INTERORGANIZATIONAL NETWORKS OF E-INTERMEDIARIES: AN EXPLORATORY STUDY

Research in Progress
Rossignoli, Cecilia, University of Verona, Verona, ITA, cecilia.rossignoli@univr.it
Ricciardi, Francesca, Catholic University of Milan, Milan, ITA, francesca.ricciardi@unicatt.it
Mola, Lapo, University of Verona, Verona, ITA, lapo.mola@univr.it
Zardini, Alessandro, University of Verona, Verona, ITA, alessandro.zardini@univr.it

Abstract

In this theory-building research, we seek to understand how the emerging systems of e-intermediation influence the evolution of novel inter-organizational networks. We chose Yoox, a leading e-intermediary in the fashion industry, as an exemplary case. We found that the core technological capabilities of the e-intermediator, rather than deterministically triggering a single coordination strategy (as mainstream literature predicts), have been exploited to develop a range of interaction approaches, including market, hierarchy, and cooperative network relationships. At this phase of our research in progress, we can extract provisionary propositions from our field study. The most representative propositions we elaborated are the following: (i) when Information and Communication Technologies (ICTs) empower e-intermediation B2B interactions, they can effectively support market, hierarchy, or cooperative network interactions; that is, ICTs facilitate inter-organizational dynamism; (ii) e-intermediation does not encourage, per se, preferential or typical inter-organizational coordination forms. Partnering organizations develop market and/or hierarchy and/or cooperative network interactions depending on their perceptions of irreplaceability, as well as on other factors such as managerial strategies, concerns, and previous relational experiences; (iii) in e-intermediation business networks, the e-intermediary’s technological leadership is more likely to produce a long-term competitive advantage if it is leveraged to feed and enrich the e-intermediary’s relational leadership dynamically over time.

Keywords: E-intermediaries; E-marketplace; Inter-organizational network; Relational view of the firm.

1 Introduction

The potential strategies available to manage sales and marketing activities have changed radically in recent years. Faced with the technical, logistical, and communication challenges of e-commerce, many firms chose not to develop this capability (entirely) in-house; as a consequence, demand for e-commerce intermediation and outsourcing has increased dramatically (Bakos, 2001, Hong and Zhu 2006). In each industrial sector and every market niche, a few players have emerged as top e-commerce intermediaries, such as Amazon, Opodo, and eBay. With this study, we conceive of e-intermediation as a form of extra-organizational support for e-commerce processes, ranging from simple externalized management of the online front-end (e.g., e-commerce site, e-marketplace) to
outsourced management of complex marketing and sales processes related to e-commerce, including pricing, invoicing, or logistics in line with the recent literature on e-marketplace and networks (Wang et al 2008; Wigand, 2011; Klein et al. 2011).

Using this definition, we seek to understand how emerging systems of e-intermediation influence the evolution of novel interorganizational networks. Specifically, this work focuses on identifying which interorganizational designs might be encouraged (or discouraged) by the emerging role of e-intermediaries. Building on work by Powell (1990), we propose three possible ways to manage such interorganizational relationships:

1. **Market approach**: Organizations choose this strategy when they believe the resources to be exchanged are more important than the relationship with the chosen e-intermediary; a future capability to replace the e-intermediary appears beneficial, so a sustainable “exit strategy” must remain available throughout the business relationship. In this form of coordination, interactions are ruled by short- and medium-term intermediation or outsourcing contracts, and reciprocal adaptations by partnering organizations are rare.

2. **Hierarchy approach**: This strategy is more common when the organization purchasing the e-intermediation services considers extensive, long-term control over e-commerce activities necessary. A hierarchical approach to e-intermediation could lead to the acquisition of an e-intermediary, the formation of a joint venture, or ultimately insourcing of the activities, after an interim phase.

3. **Cooperative network approach**: This strategy applies when both partners believe that the other party controls resources that are valuable and difficult to replace, so a long-term relationship offers a strategic asset; hierarchical control of such relationships does not appear useful, affordable, or desirable. In this form of coordination, interactions are (also) ruled by extra-contractual social regulators, such as trust, reputation, reciprocity, altruistic cooperation, and reciprocal adaptation.

These three forms of coordination imply different procedures, interaction climates, behaviors, beliefs, and management styles. An ability to move among forms also is increasingly critical in today’s complex economic scenario, in which interorganizational relationships quickly evolve from one form to another (Gulati, 1998; Riemer and Vehring, 2012). Furthermore, the boundaries among these three forms appear blurred, even in well-established settings (Uzzi, 1997; Roberts, and Liu, 2012).

Although interorganizational dynamism thus goes far beyond a mere make-or-buy choice (Makadok and Cof 2009; Roberts, and Liu, 2012), extant literature often concentrates solely on how new e-intermediation possibilities, empowered by information and communication technologies (ICTs), influence make-or-buy strategies. Management choices get framed as pairs of opposites (O'Reilly and Finnegan 2009). For example, the make-or-buy opposition is mirrored by the classical hierarchy-vs.-market opposition in transaction cost theory (Williamson, 1985; Thompson, 2003; Gereffi et al. 2005; Grewal et al. 2010), which suggests describing economic activities as sums of discrete transactions. Transactions may be ruled by systems of empowerment and contracts within the organization (hierarchies), or by the system of prices and contracts with external actors (market). Mainstream literature on e-intermediation and ICT-enabled outsourcing tends to adopt this theoretical approach, highlighting how new technologies can lower the costs and risks of external transactions while enhancing transparency and information flows. Malone et al. (1987) summarize three advantages of electronic networks: (1) communication effect, (2) electronic integration effect, and (3) electronic mediation effect. According to this perspective, organizations seek to exploit the novel possibilities offered by ICTs to control their transaction costs and concentrate on their own core capabilities (Clemons et al., 1993). Thus, if ICT effectively empowers an interorganizational environment, a shift from make to buy, or from hierarchy to market, is logical (Malone et al., 1987).
But do ICTs influence interorganizational networking simply by making the “buy” option more efficient? The evolution of ICT-enabled business networks in the real world likely is more complex. For example, Wingand (1995, 1997, Wigand et al. 1997) asserts a fourth effect of electronic networks, namely, the strategic electronic network effect. In this approach, ICTs encourage the emergence of interorganizational networks of independent actors, linked through interdependent relationships that are influenced by social phenomena, such as trust, reputation, and altruism. The purpose of these networks is to search for flexibility and control in exchanges. The networks thus help administer economic activities, using coordination processes that generally are not hierarchical but rely instead on long-term cooperation among different organizational actors.

Rossignoli et al. (2009) suggest a fifth possible effect of electronic networks, the arbiter effect, that implies an electronic hierarchy. If an ICT-enabled network includes a limited number of members, transaction management might revert to hierarchical forms. The constitution of such networks does not necessarily reduce transaction costs, but it might fill structural gaps with specific e-intermediation capabilities. Rossignoli et al. (2009) interpret such closed networks as a special form of hierarchy, because the entry of new members gets regulated, and transactions are partially based on power relationships.

Overall, related literature supports the idea that e-intermediation encourages a shift to market strategies for interorganizational relationships, though other contributions suggest that e-intermediation may encourage hierarchy or cooperative networking too as interorganizational strategies (Sturgeon, 2009; Klein et al. 2011). These three streams flow separately; research investigating how or why the same e-intermediary, with the same technological capabilities, might develop market and/or hierarchy and/or cooperative interorganizational strategies is missing. We thus lack a comprehensive theory of the evolution of different interorganizational networks around real-world e-intermediaries (Klein et al. 2011; Riemer and Vehring, 2012).

In response, we designed this study to build theory in this field. We chose an explorative approach so that we could extract concepts from an exemplary case. We present these concepts in the Conclusion section, in the form of constructs and propositions that are available for further discussion, operationalization, and testing. The questions that guide our research are as follows:

a) In an exemplary case, how does an emerging e-intermediary build its interorganizational network through market, hierarchy, and/or cooperative network strategies?

b) What propositions can be extracted from an exemplary case for possible testing and generalization?

2 Research Method

For this explorative, theory-building, qualitative, exemplary case study, our first methodological challenge was to choose an e-intermediary whose interorganizational network we could investigate. We adopted an intensity criterion, discussing impressions and observations, taking notes to crystallize ideas to ensure that we investigating a context in which the phenomenon under study is well developed, important, and highly visible (Bryman and Bell, 2007). Through discussion, we determined that we needed an exemplary case with the following characteristics:

• The e-intermediary is perceived as a leading company and a benchmark in a certain industrial sector.

• The e-intermediary is potentially a full outsourcer, able to support partnering organizations in all their e-commerce processes, including marketing and logistics.

• The e-intermediary’s interorganizational network includes relationships of all three types (market, hierarchy, cooperative network).
To start the study, we required a suitable research site in which to conduct an exploration that would allow us to find guiding themes and relevant concepts critical to further explorations, with more relevant and sharper questions (Eisenhardt, 1989). In other words, we adopted a theoretical sampling strategy based on relevance and emergence (Glaser, 1978). We scouted the economic environment and identified a leading e-intermediary in the fashion industry, Yoox, which met these requirements. Yoox seemed particularly suitable because its interorganizational network comprises mainly Italian firms, which have peculiarly strong traditions with regard to generating strategic value through business networking (Powell, 1990).

Given the importance of context to our study, we also needed to find specific cases of interorganizational network from which we could derive knowledge via the rigorous interpretation of actions, accounts and patterns found in the data. To achieve this we adopted an interpretive case study approach (Walsham, 1995), collecting and analyzing data following the principles of classic grounded theory methodology (Glaser, 1978, 1998; Glaser & Strauss, 1967). The adopted approach has been described as an effective and appropriate way of researching emerging phenomena in their own organizational and human context (Orlikowski, 1993a; Van de Ven & Poole, 1989). Furthermore, this approach allows us to explore the substantive area of study in order to produce grounded explanations of the phenomena under observation (as suggested by Eisenhardt, 1989; Orlikowski, 1993b) that is informed (but not hijacked) by the extant literature on intermediaries and e-marketplace.

To gather information, we relied on document analysis (such as press releases, investor relations, and video interviews with Yoox top managers, as well as entrepreneurs and managers from partnering firms) and semi-structured interviews. Through an in-depth analysis of these documents, we drew a satisfying model of Yoox’s network structure, on the basis of which we designed the semi-structured interviews. Approximately 5000 fashion firms appear in Yoox’s e-intermediation network, so we decided to adopt a maximum variety criterion (Bryman and Bell, 2007) and select a restricted number of representative firms in which to conduct interviews. That is, we sought to investigate both small, emerging fashion firms and large, famous, well-established maisons, representing both luxury and middle-level brands. Moreover, our document analysis suggested that Yoox’s business network, rather than being based on a single coordination form, included relationships of all three theoretical types (market, hierarchical, and cooperative), so we attempted to design the sample of firms to ensure all three approaches were well represented in the analysis.

Since 2011, we have conducted seven semi-structured interviews with managers working in Yoox’s partner organizations. Obtaining these interviews was relatively difficult; the potential interviewees seemed concerned about the confidentiality of some aspects of their interorganizational agreements with Yoox. Thus we developed an impression that all the partners we interviewed viewed their relationship with Yoox as an important asset; this impression was confirmed in the interviews. We plan ultimately to complete 12–15 interviews, but the seven interviews we conducted thus far already offer interesting consistencies and support some initial interpretations.

In Eisenhardt’s (1989, 2007) terms, we used a within-case analysis. We first studied each interview individually, to let patterns emerge. We then discussed the possible connections across interviews to build more general claims.

3 The Yoox e-Intermediation Network

Because this article reports on research in progress, we do not provide details on the interviews conducted thus far or our content analyses; rather, we synthesize the provisional outcomes of our qualitative research, which we plan to integrate with at least five further interviews with respondents from at least three more carefully selected firms. Our synthesis is structured longitudinally, to highlight the evolutionary processes we have identified thus far in the focal business network.
3.1 Phase 1: type 3 (cooperative network) relationships

Yoox started in 2000, largely through the trust that some renowned Italian fashion houses placed in the founder, Federico Marchetti. Marchetti wanted to build an effective e-commerce platform to sell high-quality, overstocked, or unsold items from previous seasons, at discounted prices. The e-marketplace was carefully conceived of as a catalyst of Italian and European taste and quality. For example, new creative contributions were continuously scouted for the portal, as were selections of vintage clothing or rare books. The design of the e-commerce activities was consistent with the suggestions and needs of a selected group of fashion houses, such as Dolce & Gabbana, Diesel, Gucci, Armani, and Cavalli. These top names expressed a strong interest in the successful development of the e-marketplace, because they understood it would enable them to offload the previous year’s merchandise without undermining their brands or cannibalizing sales at their existing stores. Moreover, Yoox proved able to attract online consumers while also effectively managing the back-end process, from item selection to pricing, marketing, warehousing, logistics, customer care, and invoicing. Finally, Yoox’s services proved more profitable for the fashion houses than were those of traditional overstock distribution channels.

As a consequence, this e-marketplace generated a strongly cooperative network. The fashion houses considered Yoox irreplaceable, because it was a first mover from both technological and relational perspectives. They believed no other firm could do the same job. Moreover, Yoox considered each renowned fashion house irreplaceable, because the presence of all these famous brands on the yoox.com portal resulted in a substantial reputation effect that would soon become Yoox’s core asset. Thus, in the start-up phase, the relationship between the e-intermediary Yoox and the fashion houses using its marketplace reflected the third type (cooperative network approach).

Also in this start-up phase, technologies contributed notably to the success of the business model. The reliable technological platform could encompass the whole process, and the innovative, effective web interfaces attracted a community of loyal consumers. Smooth, reliable global logistics were supported by advanced RFID technologies. Even in peak conditions, the customer service was high in quality, and marketing processes spanned dozens of countries, in many different languages, market conditions, and customer cultures. The electronic catalog was continuously updated. Finally, the whole process generated transparent information flows that enabled reliable process integration and control between the manufacturer and e-intermediary.

3.2 Phase 2: type 1 (market) relationships

Starting around 2005–2006, the Yoox business network began to evolve toward a much more complex and diversified system. Its excellent image enabled the Yoox e-marketplace to attract more small and micro-sized fashion firms, which were not interested in selling overstocked items but rather hoped to find a place in a global, virtual shop for their current season collections. Yoox started accepting hundreds of these manufacturers into its network, following a selection process to verify product quality, so that Yoox could safeguard its brand. Many of these small firms, lacking strong distribution channels, considered Yoox an irreplaceable partner, because its strong brand, already linked to legendary names such as Armani or Gucci, offered a valuable means for market entry into appealing markets such as Russia, the United States, or Japan that would otherwise have been unreachable by the small firms. Moreover, the technological leadership of Yoox’s e-marketplace remained undisputed. In contrast, Yoox did not regard these varied small and micro brands as necessary; these thousands of firms helped it reach a critical mass, but it was not possible (or strategic) for Yoox to invest in each individual relationship. The firms thus tended to form asymmetrical relationships with Yoox, such that they depended heavily on the yoox.com e-marketplace but Yoox did not depend on each individual fashion firm. Accordingly, these
relationships were shaped more by the mechanisms of the market approach, though some typical elements of cooperative networks remained (e.g., fashion firms adapted their routines to Yoox’s software interface, even if it did not integrate smoothly with their existing internal systems).

In response to the increasing competition in the market Yoox launched two new portals - thecorner.com and shoescribe.com - Since its launch in 2008, thecorner.com has offered a wide selection of branded, cutting-edge, high-quality clothing for men and women. It also offers a sort of springboard for vanguard designers. Each brand has a dedicated mini-store, or corner, on the portal that features new collections, related editorial contents, and exclusive videos. Thus, visitors gain access to the designers’ worlds and inspirations. Thecorner.com also offers a creative and multimedia shopping experience, including innovative editorial projects, photo campaigns, visionary videos, and fashion movies.

The other new online store, shoescribe.com, is dedicated to women’s shoes and includes a mix of e-commerce, editorial content, and exclusive services, such as style advice from famous shoe stylists. It also provides a vast selection of shoes, along with books about shoes, jewelry for shoes, and products for shoe care. Again, the Yoox strategy was to build an inimitable customer experience and sense of exclusivity on the one side, together with long-term, cooperative relationships with a selected number of strategic partners on the other side.

The first mono-brand e-commerce sites were launched in 2006. Many top brands chose to outsource to Yoox the design and management of their branded virtual stores; other firms followed, including some newcomers to yoox.com. The network dynamics triggered by this new e-intermediation service were complex. The agreements were similar to traditional sales and marketing outsourcing contracts, requiring that the outsourcer remains “transparent,” so that end-customers believe they are entering into a direct relationship with the producer. However, they also granted full logistics, customer care, and invoicing responsibilities to Yoox, along with responsibility for the website’s front end. Yoox would not make decisions about which products or prices to display. In some cases, the fashion houses asked for marketing support, but others did not. This type of service implies a strong investment on the part of both partners, as well as effective cooperation among many representatives of both parties. Although this description seems to imply ideal conditions for the development of cooperative network strategies, we did not find this type of relationship in all cases. Rather, because they were outsourcing a core capability, many of the fashion houses began to feel uncomfortable with this situation, noting an overly asymmetrical relationship with Yoox. Some emerging network ties thus shifted toward other network coordination strategies.

3.3 Phase 3: type 2 (hierarchy) relationships

In 2010, ten years after its birth, Yoox was operating in a significantly different environment. New players with similar technological capabilities had emerged. Many fashion houses started perceiving the Yoox e-marketplace somewhat replaceable, and many of its relationships with the thousands of smaller firms selling through the yoox.com portal shifted toward type 1 (market approach). This phenomenon was less evident on thecorner.com or shoescriber.com, because of greater selectivity and personalization. In addition, some selected firms selling on Yoox.com entered the core of the business network, in that they exploited Yoox’s in-depth knowledge of the customer base to create capsule collections for sale exclusively on the e-marketplace.

The relationships with the firms that chose Yoox to empower their mono-brand online stores unfolded in various ways. Some of these long-term relationships were based on trust, personal friendships, and in-depth reciprocal knowledge. Other firms adopted a more short-term, opportunistic business networking style, such that they considered the e-commerce outsourcing contract as a sort of apprenticeship phase, necessary for them to build similar in-house capabilities, or they prepared to abandon the partnership and commit their e-commerce activities to other (preferably smaller and
weaker) e-commerce firms that they could control better. In 2012, two firms (three brands) closed their virtual shops with Yoox and opened stores on other sites. As of April 2013, there are 28 online mono-brand stores powered by Yoox.

The very nature of the outsourced activities for mono-brand stores (i.e., core, critical) resulted in a perceived need for more structured and protected long-term business relationships. But such a goal would be difficult without an existing, long-term, trust-based acquaintance that led to in-depth collaborative network strategies. In August 2012, Yoox created a joint venture company with PPR Group (corporate French leader in the global luxury industry) to manage the online stores of five PPR brands: Bottega Veneta, Yves Saint-Laurent, Alexander McQueen, Balenciaga, and Sergio Rossi.

That is, the technological solutions and capabilities provided to the mono-brand stores by Yoox led not to a single version of interorganizational coordination but rather to the development of three forms, in order of appearance: cooperative networks, market approaches, and hierarchies. Similarly, the same technological solutions and capabilities provided to multi-brand stores resulted in the development of two forms: cooperative networks and market approaches.

In the third phase, Yoox’s technological investments focused on improving front-end networking capabilities (e.g., apps for smartphones, crowd-affiliation networks to link Yoox to a constellation of personal sites and social networks). Moreover, the enhanced business intelligence capabilities of the system increase the strategic value of strong partnerships with Yoox. However, the business-to-business (B2B) interfaces on the yoox.com platform (which partnering firms use to upload data and integrate processes) have not been updated yet, even though many users appear dissatisfied with them.

4 Conclusions

In this theory-building research, we seek to understand how the emerging systems of e-intermediation influence the evolution of novel interorganizational networks. We have adopted a relational view of the firm: In our study, we do not see economic settings as sums of transactions or discrete exchanges but rather as systems of relationships. We do not regard interorganizational, long-term, cooperative relationships as hybrids along the hierarchy–market continuum but instead identify them as a distinctive method to coordinate economic activities (Powell, 1990).

In the exemplary case we study, the core technological capabilities of the e-intermediator, rather than deterministically triggering a single coordination strategy (as mainstream literature predicts), have been exploited to develop a range of interaction approaches, including market, hierarchy, and cooperative network relationships. Yoox’s business network today features thousands of firms with which it engages in (repeated) market interactions (Loose ties of figure 1); hundreds of firms with varying degrees of cooperative network relationships (strong ties in figure 1); and one corporate company that prefers a hierarchical solution to govern the reciprocal, ICT-enabled business interconnections (the core of the network of figure 1 represented by Foal firm and Joint venture with PPR).
At this phase of our research in progress, we can extract provisionary propositions from our field study:

i. When ICTs empower e-intermediation B2B interactions, they can effectively support market, hierarchy, or cooperative network interactions; that is, ICTs facilitate interorganizational dynamism.

ii. The ICTs empowering e-intermediation B2B interactions can effectively support market strategy effectiveness by boosting “relational economies of scale,” such as by enabling large volumes of outsourced customer care or transforming the increasing number of participants in the network into a benefit (i.e., the network effect; Arthur, 1990).

iii. If ICTs empower e-intermediation B2B interactions, they can effectively support hierarchy and/or cooperative network strategy effectiveness by boosting interfirm relational intensity and reciprocal adaptation. For example, by sharing its own business intelligence analyses, Yoox helped selected partners develop new customer-driven (encapsulated) collections.

iv. E-intermediation does not encourage, per se, preferential or typical interorganizational coordination forms. Partnering organizations develop market and/or hierarchy and/or cooperative network interactions depending on their perceptions of irreplaceability, as well as on other factors such as managerial strategies, concerns, and previous relational experiences.

v. In e-intermediation business networks, the e-intermediary’s technological leadership is more likely to produce a long-term competitive advantage if it is leveraged to feed and enrich the e-intermediary’s relational leadership dynamically over time.

An interesting suggestion thus emerges from the work we have conducted thus far: in emerging e-business scenarios, the key long-term competitive advantage generated by ICTs may be usefully understood and measured in terms of relational dynamism.

After concluding this qualitative research and consolidating our theory building effort, our next research steps will be dedicated to construct operationalization, hypotheses setting, and quantitative theory testing.

References


