Intentionally developed business network for mobile marketing: a case study from Finland

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Abstract
Purpose – The purpose of the paper is to investigate an intentionally developed business network (IDBN) for mobile marketing (m-marketing).
Design/methodology/approach – The IDBN for m-marketing is studied in the light of a literature review of m-marketing and IDBNs. In addition to this, a case study has been conducted.
Findings – It was found that in m-marketing there are several phases that need to be completed successfully. Resources and capabilities are different in each phase, and thereby the coordination of these is central to the success of the network. Additionally, the creator of the IDBN has a critical role in creating a common goal for the network. In a new technology context, the external technology advisor, such as the consulting agency, has a paramount position as facilitator of knowledge on the new technology in the initiation phase of the network.
Research limitations/implications – More empirical research efforts need to be focused on studying IDBNs as a way to organize exchanges between various organizations. This paper is qualitative and provides ideas for future research.
Practical implications – Advertisers and advertising agencies are faced with the challenge to develop resources and capabilities for grasping and conducting novel m-marketing campaigns. One way to cope with this change is to orchestrate a business network around m-marketing. The paper finds that number and quality of companies is dependent on technological experience and familiarity with digital advertising forms.
Originality/value – The paper is significant for two reasons. First, it presents the m-marketing process and the resources and capabilities needed in detail. Second, this study provides insights into an unexplored area of IDBNs.

Keywords Business-to-business marketing, Retailing, Telecommunication networks, Information transfer

Paper type Case study

Introduction
Business networks and mobile marketing (m-marketing) are receiving increasing attention in marketing theory (Turnbull et al., 1996; Möller and Halinen, 1999; Xie and Johnston, 2004; Okazaki, 2005; Scornavacca et al., 2005). Practitioners have also recognized that business networks and m-marketing are pertinent future development areas (Christopher and Jüttner, 2000; Marriot, 2006). Currently, within the business network domain, specific emphasis has been placed on intentionally developed business networks (IDBN) and their characteristics (Möller and Svahn, 2003; Möller et al., 2005). M-marketing has now been studied for a decade (Okazaki, 2005; Scornavacca et al., 2005), and there are many conceptual papers that address the general business logic of mobile commerce (m-commerce) and describe the applications employed (Balasubramanian et al., 2002; Varshney and Vetter, 2001), as well as discuss suitable business models (Tsalgatidou and Pitoura, 2001; Yuan and Zhang, 2003). To illustrate further the importance of m-marketing, it has been suggested that m-marketing based on short messaging service (SMS) is likely to surpass internet-based advertising before the end of 2006 (Trappey and Woodside, 2005).
The nascent field of m-marketing research is heterogeneous and underdeveloped in nature. However, some studies in the field have proposed the importance of examining m-marketing processes and the resources and capabilities required (Leppäniemi et al., 2004; Becker, 2005; Facchetti et al., 2005; Salo et al., 2005; Virtanen et al., 2005). Nevertheless, the majority of academic research has centered around consumers and their acceptance of mobile marketing (Barnes and Scornavacca, 2004; Dickinger et al., 2004; Okazaki, 2005; Tsang et al., 2004; Barwise and Strong, 2002; Kavassalis et al., 2003; Nysveen et al., 2005) rather than on the requirements of the companies deploying m-marketing activities and technologies.

Against this backdrop, the aim of this study is to investigate the (IDBN) structure of m-marketing by highlighting the unique and compatible resources and capabilities required for appropriating and delivering value for the constituent members of the network. This focus has been chosen because business networks, and especially IDBNs in m-marketing, are an area that is insufficiently researched.

This article is structured as follows: First, we briefly review m-marketing literature, and then provide an overview of the business network discussion related to IDBNs. This is followed by a presentation of methodology, and along that line we draw up a description of the business network structure of m-marketing. The final section offers the conclusion of our analysis and provides guidelines for managers to organize resources and capabilities effectively in m-marketing campaigns and activities.

**Theoretical background**

**Mobile marketing**

Today, mobile and wireless communication devices and systems are commonplace in our everyday life (Balasubramanian et al., 2002; Aungst and Wilson, 2005). This shift in the ways in which we operate indicates that wireless and mobile technologies are no longer novelties; they have become central to various businesses (Nysveen et al., 2005).

Literature is full of suggested definitions of m-marketing (see Leppäniemi et al., 2006 for review). In this study we adopt the commonly used definition provided by the Mobile Marketing Association (MMA), which defines m-marketing as “any form of marketing, advertising or sales promotion activity aimed at consumers and conducted over a mobile channel” (Mobile Marketing Association, MMA, 2003). To give a practical illustration of m-marketing, Philips used billboards, brochures, and its website to promote an SMS campaign in which the customer used a short code and zip code to receive information about the nearest store carrying the new Sonicare electronic toothbrush. As a result of the campaign, over 3,000 people participated in it during the first week. Besides the key actors of m-marketing, Philips used an m-marketing consulting company and various carefully selected media channels in the campaign to attract consumers’ attention for the new product launched (Mobile Marketing Association, MMA, 2005).

Even today, m-marketing is mainly based on small trials and campaigns like Sonicare, and plays a rather small role in the advertising budgets of companies. This is partly due to the lack of skills and resources related to m-marketing activities. Commonly, the objective of m-marketing campaigns is to increase brand awareness and revenue, improve customer loyalty, generate opt-in databases and boost attendance at specific events (e.g. Sultan and Rohm, 2005).

The unbundling of mobile operators’ value chain systems has opened up m-marketing for established brands such as Disney, for example, as a mobile virtual network operator (MVNO), or Electronic Arts (EA) in the mobile games business, and created a fruitful ground for novel and traditional mobile industry actors (Anderson and Williams, 2004).

The m-marketing value chain or value network is at the moment fragmented, both in practice and in the strategies of mobile companies. So far the emergent industry has failed to reach a consensus on the form of the value chain, and it has not been able to generate a sustainable reference business model, either. Still, there are a number of companies involved in m-marketing campaigns around the world. Like m-commerce, m-marketing can also be characterized by the actors that take part in the emerging business network, as it changes rapidly in both composition and size.

To the authors’ best knowledge, there are three studies relating to the discussion on the actors and phases involved in m-marketing. Kannan et al. (2001) have divided the actors in wireless commerce into four interdependent layers as follows: Wireless infrastructure. Applications. Intermediaries. Online transactions.

The actors in each layer need to foster tight partnerships with those in the other layers to promote business and innovation. According to Barnes (2002) the m-commerce value chain is built of three components: Mobile transport (network). Mobile services and delivery support (e.g. SMS). Mobile interface and applications (e.g. device).

Leppäniemi et al. (2004) pointed that the m-marketing value chain can also be seen to consist of five stages: content creation, cross-media marketing, campaign management, customer database management, and carrier cooperation management. It can easily be seen that both Barnes (2002) and Kannan et al. (2001) emphasize technology layers and do not focus on the m-marketing process and the actors needed in composing an m-marketing campaign. Leppäniemi et al. (2004) depict the parts of the m-marketing value chain but fail to critically evaluate and illustrate how different parts of the value chain are connected to one another. Thus, it can be concluded that the prior research on m-marketing value chains has primarily seen value chains and companies as autonomous entities striving to gain competitive advantage through internal resources and capabilities and external resources (see Gulati et al., 2000). Based on these points, the authors now draw up a preliminary m-marketing process model depicted in Figure 1.


The m-marketing process model acts as an assisting backdrop with the help of which the semi-structured interview questions for the case study were formalized.
Intentionally developed business network for mobile marketing

Even more than before, business networks are now being increasingly raised to prominence through restructuring occurring in and across industries (Achrol, 1997; Achrol and Kotler, 1999; Möller and Halinen, 1999). Outsourcing, focusing on core competencies, large-scale downsizing, and the use of information technology in order to reconfigure and speed up manufacturing and administrative processes has caused large companies to be replaced with a smaller, more agile group of organizations. Möller et al. (2005) have asserted that gigantic companies such as Microsoft, IBM, ABB and Nokia can no longer master each and every relevant value activity within their respective organizations. Therefore companies are now creating complex webs of technological and knowledge bonds.

Although networks have been approached from a variety of theoretical viewpoints including social studies, power and control, institutional theory and economic perspectives, as well as strategy and marketing studies (see, e.g. Easton, 1992; Oliver and Ebers, 1998; Wilkinson, 2001; Ritter and Gemünden, 2003), there is still a shortage of research concerning IDBNs, especially in emerging contexts like m-marketing (Leppäniemi et al., 2004; Becker, 2005; Facchetti et al., 2005; Salo et al., 2005; Virtanen et al., 2005).

Within business network discussion, Jarillo (1988) illustrated that business networks can be deliberately developed. The m-marketing network under investigation in the case study section is an example of such a network. IDBN is typically used for capturing new business opportunities and in areas where technological and market uncertainty dominates the field. In an IDBN, different types of actors come together to jointly create and develop activities and offerings, something that would not be possible to accomplish within a single company, which in turn generates and enhances the value of the partnering companies. Due to the technological and market uncertainty related to innovations, both new and established companies need to stand out in an emerging network (Möller and Svahn, 2003). It is assumed that new companies will provide fresh insights into the innovation of new products, services and processes, while established companies bring in tacit industry-specific knowledge. Thus, a good mixture of companies could enable faster and more effective value creation than in those cases where only either established or relatively new companies are exclusively involved in the value creating processes. Moreover, a company’s competencies are developed through being embedded in several networks and interacting with other companies and organizations (Awuah, 2001). It is clear that an excellent mixture of novel ideas, resources and basic media skills relating to m-marketing is needed in order to be successful in the mobile media environment.

IDBN structure formation in m-marketing includes complex and dynamic learning processes and relationship formations that cannot be specified in advance. An innate feature of these business networks is uncertainty, specific to both market and technology, in value creating processes, in their capabilities and their skill formation that involves learning (see, e.g. Möller et al., 2005). Furthermore, in an IDBN, the companies and organizations involved view the structurization of the network from within their own frame of reference, which is formed by their previous perspective, experience, specialized knowledge pool and capabilities related to excelling in an uncertain environment. This interpretation of new ideas and new knowledge is a complex process, and it is also vital to create a common goal in order to be successful. In addition to sharing a common goal, benefit allocation for the individual members of the IDBN is necessary for its survival.

Methods

Our methodological choices are guided by the basic aim of expanding existing knowledge evolving around intentionally developed business network structure of m-marketing in the context of retailing. Due to the novel nature of this phenomenon and the complexity of business networks in particular, we have chosen a case study as our method of choice. Since we are dealing with a relatively new area of study in which the researcher has only little or no control over the events that are occurring in a real-life context, a case study is a very appropriate method (Stake, 2000, pp. 435–454).

Case selection is a crucial phase in case research, and advice on case selection is therefore extensively provided in literature (Eisenhardt, 1989; Pettigrew, 1989; Perry, 1998). The case companies were selected based on theoretical sampling, in which the cases are selected so that they represent the problem of the study. Nevertheless, the decision as to how many and which particular cases are selected is left to the researcher (Romano, 1989). We selected a total of four companies in order to capture the IDBN formation. Each of these four companies was actively involved in the IDBN under investigation. The main data source through which IDBN for m-marketing will be described consists of semi-structured interviews (Kumar et al., 1993; Arksey and Knight, 1999). The interviewees were accordingly asked to specify the key actors, resources required and capabilities needed to initiate m-marketing when it is incorporated into the companies’ overall marketing activities. In addition to this, we conducted an in-depth interview with one key informant from each case company (see Table I). The choice of informants was premised on the principle that information is best elicited from people who have knowledge of the phenomenon and who have been involved with m-marketing. Although other respondents working in the same company could have offered additional viewpoints on m-marketing, we chose from each company a key informant.

Figure 1 The m-marketing process model

![Figure 1](image-url)
who is actively involved in the network and thus able to provide explicit and definite insight into it. After interviewing four informants, we were able to perceive some saturation in data, and further cases or informants were thus not needed.

All the interviews were taped with the interviewee’s permission and then transcribed and analyzed accordingly. We employed qualitative data analysis in order to thematize the material (see Miles and Huberman, 1984). We also used documents, minutes of meetings, industry reports and company visits to triangulate the respondents’ answers, as suggested in literature (Patton, 1987; Yin, 1994). Data triangulation was used between the information sources mentioned above. In practice, data triangulation was first used to compare the different perspectives presented by each of the interviewees and, subsequently, to compare the interviews with other sources, such as industry reports, in order to validate our observations and interpretations. The results are presented in the next section. The identities of the companies or the respondents are not revealed for reasons of confidentiality.

Case study

Background

At the moment there are only a few actors in Finland specializing in m-marketing, and the roles of the actors in the field have not yet been established. The situation is similar to that in the US and Europe, although the number of m-marketing agencies is increasing.

The retailer under investigation has two non-food department stores in two different cities. With net sales around €70 million in 2005, it represents one of the largest non-food retailers in Finland. The case study illustrates the IDBN for m-marketing in which the structure develops in distinctive phases. Depicting stages is a common way of describing change using, e.g. time as the common denominator. Although the process is divided into stages and these stages are often described as following a certain pattern, this does not necessarily mean that the stages always follow from one another and that they do not overlap.

Although the managers of our retailer did m-marketing for the first time, they had some previous experience with the mobile medium: for some time now, they have made their products available via SMS, after which the goods are delivered to the customers by mail. Thus it can be argued that the retailer has some previous experience in using mobile channels but little knowledge of m-marketing per se.

From the beginning, the retailer was eager to initiate m-marketing because of its potential to provide a competitive advantage and the possibility for the company to differentiate itself from its rivals as a company with whom customers can interact through the mobile medium. This was the major impetus behind the decision to initiate m-marketing, and the retailer strove to be the technological forerunner in this respect. As the electronic commerce manager stated:

We have thought of it as a way to get publicity and, moreover, in addition, as far as I am concerned nobody else has even considered doing mobile marketing at as broad a scale as we have.

Naturally, the objective underlying the positive publicity was to increase sales as well.

Despite the enthusiasm towards m-marketing, the retailer did not have a clear picture of the actors needed to implement m-marketing campaigns. From their point of view, the advertising agency and the application service provider were the only actors needed for this IDBN. Therefore, there were also other actors beyond these two that brought vital capabilities and resources into the emerging network.

Designing the campaign

The resources and capabilities of the first phase were related to designing a marketing campaign to attract potential customers. During this phase, the problems stemmed mainly from the fact that the retailer was relatively inexperienced with m-marketing. This led to a situation where there were quite a few actors involved in this phase.

Similarly, to traditional marketing campaigns utilizing so-called traditional mediums such as radio, print media or television, the retailer in charge had to set the objectives for the marketing campaign. It was obvious to the retailer that the mobile medium does not work on its own and needs the support of other media. These findings were similar to those in previous studies (Leppäniemi et al., 2004). The marketing campaign was thus incorporated into the company’s overall promotion strategy. The Advertising agency had the main responsibility for incorporating the m-marketing campaign into the promotion strategy, while the Media agency was responsible for media choices. The retailer’s two most important marketing channels are its own free delivery newspaper and web site. These channels are needed for broadcasting the “invitation” to participate in an m-marketing campaign.

Surprisingly, the role of consulting agencies was emphasized by all of the interviewees, particularly the technologically inexperienced companies. Specifically speaking, the retailer acknowledged the benefits gained in this case from the involvement of the consulting agency. The retailer also saw advantages in such collaboration in the sense that its managers could learn from the consultants about the limitations, challenges, and possibilities the mobile medium can offer, plus other vital m-marketing knowledge as well. This was important since the retailer does not want to be dependent on the other actors, aiming in the future to do as much as it possibly can within the company. However, in this particular case the consulting agency had a very pertinent role in the beginning, since it had knowledge of the legal conditions concerning electronic communication (e.g. see The European Union, 2002).

The main purpose of the
consultation was to clarify how to apply existing legislation to the particular context of the company. To conform to these legal requirements, the retailer, aided by the consulting agency, decided to send two separate text messages to each opt-in customer. The first one was a personalized marketing message, while the second enabled the customer to easily prohibit the company from sending messages in the future.

Creating the content

In order to create the content of the messages, the retailer had to choose what kinds of products were suitable for m-marketing and, accordingly, identify the customers most likely to respond positively. Based on the recommendation given by the consulting agency, the retailer chose to implement its m-marketing campaign by utilizing SMS messages instead of richer mobile media applications such as the multimedia-messaging service (MMS) or downloadable applications such as JAVA. At present SMS is the most frequently used form of m-marketing, partly due to the fact that customers are familiar with it and it has a viral element to it; this means that consumers, after receiving messages, can forward them cheaply and easily to their friends. In June 2005 in the US, mobile subscribers exchanged over 7.2 billion text messages across US mobile networks (CTIA (Cellular Telecommunications & Internet Association), 2005). In Finland, over 2.2 billion SMS messages were sent in 2004, and the figure is estimated to grow steadily during 2005 and 2006 (Ministry of Transport and Communication, 2005). In other words, this means that on average, every Finn sends approximately one SMS every day. In addition to that, almost all mobile devices have the capability to receive and send SMS messages. This choice to use SMS messages as the marketing medium presented not only possibilities but problems as well.

The major problem in using text messages is that a message consists of no more than 160 alphanumerical characters. As the next quote from electronic commerce manager reveals, the retailer was aware of this problem: “Because the message consists of text only, oodles of problems are most likely to occur. But, if you want to reach consumers, you have to get their attention and communicate something of value.” This problem was resolved by the advertising agency, which used SMS to formulate a message that was persuasive and considered relevant but not irritating by the customers.

Assuring the validity of permissions

While creating the content for the messages, the retailer simultaneously made sure that the permissions given by the customers were valid. The purpose of this was to ensure that the campaign conformed to all ethical and judicial requirements. In other words, the campaign complied first and foremost with the law that requires that end users’ permissions be obtained before sending unsolicited marketing messages via the mobile medium for marketing purposes (The European Union, 2002) and also with the code of conduct provided by the Mobile Marketing Association (for details see www.mmaglobal.com).

Basically, this phase, deals with opt-in (permission) lists and customer databases containing information such as mobile phone number, demographics, behavioral data and other possible information on the customers. “Permission” means that the customers to whom the messages will be sent have previously subscribed to the service, or have by some other means given their permission for the retailer to send them messages. The interviewees considered this phase extremely important, since the customers receiving unsolicited messages might “vote with their feet” and spread negative word of mouth as well. Even though customers gave their permission once, mobile permissions are not permanent and the validity of the customer’s permission is related to the particular service (Sinisalo et al., 2005). Hence, the customer database and the permissions given by them should be updated on a continuous basis. In this particular case, the retailer had recently collected data for a customer database and opt-in lists via a mobile sweepstake (for details see Sinisalo et al., 2006), and thus the permissions for this push campaign were valid. The collection of permissions and the upkeep of databases can also be managed either jointly or separately by some other actor such as service providers, advertiser agencies, operators or application service providers.

Delivering the messages

After the m-marketing messages were ready and it had been made sure that they conformed to the legal requirements, they were sent to the m-marketing customer targets. The resources and capabilities needed in this phase were therefore related to the actual delivery of the messages.

Although the application service provider appears in this case study only in the final phases, it played a critical role throughout the process, all the way from designing the campaign to implementing it. As the statement of Chief Technology Officer of the Application service provider reveals, it was able to bring its experience to the use of the IDBN: “...although we have not acted as a consultant, we have quite eagerly provided comments and advice to the retailer.” The various technical and practical suggestions helped the retailer move forward and avoid major bottlenecks, since their aim was to implement the first campaign quickly.

The application service provider managed and hosted the m-marketing platform for the company, which is capable of sending, receiving and storing unprecedented numbers of text messages. The customer database and the permissions are in this particular case managed by the retailer. In addition to
that, the application service provider was in charge of content packaging: After the message is designed and produced, it needs to be packed into the technology system called the m-marketing server that delivers the messages to the customers’ mobiles. The content packaging and the technology resources required a specific m-marketing skill. The application service provider collaborated with the service provider with the aim of delivering the messages to different mobile operators. This was vital, since it had the open content gateways to the operators needed in order to reach the target audience – in other words, connections opened to the operator’s messaging network. Principally, opening content gateways enables the sending and receiving of SMS messages between mobile devices and the information systems of companies. It should be noted that, e.g. MVNOs, mobile network operators (MNO) and application service providers (ASP) can act as service providers in the mobile marketing ecosystem.

All the interviewees were of the opinion that in general, operators have an essential role in the m-marketing process because they enable the sending of messages. In other words, MNOs have an important position in the IDBN structure of m-marketing because they control the distribution channel by providing the network (see Leppäniemi et al., 2004). Basically, MNOs sell the network capacity to MVNOs, and from the consumers’ point of view the MVNOs would barely be distinguishable from other service providers. In this case a total of seven major Finnish operators including three mobile operators were mainly involved in the latter phases of the m-marketing process. For academics and practitioners alike, this discovery of the phases means that we can identify the actors most likely to succeed in each role played in m-marketing and thereby avoids using actors that generally have capabilities in other areas.

We also illustrated how different companies and their resources and capabilities are needed in order to form an IDBN. It is essential that the role of each actor is clear in each phase of the m-marketing process, as they can only support others in phases determined in advance. Based on the m-marketing phases and the activities undertaken by each company it is obvious that the retailer has a central role as an enabler and facilitator of the IDBN. The IDBN also provided a platform for the companies to learn about m-marketing activities and acquire elementary m-marketing skills that can later be used for similar purposes.

In sum, this study shed some light on the creation of IDBNs for m-marketing purposes. Our study focused on the four pertinent phases of m-marketing and purported how each phase from campaign design to delivery needs a unique constellation of resources and capabilities governed by the actors involved in each phase in order to be effectively and efficiently organized. Since the Advertiser in our case does not possess core competencies in m-marketing or specific m-marketing skills, it can be argued that the developed business network has to be wide and deep enough to cover all the resources and capabilities needed to produce the desired outcome. Because of the fact that m-marketing was unfamiliar to the advertiser in question, the role of the consulting company in the early phases of m-marketing was important, as it helped the advertiser to avoid the common mistakes advertisers make in conducting m-marketing campaigns, such as sending messages without the customers’ implicit permission. Therefore it can be seen that the consulting company acts as a catalyst in the initiation of m-marketing activities.

It can be suggested that when the retailer conducts more m-marketing campaigns, new resources and capabilities related to m-marketing will start to emerge and accumulate over time. Learning from previous m-marketing campaigns thus provides fresh knowledge for the Advertiser, and that knowledge can be directly put to use in forthcoming m-marketing activities. The logical follow-up of this idea is that in the case of an experienced advertiser the resulting business network structure might be different from the business network developed by a novice. In a network where the advertiser is an expert, the role of the consulting company might be limited, while a new actor that might emerge would be a mobile content provider that creates and provides content specific to mobile handsets, such as ring tones, mobile games and software (see Sabat, 2002). It is acknowledged that our study deals specifically with SMS-based m-marketing, in which the mobile content provider has a less central role than in the case of richer mobile media such as MMS and JAVA.
To conclude, it can be noted that an IDBN is created from the perspective of one actor, and therefore it reflects its image and its deficiencies. A novice might need a wider and deeper network regarding the number of actors, resources and capabilities, while an expert is more self-sufficient and its network would be more centralized. Moreover, as the novice learns from previous interaction it builds marketing specific resources and capabilities that enable further m-marketing activities to be conducted even more smoothly. From this it might be purported that the developed network will become more specialized and narrow in both structure and required activities. In addition to this, we have outlined some propositions relating to IDBNs. We also suggest that these two propositions should be tested in future studies. It is advocated that the width and depth of company-specific resources and capabilities have an impact on the quantity of actors and quality of resources needed in the IDBN as follows:

**P1.** If the focal company has a lot of experience with new technologies (including digital and mobile technologies) it decreases the number of companies and resources needed in the IDBN for m-marketing.

In addition to general technology-related resources and capabilities, experience with new forms of advertising is likely to affect the number of actors and resources needed in the IDBN as follows:

**P2.** If the focal company has a lot of experience with new forms of advertising it decreases the number of companies and resources needed in the IDBN for m-marketing.

Thus, in the case of technology and advertising experts, the IDBN could be rather specified and focused with a limited number of actors, while in the case of technology and advertising novices the IDBN could be rather unfocused with a greater number of actors. In both cases, the network creator has a central role in coordinating joint efforts and providing common goals in order to prevent network polarization.

**Discussion and implications**

Our study presented a description of the m-marketing process and depicted how a unique set of resources and capabilities is orchestrated for m-marketing purposes in the form of an intentionally developed business network (IDBN). This
description was based on a literature review and a single case study conducted in the retailing industry. We have attempted to shed light on the research gap that exists in business use of mobile technologies, and especially on how those are jointly created and deployed in the IDBN.

In the case of a novice advertiser our results underscore the importance and the role of a consulting agency when initiating m-marketing activities. Moreover, network development is influenced by learning and the accumulation of resources and capabilities related to m-marketing. It was also suggested that in the future, mobile content providers will play an increasingly pertinent role in both emerging and already established m-marketing networks. However, future developments in this nascent field are difficult to predict, as movement towards new mobile network technology (e.g. 4G) and rapid changes taking place in mobile handset technology are causing changes in the networked logic of m-commerce.

Managerial implications
Our findings provide several managerially relevant insights that increase the probability of excelling in m-marketing and network management in general. We have attempted to clarify how m-marketing can be conducted and what is needed when embarking on such novel activities. The phase model of m-marketing and its explanation give an elementary view on m-marketing for those who are new to this topic. We also highlight the discrepancy between expert and novice advertisers. In addition to these, this study pinpoints underlying differences between firms and how these differences reflect on the nature of the business networks developed for m-marketing purposes.

More importantly, we discussed how m-marketing capabilities might be created over time by learning from the adoption and deployment of mobile technology. It is in the managers’ hands to evaluate the actors needed in order to accomplish m-marketing activities and chart the company’s own resources and the resources that are still needed. When this is done effectively a lot of inconvenience and waste of resources can be avoided, not to mention the money saved with a well-planned m-marketing campaign.

Limitations and future research avenues
This paper is not without limitations. Our results are based on a single qualitative case study conducted in the retailing sector and the number of the informants is limited. This being the case, it is difficult to draw general conclusions concerning the structure of the IDBN in other contexts besides retailing. However, we have noted that the role of the consulting agency is significant in the case of new technology adoption in an IDBN. Future studies should validate this finding, first in the retailing context and subsequently in other contexts. On a more general level our results pinpoint areas to which future research could be channeled. Future studies in all forms could include other emerging or IDBNs in order to compare them and identify similarities and differences in their development phases, and their subsequent consequences to the network in question. The role of the consulting company in the adoption of new technology could be studied in more depth, and researchers could also look into the role of mobile content
providers in the mobile context. Furthermore, a longitudinal study tracing the development of an IDBN from initiation to some predetermined point in time would provide important insights that could form a backdrop for quantitative studies in this area. Finally, both of the two propositions given here should be tested in other studies.

References


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Further reading


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