Leading Practice - A Preferred Context for Researching Virtual Commerce

Ola Henfridsson

Department of Informatics, Umeå University & Viktoria Institute, Göteborg University

Email: ola.henfridsson@informatik.umu.se

Abstract

This paper provides some reasons for conducting case studies of leading practice when researching virtual commerce. Because of the dynamism of virtual commerce and the extent to which involved actors' assumptions and problems play a part in the on-going development, studying leading practice by blending interpretive case studies with management theory can be considered a preferred way of studying this phenomenon. This strategy offers possibilities to make a difference, understand how small innovative moves can yield large consequences, and detect the process by which leading actors' interpretations become self-fulfilling prophecies.

Keywords: Leading practice, virtual commerce, case studies, rigor, relevance.

1. Researching virtual commerce through case studies of leading practice

There are good reasons to believe that the appearance of virtual commerce challenges many long-standing mechanisms in retailing. Being part of an on-going globalization and business transformation, virtual commerce challenges, for instance, the trade-off between reaching a mass market and offering personalized products (see e.g., Evans and Wurster, 1999). By transcending the geographic barriers of the physical world, virtual retailers such as co-shopping sites, on-line auctions, Internet retailers, and e-commerce portals have the potential to reach the world market. At the same time, however, they can nevertheless customize the delivered services by, for instance, using flexible payment systems and CRM databases for one-to-one marketing. Because of its potential to deconstruct the tradeoff between mass market and personalization, virtual commerce has been pictured as part of a new paradigm for doing business - a new business logic (see e.g., Evans and Wurster, 1999). In this paper, I propose that in conducting case studies of the social and organizational consequences of this new business logic, it is fruitful to do this in the context of "leading practice".

Loosely defined, leading practice is the organizational or social context in which new technologies are tried out. The concept as such is independent of the question whether this try-out is successful or not. Rather, it depends on whether this experiment is new in the sense that it represents innovative use of IT in a practical context. In attempts to assess, explore, and understand virtual commerce, then, there is a lot to learn from try-outs. This is not to say that

leading practice cannot be found and studied in many domains apart from virtual commerce, but it is to say that the emerging stage of virtual commerce is particularly useful to be explored in the context of those actors and companies that transcend the traditional boundaries of the domain.

This paper examines a number of reasons why leading practice can be considered a preferred context for researching virtual commerce. The motivation for doing this is twofold. First, in view of the current debate about the relevance of IS research (see e.g., Benbasat and Zmud, 1999; Davenport and Markus, 1999), one might need to consider or re-consider approaches or contexts that for one reason or another have played a minor role in developing the discipline. Leading practice can be considered as such a context, and as part of exploring new ways to encourage relevant IS research, it can be fruitful to assess the pros and cons of leading practice in the domain of virtual commerce. Second, there are many voices debating the emerging digital economy from polarized positions. While such voices are important to define a new field of interest, research plays an important role in leveraging detailed and insightful case studies. We need to uncover the new and the old of this type of commerce. We need to explore the good and the bad, the trivia and the unique. Indeed, with little prior research and many unanswered questions, an explorative approach is needed to open up the hyped box of virtual commerce. It is not clear, however, how to go about exploring this new field of interest. This paper represents one attempt with which to come to terms with this field in order to develop useful frameworks for the practice of virtual commerce.

2. What is virtual commerce and to what extent is it a new phenomenon?

When conducting research on a new phenomenon, one of the major issues is to explore how to conceptualize it so that this phenomenon can be differentiated from related ones. In doing this, I discuss virtual commerce as the use and development of Internet-based commerce, where customer choice, payments, and penetration are handled on-line, and where the typical transaction is a short-term agreement between customer and vendor. This conceptualization is intended to differentiate it from the forms of electronic commerce that are commonly referred to as electronic data interchange (EDI). Basically, the main difference between virtual commerce and EDI is the range and scope of the agreement between customer and vendor. The coordination mechanism of virtual commerce is closer to the market than that of EDI (c.f., Powell, 1990), which traditionally builds on, and benefits from, more long-term agreements.

To further outline an understanding of virtual commerce, a few examples of this type of commerce might be appropriate. Firstly, there are virtual retailers. These retailers can be of two types. They can be established retailers such as H&M and IKEA that go on-line, introducing yet another medium for presenting and selling their products or services. In addition, they can be new companies entering retailing with Internet as its only medium. Examples of the later type are CDnow and boo.com.

Secondly, there are e-commerce portals. Within the range of one website, e-commerce portals comprise several different businesses, each selling their own products or services. These portals enable customers to find and explore a broad range of products and services in a convenient way. In this regard, they are one of the best examples of what Evans and Wurster (2000) refer to as navigators. They lower customers' search costs by enabling customers to access a variety of products within the range of one website.

Thirdly, there are co-shopping sites. This is a type of virtual commerce that can be considered as a new business model. Co-shopping sites build their business on coordinating individual customers' buying interest, so that they together represent a more attractive deal for vendors. Because of the quantity reached by a whole group of small buyers, vendors can cut their price in exchange for selling more items. Examples of co-shopping sites are letsbuyit.com and webuy.com.

Finally, there are on-line auctions. The number of on-line auctions on the Internet is increasing considerably. The attraction lies in the fact that the auction site can coordinate a great number of people without relying on time and space. Examples of on-line auctions are bidlet.se and bid2day.com.

So, what is new about virtual commerce? And, furthermore, are any of the models mentioned above examples of leading practice? These are still open questions.

3. Why case studies of leading practice are relevant for understanding virtual commerce

In what follows, I outline three reasons why leading practice is a suitable context for researching virtual commerce. These reasons can be seen as attempts to formulate why leading practice can be a way to improve the relevance of the produced research of virtual commerce.

3.1. Leading practice offers possibilities to make a difference

In the recent debate in MIS Quartely about how to make IS research more relevant (see e.g., Benbasat and Zmud, 1999; Lyytinen, 1999), there were several suggestions proposing IS research to take a more active role in improving practice. Many researchers as well as practitioners seem to feel that IS researchers in general know more than they share with the people and organizations that they study. In interpretive IS research, one can find examples of researchers who have observed this problem in relation to their long-term field studies (see e.g., Schultze, 1999; Walsham and Sahay, 1999). While Schultze (1999) notes how she needed to take on an identity as a "competent self" for maintaining credibility in the eyes of her respondents, Walsham and Sahay (1999) even observe that it would not be ethically correct to avoid sharing the insights that they had obtained throughout the study.

Leading practice is a preferred context for researchers to take more active part in improving virtual commerce, because it offers greater possibilities than other contexts to make a difference. In the early stages of a new technology's life cycle, it seems that the technology is more open to interpretation (Henfridsson, 2000; Tyre and Orlikowski, 1994). People's interpretations have not yet settled or been inscribed into the technology, which suggests that IS researchers have better possibilities to make a difference during these stages. Moreover, for the increasing number of interpretive IS researchers, this is not only a question of making a difference, but also an important methodological issue. As an interpretive IS researcher, one assumes that being part of everyday action is just about the only way to produce relevant knowledge.

In the case of virtual commerce, one can see many new technologies that are tried out by leading edge companies. CRM database technologies and new payment systems are examples of technologies that are still in the early stages of their life-cycles. The future role of

these technologies is still an open question, and if we want research-based knowledge be part of the future development of virtual commerce, there are good reasons to conduct case studies of leading practice.

3.2. Small innovative moves can yield large consequences

In early stages of new domains of knowledge, there seems to exist a certain kind of instability. The domain lacks institutionalized practices and, as a consequence, what might seem as small innovative moves deviating from the yet fragile mainstream ways of doing things can yield large consequences.

In studying a new domain of knowledge (as I consider virtual commerce to be), therefore, leading practice is a probable context in which large consequences can emerge. By tracing the small innovative moves that a leading edge company in virtual commerce might enact, researchers have a better chance to produce useful knowledge for understanding how and why organizational, social, and technological shifts occur and gain momentum.

In the case of virtual commerce, one can see how, for instance, hotmail.com started out as a small company on the Web, offering anyone who registered as a user a free e-mail account. What seemed to be a less sophisticated business model has turned out as a role model for many followers to come. Hotmail.com realized that offering free e-mail created a lot of traffic on the website, which would be interesting for advertisers as well as for virtual retailers. This case is an example of leading practice, where the blending of new technology and an innovative idea created a new business model. But the process by which this success was created in practical day-to-day activity, we know very little about. What were the critical choices? What were the small innovative moves that yielded such large consequences? I suggest that case studies of leading practice can be of assistance when learning more about these things.

3.3. Interpretations of leading actors can become self-fulfilling prophecies

In early stages of new domains of knowledge, there seems to exist a relatively larger space for individual actors to influence the direction and progress of the domain. With massive attention, but without established practices, the up-front actors of a field are listened to. Consequently, the assumptions, beliefs, and expectations that these actors hold tend to influence what others do and espouse. In many cases, early interpretations of leading actors end up becoming self-fulfilling prophecies.

In understanding the nature of virtual commerce and the future directions it might take, I suggest that case studies of leading practice can be of assistance. Being fueled by a massive stream of risk capital, for instance, it seems fruitful to assume that the involved actors of virtual commerce are relatively powerful in implementing their views. Because leading actors are important, and because interpretive case studies (see e.g., Klein and Myers, 1999; Walsham, 1995) are valuable for tracing assumptions, interpretations and problems of involved actors, there are good reasons to conduct case studies of leading practice.

4. Towards a rationale for conducting case studies of leading practice

How should case studies of leading virtual commerce be conducted, then? In this regard, it seems useful to blend lessons from interpretive IS research (see e.g., Klein and Myers, 1999; Orlikowski and Baroudi, 1991; Walsham, 1995) and management theory (see e.g., Davenport and Prusak, 1998). Within interpretive IS research, much attention is paid to the assumptions, interpretations and knowledge of the actors involved, while management theory is good at tracing new emergent phenomena at an early stage. As a result of this blending, inconsistencies and paradoxes are not streamlined to form a general pattern (thanks to interpretivism), at the same time as focus is kept at emerging phenomena. I believe that this is a very relevant way of approaching virtual commerce, not the least because of the dynamism of the whole area of this business. As an example of this dynamism, consider, for instance, how Amazon.com started out as a book retailer in the mid 90s, while they only a few years later offer a broad range of products triggering some writers to describe their business as one of the first examples of a new industry (Evans and Wurster, 2000; Hagel and Singer, 1999) - navigation or infomediation.

Understanding that leading practice can go in either direction - success or failure, knowledge about what went on in such cases are important and relevant for organizations and society once the studied practice is adopted among a wider range of society. Learning from relevant research of the early adopters, followers can learn a lot. But what about rigor, then? Rigor has been a highly valued quality of research for long. Many argue, with good grounds, that rigor is what differentiates research from consulting. Quite a few leading IS researchers feel, however, that pursuing rigor can often downplay the relevance of the conducted research (see e.g., Benbasat and Zmud, 1999; Davenport and Markus, 1999). In attempting to validate their research, researchers often tend to forget that the knowledge they produce needs to be consumable for the clients of their research. Concepts, approaches, guidelines, and so on, the debaters argue, need to have tight coupling with the domain of practice to which they correspond.

So, how can we combine rigor and relevance in virtual commerce, then? Without any pretension that this issue can be easily settled, I suggest that there are ways to increase rigor in virtual commerce research without lowering (perhaps even increasing) relevance. One interesting way is to complement traditional data collection such as interviews, observational studies, and document review with website data. Indeed, using the data that is collected on the website in log files and in CRM-databases, researchers have a highly important source for tracking customer behavior, which can be triangulated with other data sources. Website data can, of course, be considered to be a special type of document review, a method that historians have used for ages. However, I believe there are differences that motivate a differentiation. Firstly, website data is collected on a day-to-day basis. The data is very rich in that it immediately provides material for spotting variations in, for instance, customer behavior. Secondly, website data is first hand data. Even though the collection is designed by humans in the first place, the automatic procedure of the actual collection by means of log files and CRM-databases is pretty clean from interpretation. This collection provides a large amount of data with which to interpret and analyze virtual commerce.

In a way, virtual commerce itself challenges the tradeoff between rigor and relevance in research. Being an immediate concern, there are pressures for rapid research processes, which can challenge the rigor of the conducted research. Using website data, however, rich and

extensive material for interpretation is available. I consider this an interesting and challenging source of data worth to explore. Of course, it is easy to spot potential problems here. Even though the researcher has rich and detailed data, this is not in itself a guarantee for rigorous research. Indeed, using website data or not, quality of interpretation and analysis will always remain the most important part of good research.

5. Conclusion

There seems little doubt that there are many utopian views of the emerging digital economy around (for an overview, see Orlikowski, 1999). While these views tend to exaggerate the short-term social and organizational consequences of this economic transformation, many observers seem to acknowledge an increasing tempo induced by new technology on identity (Giddens, 1991), forms of organization (Iansiti & MacCormack, 1997) as well as on society as a whole (Castells, 1996). To what extent does this increasing tempo affect our strategies for researching emergent phenomena?

In this paper, I explore some reasons why case studies of leading practice can be a preferred strategy for researching virtual commerce. Because of the dynamism of virtual commerce and the extent to which involved actors' assumptions and problems play a part in the on-going development, studying leading practice by blending interpretive case studies with management theory can be considered a preferred way of studying this phenomenon. This strategy offers possibilities to make a difference, understand how small innovative moves can yield large consequences, and detect the process by which leading actors' interpretations become self-fulfilling prophecies.

In coming to terms with researching virtual commerce, it would be naive not to understand that there are more similarities than differences between researching this topic and general IS research. Recognizing this, it is worthwhile considering Klein and Myers (1999) many good suggestions for conducting and evaluating interpretive research. Each one of their principles indicates a direction for assessing virtual commerce as well. One point I raise in this paper, however, is that, in researching virtual commerce, researchers should not only bother about sorting out the new in the new business logic that they study, but they should also assess what new methods and principles for researching this phenomena that they need to adopt.

6. Acknowledgements

7. References

Benbasat, I.& Zmud, R.W. (1999) Empirical Research in Information Systems: The Practice of Relevance, *MIS Quarterly Vol. 23* No. 1, pp 3-16.

Castells, M. (1996). *The Rise of the Network Society. (Vol. 1).* Malden, MA, USA: Blackwell.

Davenport, T. H., & Prusak, L. (1998). *Working Knowledge – How Organizations Manage What They Know.* Boston, MA: Harvard Business School Press.

Davenport, T.H., & Markus, M.l. (1999) Rigor vs. Relevance Revisited: Response to Benbasat and Zmud, *MIS Quarterly Vol. 23* No. 1, pp 19-23.

Evans, P., & Wurster, T. S. (1999). Getting Real About Virtual Commerce. *Harvard Business Review(November-December),* 85-94.

Evans, P., & Wurster, T. S. (2000*). Blown to Bits - How the New Economics of Information Transforms Strategy.* Boston, MA: Harvard Business School.

Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in Late Modern Age.* Cambridge: Polity Press.

Hagel, J., & Singer, M. (1999). *Net Worth - Shaping Markets When Customers Make the Rules*. Boston, MA: Harvard University Press.

Henfridsson, O. (2000). Ambiguity in IT-Adaptation: Making Sense of First Class in a Social Work Setting. *Information Systems Journal, 10*.

Iansiti, M., & MacCormack, A. (1997). Developing Products on Internet Time. *Harvard Business Review(September-October)*, 108-117.

Klein, H. K., & Myers, M. D. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. *MIS Quartely, 23*(1), 67-93.

Lyytinen, K. (1999). Empirical Research in Information Systems: On the Relevance of Practice in Thinking of IS Research. *MIS Quartely, 23*, 25-27.

Orlikowski. (1999). "The Truth is Not Out There: An Enacted View of the "Digital Economy". Presented at the "Understanding the Digital Economy: Data, Tools, and Research," on May 25 & 26, 1999 at the Department of Commerce in Washington, DC. (http://mitpress.mit.edu/ude.html, May 10, 2000)

Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research, 2*(1), 1-28.

Powell, W. W. (1990). Neither Market nor Hierarchy: Network forms of organization. *Research in Organizational Behavior, 12,* 295-336.

Schultze, U. (1999). A Confessional Account of an Ethnography about Knowledge Work. *MIS Quartely*, 23.

Tyre, M. J., & Orlikowski, W. J. (1994). Windows of Opportunity: Temporal Patterns of Technological Adaptation in Organizations. *Organization Science, 5*(1), 98-118.

Walsham, G. (1995). Interpretive case studies in IS research: nature and method. *Eur. J. Inf. Systs., 4,* 74-81.

Walsham, G., & Sahay, S. (1999). GIS for District-Level Administration in India: Problems and Opportunities. *MIS Quartely, 23*(1).