed in Porter, 1985). For each source of value, the value chain activities that create or enhance it are mentioned. For instance, the source "products" (which refers to the offered goods or services) is discussed in connection with value chain activities such as research and development, market research, new product development, and production.

The approach adopted and the characteristics of the framework are clearly consistent with the approach and the goal of the present paper wherein, as discussed in the following sections, *i*) the value creation activities are analyzed at a deeper level of detail and *ii*) the connections among value sources, types and activities are further investigated.

3.3 Activities to facilitate value creation

Numerous concrete examples regarding activities facilitating value creation can be identified in the literature. Value creation activities are the concrete actions that firms carry out to create potential value (Rintamäki et al. 2007; Grönroos and Voima, 2013). Already in the eighties, the literature in the field of organization, strategy and operations management recognized value creation as a process that improves competitive advantage (Borys and Jemison, 1989) and emphasized the relevance of value creation activities (e.g. Porter, 1985).

Levitt (1969) is probably the first scholar to mention value creation activities (e.g. packaging, advertising, financing, delivery arrangements) beyond production. These activities are crucial for the development of the "whole product" (i.e. the sum of the core, the expected, the augmented, and the potential product), as they make the customer value increase (Levitt, 1980). References to activities surrounding the core product are also present in the "4Ps" model – Product, Price, Promotion, and Place (McCarthy, 1978). Van Waterschoot and van den Bulte (1992) list some exemplary value creation activities. Among them, the promotion of discounts, the creation of different distribution channels, the development of permanent exhibitions, and activities like press conferences and the release of press bulletins.

Levitt's whole product concept has influenced many researchers and practitioners (Payne and Holt, 1999). For example, Lovelock (1992) develops a rather comprehensive differentiation of supplementary services in the "flower of service" concept. Grönroos (1990) classifies services into facilitating and supporting ones. Facilitating services include information, order-taking, billing and payment. Supporting services include consultation, hospitality, safekeeping, and exceptions management. Colgate and Alexander (2002, p. 105) point out that it is "widely recognized that the purchase of a product is influenced by more than the core product. Purchase decisions may be influenced by the service delivery system, the quality of the interaction with personnel, the reputation of the firm, and many other factors. These factors are considered to augment the core product in the eyes of the customer, so that customers respond to both the core and the augmented product when making purchase decisions".

In 1985, Porter proposes the value chain model which classifies the value-adding activities of an organization into primary activities (which include inbound logistics, operations, outbound logistics, marketing and sales, and services) and support activities (which include firm infrastructure, human resource management, technology, and procurement). Porter's value chain model encompasses activities carried out in the marketplace. Rayport and Sviokla (1995) argue that new value can be created by moving the activities to the market-space, i.e. the information world.

With a special focus on branding firms, Nandan (2005) highlights several activities that are (or are to be) carried out by firms. The activities include, for instance, promotional strategies, the possibility for customers to give direct feedback, or – as in Fawcett (1993) – the usage of integrated marketing communications.

Bowman and Ambrosini (2007) identify five types of value creation activities. The "product creation activities" (e.g. production and outbound logistics), the "value realization activities" (e.g. marketing activities, customer relationship management, direct sales activities) and the "input procurement activities" (e.g. procurement and any activity set up in order to increase production efficiency) are involved in the creation of current profit flows. Other activities, namely the maintenance of the firm, e.g. legal work or tax management, and the creation of future value, reduce current profit-flows.

Grönroos and Voima (2013) illustrate value creation activities by presenting three "value creation spheres", namely the provider, the customer and the joint spheres. In the provider sphere firms carry out activities that facilitate the creation of value. In the customer sphere, customer creates value whereas in the joint sphere co-creation can emerge. Firms' activities related to value creation can be classified into those which either facilitate customers' value creation by providing potential resources (e.g. product) and those which can facilitate the co-creation of value (e.g. in-shop stand with direct interaction between the firm and the customer). In the former case, the interaction with customer is indirect (e.g. through the product) whereas in the latter case direct interactions occur between the firm and the customer (Grönroos, 2011b and 2013). In the present paper the attention is focused on the provider and joint sphere.

Lately, as discussed in the Introduction, many scholars (e.g. Payne et al., 2008; Edvardsson et al., 2012; Hsieh Chung, and Ho, 2012, Grönroos and Voima, 2013; Gummerus, 2013) have emphasized the need to further investigate value creation as a process. In the paper, the authors take on this call and adopt the process theory to analyze the role of firms in the value creation process consistently with the model proposed by Grönroos and Voima (2013).

4. Research methodology

The goal of the paper is to develop the "value space", an actionable framework within which the different dimensions of value creation, as to the role of the firm, are integrated into a cohesive whole. To accomplish such a goal, the theoretical and methodological lens of process theory was adopted (Crowston, 2003; Langley, 2009), the wide literature on value creation reviewed and a multiple case study carried out.

Consistently with the adopted approach and based on the results of the literature review, the proposed framework encompasses the three value creation dimensions mentioned in the literature, namely value sources, types and activities.

The steps and the methodological approach adopted to develop the framework are the following. First, a categorization of value creation activities, i.e. the actions carried out by firms to facilitate value creation, was identified. To generate it, the data collection and activity identification techniques as proposed in Malone et al. (2003, p. 344-350) were adopted. In particular, a comparative multiple case study was conducted on 65 Small and Medium-sized

Enterprises (SMEs) in the furniture industry in Finland, Germany, Italy, Spain, and Sweden. According to the European Furniture Industries Confederation [1], the furniture industry makes a significant contribution to the European economy. Moreover several studies on value creation already focus on such an industry (e.g. Andreu et al., 2010). Based on that and taking on the call of Payne et al. (2008), furniture was chosen as an example of traditional manufacturing industry. The case firms were selected from the Amadeus database (http://bvdinfo.com/Products/Company - Information/International/ amadeus.aspx). The SMEs were classified according to the average Return on Capital Employed (ROCE), measured in the period 2004-2008. Three classes of firms were identified, namely the best performers (firms in the first quartile); the worst performers (firms in the last quartile); and the medium performers (the remaining firms). The case firms were selected so as to be almost equally distributed among the three classes. The logic behind this selection was to achieve rich data to identify a broad range of value creation activities firms perform.

A brief description of the case firms is reported in Table 2.

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In each country, semi-structured interviews were conducted with the owners and/or managing directors of the selected SMEs. To ensure the comparability of interviews, a common interview protocol was developed. According to it, the interviews were organized in the following six main sections: the firm and its business, the competition (discussion on main competitors and competitive advantage of the firm), the customers (discussion on segments, management and offered services), the product (discussion on offered products, related services and new product development) and the operations and supply chain management (discussion on value creation in the entire value chain). Given the semi-structured nature of the interviews, every interview was recorded to guarantee the completeness of data. Initially, each author separately read all the transcriptions of the interviews conducted by him/her to identify the activities performed by the firms. The task of the authors was to identify all the potential value creation activities carried out as well as the types of leveraged value and their source. All the statements that referred to activities that may lead to the creation of customer value were collected by each author (e.g. the provision of high quality standards). The interviewed firms' web sites as well as the sales catalogues were also analyzed. The analyses led to a comprehensive listing of statements related to performed – potentially value creating – activities of every firm. Each identified activity was then examined in teamwork to achieve consensus on the name and its potential to facilitate value creation. In this way a unique and agreed activity categorization was developed. After consolidating it, to avoid bias towards the furniture industry, the identified activities were supplemented based on examples of further value creation activities mentioned in the extant literature (reported in Section 2.4). This was necessary in order to support a more general use of the framework. The case firms were used only to generate as many as possible value creation activities. By adopting a deductive approach (as discussed above), the activities were, if needed, generalized to make them industry independent and the list of activities integrated so as to include all the value creation activities mentioned in the literature.

A total of nine main activities and 108 sub-activities (first and second level of decomposition) were identified. Together they comprise the "value creation activity model" (VCAM). VCAM differs from existing models (e.g. Porter's value chain) as to the activity level of decomposition. The larger grain of the activities proposed in e.g. Porter's value chain makes quite hard the analysis and management of the specific (elementary) actions carried out by firms. The finer grain of the activities in VCAM enhances managerial insights into the value creation process and is necessary to link activities to potential value creation types and sources.

The bi-dimensional value creation framework proposed by Smith and Colgate (2007) was then revised and integrated with VCAM so as to develop the "value space", a three dimensional framework wherein potential value creation activities, sources and types are integrated into a cohesive whole.

5. The Value Creation Activity Model: a categorization of value creation activities

VCAM is a model involving the activities firms carry out to facilitate value creation. The activities, as reported in the Appendix, are further classified as direct interactions and indirect activities based on Grönroos and Voima (2013).

The first four main activities are closely related to the core product. The activity "1.0 Providing product-related attributes" involves sub-activities aimed to the provision of attributes related to materials (e.g. products of durable materials), design (e.g. products designed by famous designers), assembly/installation (e.g. plug and play equipment), environment (e.g. products that do not pollute during the production cycle), quality (e.g. high quality products), technology (e.g. products with integrated lighting), opportunities for modification (e.g. possibility to change the color or the dimensions of the product), kind of carriers (e.g. software programs available on DVD and as download), package (e.g. products with packages that are easy to carry), customization opportunities (not standardized) and/or handmade products.

The activity "2.0 Pricing" involves sub-activities related to the price, namely the provision of a good quality/price ratio, the provision of price-related characteristics (i.e., products with high price or low price) and the provision of discounts.

The activity "3.0 Providing wider range of product offerings" involves sub-activities aimed to the provision of vertical or combined product offerings, different product offerings (e.g. products with different quality) and product-related complementary products (e.g. winter tires for cars).

The activity “4.0 Improving/innovating products” involves sub-activities aimed to the provision of product innovation (incremental and/or radical innovation) and to the provision of frequent new products.

The activity “5.0 Providing additional services” involves sub-activities aimed to the provision of services, for example information on the firm and/or the products, software to support customization, purchase-related services (e.g. best price guarantee), delivery and installation services (e.g. providing taking back of old products), use/maintenance-related services (e.g. the provision of “how to...” courses), access to social networks/communities on the specific products/firm, the possibility for customers to participate to the production process (e.g. possibility for a customers to harvest grapes and produce the own wine in a wine firm), the possibility to visit the production facility, the possibility to receive combined offerings (e.g. discounts for car rental when air tickets are bought) and the provision of additional services regarding complains (e.g. the possibility to receive continuous assistance). Some of the sub-activities (e.g. providing interaction with specialized personnel, participating in the production process and visiting the production facility) involve direct interactions.

The activity “6.0 Providing sales support” involves sub-activities aimed to the provision of facility management support (e.g. the management of a section of the retailers’ exhibition), sales means (e.g. direct assistance to retailers during sales), sales assistance by firm’s employees, and/or courses to educate retailers to sell the products. Educated retailers are able to inform the customer about the attributes (e.g. core product features, added service features), performance and outcomes of the product in the best way. That also reduces the personal investment of the customers concerning the purchase process and therefore the non-monetary costs.

The activity “7.0 Providing distribution channels” involves sub-activities aimed to the provision of different distribution channels (i.e., direct channel(s), indirect channel(s), both direct and indirect channels, and/or appropriate channels in the view of the customer).

The last two activities, "8.0 Promoting the product" and "9.0 Communicating the brand", are related to the promotion of the product and the firm's brand respectively. Most of the sub-activities of the 8.0 and 9.0 activities have the same name, but they are performed for different purposes (a specific product or a brand). In detail these are the provision of advertising, personal selling, sales promotion, public relations, and direct marketing. Some sub-activities are potential value co-creation activities, e.g. visiting trade fair: interacting with consumers.

6. The value space framework

The value space framework is a three dimensional framework whose dimensions are the potential value creation activities performed by a firm, the related sources of value and the types of value they are intended to create (Figure 1). As to the value creation activities, the framework refers to VCAM. As to the value sources and types, the framework is rooted on a revised version of the value creation framework proposed by Smith and Colgate (2007). The revisions deal with the classification of some value types.

In the rest of the Section, the value types which are at the base of the new framework are discussed and the differences with those proposed by Smith and Colgate are stressed. Then the value space, the new three dimensional value creation framework, is presented.

6.1 The value types: a revised classification

The cost/sacrifice value type involves three aspects, namely monetary costs, non-monetary costs, and risks. Monetary costs in turn include the product price, the distribution costs, the costs of use, the costs of maintenance, and the disposal costs (Woodall, 2003). Unlike the classification proposed by Smith and Colgate (2007), search costs are not included as they are considered as more relevant for the business to business market (in the business to consumer market they are rather included in the form of personal investments). Non-monetary costs include psychological costs (e.g. costs associated to cognitive difficulty or stress) and personal investments (e.g. time, effort, and energy). The risk aspect includes psychological risks (e.g. risk of being cheated), financial risks (net potential loss including potential replace) and operational risks (Huber et al., 2001, Sweeney et al., 1999). Unlike the classification proposed by Smith and Colgate (2007), strategic risks are not included as they are considered as more relevant for the business to business market.

The three aspects of the functional/instrumental value are attributes, performance, and outcomes/consequences. Attributes are associated to the product features and the related services (Woodall, 2003). Performance is associated to the way the product responds to its use, for example in terms of reliability and durability (Sheth et al., 1991). Outcomes/consequences deal with the effects associated to the product purchase and use such as social benefits, e.g. environmental benefits, practical benefits and personal benefits (Woodall, 2003). Strategic benefits are not considered as they are more relevant for the business to business market.

The aspects related to the experiential/hedonic value involve four aspects, namely sensory, emotional, social/relational, and epistemic values. The first aspect includes every sensory stimulus that leads to the arousal of feelings or emotions (Carbone, 2004). The emotional value is associated to emotions. It can be illustrated with examples like the romance aroused by a candlelight dinner or the fear aroused while viewing a horror movie. The epistemic value is associated to knowledge creation. It can be exemplified by the visit to a new place or the experience of another culture (Sheth et al., 1991). Finally, the aspect of social/relational value deals with relational or network benefits, personal interaction, development of trust or commitment or an established bonding/connectedness, as proposed by Smith and Colgate (2007).

The symbolic/expressive value involves four aspects, namely the social and conditional meaning, the personal meaning, the self-identity/worth, and the self-expression. The latter aspect deals with the expression of personal tastes and values, whereas the social meaning aspect is about the effect of luxury and/or highly visible products on the reputation of the owner.

In addition, those luxury goods appeal to the owners' self-concept and self-worth in giving them a good feeling about themselves (Smith and Colgate, 2007). The aspects of personal and conditional meaning deal with attached associations to a product that are either person-specific, like a special song, or culturally-based, for example, a Christmas card (Sheth et al., 1991).

6.2 The value space: a new and three-dimensional value creation framework

The value space results from the integration of VCAM and the revised version of the Smith and Colgate's (2007) framework. By integrating potential value creation activities with potential value types and sources of value, the bi-dimensional matrix proposed by Smith and Colgate (2007) is improved and transformed into a three-dimensional framework.

The cells of the value space represent the different possible combinations of (Activity, Value Source, Value Type) firms might carry out [2]. As an example, Figure 1 reports the combination (Activity 3, Interaction, Experiential/Hedonic Value) [3].

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In theory all activities could be associated to all the value sources and types so making the number of possible combinations equal to 2,160 (108 activities * 5 value sources * 4 value types). However, some combinations seem not to be feasible (or, at least, still not feasible) and only a subset of possible combinations is usually carried out by firms. For example, it would be quite problematic to state that providing non-personalized advertising is associated to a value source different from information or potentially provide some kind of symbolic value.

Any firm carries out only a subset of the feasible combinations. Among them, some combinations are more common or more likely. Providing different indirect distribution channels, for instance, reduces the personal investments (non-monetary costs) of a potential customer and will therefore mainly lead to the creation of potential cost/sacrifice value.

Each activity in value space is performed so as to leverage some specific source of value (e.g. product, information) and to facilitate the generation one or more (in few cases all) types of value. Each firm can easily modify and/or integrate the activities in the framework and, ex post, with the support of its customers, verify if the potential value was transformed by each customer into real value.

7. Applications of the value space

Firms can use the value space as a tool to *i*) assess the currently performed potential value creation activities and *ii*) support the analysis of consistency between the value creation activities carried out and the value proposition defined. The two applications will be discussed in order.

7.1 Assessment of the value creation activities

By marking the cells (i.e., each value creation activity carried out, the leveraged source of value in the view of the firm and the potentially created type of value) of the framework corresponding to the combinations already carried out, firms can indeed examine the value creation activities performed and, for each of them, the specific leveraged value source and the potentially facilitated type of value.

Firms are not always aware of the potential value creation activities they are performing. Being able to visualize them could be a way to support the value creation process analysis and to reflect on the process (exploitative business process management according to Kohlborn et al., (2014). The framework could thus be used for descriptive and reflective purposes. Firms can also examine the combinations carried out by their competitors, so using the framework as a benchmarking tool. Finally, firms can examine the combinations not carried out (by itself and/or its competitors). Such an examination could be useful to identify value creation opportunities not yet exploited so as to create new markets and/or develop innovative products and services.

In this sense, the framework can be used to support explorative business process management (Kohlborn et al., 2014).

The large number of possible combinations in the framework is to be considered as a valuable source of new ideas and opportunities for the firms. The framework thus can be used with a generative purpose. As an example, the combinations carried out by two of the case firms are reported in Table 3. For space reasons, multiple value types have been reported on the same table row. Thus, the actual value creation combinations carried out by each firm is greater than the number of the marked rows reported in Table 3 (columns 5, 6, 7).

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The first firm, Ex1, is a branding and design-oriented firm that manufactures high quality and high price seats and tables and is located in the industrial district of Manzano (Italy). The second firm, Ex2, produces low-medium target sofas and is located in Veneto (Italy).

As shown in Table 3, Ex1 mentions 22 potential value creation activities (as discussed in Section 4, the semi-structured interviews were used as a starting point to create VCAM. Firms did not receive a pre-defined list of activities to be discussed, so it is possible that, during the interviews, some activities carried out by the firms were not mentioned and that those activities are not even reported on the firms' web sites). Besides examining the specific activities carried out and the attendant value source and type, the firm could easily assess that, for example, no 2.0 activities are carried out. That observation, if not due to a mere omission in the identification of the carried out activities, could make the firm reflect on the opportunity of changing its behavior. Similarly, it would appear that only few activities deal with ownership/possession and environment value source (activity 2 and 1, respectively) and/or are carried out to facilitate experiential/hedonic and/or symbolic expressive value. That could make the firms aware of chances of potential value creation still not exploited (e.g. by managing the already carried out activities in a different way or generating completely new activities). For example, firm Ex1 could ask itself if possible to manage in a different way the activity 6.1.1 so as to facilitate also the creation of symbolic/expressive value and/or what to do (in terms of new activities) to combine the source environment and symbolic/expressive value. Answers to those questions could come from the analysis of the behavior of competitors and/or firms working in different industries.

Similar considerations could be done by Ex2, which mentions 12 potential value creation activities. None of them is associated to the environment value source. Moreover some activities should facilitate the creation of experiential/hedonic and/or symbolic expressive value: is that what really the firm wants to do (given that it has a low-medium target)?

Finally, firms could use the framework also to verify if and how the potential value was transformed into real value by each customer. Such an assessment could be carried out by comparing the results obtained by adopting the framework with those collected by the use of ad hoc defined customer relationships management methodologies.

7.2 Analysis of consistency between the value creation activities carried out and the value proposition defined

12 value propositions were identified. In particular, ten of them are those proposed in Rintamäki et al. (2007). The propositions are reported, together with the examples provided by the same scholars, in Table 4 (first ten rows).

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Place Table 4 about here

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The (possible) created value types were modified based on those reported in the value space framework. Also the list of possible combinations was completed by adding two more theoretical value propositions (last two rows in Table 4): solution-, experience- and meaning-oriented firms (whose value types are functional/instrumental, cost/sacrifice [non-monetary costs; risks (without financial risk)], experiential/hedonic, symbolic/expressive ones) and price-, solution-, experience and meaning-oriented firms. Going back to the use of the framework, after selecting the combinations currently carried out, firms can assess the value proposition they provide and if it is consistent with the firm's declared value proposition. For example, a firm that carries out the combinations reported in Table 5 is a solution-oriented firm because all the carried out combinations are associated to functional/instrumental and cost/sacrifice [non-monetary costs; risks (without financial risk)] value type.

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Place Table 5 about here

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If that firm is declared as experience-oriented, it will clearly find out an inconsistency between what it declared and what it really did in terms of facilitating value creation. Contrary, if the firm is declared as solution-oriented firm, it could use the framework to find out all the combinations corresponding to that value proposition not yet exploited.

To that regard, for instance, an experience-oriented firm that misses an activity like "Providing benefits" (that is likely to create emotional value) might consider to performing such an activity in the future to sharpen its own profile.

8. Conclusions

The firm's role in the value creation process is investigated in this paper. In particular, the value space, an actionable framework within which potential value creation activities, types and sources are integrated into a cohesive whole, is proposed and discussed. The framework is developed based on process theory, and integrates the value creation activity model (VCAM) and a revised version of the value creation framework by Smith and Colgate (2007). VCAM, a categorization of firms' value creation activities, involves the activities firms carry out to facilitate value creation, both indirectly and in direct interaction with customer. It comprises nine main activities, each of them consists of sub-activities (first and second level of decomposition) for a total of 108 sub-activities at the lowest decomposition level. The model was developed by adopting the logic embraced in Malone et al. (2003).

The value space was developed based on the results of an extensive literature review on value creation frameworks (mostly developed in the field of marketing) and activities (mostly developed in the field of operations management/strategy/organization) and a multiple case study on 65 European firms in the furniture industry. By explicitly linking actions to potential value created, the framework contributes to the development of a more holistic and actionable view on value creation. The paper contributes to theory and to practice in several important ways.

From a theoretical perspective the framework systematically incorporates activities, which are necessary for any theory that claims to be actionable. The results of the study contribute to the current debate on the firms' role in value creation. As suggested by Grönroos (2011b) and Grönroos and Voima (2013) firms both facilitate and co-create value with their customers. This is manifested in activities that firms carry out both indirectly and by direct interactions with customers. To the authors' knowledge, the value space is the only framework that includes the concept of activities, classifies them as indirect and direct interactions, and associates them to potential value types and sources. This should be seen as an important contribution, since without having systematic categorization of the potential activities no framework is really actionable.

In regards to practice the value space represents a highly flexible tool to gain an in-depth understanding of the firm's role in the value creation process. From a managerial perspective, it enables firms to assess what they do and do not perform in terms of value creation and to compare the potential value with the value perceived by customers, once it is collected by customer relationships management methodologies. Also, firms can assess how they behave with respect to the value propositions defined. The assessment of positioning with respect to the propositions supports firms in discovering weaknesses or contradictions. Thus, the value space can be used for descriptive and reflective purposes. Furthermore, in pointing out gaps in the bundles of combined activities, source and types of potential value, the framework may facilitate the identification of innovative ways to create potential value. The value space therefore might be used as a managerial tool for opportunity recognition, even though not every identified new combination might be feasible. By using it, firms receive information on their own strengths and weaknesses regarding the creation of potential value for its customers. Especially the identification of the latter one may then be used to improve the firms' value-creation performance which can in turn lead to more satisfied and loyal customers.

The paper has some limitations, which may open new research avenues.

First, the fact the framework was initially developed by focusing on the furniture industry (inductive stage of the research process) might have led to a bias in the identified activities. This potential limitation was partially overcome by revisiting the list of initially identified activities based on the literature on value creation (deductive stage of the research process). However, the scalability of the value space framework – i.e. the possibility to modify or expand it by adding new activities as well as new combinations of sources and types of value – makes it suitable to the special conditions of any firm.

Second, only the firm's role in the value creation process was considered. The customer's view, which is relevant to integrate firm's activities with customers' resource integration in customer sphere (Grönroos and Voima, 2013), was not taken into account. Finally, modeling the value creation process as carried out by firms (so including, for example, the identification of interdependencies among activities carried out by firms as well as of the attendant coordination mechanisms) was out of the scope of this article. However, the value space represents a significant step towards a process model of value creation carried out by firms. By supporting process analysis and process innovation, it can be used to facilitate both exploitative and explorative business process management in relation to value creation.

Future directions of research may include *i*) the framework testing on different industries, manufacturing and services alike, *ii*) the framework modification so as to make it match also to the business-to-business context and *iii*) the analysis of the activities in the customer's sphere and the eventual refinement of the activities in the joint value spheres by including the customer's view.

[1] See http://www.efic.eu/industry.aspx

[2] For space reason, the article reports only the list of activities (i.e. the value creation activity model). The entire framework is available on a spreadsheet. Please email to the corresponding author for a copy.

[3] Please note that the categorization of activities, value source and value types are not ordered sequences, so in Figure 1 the numbers must be intended as simple identification codes.

APPENDIX.

The Value Creation Activity Model.

The Value Creation Activity Model is reported below. Please note that the label **DirInt** is associated to activities that could facilitate co-creation (as they require direct interaction between the firm and the customer).

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Place Appendix_Table about here

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Table 1. Main value creation frameworks.

Authors, year	Focus	Limitation/Critique
Sheth et al., 1991	Value types: Functional value (ability of a product to perform in the expected way); social value (attached associations with specific groups); emotional and epistemicvalue (ability to arouse emotions or curiosity); conditional value (influence of specific situations on the utility of a product and/or service)	Neglect of sacrifice aspect (e.g. mentioned in Gale, 1994; Monroe, 1990; Zeithaml, 1988)
Heard, 1993	Sources of value assessed by the customers based on four value dimensions (i.e., being correct, timely, appropriate, and economical)	Only three value sources (Smith and Colgate, 2007)
Woodruff and Gardial, 1996	Hierarchical relationships among the attributes and the performance of a product, the consequences of its use and the resulting effects on the customers' goals achievement	Product is the only considered source of value
Holbrook, 1999	Types of value: Efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality (values classified as "extrinsic vs. intrinsic", "self-oriented vs. other-oriented" and "active vs. reactive")	Neglect of sacrifice aspect (e.g., mentioned in Gale, 1994; Monroe, 1990; Zeithaml, 1988)
Woodall, 2003	Value types: balance of benefits and sacrifices (net value), outcomes that derive from the use or experience (derived value), product attributes (marketing value), reduction of sacrifice (sale value), difference between a price that is considered to be fair and a benchmark price (rational value)	A value creation dimension only
Rintamäki et al., 2007	Value types: economic and functional value (concrete, transaction-based and more utilitarian value types) and emotional and symbolic customer value (more abstract, interaction-based and hedonic types of value). Firms are classified as price-oriented firms (focus on economic value); solution oriented firms (focus on functional value), experience-oriented firms (focus on emotional value) and meaning oriented firms (focus on symbolic value)	A value creation dimension only; concrete activities are missing
Smith and Colgate, 2007	- Customer perceived value types: cost/sacrifice value (if costs and sacrifices - during purchase, ownership and use- are to some extent minimized) functional/instrumental (if the product that has desired characteristics, is useful and/or performs desired functions), experiential/hedonic value (if the product creates appropriate experiences, feelings and emotions for customers) and symbolic/expressive value (if the product is attached or associated to a psychological meaning by customers) - Sources of value (i.e., products, information, interactions, environment, and ownership/possession transfer).	Activity dimension is missing
Payne et al., 2008	Processes, resources, and practices adopted to achieve a certain goal (customer value-creating processes) and manage the business and the relationships with stakeholders (supplier value-creating processes)	Framework not particularly actionable as the supply, customer and encounter processes are only partially mapped and not generalized (only illustrated with respect to the specific case of a travel company)

Table 2. The case firms.

	Finland	**Germany**	**Italy**	**Spain**	**Sweden**
Number of companies	12	11	15	15	12
Size (with reference to the number of employees)	Micro: 1 Small: 8 Medium: 3	Micro: 0 Small: 0 Medium: 11	Micro: 0 Small: 8 Medium: 7	Micro: 1 Small: 7 Medium: 7	Micro: 0 Small: 10 Medium: 2
Employees	Average: 39 Min: 8 Max: 75	Average: 122 Min: 57 Max: 210	Average: 50 Min: 12 Max: 133	Average: 72 Min: 7 Max: 240	Average: 37 Min: 15 Max: 110
Average ROCE	Low: 4 Medium: 4 High: 4 N.A.: 0	Low: 2 Medium: 5 High: 3 N.A.: 1	Low: 4 Medium: 5 High: 4 N.A.: 2	Low: 5 Medium: 5 High: 5 N.A.: 0	Low: 2 Medium: 7 High: 3 N.A.: 0
Market	Mainly domestic or Nordic market orientation	Mainly European market orientation	Either domestic or international market orientation	Mainly domestic market orientation	Mainly Nordic market orientation
Number of design-oriented company	7	6	6	5	8

Table 3. The value space framework: the case of company Ex1 and Ex2.
Legenda: An x in row *i* column 5 (column 6) indicates that the combination of activities, source and types of value reported on row *i* is carried out by Company Ex1 (Company Ex2).

ID	Activities	Source of value	Type(s) of value	Company Ex1	Company Ex2
1.1.1	Providing quality and durable materials (e.g., solid wood, high-end fabric)	Products	Functional/Instrumental Cost/Sacrifice	X	
1.7.1	Providing design-related modifications (e.g., different colors, available pelmet)	Products	Functional/Instrumental Cost/Sacrifice	X	X
1.7.3	Providing material-related modifications (e.g., different types of wood for furniture, different kinds of fabrics for a tailor-made suit)	Products	Functional/Instrumental Cost/Sacrifice	X	X
2.2.2	Providing low-price-related characteristics	Products	Cost/Sacrifice		X
3.1	Providing vertical or combined product offerings (holistic; e.g., whole living room furniture)	Products	Functional/Instrumental Cost/Sacrifice		X
3.2	Providing different product offerings (e.g., differentiated by quality, technical aspects, style/design, or by combination of these)	Products	Cost/Sacrifice	X	X
4.2	Providing new products frequently	Products	Functional/Instrumental	X	
5.1.1	Providing information of the company/services	Information	Cost/Sacrifice	X	X
5.1.2	Providing information of the products	Information	Functional/Instrumental Cost/Sacrifice	X	X
5.1.3	Providing information of the company/products by third party (e.g., newspaper articles or customer ratings on webpage)	Information	Experiential/Hedonic Cost/Sacrifice	X	
5.1.7	Communicating specific aspects of the product (related to environment, design, quality; e.g., stamp, label or certificate attached to the product)	Products	Functional/Instrumental Cost/Sacrifice		X
5.2.2	Providing interaction with designer	Interaction	Functional/Instrumental Cost/Sacrifice	X	
5.4.2	Providing delivery in time/on specific date	Ownership/ Possession	Cost/Sacrifice	X	
5.7	Participation in production process (e.g., at a winery)	Interaction	Experiential/Hedonic Symbolic/Expressive	X	
5.8	Visit of the production facility (e.g., of a car manufacturer)	Interaction	Experiential/Hedonic Symbolic/Expressive	X	
6.1.1	Management of own section in retailer´s exhibition (small area, small investment)	Environment	Functional/Instrumental Experiential/Hedonic Cost/Sacrifice Value	X	
6.2.2	Providing price lists and (self-explanatory) displays, catalogues, etc.	Information	Functional/Instrumental Cost/Sacrifice		X

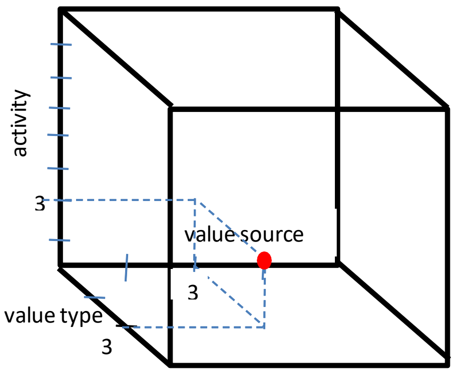
ID	Activities	Source of value	Type(s) of value	Company Ex1	Company Ex2
7.1.2	Providing a factory outlet	Product	Cost/Sacrifice	X	
7.3	Providing combination of direct and indirect distribution channels	Ownership/ Possession	Cost/Sacrifice	X	X
8.1.1	Non-personalized advertising	Information	Functional/Instrumental Cost/Sacrifice	X	
8.2.1	Visiting trade fair: interacting with consumers	Interaction	Functional/Instrumental Experiential/Hedonic Symbolic/Expressive Cost/Sacrifice	X	X
8.2.2	Visiting trade fair: providing information to consumers (no direct interaction, e.g., virtual exhibition)	Information	Functional/Instrumental Symbolic/Expressive Cost/Sacrifice	X	X
9.1.1	Non-personalized advertising (e.g., magazine ads, image film, brand logo)	Information	Experiential/Hedonic Cost/Sacrifice	X	
9.2.1	Visiting trade fair: interacting with consumers	Interaction	Experiential/Hedonic Symbolic/Expressive Cost/Sacrifice	X	
9.2.2	Visiting trade fairs: providing information to consumers (no direct interaction, e.g., virtual exhibition)	Information	Experiential/Hedonic Symbolic/Expressive Cost/Sacrifice	X	
9.4.1	Events/initiatives organized only by the company	Information/ Interaction	Experiential/Hedonic Symbolic/Expressive Cost/Sacrifice	X	

Table 4. Overview of value creation propositions.

Value proposition	Created value type(s)	Examples
Price-oriented companies	Cost/sacrifice (economic costs; financial risk)	Wal-Mart
Solution-oriented companies	Functional/instrumental, cost/sacrifice (non-monetary costs; risks (without financial risk))	Tesco
Experience-oriented companies	Experiential/hedonic	Barnes & Noble
Meaning-oriented companies	Symbolic/expressive	The Body Shop
Price- and solution-oriented companies	Cost/sacrifice (economic costs; financial risk); cost/sacrifice (non-monetary costs; risks (without financial risk)); functional/instrumental	Dollar General
Price- and experience-oriented companies	Cost/sacrifice (economic costs; financial risk), experiential/hedonic	Trader Joe's
Price- and meaning-oriented companies	Cost/sacrifice (economic costs; financial risk), symbolic/expressive	Target
Solution- and experience-oriented companies	Functional/instrumental, cost/sacrifice (non-monetary costs; risks (without financial risk)), experiential/hedonic	Stop & Shop
Solution- and meaning-oriented companies	Functional/instrumental, cost/sacrifice (non-monetary costs; risks (without financial risk)), symbolic/expressive	Safeway
Experience- and meaning-oriented companies	Experiential/hedonic, symbolic/expressive	Nordstrom
Solution-, experience- and meaning-oriented companies	Functional/instrumental, cost/sacrifice (non-monetary costs; risks (without financial risk)), experiential/hedonic, symbolic/expressive	-
Price-, solution-, experience and meaning-oriented companies	Combination of all values types	-

Table 5. An example of solution-oriented company.

ID	Activities	Source of Value	Types of Value
1.7.1	Providing design-related modifications	Products	Functional/Instrumental Cost/Sacrifice
4.2	Providing new products frequently	Products	Functional/Instrumental
5.3.1	Providing different payment options	Ownership/ Possession	Cost/Sacrifice
5.3.3	Providing extended product trial period	Ownership/ Possession	Cost/Sacrifice
5.10.4	Providing home repair service	Ownership/ Possession	Cost/Sacrifice
8.1.2	Advertising specific aspects of the product	Information	Functional/Instrumental Cost/Sacrifice



Legenda

Value type
1= Cost/Sacrifice
2=Functional/Instrumental
3=Experiential/Hedonic
4= Symbolic/Expressive

Value source
1=Product
2=Information
3=Interaction
4= Environment
5=Ownership/Possession

Activities
1=Providing product related attributes
2=Pricing
3=Providing wider range of product offerings
4=Improving/innovating products
5=Providing additional services
6=Providing sales support
7=Providing distribution channels
8=Promoting the product
9=Communicating the brand

Figure 1. The value space framework.