

Summer 6-19-2015

The Research Status of Value Co-creation in Service Platforms

Na Shu

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, 210094, China,
shuna1992@126.com

Yihong Xiao

School of Economics and Management, Nanjing University of Science and Technology, Nanjing, 210094, China,
xyhnjust@163.com

Follow this and additional works at: <http://aisel.aisnet.org/whiceb2015>

Recommended Citation

Shu, Na and Xiao, Yihong, "The Research Status of Value Co-creation in Service Platforms" (2015). *WHICEB 2015 Proceedings*. 31.
<http://aisel.aisnet.org/whiceb2015/31>

This material is brought to you by the Wuhan International Conference on e-Business at AIS Electronic Library (AISEL). It has been accepted for inclusion in WHICEB 2015 Proceedings by an authorized administrator of AIS Electronic Library (AISEL). For more information, please contact elibrary@aisnet.org.

The Research Status of Value Co-creation in Service Platforms

Na Shu¹, Yihong Xiao^{1}*

¹ School of Economics and Management, Nanjing University of Science and Technology,
Nanjing, 210094, China

Abstract: Service platforms based on network are becoming even more important to physical end-products and services industry. As service platforms will become the founding infrastructure of our economies, the understanding of the value that a service platform can create is of great importance. The development of technology enhances a new way to create the value. Involving customers to co-create value is an important strategy for businesses to satisfy personalized demands and to gain competitive advantages. The paper studies the application of value co-creation in the service platform under the context of Service Dominant Logic (SDL).

Keywords: value co-creation, service platform, service dominant logic, e-commerce, cloud, ICT

1. INTRODUCTION

The extensive application of information and communication technology (ICT) promotes industrial integration, makes the provision and development of products/services continuously improved, and expands the content and field of services. Whether in the field of production, life or the field of public services, a large number of new service mode and service market have emerged. Service platforms are attached great importance to technology and create technical conditions for service provision and development. In recent years, the number of service provision and development on every platform has been a rapid growth. The development of technology enhances a new way to create the value. Value co-creation is a relatively new concept. At present, there are mainly two kinds of views. One is value-creating theory based on consumer experience proposed by Prahalad and Ramaswamy [1], the other is value-creating theory based on SDL proposed by Vargo and Lush [2] in 2004. The paper studies the application of value co-creation in service platforms under the context of SDL.

2. THE SUMMARY OF VALUE CO-CREATION AND SERVICE PLATFORM

2.1 The summary of value co-creation

In 2004, Vargo and Lush proposed the theory of Service Dominant Logic, putting forward new opinions on economic basis and value creation. As SDL proposed, it caused a warm response and discussion in marketing and management circles. Relevant academic debate promotes the continuous improvement of SDL and ultimately forms ten assumptions about SDL [3].

“Service” in SDL differentiates from traditional meaning. Vargo and Lush redefined service as the application of specialized competences (knowledge and skills) through deeds, processes, and performances for the benefit of another entity or the entity itself. Service is a common form of exchange, rather than the specific form [4]. Value co-creation is built on the universality of service. “Service is the fundamental basis of exchange and it is universal form rather than a special form” is the core idea of SDL.

“The customer is always a co-creator of value” is another core idea of SDL. SDL stresses that operant resources play a decisive role in the value creation process and believes that operant resources are the fundamental source of competitive advantage. According to SDL, consumer is the owner of operant resources and they put their knowledge, skills, experience to creation process, which is an important premise of value

* Corresponding author. Email: xyhnjust@163.com (Yihong Xiao), shuna1992@126.com (Na Shu)

creation. SDL attributes importance to the value-creating processes that involve the customer as a co-creator of value.

In the SDL, co-creation value is fundamentally derived and determined in use (the integration and application of resources in a specific context) rather than in exchange (embedded in firm output and captured by price). Value co-creation occurs when a consumer uses or consumes products or services, rather than when the output is manufactured. Value co-creation is the sum of value that producers co-create with consumers who co-create value through consuming products or services, through providing products or services [4].

2.2 The summary of service platform

Service platforms can be considered one of today's highly valued technologies. In recent years, there has been a rapid growth in the number of services being developed and offered over various platforms. Both in the context of creating better value for customers purchasing their services as well as for their stakeholders (who want to see their stake increase in value), value creation is the main focus of service platform operators. So the study of value co-creation and service platforms is particularly prominent and interesting.

Service platforms have several important characteristics [5]:

- Network externality: service participants have network externalities; platform market belongs to the bilateral or multilateral market.
- Resource integration: service platforms attract and integrate professional service resources, which is complementary to core service, to provide systematic services for customers.
- Functionality: service platforms are not only the interaction medium of service participants, but also with the function of service resource configuration and service operation management.
- Collaboration: there is a synergistic effect between service participants and customers, the value of the products/services provided by service platforms increases with the increase of the number of participants.
- Derivative: platform firms offer support to other enterprises through opening the core resources, which can derivative new service platforms.

As the new business model, service platforms in different types and different areas have some common characteristics: service platforms are market-oriented/customer-oriented and the goal of platform construction is to meet the diverse needs of customers; sharing platforms to meet different needs; platforms are the converging points of supply and demand information [6,7].

3. VALUE CO-CREATION IN THE SERVICE PLATFORM

We define a "service platform" as a modular structure that comprises tangible and intangible resources and facilitates the interaction of actors and resources. The so-called value co-creation in service platforms is when stakeholders (application users, service developers, and platform service providers) harvest their own benefits, the value of the whole service platforms improves. In the service platform ecosystem, the major stakeholders, who contribute to the value creation, are application users, service developers, and platform service providers [8]. The value exchange between these stakeholders can be direct (direct payments for services offered and used) or indirect (revenue through advertisement), resulting in net utility for users, profit/loss for the IT platform provider, and profit/loss for service developers. From a business perspective, value creation is the main focus of service platform provider whether it creates better value for customers or stakeholders.

In terms of capabilities for value creation, the characteristics of service markets are also different to those of traditional IT markets. In today's service business environments, service providers can no longer rely on simple comparisons of features, functions, and prices of their products with those of competitors, to determine their competitive advantage in the market. In order to achieve the value co-creation in service platforms, the analysis and understanding of the value generating from service platforms is very important. Compared with the

traditional firms, service platforms can realize economies of scale and scope much faster [9, 10]. In determining the economic value of service platforms, the effect of network is very important. Microsoft Windows is a very good example of the significance of two-sided network effects. The more windows applications are available, the more reasons for a user to choose Windows, the more reasons for developers to build applications for windows. However, for service platforms, interconnecting users and service integrations are more important factors than in traditional software markets. Service platforms can reach a large number of users and developers much faster. An example of that is the raise of the social network platform Facebook. A few studies have also been performed in this area [11-14].

4. THE RESEARCH STATUS OF VALUE CO-CREATION IN THE SERVICE PLATFORM

As economies of scale and scope can be achieved very quickly with service platforms, some service platforms will become the founding infrastructure of our economies. Therefore, an understanding of their value creation becomes important.

There have been a number of studies performed on the value creation process and value factors in platform-based markets in general [12, 15, 16]. A few studies also exist on IT service markets [10, 13, 14, 17]. These studies focus on value creation in e-business, adoption of mobile Internet, mobile service ecosystem, IT service platforms, and on the evaluation of service platform business models.

4.1 The research status of value co-creation in the e-commerce platform

In e-commerce contexts, when customers apply their knowledge and skills (e.g. product expertise or Internet skills) to the resources provided by the website (e.g. e-service quality, usability), value is co-created. Research on value creation in e-commerce, within the service-logics perspective, has not been widely applied or has rarely been discussed [34], which is surprising as e-commerce is inherently interactional. In recent years, the development of ICT, such as the Internet and social media, has provided a platform where customers can engage and interact with firms and their stakeholders and/or other customer communities [35]. The Internet therefore contributes a platform where customers can draw upon their own and others' resources to co-create value with firms. So the study of value co-creation and resource integration in e-commerce contexts is particularly prominent and interesting.

Theoretical value creation frameworks for e-businesses and, in particular, for service platforms have been proposed in recent literature [12-14, 18-21]. Amit and Zott have conducted a study of value creations in the general context of e-business [12]. B2B is a model of e-business. Value creation topic of B2B service platform has also been attracted considerable attention in current marketing and management research [22-24]. At the same time, service has also been extensively studied in the B2B environments [25, 26]. But few studies have been carried out in the new B2B technology service. Furthermore, the concepts of complementarities and network effects are adopted into theoretical models for platform leadership and value creation in e-businesses in recent studies [12, 13].

4.2 The research status of value co-creation in the cloud service platform

Since consumers represent a key factor for success, their preferences should not be neglected in order to operate successfully in the marketplace. Hence, the use of cloud platforms might serve as an excellent opportunity to increase value creation between the involved actors for both, the B2B and the B2C market.

Only a few studies have been conducted on value chains, value networks, and value creation in cloud computing. A value chain reference model for cloud computing was presented by Bany et al. They developed a value chain model based on Porter's value chain theory and adapted it to the non-linearity value creation aspects of cloud computing [27]. Böhm et al. also describe different cloud stakeholders, their roles in the market, and the interactions between them to develop a generic value network model [28].

4.3 The research status of value co-creation in ICT platform

ICT platforms provide an enabling technology for the development and provision of application services in service-oriented environments. The present paper provides an understanding of firms' ICT capabilities in terms of value co-creation and provides empirical evidence of the degree to which ICT constitutes a valid resource with which to support value co-creation.

In recent years, it has been extensively recognized throughout the literature that the adoption and implementation of ICT constitutes a strategic factor in business-to-customer (B2C) interactions [29, 30]. Furthermore, ICT is particularly noteworthy for its potential in the B2C value co-creation process [31, 32]. With this in mind, it has been identified that firms should re-design their customer service and delivery processes so as to foster improved B2C interaction by means of ICT. This re-design should center on providing the client with a more appealing offer that is personalized, to better reflect their individual needs and preferences and, ultimately, to achieve a perception of greater value [33].

The literature on SDL calls for progress in the study of the antecedents of value co-creation and the effect of on business outcomes. Nevertheless, the existing research on value co-creation provides little empirical evidence. Specifically, Shaw et al. [32] find that it is of critical importance to involve the customer as a co-creator of value and highlight the potential of ICT to support this process.

5. CONCLUSIONS

This paper studies the application of value co-creation in the service platform under SDL. Specifically, the paper makes the summary of value co-creation and service platform. Besides, the paper states value co-creation and its research status in the service platform. However, the paper only involves the e-commerce platform, the cloud service platform, Information and Communications Technology platform, which is typical but incomplete.

This paper also holds implications for research on value co-creation in general. The first implication highlights the need to further explicate the key characteristics of service platforms and value co-creation processes. Another implication involves the need for firms to focus on the service ecosystem, which requires firms to consider all resources and their interconnections.

ACKNOWLEDGEMENT

This work has been partially supported by the Research Fund for the Doctoral Program of Higher Education of China (20133219120040) and the Fundamental Research Funds for the Central Universities (No.2012YBXM013).

REFERENCES

- [1] Prahalad C K, Ramaswamy V. (2004). Co-creation experience: The next practice in value creation. *Journal of Interactive Marketing*. 3(1): 5-14.
- [2] Vargo S L, Lusch R F. (2004). Evolving to a new dominant logic for Marketing. *Journal of Marketing*. 68(1): 1-17.
- [3] Vargo S L, Lusch R F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*. 36(1): 1-10.
- [4] Payne A F, et al. (2008). Managing the co-creation of value. *Journal of the Academy Marketing Science*. 36(1): 83-96.
- [5] Hua Zhongsheng. (2013). Platform service and management problems in the network environment. *Journal of Management Science*. 16(12): 1-12.
- [6] Cao Junhao, Chen Hongmin, Shi Bide. (2010). The intensity of network externality classification and research based on the theory of two-sided market monopoly B2B platform. *Journal of Shanghai Jiaotong University*. 44(12): 1661-1664.

- [7] Li Quan, Chen Hongmin. (2009). The research on platform competition efficiency and strategic effects of investment. *Journal of Industrial Engineering and Engineering Management*. 23(4): 27-30.
- [8] Jörn Altmann, Mihaela Ion, Ashraf Adel Bany Mohammed. (2007). Taxonomy of Grid Business Models. *Lecture Notes in Computer Science*. 4685: 29-43.
- [9] H Demirkan, RJ Kauffman, JA Vayghan, et al. (2008). Service-oriented technology and management: perspectives on research and practice for the coming decade. *Electronic Commerce Research and Applications*. 7(4): 356-376.
- [10] Selam Abrham Gebregiorgis, Jörn Altmann. (2012). IT service platforms: Their value creation model and the impact of their level of openness on their adoption. In: K Vanmechelen, J Altmann, O F Rana, eds. *Economics of Grids, Clouds, Systems, and Services: Vol 7714*. Seoul: Technology Management, Economics, and Policy Program, 100-124.
- [11] Norbert, Bose, Sanjay, Fiammante, Marc, Jones, Keith, Shah, Rawn Bieberstein. (2005). *Service-Oriented Architecture (SOA) Compass: Business Value, Planning, and Enterprise Roadmap*. Upper Saddle River: FT Press.
- [12] Amit R, Zott C. (2001). Value creation in e-business. *Journal of Strategic Management*. 22: 493-520.
- [13] Lee S, Kim T, Noh Y, Lee B. (2010). Success factors of platform leadership in web 2.0-service business. *Service Business*. 4(2): 89-103.
- [14] Smedlund A. (2012). Value co-creation in service platform business models. *Service Business*. 4(1): 79-88.
- [15] Kim H W, Chan H C, Gupta S. (2007). Value-Based Adoption of Mobile Internet: An Empirical Investigation. *Decision Support Systems*. 43: 111-126.
- [16] Basole R C, Karla J. (2012). Value Transformation in the Mobile Service Ecosystem: A Study of App Store Emergence and Growth. *Service Science*. 4(1): 24-41.
- [17] Haile N, Altmann J. (2012). Value Creation in IT Service Platforms through Two- Sided Network Effects. In: K Vanmechelen, J Altmann, O F Rana, eds. *Economics of Grids, Clouds, Systems, and Services: Vol 7714*. Seoul: Technology Management, Economics, and Policy Program, 139-153.
- [18] Iansiti M, Levien R. (2004). Strategy as ecology. *Harvard Business Review*. 82(3): 68-81.
- [19] Gawer A, Cusumano M A. (2008). How companies become platform leaders. *MIT Sloan Management Review*. 49(2): 28-35.
- [20] Kim K, Altmann J, Hwang J. (2011). An analysis of the openness of the Web2.0 service network using two sets of indices for measuring the impact of service ownership. In: J Altmann, eds. *Hawaii International Conference on Systems Science: Vol 44*. Hawaii: IEEE Computer Society Press.
- [21] Kim K, Altmann J, Hwang J. (2010). Measuring and analyzing the openness of the Web2.0 service network for improving the innovation capacity of the Web2.0 system through collective intelligence. In: J Altmann, eds. *Symposium on Collective Intelligence*. Hagen: Springer Advances in Intelligent and Soft Computing.
- [22] Andreas Eggert, Wolfgang Ulaga. (2002). Customer perceived value: a substitute for satisfaction in business markets. *Journal of Business & Industrial Marketing*. 17: 107-118.
- [23] Adam Lindgreen, Michael Antioco, Roger Palmer, Tim van Heesch. (2009). High-tech, innovative products: identifying and meeting business customers' value needs. *Journal of Business & Industrial Marketing*. 24: 182-197.
- [24] Emma K, Hugh Wilson, Veronica Martinez, Amir Toossi. (2011). Assessing value-in-use: a conceptual framework and exploratory study. *Industrial Marketing Management*. 40(5): 671-682.
- [25] Melanie Baier, Gernot Graefe, Ellen Roemer. (2008). Selecting promising business ideas for innovative IT services. *European Journal of Innovation Management*. 11(4): 560-576.
- [26] Darline Vandaele, Paul Gemmel. (2008). Purchased business services influence downstream supply chain members. *International Journal of Service Industry Management*. 18(3): 307-321.
- [27] Ashraf Bany Mohammed, Jörn Altmann, Junseok Hwang. (2010). Cloud computing value chains: understanding businesses and value creation in the cloud. *Economic Models and Algorithms for Distributed Systems*. 187-208.

- [28] Markus Böhm, Galina Koleva, Stefanie Leimeister, Christoph Riedl, Helmut Krcmar. (2010). Towards a generic value network for cloud computing. *Economics of Grids, Clouds, Systems, and Services*. 6296: 129-140.
- [29] Alonso-Almeida M M, Llach J. (2011). Adoption and use of ICTs in small business environments: Impact on business competitiveness. *The Service Industries Journal*. 33(15–16): 1456 – 1472.
- [30] Poulis E, Poulis K, Dooley L. (2013). Information communication technology innovation in a non-high technology sector: Achieving competitive advantage in the shipping industry. *The Service Industries Journal*. 33(6): 594–608.
- [31] Karpen I O, Bove L L, Lukas B A. (2012). Linking service-dominant logic and strategic business practice: A conceptual model of a service-dominant orientation. *Journal of Service Research*. 15(1): 21–38.
- [32] Shaw G, Bailey A, Williams A. (2011). Aspects of service-dominant logic and its implications for tourism management: Examples from the hotel industry. *Tourism Management*. 32: 207– 214.
- [33] Grisseman U S, Stokburger-Sauer N E. (2012). Customer co-creation of travel services: The role of company support and customer satisfaction with the co-creation performance. *Tourism Management*. 33(6): 1483–1492.
- [34] Johanna Gummerus. (2010). E-services as resources in customer value creation: A service logic approach. *Managing Service Quality: An International Journal*. 20(5): 425-439.
- [35] Albert M Muñoz Jr, Hope Jensen Schau. (2011). How to inspire value-laden collaborative consumer-generated content. *Business Horizons*. 54(3): 209-217.