

The Role of Social Capital in Expanding Retail Platform Ecosystems

He, T., Liu, M.J., Phang, C.W.



**University of
Nottingham**
UK | CHINA | MALAYSIA

University of Nottingham Ningbo China, 199 Taikang East Road, Ningbo, 315100, China

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Research-in-Progress

Tong HE

University of Nottingham Ningbo China
199 Taikang East Road, Ningbo,
Zhejiang, China, 315100
tong.he@nottingham.edu.cn

Martin J. Liu

University of Nottingham Ningbo China
199 Taikang East Road, Ningbo,
Zhejiang, China, 315100
Martin.Liu@nottingham.edu.cn

Chee Wei Phang

University of Nottingham Ningbo China
199 Taikang East Road, Ningbo,
Zhejiang, China, 315100
CheeWei.Phang@nottingham.edu.cn

Abstract

In the past few years, the discussion on platform ecosystems has become pervasive in strategy and information system research. Previous studies underlie the transformational nature of digital infrastructure in expanding the ecosystem. In this paper, the authors focus on the retail sector, where online retail platform owners such as Amazon and Alibaba are contending for ecosystem members and expanding by making them more physical. As ecosystem members have traditionally coordinated their network activities and resources embedded in an enabling social context, this study aims to investigate the influence of pre-existing social capital possessed by ecosystem members on expansion of retail platform ecosystems. This dimension has received little attention thus far. Based on some conceptual basis discussed by extant literature and some preliminary empirical findings through our case study on Alibaba Lingshoutong (LST), a growing retail platform ecosystem, we have proposed some future research directions.

Keywords: Platform ecosystems, retailing, social capital, network structure, case study

Introduction

In recent years, there has been mounting evidence that digital platforms have disrupted value chains and redefined traditional business landscape (e.g. book, music and gaming) (Nambisan et al. 2017; Yoo et al. 2010). The process of these transformations is termed as platformization, which rests on open architectural and governance control points through digitalization (Constantinides et al. 2018). Concomitantly, we are starting to notice the countereffect happening as digital platforms are expanding their scale and scope by making them more physical. This is termed as infrastructuring and Alibaba is a good illustration of this (Constantinides et al. 2018). While beginning from a multi-sided platform model, Alibaba is expanding its retail platform ecosystem by engaging in more traditional supply chains

or “pipeline business” (Parker et al. 2016) and aligning with brick-and-mortars. To attract more ecosystem followers and expanding the platform ecosystems, extant research has tended to focus on ecosystem leadership and complementing platform growth with technical resources (Kapoor and Agarwal 2017; Tiwana et al. 2010). Research context are mainly high-tech industry such as software and gaming industry (Gawer and Cusumano 2014; Wareham et al. 2014), whereas retail platform ecosystems with both digital and physical presences have received little attention from academics. Previous empirical research has argued for the importance of social capital in bonding retail channel partners and industry peers and explaining a superior retail performance (SeEVERS et al. 2010; Spralls et al. 2011). It remains unclear that how digital platform sponsors attract complementors from traditional retail market categories to expand their ecosystems when pre-existing social capital of channel partners is strong. There are competing views on whether pre-existing social capital or prior embeddedness facilitates new linkages in extant literature. One line of work shows that a history of dense and extended inter-organizational connections offer expertise for companies in managing new linkages (Anand and Khanna 2000). Managing and coordinating new linkages could be institutionalized within the organization’s regular routines (Westney 1988). In contrast, some empirical work shows that each linkage that embeds firms more deeply in the industry network constrain their management and absorptive capacity. Firms with high embeddedness are reluctant to further forge new linkages (Ahuja 2000). Motivated by this, this paper aims to provide nuanced explanations on: to what extent and how does pre-existing social capital influence the expansion of retail platform ecosystems? We respond to previous call for research on retail ecosystem and attempt to find out the contexts and conditions that favour the expansion of intermediary-coordinated ecosystems in retailing (Singh et al., 2019).

This research question is important especially for ecosystem leaders. Adner (2017) suggests that ecosystem members might not seek for the identical end goals with the identical level of motivations as ecosystem leader themselves are. This implies that expanding retail platform ecosystems and attracting ecosystem members is not an easy thing for ecosystem leaders. To manage rivalries across ecosystems and compete for dominance, retail platform owners such as Amazon and Alibaba are expanding their ecosystems by attracting actors to join and orchestrating complementary innovations to the shared success of the ecosystem (Constantinides et al. 2018). Constructed by ecosystem leaders, digital infrastructure is provided with ecosystem members to network with actors within and across ecosystems. Although extant research has implied that generativity and malleability of digital infrastructure allows for a much larger number of connections for ecosystem members than traditional network approach (Nambisan et al. 2017), research shows that the value derived from network for each member does not solely depend on how many connects in the network, i.e., network size, but also rests on network structure, which includes the relationship among members and heterogeneity and relative characteristics of members (Afuah 2013). Retail ecosystem members (e.g. brand owners, manufacturers, wholesalers, distributors, agents, third-party logistics providers, retailers) have traditionally coordinated their network resources and activities embedded in an enabling social context. Therefore, merely pursuing for digital infrastructure to expand retail platform ecosystem could be misleading for ecosystem leaders. Yet in striving for enhancing transaction efficiencies, most efforts to build electronic platform networks to support transactions neglect this context (Steinfeld 2004). Therefore, this research will draw on social embeddedness perspective (Adler and Kwon 2002; Granovetter 1985) to shed some light on the expansion of retail platform ecosystem with both digital and physical presences. We aim to investigate this research question through an in-depth case study (Seawright and Gerring 2008). The next section is organized as follows. We begin by reviewing literature on platform ecosystem and social capital to establish conceptual basis. We then propose a research method for our research question. We conclude our paper by clarifying its potential contributions and identifying directions for future research.

Conceptual Basis

Retail Platform Ecosystems

There is burgeoning research on different types of ecosystems. Among them, one particular stream is related to platform ecosystems, which underlie the interdependence between platform sponsors and

platform participants (Jacobides et al. 2018). Platform sponsors are viewed as ecosystem leaders, who often take charge of designing architectural structure and governance mechanism, attracting actors to join, and orchestrating complementary innovations to the shared success of the ecosystem (Dedehayir et al. 2018). Constructed by platform sponsors, digital infrastructures play a prominent role in the creation and maintenance of platform ecosystems. Defined as “the computing and network resources that allow multiple stakeholders to orchestrate their service and content needs” (Constantinides et al. 2018), digital infrastructure allows data to be easily collected, stored, analyzed and shared across numerous systems and devices within ecosystems. As the examples of Alibaba and Amazon suggest, digital infrastructure is cultivated in a capital intensive approach and small firms could not establish the same level of computing and networking resources in a short period of time and thus they rely on the effective participation of platform ecosystem to gain access digital infrastructure (Tilson et al., 2010).

Moore (1993) classifies each ecosystem evolution process into four stages, namely birth, expansion, leadership, and self-renewal (or death). The first stage is the birth of ecosystem. It is often characterized by the collective ability to define and deliver innovative value proposition to customers through alignment with cohorts of partners. To prevent rival ecosystems from delivering same value propositions, solid alignment with critical suppliers and channels is an important approach for value capture. The second stage is the expansion of ecosystem, during which players are contending for market share and scaling up their businesses. In this stage, companies are competing for “dominant design” (Abernathy and Clark 1985) in which once achieved the switching costs for customers is high and through which companies could grasp maximum coverage in the marketplace (Shapiro & Varian, 1999). For example, Intel and Microsoft develop their own PC ecosystem and benefit from economies of scale by building standard on microprocessor and operating system respectively, which restrict entry from competitors (Gawer and Cusumano 2014). The third stage is leadership, in which ecosystem leaders offer compelling vision about the business future and encourage other followers to jointly provide comprehensive products or services to customers and anticipate financial gains together. This stage mainly focuses on the tensions within the ecosystem since leaders need to maintain the bargaining power with other players. The fourth stage is self-renewal, during which continuous innovations is needed to maintain the lives in the ecosystem and prevent alternative ecosystems to entry. Sudden environmental condition change such as government regulations and technology breakthrough may give rise to nascent ecosystem and how an old ecosystem react to threats from new ecosystem is an ultimate challenge. In this study, we focus on the second stage and we conceptualize retail platform ecosystem expansion as the span of time that platform sponsors contend for ecosystem followers and compete with rival ecosystems for dominance.

Although platform sponsors facilitate the connection between supply and demand, they do not necessarily own or control physical assets (Hagiu and Wright 2015). This business model is also termed as “multi-sided platform” and is viewed as a financially attractive model (Constantinides et al. 2018). However, in recent years in the retailing sector, to manage rivalries across ecosystems and compete for dominance, online retail platform owners such as Amazon and Alibaba are expanding their ecosystems by making them more physical. They are engaging in more traditional supply chains or “pipeline business” (Parker et al. 2016) by acquiring physical assets from brick-and-mortars or aligning with ecosystem members (e.g. brand owners, manufacturers, distributors, agents, third-party logistics providers) to jointly provide services for retail customers. Unlike hierarchical supply chain management, platform ecosystem is characterized by “semi-regulated marketplaces” (Wareham et al. 2014) and ecosystem participation is viewed as a particular type of loose alliance (Jacobides et al. 2018). A key strategic concern for ecosystem leaders is scaling the market coverage of relevant sides to achieve direct and indirect network effects. In a dearth of markets on either side, the characterization would devolve into a regular supply chain with the platform playing the role of distributor (Adner 2017).

To achieve positive network effects, the paradigm of winner-take-all markets has dominated the discussion on competitive strategy in the platform context. The unique disruptive properties of digital infrastructure such as generativity and malleability enable network outcome less bounded (Nambisan et al. 2017). Generativity is characterized by design flexibility, which allows for creation additional contacts without increasing additional physical inputs by the designers of the digital system (Tilson et

al. 2010). Malleability is another unique feature of digital infrastructure, defined as the ease with which digital technologies could be reconfigured (Tiwana et al. 2010). These disruptive properties of digital infrastructure tend to assist ecosystem members to expand their network with great speed. New linkages tend to be formed and administered less time intensively. However, for ecosystem members, the size of their network does not equal to the value they derived from the network. To ensure the alignment and participation of ecosystem, an important question is, what is it about a network that offer value to network members? Past research has established that network size is not the only determinant for network value. The other determinants include network structure, which includes the relationship among members and heterogeneity and relative characteristics of members (Afuah 2013). Although, for ecosystem members, network is potentially enlarged through participating in the retail platform ecosystems, it is unclear how pre-existing network structure influences the effective participation in the new ecosystem. The next section will elaborate on this.

Social Embeddedness Perspective

Network approaches in retailing sector have been theoretically addressed using social capital theory (Seevers et al. 2010; Spralls et al. 2011) This theoretical perspective focuses on the approach that agents are embedded in social networks and draw on an agent's social capital for obtaining transactional efficiencies (Burt 2000). Social capital is derived from Bourdieu (1983) and defined by Helliwell and Putnam (1995) as “the trust, norms of reciprocity and networks of civic engagement, which increase the efficiency of society by facilitating coordination between individuals”. Nahapiet and Ghoshal (1998) further improve the concept of social capital from a resource-based view and define it as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit”. Adler and Kwon (2002) develop a theoretical framework explaining how social capital operates through providing opportunities, having motivation and possessing ability. Opportunities result from location in a network structure. Motivation arises from relational dimension of social capital (shared norms and trusts). Ability comes from resources that could potentially be mobilized through their social relations. The above descriptions underlies three dimensions of buyer–seller social capital: (1) structural linkages and interactions between buyers and sellers; (2) shared rules and expectations between buyers and sellers that define how they should behave; and (3) the strength of trusts nurtured between in the buyer-seller network that is derived from historical transaction experience.

Social embeddedness researchers have found disparate advantages of relying on social capital during critical economic exchanges. These include greater emphasis on joint problem solving and an increased possibility that new exchanges will sustain within an existing relationship rather than be directed towards strangers (Uzzi 1997). Experimental results also show that when sentiments are positive (e.g. consisting of trust and commitment), current suppliers are unlikely to be displaced even when alternative new partners enter the market with better deals (Schurr and Ozanne 1985). Thus, relational advantages of social capital create disincentives for ecosystem members to replace previous linkages and form new linkages. Jacobides et al. (2018) explicitly consider the platform in relation to the ecosystem of specialized complementary goods or services. This implied that once incumbent retail industry players join a platform ecosystem, they are subject to specific interface requirement and might be required to quit their current network. This might deter incumbent industry players with high embeddedness from joining the ecosystem.

In most of the cases, not every ecosystem member captures the same value from the network. This depend on their position in the network. The more central an ecosystem member's position, the more value this member could derive from the network. Structural social capital has been captured in terms of this centrality. Simply described, structural social capital captures ‘who you can reach and how you can reach them’ (Nahapiet and Ghoshal 1998) and consequently ‘what you can do’ with the capability. The notion of “structural holes” (Burt 1992) is critical to demonstrate that firms occupying the favoured network position of bridging structural holes—the gaps between firms otherwise disconnected in the network—are likely to have information benefits. Through bridging structural holes, the actors occupying the brokerage position in the network can access a wider types and sources of information

(Burt 1992). Sometimes referred to as the “tertius gaudens, or “the third who benefits” (Burt 1992), brokers accumulate benefits since they can negotiate for favourable terms and have a disproportionate right in whose interests are served in the network. Thus, for platform ecosystem leaders, only underling network size, without considering the structural and relational dimensions of social capital possessed by ecosystem members, could be misleading. As this could not make sure the benefits derived from ecosystem expansion motivate effective ecosystem member participation and further facilitate the ecosystem expansion.

In the retailing sector, producers and consumers can be viewed as separate groups on two sides, with retailers bridging the structural holes and connect these actors with different interests. As retailers occupy the structural hole between consumer markets and product markets, bridging customer demands with product availability, manufacturers and distributors are therefore motivated to forge an intimate relationship with retailers to gain network advantages. These relationships develop over time with transactions as the retailers and suppliers develop trust and friendships facilitated by quality products and services (Seevers et al. 2010). Network members accumulate favours that could be invoked as resources when needed (Adler and Kwon 2002). These intangible and relational assets accumulate and grow with the increase of its usage, which is unlike other kinds of capital that would depreciate with use. In the absence of human capital and financial capital, the significance of social capital is highlighted. It could compensate other types of capital and act as a substitute for other resources if “connections” are superior, thus reducing transaction costs and improving the efficiency (Adler and Kwon 2002).

Although digital infrastructure is powerful in connecting dispersed actors and automate repetitive tasks, many business-to-business services in retailing still need human agents to execute in order to fulfil customers’ affective needs and expectations (Singh et al. 2019). The transactions made by retail ecosystem members are not only commercial but also social. Merely relying on self-organizing and intelligent machine agents to execute business process may not adequate to satisfy the concerns of ecosystem members. Through an intense focus on providing superior sensitive and personal distribution service, human agents enjoy an inherent advantage in terms of intimacy and sentimental attachments over machine agents (Seevers et al. 2010). Traditional brokerage is versed in hands-on small-scale operation and daily relationship maintenance with retailers. The nature of the network involves unspecified personal obligations, intrinsic rewards, and is the middle ground between pure calculation and pure love.

In summary, as the traditional network is delineated according to actor ties, rather than according to ecosystem value proposition per se (Adner 2017), pre-existing social capital plays a prominent role in explaining network behaviour and network outcome of ecosystem members who are contended for by ecosystem leaders. For ecosystem leaders, merely pursuing network effects to enlarge the number of ecosystem members without considering network structure and pre-existing actor ties might be misleading. True to its biological metaphor, the design of an ecosystem encourages the co-existence of different species. Achieving ecosystem expansion not only include increasing the size of the network, but also include promoting the heterogeneity (the coexistence of multiple retail ecosystem members), enhancing relationship within the network and further motivate effective ecosystem participation. Ecosystem leaders might need to deal with great variation in actor’s social capital to motivate them to participate in the ecosystem.

Methods

New retail ecosystem strategies rolled out by Chinese Internet giants Alibaba, JD.com and Suning provide an excellent research setting to address our research question. These digital platform owners are now contending for market share and attracting millions of mom-and-pop stores in semi-urban and rural China to join their retail platform ecosystems. An in-depth case study will be conducted on Alibaba Lingshoutong (“LST”). We select this platform company as an extreme case for intensive study, a prototypical or paradigmatic case that is particularly useful for exploring and analyzing the phenomenon

of interest (Seawright and Gerring 2008). Initiated by Alibaba group in 2014, LST is a business-to-business digital sourcing and distribution platform, leveraging its digital infrastructure and intermediating exchanges between brand owners and independent and unfranchised retailers (Alibaba Group 2018). LST acts as the platform ecosystem sponsor, enabling and facilitating interactions between platform ecosystem members including retailers, consumers, producers, and third-party logistics actors. To contend for market share and compete with other rival retail platform ecosystems, LST is now subsidizing millions of mom-and-pop stores owners to install its procurement app and digital devices across townships and villages in China. These mom-and-pop stores used to source inventories from multiple levels of wholesaler and dealers. Mom-and-pop storekeepers are now scrambled by both digitally enabled retail platform ecosystem and traditional retail supply chain value system.

LST allows for all the invoicing, procurement, inventory and sales data in the store to be digitally connected and the query could be completed with one click by shopkeepers. They could order and source from a broad selection of brands and products at wholesale price online by using the LST mobile app. A free smart POS system with Alipay e-payment terminal (for data collection) is installed in the store at the checkout counter once the store has ordered a certain amount of goods from LST. With every item or service purchased electronically, retailers could gain a clear depiction and analysis of nearby demographics. Their technology can also be used for merchandising, inventory management and logistics to enhance their business operations. An inventory checking and reporting system is in operation to give real-time advice on what to source, when to source and how to display products assortments in their stores based on big data analytics and LST provides mom-and-pop store owners with digital devices and applications

Multiple interviews on these storekeepers and their channel partners will be conducted to qualitatively understand their network behaviour and how they react to LST. All interviews will be conducted in China, where social capital is abundant and *guanxi*-type systems are pervasive and dominate business activities (Gu et al. 2008). The advantage of case study is its explanatory power in understanding both process and outcome of a phenomenon through complete observation, analysis and reconstruction of the cases under investigation (Tellis 1997). Case study also acts as a useful tool to investigate the behavioural context and sophistication of real-life business situations through the human agents' perspective, which might not be captured through experiments and surveys. Rather than reducing the complexities of realities, case study narratives construct realities (Hamel et al. 1993).

Conclusion

The extant literature defines what platform ecosystem is and the distinctive features of ecosystem compared with traditional market-based arrangements and vertical integrated supply chain. Little empirical evidence has captured how platform ecosystems attract ecosystem followers and how they are reacting on a broad scale in retailing. Little is known about the role of pre-existing social capital possessed by retail ecosystem members in expanding retail platform ecosystems.

This study aims to make contribution on the literature in the following aspects:

1. Shed light on the context and conditions that favour or constrain intermediary-coordinated ecosystems in ecosystem research
2. Contextualize platform ecosystems in retailing literature

This study will potentially benefit practitioners by:

1. Helping ecosystem leaders to design ecosystem strategy to deal with heterogeneity of ecosystem members and the co-existence of different species
2. Helping incumbent retail industry players to compete with retail platform sponsors
3. Enhancing the understanding of "New Retail" trend in China

Proposed Future Research

In the future, research could approach social capital and digital infrastructure as a duality (Farjoun 2010) and see if there are any opportunities for the synergy between these two:

1. How the structure and content of ecosystem members' pre-existing social capital affect their ability to adapt to ecosystem changes?
2. How retail platform ecosystem leaders make pre-existing social capital as a part of the ecosystem and rebuild and reconfigure them to a shared success of ecosystem?
3. What types of synergies exist and how might they be jointly enhanced through ecosystem design?

New sociotechnical theories are needed to theorize how digital infrastructure and social capital collectively integrate supply chain processes and simultaneously pursue both standardized and humanized as well as offering stable and flexible service delivery process to retail ecosystem members (Constantinides et al. 2018).

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References

- Abernathy, W. J., and Clark, K. B. 1985. "Innovation: Mapping the Winds of Creative Destruction," *Research Policy* (14:1), pp. 3-22.
- Adler, P. S., and Kwon, S.-W. 2002. "Social Capital: Prospects for a New Concept," *Academy of Management Review* (27:1), pp. 17-40.
- Adner, R. 2017. "Ecosystem as Structure: An Actionable Construct for Strategy," *Journal of Management* (43:1), pp. 39-58.
- Afuah, A. 2013. "Are Network Effects Really All About Size? The Role of Structure and Conduct," *Strategic Management Journal* (34:3), pp. 257-273.
- Ahuja, G. 2000. "The Duality of Collaboration: Inducements and Opportunities in the Formation of Interfirm Linkages," *Strategic Management Journal* (21:3), pp. 317-343.
- Anand, B. N., and Khanna, T. 2000. "Do Firms Learn to Create Value? The Case of Alliances," *Strategic Management Journal* (21:3), pp. 295-315.
- Bourdieu, P. 1983. "The Field of Cultural Production, or: The Economic World Reversed," *Poetics* (12:4), pp. 311-356.
- Burt, R. S. 2000. "The Network Structure of Social Capital," *Research in Organizational Behaviour* (22), pp. 345-423.
- Constantinides, P., Henfridsson, O., and Parker, G. G. 2018. "Introduction—Platforms and Infrastructures in the Digital Age," *Information Systems Research* (29:2), pp. 381-400.
- Dedehayir, O., Mäkinen, S. J., and Ortt, J. R. 2018. "Roles During Innovation Ecosystem Genesis: A Literature Review," *Technological Forecasting and Social Change* (136), pp. 18-29.
- Farjoun, M. 2010. "Beyond Dualism: Stability and Change as a Duality," *Academy of Management Review* (35:2), pp. 202-225.
- Gawer, A., and Cusumano, M. A. 2014. "Industry Platforms and Ecosystem Innovation," *Journal of Product Innovation Management* (31:3), pp. 417-433.
- Gioia, D. A., Corley, K. G., and Hamilton, A. L. J. O. r. m. 2013. "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology," *Organizational Research Methods* (16:1), pp. 15-31.
- Granovetter, M. 1985. "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology* (91:3), pp. 481-510.
- Gu, F. F., Hung, K., and Tse, D. K. 2008. "When Does Guanxi Matter? Issues of Capitalization and Its Dark Sides," *Journal of Marketing* (72:4), pp. 12-28.

- Hagiu, A., and Wright, J. 2015. "Multi-Sided Platforms," *International Journal of Industrial Organization* (43), pp. 162-174.
- Helliwell, J. F., and Putnam, R. D. 1995. "Economic Growth and Social Capital in Italy," *Eastern economic journal* (21:3), pp. 295-307.
- Jacobides, M. G., Cennamo, C., and Gawer, A. 2018. "Towards a Theory of Ecosystems," *Strategic Management Journal* (39:8), pp. 2255-2276.
- Kapoor, R., and Agarwal, S. 2017. "Sustaining Superior Performance in Business Ecosystems: Evidence from Application Software Developers in the Ios and Android Smartphone Ecosystems," *Organization Science* (28:3), pp. 531-551.
- Lovett, S., Simmons, L. C., and Kali, R. 1999. "Guanxi Versus the Market: Ethics and Efficiency," *Journal of International Business Studies* (30:2), pp. 231-247.
- Moore, J. F. 1993. "Predators and Prey: A New Ecology of Competition," *Harvard Business Review* (71:3), pp. 75-86.
- Nahapiet, J., and Ghoshal, S. 1998. "Social Capital, Intellectual Capital, and the Organizational Advantage," *Academy of Management Review* (23:2), pp. 242-266.
- Nambisan, S., Lyytinen, K., Majchrzak, A., and Song, M. 2017. "Digital Innovation Management: Reinventing Innovation Management Research in a Digital World," *MIS Quarterly* (41:1), pp.223-238
- Schurr, P. H., and Ozanne, J. L. 1985. "Influences on Exchange Processes: Buyers' Preconceptions of a Seller's Trustworthiness and Bargaining Toughness," *Journal of Consumer Research* (11:4), pp. 939-953.
- Seawright, J., and Gerring, J. 2008. "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options," *Political Research Quarterly* (61:2), pp. 294-308.
- Seevers, M. T., Skinner, S. J., and Dahlstrom, R. 2010. "Performance Implications of a Retail Purchasing Network: The Role of Social Capital," *Journal of Retailing* (86:4), pp. 310-321.
- Singh, J., Arnold, T., Brady, M., and Brown, T. 2019. "Synergies at the Intersection of Retailing and Organizational Frontlines Research," *Journal of Retailing* (95:2), p. 90-93.
- Singh, S., and Srivastava, S. 2019. "Engaging Consumers in Multichannel Online Retail Environment a Moderation Study of Platform Type on Interaction of E-Commerce and M-Commerce," *Journal of Modelling in Management* (14:1), pp. 49-76.
- Spralls, S. A., Hunt, S. D., and Wilcox, J. B. 2011. "Extranet Use and Building Relationship Capital in Interfirm Distribution Networks: The Role of Extranet Capability," *Journal of Retailing* (87:1), pp. 59-74.
- Steinfeld, C. 2004. "Explaining the Underutilization of Business-to-Business E-Commerce in Geographically Defined Business Clusters: The Role of Social Capital," *Social Capital and IT*. Cambridge, MA: MIT Press, pp. 209-229.
- Tellis, W. M. 1997. "Application of a Case Study Methodology," *The qualitative report* (3:3), pp. 1-19.
- Tiwana, A., Konsynski, B., and Bush, A. A. 2010. "Research Commentary—Platform Evolution: Coevolution of Platform Architecture, Governance, and Environmental Dynamics," *Information Systems Research* (21:4), pp. 675-687.
- Uzzi, B. 1997. "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness," *Administrative Science Quarterly* (42:2), pp. 35-67.
- Wareham, J., Fox, P. B., and Cano Giner, J. L. 2014. "Technology Ecosystem Governance," *Organization Science* (25:4), pp. 1195-1215.
- Westney, D. E. 1988. "Domestic and Foreign Learning Curves in Managing International Cooperative Strategies," *Cooperative Strategies in International Business* (21:2), pp. 332-337.
- Yen, D. A., Barnes, B. R., and Wang, C. L. 2011. "The Measurement of Guanxi: Introducing the Grx Scale," *Industrial Marketing Management* (40:1), pp. 97-108.
- Yoo, Y., Henfridsson, O., and Lyytinen, K. 2010. "Research Commentary—the New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research," *Information Systems Research* (21:4), pp. 724-735.