CO-CREATION: POSITIONING DIFFERENT EXPERIENCES IN THE MULTIDIMENSIONAL SPACE

Segar Reddy
Oxford Brooks Business School, Oxford Brooks University, Oxford, OX3 0BP, United Kingdom
segar.reddy@gmail.com

J Rajendran Pandian
Reginald F. Lewis College of Business, Virginia State University, Petersburg, VA 23806, United States of America
jpandian@vsu.edu

Abstract

The idea of co-creation has been applied by managers long before academic researchers started studying co-creation. de Koning, Crul & Wever, 2016 reviewed literature on over fifty models of co-creation and presented four meta-models by synthesizing the literature they reviewed. In our paper, our main focus is to position three different co-creation examples in the co-creation space presented by de Koning et al., 2016 in their meta-models. Our first step is to identify all independent dimensions in each meta-model and develop a multidimensional model of co-creation. Once we have developed the multidimensional model, then we could position the three cases in which we have some in-depth understanding of how co-creation is applied. The first case is the co-creation experience from SAP, the enterprise resource planning software provider and the co-creation efforts with its customers. The second is the experience from those using Adobe software and publishing their own creations. Adobe provides a space for these original creations and share these creations with other Adobe software users. The third case is an example of automobile producers working with their auxiliary suppliers and developing new components or
parts which enhance the performance of the new automobile. Our attempt to position these co-creation cases is to understand whether any other additional dimension(s) is (are) required to describe the co-creation space and the spectrum of activities where co-creation takes place. From the experience we gain by applying the multidimensional model, we intend to make contributions in future based on in-depth studies to be conducted based on our learning from this exercise.

Keywords
Co-Creation, Meta-Models of Co-Creation, Multidimensional Model of Co-Creation, Illustrations of Co-Creation

1. Introduction

The act of co-creation has preceded any recorded research on co-creation even if the act was not called or referred to as co-creation. For example, while Ford Motor Company was keen on reducing the cost of manufacturing Model – T, Ford Managers focused on each of the elements of variable costs. One such cost was that of the foot-board used by women wearing skirts to get into the car. This foot-board was made of teak wood so that it could withstand the snow, ice, rain and the sun and last for a long time. So, Ford managers required that their supplier of components like brake drum, brake shoes etc., to pack these supplies in teak wood boxes of the appropriate dimensions so that the teak wood could be carefully recovered by Ford employees and used for the foot-board of Model – T. Here, you observe the co-creation of value through the insiders (employees) and outsiders (the suppliers) working together with the coordination of the managers. In their review of literature on co-creation, de Koning et al., 2016 identified four meta-models of co-creation namely, the joint space of co-creation, the co-creation spectrum, the co-creation types and the co-creation steps. Our understanding of co-creation has benefited greatly from their review. For example, they refer to Prahalad & Ramaswamy, 2004 while discussing their first meta-model “joint space of co-creation”. Though Prahalad & Ramaswamy did not explicitly state about joint space of co-creation, they discuss in details about the building blocks of co-creation where they address the issue of ‘access’ as ‘the customers’ interest changing from ownership of products to accessing experiences. This ‘access’ clearly requires sharing of assets both physical as well as intellectual which is what was implied in the meta-model of joint space of co-creation. In this paper, we wanted to integrate all these meta-models into one multidimensional model which will be difficult to present in a diagram but will holistically capture all of de Koning et al., meta-models. In an effort to create one model of co-creation, we had to identify dimensions from each of the
meta-model and combine all these dimensions in our integrated model. In this paper, we present a brief review of literature, our model which is solely based on de Koning et al., 2016 work and our integration of other authors’ prior work in this field, our illustration of three distinct cases in the field of co-creation, our modest opinion on our contribution and the limitations of our model and offer our conclusions.

2. Literature Review

Our understanding of co-creation started with the review of co-creation literature by de Koning et al., 2016. Since many articles content was presented in one paragraph by de Koning et al., we had to go back to some of the original articles to enhance our understanding. Prahalad & Ramaswamy, 2000 discussed the changing role of customers and how firms could utilize customer competencies to enhance their own competitive advantage by co-opting customer competencies. Though Prahalad & Ramaswamy suggested the change of role of customers started from the turn of the new century, we argue that Ford Motor company in an effort to reduce the per unit cost of Model – T worked in close coordination with their suppliers to improve quality of the component they supplied and to change designs to reduce the per unit cost in assembly (Chandler, 1964). Though nobody ever called these activities as co-creation, as de Koning et al., pointed out that co-design started as early as 1970s where designers were working together to improve design of products under participatory design or open design. Prahalad & Ramaswamy discussed their ideas under value co-creation. de Koning et al., pointed out that these cooperative actions might take place along each of the value creating activities. Given these realities, there is no need to restrict the co-creation to one activity or one function alone. So, co-creation could take place right from idea generation, through design stages and manufacturing of goods or providing services and after sales service or customer relationship management. In this paper, we do not distinguish co-creation as limited to any one function or any one value creating activity or to production of goods or providing services. The idea becomes more complex once you start taking into account the social creation by customers and other external stakeholders or by the internal stakeholders of the brand image or brand meaning. Certainly, one needs to consider the product or service brand holistically and not just the core product or service. de Chernatony & Riley, 1998 did a thorough analysis of the components of a brand and arrived at a double vortex model where the actions taken by the firm leads to the brand image in the minds of their consumers which in turn reinforces the internal stakeholders’ ideas on the brand characteristics. Asmussen, 2014 extended this idea to include the
brand meanings (in the minds of customers) and the brand manifestations (actions by internal stakeholders that change the attributes or the characteristics of the product/services) along with internal and external stakeholders lead the co-creation activity to create the complex identity of a brand.

Some authors would like to emphasize the distinction between goods and services in terms of service dominant logic versus goods dominant logic (Vargo & Lusch, 2004, Vargo & Lusch, 2008). The complexities of international marketing adds another layer especially for services firms where there is a need for co-creation with their customers (Akaka & Vargo, 2011). Mills and Morris, 1986 examined how customers were involved in service creation. Though they did not use the term “co-creation”, the idea they discussed was about service co-creation where in some instances the demand on the clients is high whereas in other instances it is low. But, if the demand on the clients is high and the client fails, it is automatically transferred to the supplier since the client is not an employee though they are involved in a co-creation process. Dong, Evans and Zou, 2008 pointed out that the attribution of the failure would dictate how the co-created service was enacted. Essentially, all these discussions suggest that co-creation is difficult in any situation – manufacturing or service. We acknowledge the distinction between satisfying a customer needs through goods and satisfying a customer needs through providing a service and this distinction adds to the complexity of brand and co-creation of brands. The discussion above is to illustrate the fact that co-creation could occur anywhere along the value creation process and the co-creators need not necessarily be limited to the supplier and the customer. Co-creators could include other external stakeholders. The next step is to develop a new model that covers the complete sphere where co-creation occurs that captures the true nature of co-creation.

3. de Koning, Crul and Wever (2016) Meta-Models

de Koning et al., covered literature on 50 different models to provide us with four meta-models which will be common over a large number of co-creation observed in real life. They were able to collapse these 50 models and came up with four meta-models: the joint space of creation, the spectrum of co-creation, the types of co-creation and the steps of co-creation. Just to highlight the significance of the name: joint space of creation which indicates that two or more co-creators worked together in the joint space to create something unique for all the co-creators to benefit from. Such a name does not mean that in other meta-models there was no joint space. In each meta-model, the dominant attribute is used to name that meta-model. Similarly, in the meta-model
named the spectrum of co-creation, the major idea emphasized is the different activity where the customer participated in the co-creation. Given the fact that not just customers but all external stakeholders as well as all internal stakeholders could participate in the co-creation activity, where in the series of value creation activities the co-creation takes place becomes important. In the following passages, we explore these meta-models in-depth and extract unique dimensions in each meta-model. These dimensions are combined to form one multi-dimensional model.

3.1 The Joint Space of Co-Creation

The joint space of creation meta-model clearly identified a shared space where the co-creators worked together and possibly shared assets and competencies. This joint space used to share assets as well as competencies results in outcomes which are far superior to those obtained while each participant uses their own resources and competencies exclusively. In order for us to have one model, we suggest a multidimensional model that integrates dimensions which could be completely independent or overlapping or even evolving jointly. For example, from de Koning et al., first meta-model of the joint space of co-creation, we extract two dimensions: shared activities and shared assets (physical as well as intellectual) though the authors have not stated these explicitly. Since one of the inputs into these models is from Prahalad & Ramaswamy, 2000, where Prahalad & Ramaswamy clearly pointed out that companies in the network and the customers shared necessary resources in order to improve the outcome. Since our aim is to extract dimensions, we examine each meta-model from that perspective and we do not contrast every meta-model de Koning et al., reviewed. This may result in our recovering similar or same dimensions in multiple meta-models.

3.2 The Spectrum of Co-Creation

The second meta-model is called the spectrum of co-creation where de Koning et al., present two dimensions: level of collaboration and influence on output. In one extreme is the traditional model where there is neither any input from the customers nor any influence on the output (Though customers did not have explicitly have any influence, they used their future purchase decisions to influence every supplier). But, there is no input from or influence of customers on the suppliers’ output. In the traditional model customers do not participate in any value creating process but were realizing the value of the output in satisfying their wants. de Koning et al., refer to two models of co-creation under this meta-model. In the open innovation model, though the level of collaboration was high, there was no influence of outside collaborators (Outside collaborators is purposely used since stakeholders other than customers could also
participate in the innovation process. Since the inside collaborators made the final decisions about the output. On the other hand, in the co-design models, the outside participants had quite some influence on the output and collaborated extensively in the design activity. So, along these two dimensions of level of collaboration and influence on the output, the open innovation model was in one quadrant and the open or participatory design model was in the opposite quadrant. The traditional model was relegated to the quadrant where level of participation and influence were non-existent. The fourth quadrant did not have any type of co-creation models since without collaboration, you cannot have any influence on the output. Though de Koning et al., did not explicitly refer to the restriction on activities where collaboration or co-creation took place, it is clear that in one case it was restricted to innovation related activities and in the other design related activities. So, in co-design models, customers or other outside collaborators did not participate in any of the other activities other than design. Whereas, when we bring in socially constructed brand image, the participants not only include customers but also the internal stakeholders in that the brand image required that other internal stakeholders act to keep the vigilant customer happy in every activity required for the value creation. Greening of the whole supply chain is an example where the customers’ demands for the firm to be green not just where it created value but also be green along the whole value chain resulted in firms greening their supply chain as a whole. Though customers do not actively engage in all supply chain activities, they influence all the supply chain activities. In the model discussed by de Koning et al., the influence considered is the direct influence as in the case of co-design models where customers collaborated and influenced the design directly. de Koning et al., did not view brand as such and hence did not consider the indirect influence exerted by the customers. For our extraction dimensions, there are two independent dimensions: level of collaboration and influence on the output. The third dimension implicit in these models is the value creating activity where the co-creation took place. In the co-design (or participatory design) models referred to, collaborators participated in jointly designing the output whereas the open innovation models implied that the collaborators jointly participated in innovation activities. Since in the next meta-model discussed this dimension is explicitly stated, we left that dimension for the third meta-model.

3.3 The Types of Co-Creation

The third meta-model identified the types of co-creation where de Koning et al., clearly specified three dimensions: phase (the value creating activity) where the co-creation occurs, the level of control and the direct value of output created. In the previous meta-model, we extracted
two dimensions of which the level of influence is the same as the level of control in this model. The other two dimensions are new. The first new dimension is the activity where one is able to observe the value created by the co-creators. As pointed out in the previous passage, the collaboration could occur anywhere along the long chain of value creating activities. de Koning et al., in their discussions restricted the value creating activities originally observed within the realm of the supplier. Though co-creators may not expect explicit acknowledgement of their contribution to the value, it is difficult to assign the direct value created by each co-creator’s contribution. The additional unique dimension from this meta-model is the direct value of the co-creation. It is difficult to assess the amount of direct value created by each co-creator especially when the value realized depended on how the end user perceived the value of the product (or service). Value is always determined by the end user and hence the end users’ assessment of the amount of value created by each activity is of importance. The third dimension de Koning et al., referred to should be assessed from the end users’ perspective which makes it the most difficult dimension to measure across every value creating activities. When value engineering became popular in the 80s, suppliers interacted closely with end users in understanding the value of every component (or activity in service-dominant logic). Though difficult, it is possible to assess the direct value created by each value adding activity.

### 3.4 The Steps of Co-Creation

The fourth meta-model is the steps of co-creation where de Koning et al., presented the co-creation as an innovative approach where the co-creators identify, analyze, define, design, realize and evaluate in order to achieve the improved output/value or a workshop. They illustrated these steps with a design workshop where the steps observed are invite, share, combine, select and continue. Since the number of steps could vary depending upon how the co-creators interact to decide on the steps, collapse a few into one, assign different responsibilities among themselves, we view the steps of co-creation itself as a dimension which could vary depending upon the co-creators, their comfort level in co-creation and the interactions that occur among the co-creators. The other dimension implicitly referred to is the first dimension discussed in the previous meta-model namely the value creating activity where co-creation occurred.

### 3.5 Our Integrated Multi-Dimensional Model

The dimensions identified in each meta-model is shown in Table 1. Our model of co-creation is an integrative model and will retain dimensions from all four meta-models above. Hence, dimensions in our multi-dimensional model are: shared activities, shared assets (physical
and intellectual), level of collaboration, influence on output (the same as level of control), direct value of co-creation and the steps of co-creation. The number of elements in each dimension makes the generalized model of co-creation complex. But, in each instances the co-creators work together to realize the value they want to achieve. In the following passages, we present three examples to illustrate our model. Given the fact that our model is multidimensional, it will be difficult to present them in figures.

**Table 1: Meta-Models and the Dimensions in each Meta-Model**

| Name of the meta-model               | Dimensions identified                                      |
|--------------------------------------|-----------------------------------------------------------|
| The Joint Space of Co-Creation       | Assets shares; Capabilities shared                        |
| The Spectrum of Co-Creation          | Level of collaboration; Influence on output               |
| The Types of Co-Creation             | Activity where co-creation occurred; Level of Control; Direct value created by co-creation |
| The Steps of Co-Creation             | The steps of co-creation                                  |

**4. Illustration of Co-Creation Examples**

In the following section, we attempt to examine three cases with respect to our multidimensional model and assess how in each case each of these dimensions differed.

**4.1 The SAP Experience**

The first case is that of SAP, the enterprise resource planning (ERP) software. SAP is a general-purpose ERP software. Every time when a client is unable to get the output they need, they communicate this to SAP engineers. SAP engineers then through a standard procedure collect information on what the client wants to achieve. Then, SAP engineers modify the software and produce the newer version of their software which is tested by the client who requested the change. There could be multiple iterations of revision and testing before the latest version is made available to all their clients. In this scenario, the supplier had complete control of the process of bringing about the change whereas the customer had some influence on the output they required. Since SAP attempts to satisfy all their customers’ needs, if the existing software is unable to meet the demands of their customers, SAP will work with their customers to satisfy their demands. Customers should not have any problem in not having any control over the process as long as their influence over the output is 100%. The only shared activity in this co-creation of value is the interaction between
SAP and their customers. There was no shared physical or intellectual assets in the co-creation process. But, SAP users invariably used SAP’s hardware and the software while implementing SAP based ERP system in their firms. So, using SAP itself is an act of continuous co-creation where the physical as well as intellectual assets are constantly used by the co-creator, the customer. As far as level of collaboration is concerned, every customer participated 100% in their part as required by the supplier (SAP). Though the process of change was controlled by SAP, the customer’s influence on the output was total (100%). The direct value created depends on the customers’ assessment of the value of the change they required. de Koning et al., presented the steps involved in co-creation from the supplier’s perspective. In this case where SAP’s customers initiate the request for output which they need, the first step of inviting the co-creator is initiated by the customers. The rest of the steps depend on the standard procedure adopted by SAP. But, the co-creators worked together in each of the steps of co-creation except where the SAP engineers modified the software by themselves to obtain the output as required by customers. Also, steps involved in the co-creation need not be the same for every co-creation activity.

4.2 Adobe Acrobat Experience

The second case discussed is that of Adobe Acrobat Software where Adobe Acrobat provides a space under their umbrella where customers could create complex images and make them available for other Adobe Acrobat Software users to buy these images from Adobe Acrobat. Adobe Acrobat pays some part of this revenue to the creator of these images. In this instance, the co-creators shared the physical and intellectual assets provided by Adobe Acrobat though there was no activity shared by Adobe Acrobat in the co-creation process. But, Adobe Acrobat created value for other users by sharing the complex images created (co-creators’ intellectual assets) and add value to co-creators by sharing part of the revenue generated by use of these complex images. Thus, both Adobe Acrobat and its users benefit from this act of sharing the co-creators’ intellectual assets. The level of collaboration is 100% for the co-creators in creation of these images and the physical and the intellectual assets are used by the co-creators. When other customers of Adobe Acrobat software use the complex images created by other customers, they share the physical and intellectual assets provided by Adobe Acrobat and the intellectual assets provided by the customers who created these complex images. Users of Adobe Acrobat had complete control over the creation process in that their influence over the output was total. Though the direct value created depended on the users, in terms of value in use which could be measured by what the users were ready to pay for these complex images. As far as the steps in co-creation is concerned, Adobe Acrobat
provided their physical and intellectual assets to the co-creators for producing the images they chose to but provided a path to continue their co-creation with other users.

4.3 Automobile Manufacturer Experience

The last case we would like to examine is the collaboration between the Japanese auto producers and their ancillary suppliers most of whom were partly owned by these major manufacturers. These Japanese auto manufacturers were the most important reason for researchers in international business arguing that your firm went abroad because your customer firm went abroad. When Suzuki went to India to collaborate with Indian companies to form Maruti Udyog, it required that the Government of India licensed all its ancillary firms to establish their own subsidiaries in India. Honda did the same when they established their manufacturing facility in Marysville, Ohio, USA, they required that their ancillary companies followed them to establish near Marysville. Let us consider the air conditioner manufacturer for Honda (We chose Honda to illustrate our view though we have not had close working relationship with Honda neither do we claim that Honda’s co-creation process is similar to what we have described in the following passages). The air conditioning system in the automobile has gone through tremendous technological changes. From the time when we increased or decreased the level of cooling or heating, the changes that have been brought about are tremendous that now we just set the temperature in the cabin. If the cabin temperature is lower than the set temperature, the system automatically chooses heating instead of cooling and vice versa. Since the heating and cooling are from different systems, this integration required close collaboration between the air conditioner manufacturer and Honda engineers. Though the air conditioner manufacturers had total control over their output, the needs of Honda are to be met. Since the changes in air conditioning technology is updated by air conditioner manufacturers, the design of the automobile which Honda controls totally based on the model, the brand image they want to create and the extent of reduction in the carbon footprint they want to achieve will determine the use of each other’s assets. The level of collaboration was also very high depending on the required extent of change required. When such changes are brought about a lot of details like ease of assembly, ease of access and ease of maintenance are to be taken into account, the level of collaboration will be high. Most of the time, the total automobile is redesigned so that these needs can be addressed easily. Though the direct value created depended on the component and its centrality to the operation of the automobile, the cabin air conditioning is crucial for the acceptance of the automobile by most customers. Since the direct value is to be assessed from the end user’s perspective, air conditioning would be valued
highly though not as highly as the engine and the engine’s reliability. All the steps of co-creation are covered since Honda is to invite its partner firms to be involved in these co-creation from the beginning and possibly participate in each and every value creating activity. So, in this example, co-creators work right from design through production and testing and possibly after-sales-service (customer support and training of after-sales service people). This is an example where co-creation occurs right through all the value creating activities and all physical and intellectual assets are shared as required. Though the control of the output (the air conditioning equipment) could have been maintained by Honda, the control was transferred to the air conditioner manufacturer and the influence over the output would have been more for the ancillary firm. In the following passages, we highlight our contributions and certain limitation of our research.

5. Our Contributions, Limitations and Suggestions for Future Research

In the passages above, we have used three examples of co-creation activities and presented how each of these dimensions of our multidimensional model differed in each example. In these following passages, we discuss the contributions we have made through our multidimensional model, certain limitations of our model and our suggestions for future research.

5.1 Contributions of our Multidimensional Model

Our first contribution in this paper is the integration of the four meta-models presented by de Koning et al., 2016 in their paper into one multidimensional model. This integration will help future researchers in large sample studies. For example, if one examines co-design activities across many different firms, it would be easy to assess hypotheses based on other dimensions. In a similar fashion, one could examine operations across many firms and compare practices that led to increased value creation and success as a whole. One could also view different activities where co-creation occurs in many firms as long as we are in a position to include zero value created due to co-creation where no co-creation occurred. That way, we will be able to integrate multiple studies which were conducted focusing on one or more value creating activities and test hypotheses across these dimensions. We hope that our multidimensional model reduces complexity for future researchers who examine one value creating activity where co-creation occurs across many firms and increases research output in co-creation activities. We sincerely believe that there is no more need to emphasize service-dominant logic versus product-dominant logic since this integrated model could be applied to both service-dominant firms as well as product-dominant firms. The
distinction of service-dominant versus product-dominant occurs only due to our inability to store service.

This model helps researchers to compare value created due to co-creation across different firms in one component or a firm compare value created by co-creation across different components in their own firm. For example, a researcher wants to improve firms’ ability to create value for their consumers by improving the engine design in automobiles. A researcher could compare multiple engine manufacturers in just the activity of co-designing the engine from customers’ perspective. Such research will help manufacturers carry out a better job of collaboration with designers and customers. On the other hand, a firm can improve co-designing components by comparing its co-designing activity across different components in their own firm applying this model. From their learning, they could improve the co-designing process for the component where they needed improvements.

Firms are always concerned about the performance implications of their value creating activities. When firms realize that the value created can be increased through co-creation, our model will help them detail where co-creation could improve value created by first assessing value created in each activity from the customers’ perspective and improve value created in the highest value adding activity first and then apply their learning to other activities to include co-creation.

5.2 Limitations of our Research

Though we would not view this element negatively, we need to highlight that our research is built on the foundations of de Koning et al., 2016. Though we referred to articles mentioned in their work, the focus was to enhance our understanding of de Koning et al., and not discovering any new ideas. We could have carried out a new literature review but we felt that de Koning et al., review was good and decided to build on it. Also, we view that co-creation has been going on for years. Marketing professors used to mention the importance of listening to your customers because they were not only sources of new ideas but also sources of competitive intelligence. Many successful managers have gone on to become industry leaders by being very good listeners and using customers to build their firm. Given the nature of co-creation and the thorough nature of de Koning et al., review, our dependence on de Koning et al., review should not be viewed adversely. Our development can be put to test in future research and prove whether our dependence on de Koning et al., failed us or not.
5.3 Suggestions for Future Research

Though we do not want to suggest firms to focus on any specific value adding activity, managers have always been doing ABC Analysis to identify where they should focus their attention to get the best result depending upon the circumstances. For example, purchasing managers were told to focus on items which were of high value (in terms of cost per unit) and provide maximum return to effort in the short run. Such practices do not suggest that firms should ignore items which are of low value since these items do not cost the firm very much. Future research could help identify high value adding activities where firms should focus on to increase value created for their customers through co-creation by examining every value adding activities. Value is always from the perspective of customers and hence such research will pay off handsomely though it is difficult to conduct such integrated research.

Sustainability is becoming an important area of research. By co-creation of design (i.e., co-designing), firms could identify how to conserve material usage and how to recycle used products easily and successfully without increasing our carbon footprint. Such designs should not sacrifice value for customers, cost economic hardship due to reduction in job creation or disrupt social fabric by creating conflict between different groups in a society. Integrating issues of sustainability into every value creating activity will make firms create more sustainable goods and services. This by itself can be viewed as one of our major contributions.

6. Conclusion

Co-creation has been going on for many decades since the infancy of the automobile industry, and possibly even before that. de Koning et al., review provided a platform for us to build our multidimensional model. We believe that our contribution will help future researcher examine more complex issues integrating co-creation with other demanding issues like sustainability, climate change and many other needs our society faces today.

References

Akaka, M. A. and Vargo, S. L. (2011) Complexity and Context in International Marketing: From Standardization/Adaptation to Value Co-Creation, AMA Summer Educators’ Conference Proceedings
Ausmussen, B. (2014) How do Brand Managers Conceptualise Brands as Complex Phenomena?
   Paper presented at EMAC 43rd European Marketing Academy Annual Conference: Paradigm Shifts & Interactions, Valencia, Spain.

Chandler, A. D. Jr. (1964) Giant Enterprises: Ford, General Motors and the Automobile Industry. New York: Harcourt, Brace and World, Inc.

de Chernatony, L. and Riley, F. D. (1998) Modelling the Components of a Brand. European Journal of Marketing, 32(11/12): 1074-1090.
   https://doi.org/10.1108/03090569810243721

de Koning, Crul and Wever (2016). Models of Co-Creation, Fifth Service Design and Innovation Conference Proceedings, pp. 266-278.

Dong, B., Evans, K. R. and Zou, S. (2008) The effects of customer participation in co-created service recovery, Journal of the Academy of Marketing Science, 36: 123-137. https://doi.org/10.1007/s11747-007-0059-8

Mills, P. K. and Morris, J. H. (1986) Clients as “Partial” Employees of Service Organizations: Role Development in Client Participation, Academy of Management Review, 1986, 11(4): 726-735. https://doi.org/10.5465/amr.1986.4283916

Prahalad, C. K. and Ramaswamy, V. (2000) Co-opting the Customer Competence Harvard Business Review, Jan/Feb 2000, 78(1): 79-87.

Prahalad, C. K. and Ramaswamy, V. (2004) The Future of Competition. Boston, MA: Harvard Business School Press.

Vargo, S. L. and Lusch, R. F. (2004) Evolving to a new dominant logic for marketing. Journal of Marketing, 68, 1–27 (January, 2004). https://doi.org/10.1509/jmkg.68.1.18.24035

Vargo, S. L. and Lusch, R. F. (2008) Service-Dominant Logic: Continuing the Evolution. Journal of the Academy of Marketing Science, 36: 1-10. https://doi.org/10.1007/s11747-007-0069-6