

MANAGING THE ACTOR'S NETWORK, BUSINESS MODEL AND BUSINESS MODEL INNOVATION TO INCREASE VALUE OF THE MULTIDIMENSIONAL VALUE NETWORKS

Dina Dellyana*

Institut Teknologi Bandung

Togar M Simatupang

Institut Teknologi Bandung

Wawan Dhewanto

Institut Teknologi Bandung

ABSTRACT

Recently, there have been significant changes in many industries triggered by the development of new Internet-based technology. New business models have been invented in response to the changes and to keep up with competition, for the most part forcing companies to conduct partnerships or collaborations with different actors in order to fulfill the business's offering. A partnership with more than two actors then triggers the formation of a strategic network. The aim of this research is to understand the management of the actor's network, the business model and the business model innovation dimension in the multidimensional value network (MDVNs) in search of increased value outcome. A case study of three MDVNs from different industries is carried out to explain the constellation of the relationship between dimensions and its outcome in value. The findings indicate the two-way relationship between the actor's network, business model and business model innovation dimensions. The general relationship of the three dimensions then results in a contextualized relationship on multidimensional value nets as the case. The model then becomes a helpful tool for effective business model innovation in the network. Firms are now examining new roles in the industry and the partnership opportunities which then become the basis of the strategic nets formation. As for the managerial implication, the model could facilitate the analysis actor's network dimensions, business model and activity of business model innovation which bears the different characteristics of each network. It is also possible for the model to evaluate the network effectiveness towards the business model innovation based on value as the outcome.

Keywords: Business Model; Business Model Innovation; Network.

1. INTRODUCTION

The business landscape is changing worldwide, and many factors have fostered the changes, including the rapid use of internet and development of digital technology. The rapid development of the internet has brought positive and adverse effects to most industries. In most cases, the internet has triggered the cross group/actors value creation activity which requires actors in industry to change their business models (Leyshon, 2000). The new business models often require more partnership and collaborating actors which cause a value chain reconfiguration (Kartseva et al., 2004) and then form complex linkages that lead to the creation of a "value network" (Bovet and Martha, 2000). The value network is effective for increasing value in their business network (Nenonen and Storbacka, 2010), increasing efficiency,

* Corresponding author: School of Business and Management, Jl. Ganesha No. 10 Bandung, West Java, Indonesia, (62)22-2531823 dina.dellyana@sbm-itb.ac.id

increasing speed, and to provide ease for the services they offer (Palo and Tahtinen, 2011). The value network resulting from various actors' cooperation can also offer better cost-efficient products and services with shorter delivery terms (Möller and Halinen, 1999) since the value-creating networks can help them acquire access to complementary assets (Rasmussen, 2007), integrate resources and co-create markets (Vargo, 2007), and reduce the costs or risks of innovation activity (Rasmussen, 2007).

Actors from many industries in Indonesia strive to find various ways of adapting to this situation. They start by adapting the "internet" business model, then form a multidimensional value net. Multidimensional value nets (MDVNs) is one of the three types of strategic business nets (vertical value nets, horizontal value nets and multidimensional value nets) conceived by Möller et al. (2005). MDVNs comprise a hub organization that creates its market offering by integrating products and services required from a group of different types of suppliers and channel firms. In general, MDVNs are formed to create a new business concept with new technologies, which requires the hub organization to orchestrate various roles of actors to create new value activities. Multidimensional value nets was chosen as it offers the dynamics of different types of actors (Moller et al., 2005).

To gain significant value outcome from multidimensional value nets, many factors need to be analysed. First, since actors in this network come from different industries, it requires different arrangement and managerial capabilities to maintain the partnership (Moller et al., 2005). Thus, it is important to conduct analysis of the actor's behavior, government and structure in the network (Wu and Zhang, 2009). Second, comprehending clear resources and capability of each network member, including their business model and network ties, can significantly help actors in the network to innovate their business model (Nenonen and Storbacka, 2010; Lindgren et al., 2010). Third, after analysing each member's business model, the process of reconfiguring, connecting, integrating the business model's elements and identifying the most essential elements in future business is important to ensure the benefits of business model innovation activity (Fu et al., 2006; Palo and Tähtinen, 2011; Wu and Zhang, 2009).

Due to the increase for the need of value-creating networks study, research on this topic expanded (e.g Wu and Zhang, 2009; Nenonen and Storbacka, 2010; Bask et al., 2010; Palo and Tähtinen, 2011). This research intends to focus on that topic. Thus, this research will try to find the configuration on each element in the model in regards to the outcome of the value creation, value delivery and value capture based on data collection of three MDVNs from three different industries.

2. LITERATURE REVIEW

2.1. Actor's Network

This research focuses on strategic networks, which is defined as any restricted group of organizations or actors that are interconnected with the structures, governances, and unique behaviours that are strategically important to participating firms. The members of the network work together towards the intention of a particular task or output (Möller et al., 2005). Actors in the network can be individuals, collectives, communities, or enterprises (Allee, 2008). The role of actors varies among suppliers, partners, distribution channels, and consumers (Möller and Halinen, 1999). Based on Shuman and Twombly (2010), the network is comprised of the governance principles, which includes the structure and behavior elements. The network structure is defined as the relationship arrangement of the network's members. The structural elements include network ties, network configuration, and network stability (Inkpen and Tsang, 2005).

Network governance is the process of making and implementing a decision in the network. The network governance ‘involves a select, persistent, and structured set of autonomous firms (as well as non-profit agencies) engaged in creating products or services based on implicit and open-ended contracts to adapt to environmental contingencies and to coordinate and safeguard exchanges’ (Jones et al., 1997: 914). The network governance elements include review and evaluation, decision-making authority (Shuman and Twombly, 2010), collaboration guidance (Bititci et al., 2004), and transaction (Snehota and Håkansson, 1995). Network behavior is the way in which members of the network act toward others. The network behavior elements include active/passive communication, sharing resources, transparency of internal information, and time period of collaboration (Shuman and Twombly, 2010). Based on the description above, the network is comprised of relationship arrangement of the network’s members, the process of making and implementing a decision in the network and the way in which members of the network act toward others.

2.2. Business Model

Business model is the representation of how actors in the network exchange value and arrange the value flow. Based on previous research, one of the elements of the business model in the network perspective is the value exchange between network actors (Weill and Vitale, 2001; Komulainen et al., 2006; Wu and Zhang, 2009; Palo and Tähtinen, 2011). Based on Allee (2003), a value network creates economic value throughout complex dynamic exchanges between one or more network members. Value exchanges need to be converted in order to gain better economic understanding. Furthermore, by visualizing the value exchanges in the business model, the analysis of the value of a network can be easily facilitated. Value exchanges form value creation activities through a tangible and intangible value flow, thus the value flow is also an important element of the business model (Wu and Zhang, 2009). Tangible value exchanges include exchanges on products, services and money. Intangible value exchanges include knowledge, influence and exposure (Wu and Zhang, 2009). Based on the explanation above, the business model is defined as the representation of how actors in the network exchange value and arrange the value flow.

2.3. Business Model Innovation

Business model innovation (BMI) is a systematic procedural strategic activity that is critically contingent on the firm’s ability to sort, evaluate, refine and rearrange its diverse resources and capabilities (Najmaei, 2011). The BMI process includes initiation, ideation, integration, and implementation (Frankenberger et al., 2013). The initiation stage covers the activity of understanding the needs of the players and identification of change drivers. The ideation stage comprises the activity of overcoming the current business logic, thinking in the business model, and managing the idea creation. In the integration stage, the activity consists of detailing and ensuring the alignment of the business model and managing partners. In the implementation stage, the activity is to overcome the internal resistance and evaluation. Different BMI processes result in different types of BMI, as conceived by Giesen et al. (2007). The framework explains three BMI types: industry model, revenue model, and enterprise model. The industry model occurs when one network innovates in the industry value chain by moving into new industries, redefining existing industries, or creating entirely new ones, and also by identifying/leveraging unique assets. The revenue model occurs when one network innovates in how it generates revenue through offering re-configuration (product/service/value mix) and pricing models. The enterprise model occurs when one network innovates in the role it plays in the value chain by changing its extended enterprise and networks with employees, suppliers, customers, and others, including capability/asset configuration.

2.4. Value

"Value inhabits in the satisfaction and fulfilment of customers' expectations" (Martinez, 2003). Customer expectation has become the focus of value creation and can be achieved when the relative amount of value is subjectively realized by the customer (Lepak et al., 2007). To ensure value is realized by the targeted customer and to maximize competitive advantage, the value creation actors need to build a stronger network of value delivery partners (Berggren and Nacher, 2001). A stronger network of value-delivery partners and the unique business model's propositions can sustain and maximize value delivery and create the best process of value delivery (Berggren and Nacher, 2001; Demil and Lecocq, 2010). Value also inhabits in generating wealth for organizations (Martinez, 2003). To generate wealth for organizations in the network, the value creation and value delivery network need to ensure that network members can capture value from the business model that is executed. For instance, in his paper, Johns (2005) explains how retailers and distributors capture value from the sale of the game and how the negotiation happens. They also explain how a manufacturer can also capture value by becoming an exclusive manufacturer. It can be concluded that value capture starts from initiation of value creation until value delivery. Based on previous research, in this research value is defined as the expected output of BMI activity in a particular network that is created and delivered for customers through maximum value capture for network members.

3. METHODOLOGY

To answer the research objectives, a multiple case study design is provided to guide the data collection of this research since (1) it allows replication logic (2) this research aims for theoretical replication rather than literal replication (Yin, 2014). The case distinction allows this research to identify and compare the strengths and weaknesses of each case. As the unit of analysis, this research has selected three MDVNs based on several criteria: first, it is the network of a focal company in the Indonesian creative industry subsectors, second, it includes more than two members in its network and third the three MDVN are come from different industries to make sure the cases are contrasting.

In this case study research, the collection of data is conducted through: (1) semi-structured interviews with key internal management of the network's focal firm, (2) semi-structured interview with partners, (3) observation and (4) secondary sources. To enhance the rigorousness of the study, the principles of data collection proposed by Yin (2014) were followed:

1. First, to use multiple sources of evidence. Multiple data sources can contribute to a high degree of construct validity. In this case study, both customers (network members) and focal firms were interviewed. We also observed the three platforms of the case studies. In addition, archival records such as meeting reports and company websites provide a more in-depth understanding of focal firms' networks, and to complement the results of the study.
2. Second, to create a case study database. A case study database helps to increase reliability of the case study (Yin, 2014). In this study, case study notes were maintained by taking notes during the interviews. Audio was also recorded during the interviews for documentation purposes. Our case study documents also include company background information. Interview and observation protocols are developed and used to guide each activity.

This research carried out four techniques for analysis suggested by Yin (2014): pattern matching by linking data to propositions, explanation-building, logic models, and cross-case synthesis. There are some instances when a proposition can be supported, partially-supported and not even supported at all

Table 1: Respondent Information

Case		Position	Interview Date
Guvera	Focal Firm Management	Managing Director of Guvera	October 25, 2015
		Music director of Guvera	February 5, 2016
	Network members	Dokuwallet (vice president of merchant product)	February 12, 2016
		Tokopedia (Internet Marketing Specialist)	March 3, 2016
Zalora	Focal Firm Management	Buyer	April 4, 2017
	Network members	Nazmi (Founder and Owner)	May 1, 2017
		Fairy Berry (Founder)	April 29, 2017
IDCloudHost	Focal Firm Management	Chief Marketing Officer at IDCloudHost	June 15, 2017
	Network member	Metagraf (Founder)	July 2, 2017
			Bank Negara Indonesia (branch manager)

by the case study result. A proposition is considered fully supported when the measured variable results in the same intensity level. A proposition is considered partially-supported when the measured variable results in intensity level difference of one. A proposition is considered not supported when the measured variable results in intensity level difference of two. The measurement of BMI in the network perspective consists of four dimensions of the conceptual model: network dimension, business model dimension, business model innovation dimension and value dimension. Each dimension is broken down into elements which characterize the dimension. The intensity level is chosen as the basis measurement as it is considered to be representative in measuring each dimension in the network context. The level is built based on elaboration of previous research (e.g. Shuman and Twombly, 2010; Bititci et al., 2004; Håkansson and Shenota, 1995; Inkpen and Tsang, 2005; Wu and Zhang, 2009; Komulainen et al., 2006; Palo and Tähtinen, 2011; Giesen et al., 2007; Frankenberger et al., 2013; Bucherer et al., 2012)

4. FINDINGS

The analysis for each case is described in this section, including case introduction and proposition testing of each case to the propositions. This section ends with a summary, comparison and analysis of these cases.

4.1. Introduction and discussion of case studies

4.1.1. Guvera Indonesia

Established in 2008, Guvera is an Australian-based online music streaming platform which can be found in web browsers, iOD, Android and Windows Phone. By signing a licensing agreement with many international record label and local record label, Guvera offers more than 10 million songs for its global customers. Collaborating with Jakarta IT firm Skybee, Guvera launched its service in Indonesia in February 2014, with the Guvera Indonesia representative office located at Graha Tirtadi 1st floor, unit 102. Jl Senopati 75, Jakarta. Since their emergence in Indonesia, they have attempted to sign agreements with as many local labels as possible in Indonesia to enrich their music catalog. They have also conducted partnerships with telcos, local content providers and payment providers to provide the best music experience in their platform. They also offer advertising opportunities in their platform for other companies to gain revenue other than from music streaming.

4.1.2. Zalora Indonesia

Zalora is an online marketplace or e-commerce that provides fashion products. Currently, Zalora operates in Indonesia, Singapore, Malaysia, Brunei, Thailand, Philippines, and Hong Kong. It was

established in late 2011 by its five co-founders, including Oliver Samwer, Catherine Sutjahyo, and Hadi Wenas. The main investors of Zalora are Rocket Internet and Kinnevik AB, which formed Global Fashion Group (GFG). GFG is comprised of five of the world's leading fashion e-commerce for emerging markets, one of which is Zalora. Currently, GFG employs more than 9000 people in 24 countries and cooperates with many partners from various industries, including fashion labels, logistics firms, financial institution, media and public advertisers.

4.1.3. IDCloudHost

PT Cloud Hosting Indonesia or IDCloudHost (idcloudhost.com) is a web-hosting company that emphasizes the best and latest technology to provide the best service for their clients. Established in 2015, the company started with bootstrapping financing — a self-funding technique to start and run the company. IDCloudHost has three offices: a Bandung office for headquarters and customer service centre, a Jakarta office for finance and legal affairs, and a Sukabumi office for technical operations. They offer several services, including domain registration, cloud hosting, VPS and dedicated server supply, domain reselling and hosting reselling. IDCloudHost started its business by bootstrapping its founders' own money to avoid outside financing. IDCloudHost has several partners to help their daily operations, including PANDI (Pengelola Nama Domain Internet Indonesia), the Indonesian domain name registry (.id) which was established by the Ministry of Communication and Information Technology in Indonesia; banks (as payment gateways), and media (to increase brand awareness).

4.2. Cross-Case Analysis

This section provides an analysis and discussion of the descriptive data obtained from previous case analysis. The objective of cross-case analysis is to find similarities and differences among the three case studies. The comparison analysis of three cases is towards four dimensions: Actor's Network, Business Model, Innovation and Value. Discussion of the findings follows this chapter.

5. DISCUSSION

Analyzing the information from three cases reveals the following common traits. In all MDVNs, the actor's network coordinates towards the business model. Less exclusive network structures in MDVNs allow actors to negotiate when to start the value flow (timing) and can also invite potential actors to enter the network and exchange values. Different types of partners bring different values to be exchanged, resulting in different value flows and network behaviors. This condition faces each network with its various business models to be managed. Dynamic network governance negotiates the type of value exchanges required and timing of value flow in the business model (BM) through mutual agreement. Dynamic network behavior helps manage communication, sharing activities, transparency of information, and period of collaboration towards the value exchange and value flow. It is discovered that different business models result from different types of partners, requiring intense communication which is hoped to be continuously conducted in order to refine and evaluate each business model. However, communications between actors do not always happen the way they should be. This condition triggers problems such as slow response to the needs and wants of partners and slow detection of business model failure.

Based on the analysis, it is revealed that the business model provides the platform for the actor's network interaction. Less rigid value exchanges among actors allow them to negotiate the mechanism of transaction, sharing resources, review and evaluation. The most convenient mechanism to both actors

Table 2: Cross Case Analysis

Dimensions	MDVN 1 (Guvera)	MDVN 2 (Zalora)	MDVN 3 (ID Cloudhouse)
Actor's Network	<p>Structure: 6 different types of partners (cell phone distributors, smartphone producer, telco's provider, records label, payment gateway, advertisers), all direct ties, contract-based.</p> <p>Governance: decision-making depends on negotiation, each partnership/collaboration has same bargaining power.</p> <p>Behavior: high transparency, variable time period of collaboration, open for sharing resources</p>	<p>Structure: 5 different types of partners (Fashion label, logistic firm, financial institution, media, advertisers), all direct ties, contract/agreement-based.</p> <p>Governance: each partnership/collaboration has different decision-making systems.</p> <p>Behavior: intense communication, high transparency, loose time period of collaboration</p>	<p>Structure: 4 different types of partners (PANDI, banks, media, other start-ups), all direct ties, contract-based.</p> <p>Governance: PANDI as decision-maker of domain registration, the rest is negotiation-based</p> <p>Behavior: medium transparency, long-time period of collaboration, open for sharing resources</p>
Business Model	<p>Value exchange: subscription fee and advertising fee, revenue sharing, sponsorship fee, information, database.</p> <p>Value Flow: product flow, information flow, service flow, and money flow quite intense but centralized to Guvera</p>	<p>Value exchange: commission fee, products, database</p> <p>Value Flow: product flow, information flow, and money flow quite intense but centralized to Zalora</p>	<p>Value exchange: service fee, subscription fee and advertising fee, database.</p> <p>Value Flow: service flow, and money flow centralized to ID CloudHost</p>
Business Model Innovation	<p>Type: industry type, Guvera creates a new digital music value chain mainly in distribution and consumption</p> <p>Process: adjustment of its business model to Indonesian rules in initiation process then develop the business model in ideation, integration phase through implementation</p> <p>phase. Actors/network members open to share ideas</p> <p>Level: could be in the market breakthrough level if the market is ready</p>	<p>Type: revenue type, Zalora reconstructs its affiliate marketing program and services.</p> <p>Process: adjustment of its business model to Indonesian rules in initiation process then develop the business model in ideation, integration phase through implementation</p> <p>phase. Actors/network members open to share ideas, but rarely conducted.</p> <p>Level: industry breakthrough</p>	<p>Type: revenue type, IDCloudHost reconstruct its service offering</p> <p>Process: from initiation, integration, and implementation. Actors/network members open to share ideas</p> <p>Level: market breakthrough</p>
Value	<p>Creation: increased quality of services, increased quantity of products, lower service prices, technology integration, simplification, increased customer experience, increased customer knowledge</p> <p>Delivery: Less time to the market for new artists, new songs delivered by labels, increased quality of products and service delivery, decreased cost of product delivery, increased customer experience of delivery, increased engagement with customers</p> <p>Capture: profit from subscription fees, number of users, profit from advertising fees, increased customer awareness.</p>	<p>Creation: increased quality of services, increased quantity of products, reduced price of products, simplifier, technology integration, increased customer experience, increased customer knowledge</p> <p>Delivery: increased delivery service, decreased cost of delivery, speeded-up delivery process</p> <p>Capture: profit from sales, increased number of customers, commission fees, increased number of contacts</p>	<p>Creation: Improvement of service quality, lower advertising fees in media partners, increasing market awareness</p> <p>Delivery: Lower B2B customer service fees, simple domain registration, integrated customer experience in website transactions, increase of customer trust</p> <p>Capture: service fees, number of customers, market awareness.</p>

becomes the objective of negotiation. Although the value exchange is less rigid, it can safeguard network ties, configuration, and stability. A focal firm is needed to manage the value flow which includes communication and transparency of information arrangement. The communication in this type of network is mostly related to sales report and business model implementation. In MDVN, the BM needs to have a good rapport to maintain network ties, configuration and stability

Successful business model innovation requires active interaction between actors in the MDVN. Dynamic network governance can provide room for various BMI types and BMI processes, whereas dynamic network behavior can increase the actor's involvement in the BMI process. Actors that agree to collaborate are required to contribute their resources or capabilities to the BMI process and interact with other partners related to the business model. The latest BMI in MDVN requires the rearrangement of network ties and configuration. In MDVN, BMI is usually arranged in the contract. The contract is developed based on a mutual agreement to ensure the sharing of resources, active communication, transaction, reviews and evaluation. Usually, a contract regarding rights and responsibilities can still be adjusted based on the cooperating actors' convenience. Business model innovation facilitates the representation of business models in MDVN and adapts to domestic BM. The adaptation includes new cooperation with local strategic partners in compliance with investment regulations in Indonesia. The current BM is essential for business model innovation in MDVN. Current value flow provides lessons to be learned in order to modify contracts/partnerships, money flow and information flow.

In most MDVN the BMI level is low, but still results in high value creation, delivery and capture, because a low level of BMI in MDVN can result in high value creation through cooperation with many actors who bring different expertise. According to Lund and Nielsen (2014), "it was found that it is not only about how the business model could 'merge' together, but it is also essential to commercialize them as fast as possible to different markets". The BMI carried out after their emergence is mostly in incremental levels, in terms of adjusting the offering, which results in new services, price and product packages. This also increases through consistent innovation in the offering, method of payment and more. Low levels of BMI in MDVN can result in high level of value delivery through consistent customer engagement and consistent increase in quality of delivery. In MDVN, low levels of BMI can result in high levels of value capture through opening many revenue sources, such as subscription and advertising.

6. CONCLUSION

This research begins with the background and problem identification, which leads to the research objective of this research, namely to find configurations of actor's network, business model and its innovation towards the outcome of value creation, value delivery and value capture. This research finds that the actors/network members involved in MDVN have different business models, thus the generalization of actors/network members coordination with focal firms is inapplicable. A focal firm needs to maintain different types of business models and actor coordination through good negotiation. These findings are in line with Wu and Zhang (2009), who asserted that the value flow, such as products, information and money flow and the form of linkage, are vital attributes in value network research. The form of linkage indicates the mode of network governance, which consists of equity and non-equity arrangement. The equity and non-equity arrangement can be classified from dimensions such as frequency, duration, the degree of trust, integration, and control. To make this network effective, a trustworthy focal firm, orchestrator or choreographer of the network who is easy to reach and open for any member to communicate is needed. They need to have a representative who has good communication and negotiation skills, and a capability to foresee innovation opportunities among the

member. The focal firm needs to allocate different people to manage different type of partners, as they have different interests and expectations. Constant review and discussion needs to be regularly conducted as the offering of this network is new and might still need a lot of improvement.

It is found that the multi-dimensional net is usually established to embrace new business concepts with new technologies. From the cases it can be seen that the motives of network formation in multi-dimensional value nets from the focal firm is to create new business concepts with new technologies. To realize the new concepts, they need to conduct partnerships with different types of focal firms to provide different types of payment. From the partners' perspective, the motive of joining the network is mainly to get income from the partnership. Another motive is to increase awareness, for example companies that advertise in the focal firm's platform. Thus, different types of resources and skills are gathered here to provide the best offering to the customer. Joining this kind of network is recommended for actors who want to learn about the new business avenues, as the income is usually still unstable for an undetermined time. However, as this type of network offers long-term success opportunities, actors who have joined this network since the beginning of its emergence can obtain more knowledge and the crème de la crème of the new business model.

ACKNOWLEDGEMENT

The authors would like to thank an anonymous referee for useful comments and suggestions. The usual disclaimer applies. Funding for this project comes from School of Business and Management, Bandung Institute of Technology Research Grant Scheme.

REFERENCES

- Allee, V. (2003). *The Future of Knowledge: Increasing Prosperity through Value Networks*. Amsterdam, Boston: Butterworth-Heinemann.
- Allee, V. (2008). Value network analysis for accelerating conversion of intangibles. *Journal of Intellectual Capital*, 9(1), 5-24.
- Bask, A. H., Tinnilä, M., & Rajahonka, M. (2010). Matching Service Strategies, Business Models and Modular Business Processes *Business Process Management Journal*, 16(1), 153-180.
- Berggren, E., & Nacher, T. (2001). Introducing New Products can be Hazardous to Your Company: Use the right new-solutions delivery tools. *The Academy of Management Executive*, 15(3), 92-101.
- Bititci, U. S., Martinez, V., Albores, P., & Parung, J. (2004). Creating and Managing Value in Collaborative Networks. *International Journal of Physical Distribution and Logistics Management*, 34(3/4), 251-268.
- Bovet D., & Martha, J. (2000). *ValueNets: Breaking the Supply Chain to Unlock Hidden Profit*. Chichester, UK: John Wiley and Sons.
- Bucherer, E., Eisert, U., & Gassmann, O. (2012). Towards Systematic Business Model Innovation: Lessons from Product Innovation Management. *Creativity and Innovation Management*, 21(2), 183-198.
- Demil, B., & Lecocq, X. (2010). Business Model Evolution: In Search of Dynamic Consistency. *Long Range Planning*, 43(2-3), 227-246.
- Frankenberger, K., Weiblen, T., Csik, M., & Gassmann, O. (2013). The 4I-framework of business model innovation: A structured view on process phases and challenges. *International Journal of Product Development*, 18(3-4), 249-273.

- Fu, R., Qiu, L., & Quyang, L. (2006). A Networking-based View of Business Model Innovation: Theory and Method. *Communications of the IIMA*, 6(4), 81-87.
- Giesen, E., Berman, S. J., Bell, R., & Blitz, A. (2007). Three Ways to Successfully Innovate your Business Model. *Strategy and Leadership*, 35(6), 27-33.
- Inkpen, A. C., & Tsang, E. W. (2005). Social Capital, Networks, and Knowledge Transfer. *Academy of Management Review*, 30(1), 146-165.
- Johns, J. (2005). Video games production networks: value capture, power relations and embeddedness. *Journal of Economic Geography*, 6(2), 151-180.
- Jones, C., Hesterly, W. S., & Borgatti, S. P. (1997). A General Theory of Network Governance: Exchange Conditions and Social Mechanisms. *Academy of Management Review*, 22(4), 911-945.
- Kartseva, V., Gordijn, J., & Akkermans, H. (2004). A design perspective on networked business models: A study of distributed generation in the power industry sector. *Proceedings of 16th Bled conference 2003*, 434-445.
- Komulainen, H., Mainela, T., Sinisalo, J., Tahtinen, J., & Ulkuniemi, P. (2006). Business Model Scenarios in Mobile Advertising. *International Journal of Internet Marketing and Advertising*, 3(3), 254-270.
- Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value Creation and Value Capture: A Multilevel Perspective. *Academy of Management Review*, 32(1), 180-194.
- Leyshon, A. (2000). Time-space (and Digital) Compression: Software Formats, Musical Networks, and the Reorganisation of the Music Industry. *Journal of Environment and Planning*, 33, 49-77.
- Lindgren, P., Taran, Y., & Boer, H. (2010). From Single Firm to Network-Based Business Model Innovation. *International Journal of Entrepreneurship and Innovation Management*, 12(2), 122-137.
- Lund, M., & Nielsen, C. (2014). The evolution of network-based business models illustrated through the case study of an entrepreneurship project. *Journal of Business Models*, 2(1), 105-121.
- Martinez, V. (2003). *Understanding Value Creation: The Value Matrix and the Value Cube* (Doctoral Dissertation). Strathclyde University, Glasgow.
- Möller, K. K., & Halinen, A. (1999). Business Relationships and Networks: Managerial Challenge of Network Era. *Industrial Marketing Management*, 28(5), 413-427.
- Möller, K., Rajala, A., & Svahn, S. (2005). Strategic Business Nets—Their Type and Management. *Journal of Business Research*, 58(9), 1274-1284.
- Najmaei, A. (2011). Dynamic business model innovation: An analytical archetype. *Proceedings of the 3rd International Conference on Information and Financial Engineering (IPEFR)*, 165-171.
- Neenen, S., & Storbacka, K. (2010). Business model design: conceptualizing networked value co-creation. *International Journal of Quality and Service Sciences*, 2(1), 43-59.
- Palo, T., & Tähtinen, J. (2011). A Network Perspective on Business Models for Emerging Technology-Based services. *Journal of Business and Industrial Marketing*, 26(5), 377-388.
- Rasmussen, B. (2007). Business Models and the Theory of the Firm. Centre for Strategic Economic Studies Working Paper No. 32.
- Shuman, J., & J. Twombly. (2010). Collaborative Networks Are the Organization: An Innovation in Organization Design and Management. *Vikalpa*, 35(1), 1-13.
- Snehota, I., & Håkansson, H. (1995). *Developing Relationships in Business Networks*. Londres: Routledge.
- Vargo, R. F. (2007). On a Theory of Markets and Marketing: From Positively Normative to Normatively Positive. *Australasian Marketing Journal*, 15(1), 53-60.
- Weill, P., & Vitale, M. (2001). *Place to Space: Migrating to E-business Models*. Boston, MA: Harvard Business School Press.
- Wu, X., & Zhang, W. (2009). Business model innovations in China: From a value network perspective. *US-China Business Cooperation in the 21st Century: Opportunities and Challenges for Entrepreneurs*. Indiana University, Indianapolis and Bloomington, Indiana, April 15-17.