

THE INTERCONNECTIVITY OF SHARING ECONOMY PLATFORMS

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ABSTRACT

The sharing economy increasingly gains momentum in several business sectors. This paper sets to investigate the interconnectivity among platforms in the sharing economy through reporting on how new platforms are created with reference to previous ones. The paper points out a seamless, unobtrusive, imitation pattern of spread of the sharing economy business model. It could be seen as information or availability based focusing on reproducing activities in ever new resource settings. Contributions are made to IMP research in the sense of continuing the discussion on how the sharing economy can be understood from the IMP perspective, and it broadens the discussion to include the network level. Imitation as a mechanism of spread raises new insights to understand how current business landscapes transition into a new logic of operations.

Keywords: imitation; network effects; platform; sharing economy; social media analytics

INTRODUCTION

The sharing economy defines digitally-intermediated operations enabling exchanges among peers (Acquier et al., 2017), with its business models describing how such operations are organized (cf. Zott and Amit, 2010). Conceptually, the sharing economy business model could be described as a triad including the user, platform and provider (Belk, 2014). In practice, however, the sharing economy business model would be a platform-centered net (the term 'net' here being used to distinguish it from the broader network and capturing a specific set of exchanges, Möller and Svahn, 2006) including several users and providers, these though rarely with connections among them and with exchanges remaining transactional based on the digital matching of providers and users. As such, the sharing economy has brought several new characteristics to business life (the peers, the digital matching of parties, and the transactional character of exchanges, Acquier et al., 2017), while it challenges current interactions and thereby interaction patterns (e.g., Xie and Kwok, 2017).

The individual platforms as nodes in nets of users and providers (Weber, 2014) could in turn be seen as unconnected businesses in the broader business landscape, each platform focusing on a specific type of exchange and its intermediation, or competitively fighting for the same users or providers. Still, the similarities in ways to operate suggest some kind of connection among the platforms, not the least seen as new platforms are launched and adopted to. Over the years, the sharing economy has spread from the role models Uber and Airbnb into new platforms, while also attracting new types of users and providers (Aloni, 2016; Mair and Reischauer, 2017). This development includes how current businesses start practicing sharing economy business models, how new venues are created, and how previous platforms are transformed. This paper sets *to investigate the interconnectivity among platforms in the sharing economy through reporting on how new platforms are created with reference to previous ones.* This paper asks: *How can such interconnectivity be understood? And: What do the patterns of spread look like?* The paper thereby researches new sharing economy platforms as network

effects (e.g., Halinen et al., 1999) and how various platforms are connected by means of reactive patterns in the network, these platforms though not doing business with one another.

THEORETICAL BACKGROUND

The sharing economy from a business networks perspective

The IMP business network approach assumes that firms have long-term interactive relationships with their customers and suppliers (Ford and Håkansson, 2006a; Ford and Håkansson, 2006b; Ford and Mouzas, 2013). As such, firms are embedded in a wider business network and not isolated “islands” (Håkansson and Snehota, 1989). The network approach thereby explicitly regards the customer as an active partaker in the emergence and interaction of relationships (Abrahamsen and Håkansson, 2014). The ability to foster the interconnectivity of relationships into a wider network context (Håkansson and Snehota, 1995) via relationships with customers can explain a company’s success (Abrahamsen and Håkansson, 2014).

In view of these characterising traits of business networks, the sharing economy could arguably be understood as a market transformation which accelerates the interconnectivity between consumers and providers via a digital peer-to-peer platform-logic (Acquier et al., 2017). From a business perspective, the sharing economy is sometimes used synonymously with “the collaboration economy”, “the collaborative economy” or the “on-demand economy” (Kane, 2016; Pattinson, 2016). Pattinson’s (2016, p. 3) pioneering conceptual approach dealing with the collaborative economy from an IMP perspective defines the phenomenon as: *“an economy based on digital platforms enabling wider and faster distributed networks of connected individuals, communities and businesses, to share production and consumption around common objectives.”*

In line with this definition, Pattinson (2016) draws three distinctions and developments from engaging with the sharing economy from a business perspective. First, digital technology as well as the emergence of the Web 2.0 and social media plays an inherent role in the distribution of sharing services. Secondly, the digital component of sharing business models provides “frictionless net(work)s” resulting in high-speed efficiency in the matching of resources and tasks between suppliers and customers which potentially fosters the break-down of centralised institutions characterising the traditional business-to-business market. Thirdly, such frictionless nets (networks in his text) enlarge the definition of the firm to factually including anyone – individuals, groups, businesses – as a potential contributor to the production and consumption of the offered services/products. When taken together, these three arguments suggest that the sharing economy is in an inherently more complex environment for business exchanges as the number of possible exchanges among parties grow, while the characteristics and requirements change irreversibly.

In order to initiate a debate centring around potential challenges for the reorganisation of these nets of exchanges, Pattinson (2016) provided a first attempt to merge the business network logic from the traditional IMP interaction model (Håkansson, 1982) with the novel characteristics of the collaborative (sharing) economy, proposing an adapted IMP interaction model. In comparison to the traditional interaction model (Håkansson, 1982), which visualises the dyadic relationship between two parties and five sets of variables illustrating the *interaction process, short term exchange episodes, long term relationships, the interaction atmosphere and the larger environment*, Pattinson’s adaptation focuses on depicting short-term exchange episodes that collectively influence a) *cooperation* and b) *adaptations*.

Pattinson thus focuses on the platform-intermediated exchanges, that is, the providers and users surrounding the platform as an exchange facilitating party. While triadic (and thus including the platform, Belk, 2014), rather than dyadic (Håkansson, 1982) in its conceptual framing, the platform is hence surrounded by a number of users and providers, thus creating a net of actors, and it is these actors that Pattinson (2016) describes adapting and cooperating in the platform-intermediated exchanges. Beyond that level is the obvious network as the limitless ‘environment’ (Håkansson, 1982) of business exchanges, including direct and indirect business partners (cf. Anderson et al., 1994; Håkansson and Snehota, 1989), but also other platforms and their triadic inclusion of users and providers.

Hence, the network arrays various operations, be them connecting in terms of being part of supply-chain constructs, collaborative forms, or business exchanges, or only on the level of potentially sharing the same user or provider. Or, may they in the business exchange dimension be unconnected, yet sharing practices, and in this last regard: why do they?

Spread of change

In the IMP literature, one characteristic of the network level is how actors, resources and activities do not only have a meaning to fulfil in the dyadic business relationship (Håkansson and Snehota, 1989). Rather, they have impacting consequences for such other actors, resources and activities (Hertz, 1998). On the exchange level, this would entail how a customer buying more from a supplier, would also impact the supplier’s supplier in terms of needs to provide resources. It would also entail the deselection in how a customer’s choice for a particular product would mean it would not buy it from a competing party, for instance; and similar positive and negative consequences occur also based on the supplier’s decisions (Johanson and Mattsson, 1994; Mattsson, 1996).

Stepping away from the exchange level, and connecting with the strategy of firms, similar patterns of spread have been observed (Havila and Salmi, 2000), in the sense that one party’s decision affects also surrounding parties (Halinen and Törnroos, 1998). The business strategy becomes embedded in ever-changing structures of reactions, other parties’ activities, and simultaneous manifests of strategizing (Öberg et al., 2016). The magnitude of spread and directions of spread (Thilenius et al., 2016), its casual regimes (Öberg, 2012, 2015; Öberg et al., 2016), and how change may or may not be taken up by yet other parties (Halinen et al., 1999) are but few aspects of change on the network level.

While described as spreading, these network level changes could well be seen as sourcing, in the sense that it is assumptions about the network that may guide strategic activities of firms. Hence, a company would picture its future not only based on visions about where to go next, but also in the light of aware-made or assumed network consequences. In the literature, the sources of spread have been described as company-centric, relationship-based, and external to any business exchange (including disruptive forces, legal shifts, and or as consequences of changes among parties only with indirect links to reacting bodies) (Halinen et al., 1999; Havila and Salmi, 2000; Öberg et al., 2016). Critical events have been used as a concept to mark how an activity in the network or among its parties carries consequences for others (Havila and Salmi, 2000), and critical events have allowed researchers to talk about casual connections between events and reactions in the network.

RESEARCH DESIGN

To investigate the interconnectivity among platforms in the sharing economy, this paper targets how new platforms are created with reference to previous ones, using social media analytics

(Stieglitz et al., 2014). To collect social media data, a real-time tracking tool called Notified was utilised. All publically available user-generated content that included the term “Airbnb” or “Uber” was collected. The data collection took place during a 12-month period from 1 December 2015 until 30 November 2016 for Airbnb and during a 6-month period from 1 September 2016 until 28 February 2017 for Uber. All the dominating social media outlets of Twitter, Instagram, Facebook, YouTube, blogs and forums were tracked throughout the data collection periods in real-time. This generated a dataset of 7,022 publically posted user-generated content for Airbnb as well as a dataset of 24,276 entries for Uber.

Following the completion of data collection, the data was reviewed by utilizing content analysis in order to identify how the two sharing economy platforms in question were talked about in relation to other more recently established platforms. The content analysis entailed how references were made and what they targeted, to thereafter focus on the pattern of spread in the business landscape. Dealing with such parameters as industry definitions, product/service delivery of platforms, and thereby also the stretch of activities into yet new areas, meant that spread could be captured in its various shapes and formats.

FINDINGS AND ANALYSIS

Expressions of reference

The collected data points at 271 references to Airbnb and 200 references to Uber, expressed as 61 and 14 unique platforms, respectively. What comes across is how the references expand industry borders (see further below on the patterns of spread), in how, for instance, Airbnb becomes a role model for dog sitting, and how the established firm in home electronics, Electrolux, considers shaping a business model resembling Uber. The interlinkages among role models and newer platforms (or indeed established firm adopting sharing economy ideas) is one of resembling or imitating, and allows to be so since the various platforms are actually – from a business exchange point of view – unconnected. This again means that those mechanisms about adjusting adaptation as occurring in business interaction do not take place, nor are the spread about cooperation among parties (Pattinson, 2016).

Imitation is described at length in institutional research, then focusing on external pressure for conformity and parties copying successful peers, respectively (DiMaggio and Powell, 1983). Imitation is different from adaptation in how it means resembling, but – in contrast to adaptation – is not sourced from how interactions between parties causes them to adjust to one another (Hallén et al., 1991) in mutual or unilateral sequences. Adaptation may not mean that parties become similar, rather it suggests them becoming complementary to one another, and the pressure is built into the direct interactions (Anderson et al., 1994). Imitation, and specifically then imitation of peers, may rather be done at a distance and include the studying of the successful competitors, or similar to copy its way of acting.

The length of imitation becomes evident when looking into details on the individual platforms referenced as a type of Airbnb or Uber. Over the years, Airbnb and Uber have developed to become increasingly commercialised, while being based on the transactional exchanges and peers operating at each end of the coordinating platform as fundamental characteristics of the sharing economy (Acquier et al., 2017). Similar to Airbnb and Uber, the new platforms organize their businesses through means of digital intermediation of platforms, include peers as users and providers, and are based on transactional exchanges. There is also largely the separation of users and providers present, which has come to represent the more recent development of Airbnb and Uber (Öberg, 2018a, 2018b), and the monetary payment for services. DogBuddy as one example offers dog sitting with evaluation systems of the sitters through other dog owners,

and with payments being delivered through the platform. This again is wastefully different from the very early developments of Uber and Airbnb, and as captured in some back-to-the roots movements (cf. Guyader, 2019), and points to how imitation is not only about starting operating sharing economy business models, but very specifically imitating several characteristics of the role models Airbnb and Uber.

Pattern of spread

The spread of change and its mechanisms are different in how while reactive (Havila and Salmi, 2000), not being built into business relationships and their interconnectivity, but rather happening as unobtrusive (Thilenius et al., 2016), imitative patterns. This again stresses how the changes need not be adaptive as there is no business partner to adapt to, nor cooperative with (which is how Pattinson describe operations surrounding a single platform) as the platforms are unconnected in a business sense.

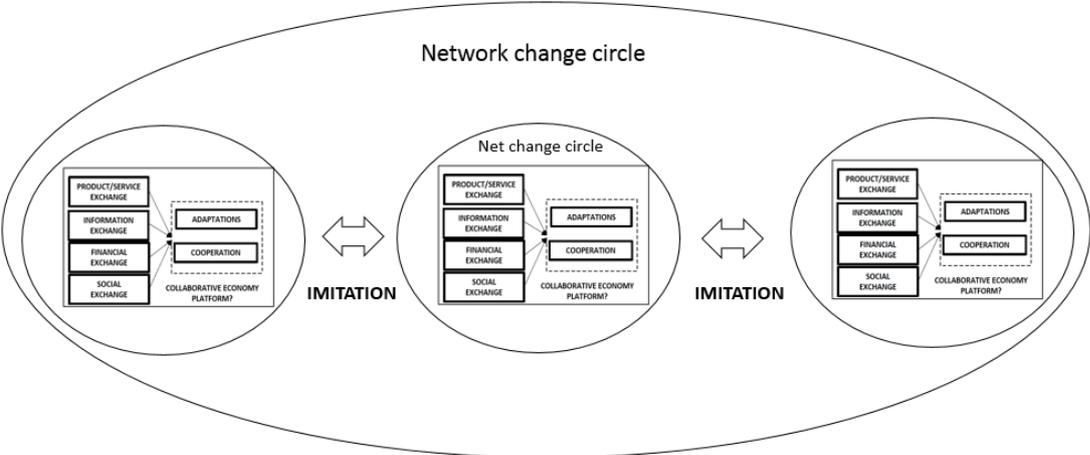


Figure 1: The network level of sharing economy spread. Combined model adopted from and inspired by Pattinson (2016, p. 8) and Halinen et al. (1999, p. 789), respectively.

The unobtrusive pattern of spread means that new platforms are created in new industry sectors, rather than in those where the sharing economy is already present. In terms of imitation as described in institutional theory, this way of spreading would be referred to as information-based or availability-based, meaning that it deals with capturing opportunities, rather than reacting to competitive pressures (Lieberman and Asaba, 2006). In this aspect, it also becomes visible how it is the activities that is imitated, while being so in ever new resource settings.

CONCLUSION

This paper investigates the interconnectivity among platforms in the sharing economy through reporting on how new platforms are created with reference to previous ones. Two questions were raised in the theory part of the paper: *How can effects be understood?* And: *What do these patterns of spread look like?* The paper points out seamless, unobtrusive, imitation among unconnected platforms, and could be seen as information- or even availability-based imitation (Kuran and Sunstein, 1999; Lieberman and Asaba, 2006) focusing on reproducing activities but doing so in different resource settings. Imitation of sharing economy platforms could be regarded to manifest as a process of business model spread, where associations related to sharing economy platforms are leveraged upon in order to launch, promote and generate awareness for new platforms in other business sectors.

Contributions are made to the IMP approach and the sharing economy literature, respectively, through further connecting these and thereby bringing together the specificities of the sharing economy with in-depth understandings of business exchanges. The paper develops Pattison's (2016) work on interconnecting the sharing economy with the IMP approach (Håkansson, 1982) through discussing the mechanisms leading to the interconnectivity of platforms in the sharing economy. The paper adds to Pattison's proposal about adaption and cooperation as mechanisms of parties to deal with the new ways of operating as the sharing economy brings about, through pointing at imitation as a mechanism of interconnectivity, and through pointing at this as a mechanism among platforms, rather than just in terms of users and providers adaption and cooperating around a single platform. The presented results thereby provide a first empirical evidence that imitation may be the starting point for a more thorough restructuration process of business networks. Put differently, it can be argued that the present results illustrate the first phase of restructuring business logics by integrating a platform-based collaborative operandi in various business models throughout a plethora of industries and sectors. This imitation as a network effect reflects how parties describe their businesses through referring to other ones, while not interacting directly with them. Furthermore, and specific for the sharing economy, the imitation is largely activity driven, meaning that resources vary by platform, while the ways to operate and create triads rely on similarities in activities and their distribution (cf. the ARA-model, Håkansson and Snehota, 1995). The paper also contributes to the literature through describing these patterns of spread and interconnectivity and thus do so in situations of unconnected businesses in the business landscape.

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