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GOING FOR THE ONLINE CUSTOMER – AN INTERPRETIVE CASE STUDY OF INTERNETWORKED CUSTOMER REACH IN ONLINE ENTERTAINMENT

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ABSTRACT

This paper explores efforts to reach the online customer in online entertainment. It does so on the basis of an interpretive case study conducted at the Swedish computer game developer Daydream Software, where the the specific objects of study were the customer reach efforts involved in the release of the game developer´s new on-line game Clusterball. The Clusterball case illustrates a radical change effort in that it represents a break with the common method to distribute a computer game. Basically, it also represents a break with the conventional wisdom of competitive strategy in that it combines a mass-market strategy with a differentiation one. We explore how the unfolding process of customer reach was deeply influenced by the intertwined nature of information technology and business processes. In addition, we suggest how understanding these intertwinings would add to both the practice of online entertainement business and the body of competitive strategy knowledge.

1. INTRODUCTION

Learning how to reach the online customer is becoming more and more at the heart of modern organization. This tendency can be observed among e-commerce companies such as Amazon and WeBuy, retailers such as H&M and IKEA, and product developers such as Microsoft and Volvo. This digitalization of customer reach is based on a number of different visions about what the Internet offers for streamlining as well as improving customer relations. One important vision, for instance, is the widespread hope that the Internet can combine economics of scale (reach) and economics of scope (richness) (see e.g., Evans and Wurster, 2000).

Even though the online customer is highly present in the everyday practice of organizing, we know little about what strategies are fruitful for reaching the online customer rather than the traditional one. Apart from promising research on the general level (see e.g., Orlikowski, 1999), we need more research about the specific nature of how online customer reach intersects with the organizational life. How can we understand online customer reach? What are the organizational and techincal consequences of digitilizing customer reach? These questions are at the center of attention in what follows.

In the pursuit of understanding these questions, our empirical outlooks are directed on the online entertainment business. This business represents leading practice (c.f., Zmud and Benbasat 1999) in terms of

its persvasive online prescence. Consider that online games have taken a significant share of total electronic games software market, which in turn is growing with an annual rate of approximately 15% (Datamonitor 1999). This paper builds on a 10-month interpretive case study (Klein and Myers, 1999; Walsham, 1995) of the customer reach efforts that the Swedish computer gaming developer Daydream Software pursued in launching their new online game Clusterball.

This paper is structured as follows. Section two explores the related literature, while section three outlines the research strategy. Section four presents the background to Daydream and their new on-line computer game Clusterball. Section five interprets the case, while section six concludes this paper.

2 INTERNETWORKED CUSTOMER REACH: RELATED LITERATURE

2.1 Customer Reach and Competitive Strategy

Porter's (1980, 1985) influential work on competitive strategy describes three generic strategies to reach a market: overall cost leadership, differentiation, and focus. The long-standing wisdom here is that these strategies cannot be combined without being "stuck in the middle" (Porter 1980, p. 41-44). However, several authors have lately documented how economics of scale (overall cost leadership) and economics of scope (differentiation) actually can be combined with successful application of information technology (Evans and Wurster 1997, 1999, 2000; Pine 1993). These authors suggest that competitive strategy is changing and that this change is related to a new role of information technology in current organizations. However, while these sources are valuable in tracking the general tendency, we need both useful theoretical concepts and more empirical work on these issues.

2.2 The Middleground of Organizations and Information Technology

While its traditional role was a supportive one (c.f., Porter 1985), many researchers have observed how information technology becomes more and more embedded in the core business processes of modern organizations (see e.g., Ciborra *et al*, 2000, Zuboff, 1988). Rather than only being used for streamlining already existing processes, new technologies such as CRM-systems and KM-systems are used to invent new ways of doing business. We believe that there are good reasons to look a bit closer at the body of literature exploring the increasingly intertwined nature of information technology and organizations. This literature provides some guidance in our efforts to understand what happens when the role of information technology increasingly lies at core business processes such as sales and customer relations.

As early as in the beginning of the nineties, Orlikowski and Robey (1991) observed how information technology enables and restricts organizational structuring; Ciborra and Lanzara (1994) noted how the design and use of IT is enabled as well as restricted by so-called formative contexts; and Orlikowski and Gash (1994) outlined how key actors' assumptions were important for understanding information systems in organizations. This body of research was important in that it documented and explored the increasingly embedded nature of IT and organizations. Later on, in refining the research within this area, the IS community has adopted new approaches such as actor-network theory (see e.g., Hanseth and Monteiro, 1997; Walsham, 1996; Walsham and Sahay, 1999). This refinement could be seen as an adaptation to the increasingly complex character of the intertwining between non-human actors such as standards, software, and hardware and human actors.

2.3 Internetworked Customer Reach

In view of the emerging number of digital organizations, i.e., organizations that mediate most of their business processes over the Internet, researchers have searched for good labels to describe these organizations. Research related to the concept virtual organizations have been been around for some years

now (Davidow and Malone, 1992; Hedberg *et al*, 1997), while internetworked organizations (Orlikowski, 1999) and cybermediaries (Jin and Robey, 1999) are recent terms used to describe and explore this kind of organizations. As an illustration, Orlikowski's (1999) exploration of how internetworked technologies such as email, web publishing tools, intranets, extranets, and hypertext systems in general influence organizations in ways not easily understood and predicted gives a good view of the complexity involved in digital organizations. So, "why are organizations investing in internetworking", Orlikowski (1999, p. 5) asks, suggesting that the core questions concern how open organizations should be with their stakeholders. Needless to say, internetworking implies openness, a notion that most organizations adhere to. However, implementing this openness in terms of making workers, work processes, and so on, public knowledge is another issue.

In the following sections, this paper reports a case of combining economics of scale and economics of scope in an effort to reach the online customer. The case will show how internetworked customer reach represents a promising domain for such combination. The case will also identify and explore some of the organizational and technical difficulties involved in pursuing a combination strategy.

3. RESEARCH STRATEGY

3.1 Research Method

This study can be broadly described as an interpretive case study (Klein and Myers, 1999; Walsham, 1995). Interpretive case studies are valuable for tracing assumptions, interpretations and problems of involved actors. The involved actors are important here, because the IS researcher's understading of the studied phenomenon is created through the meanings that these actors associate with it (Orlikowski and Baroudi, 1991). In seeking such understanding, however, the IS researcher needs to be involved in the daily activities taking place at the researched site.

Between January 2000 and October 2000, in-depth studies of the planning, design, and release of Daydream's online computer game Clusterball have been conducted by a team of three researchers (of which two are the authors). The ten-month study can be divided into three phases in terms of methodology. Between January and March, we took part in meetings and discussions and we also spent time to learn about the employees, their assignments and routines. As a result, we got a notion of the every day work at Daydream; we went from observing the company into a more active participation. In March 2000, we started to take more active part in the process. Two complete working places were set up for two of the members of the research team and between April and September 2000 we conducted 600 hours of participant observation. During this phase, we were, to some extent, intervening in the studied process. For instance, we evaluated Daydream's web sites and developed customer scenarios intended to support the early utilization of the CRM-database. October 2000 was spent complementing the data collcected.

The choice of research site was guided by two things. Firstly, Daydream represents leading practice in that they almost exclusively use information technologies such as CRM-technology, virtual communities, a dynamic advertisment system, and a micro payment-system to reach their customers. To be able to fruitfully explore, assess and predict the nature of online distribution, it can be considered important to study the organizational or social contexts in which new technologies for doing that are tried out. Secondly, we had very good access to this company. We were introduced to the special problems associated with reaching new categories of customers by Daydream's CEO.

3.2 Data Collection and Analysis

The data sources were of different kinds: participant observation, interventions, website data, meeting protocols, e-mail correspondence, press releases, and field notes. We kept diaries of the 600 hours spent at the company. Everything that happened during a working day was written down and were important tools in

the data analysis. In particular, they have been useful for re-construct the process in terms of events and dates. Website data was an important source of data. For instance, on one of the web sites – the shareholders' corner – shareholders could express their thoughts about the company and also discuss the potential of its products with other shareholders. Another example is the public forum, a community in which the Clusterball players can discuss the game. These kinds of information were important for understanding what challenges the company was facing in terms of customer reach. Being a company quotated on the Stockholm stock market, Daydream also issued press releases covering their present status to shareholders, the media and other interested parties.

4 BACKGROUND AND CONTEXT TO THE CLUSTERBALL CASE

4.1 Daydream Software – the Company

Over the years, the computer gaming industry has experienced both rapid growth and innovation. For instance, Datamonitor (1999) predicts the US and European market to grow around 15% annually between 1998 and 2003. Rapid diffusion of personal computers in combination with increasing capacity of game consoles such as the Playstation has enabled the industry to continuously deliver more advanced graphics and technical feature. In view of this development, it is not surprising that the computer gaming market is considered a very competitive one, where small miss judgments about its future direction can erode market leadership.

Daydream Software is a small (in November 2000, Daydream employed about 65 people) Swedish computer game developer that has attracted a lot of attention over the years. Coinciding with high expectations on its first game Safecracker – a CD-based game – the company was introduced at the Swedish stock market in 1996. Even though Safecracker received many positive reviews in relevant business and game magazines, however, the game was disappointing in terms of return on investment. The game was severely delayed because of the economic disorder of the American game publisher Warner Interactive Entertainment. Without sufficient marketing during the window of opportunity triggered by the positive reviews, Daydream consumed a lot of resources in terms of both time and money, as they had to find a new distributor for Safecracker.

4.2 Clusterball – the Game

With the experience of Safecracker in mind, Daydream developed Clusterball (see fig. 1). Contrary to Daydream's earlier CD-based games, Clusterball is an online computer game that can be played, distributed and paid for over the Internet. In this way, the game enabled Daydream to bypass three intermediaries – publicists, distributors and retailers – in the computer gaming value chain. Contrary to most online computer games, Clusterball's game engine was freely distributed, while the different venues were sold in so-called vanue-packs. However, in order to attract customers, the first two venues were distributed freely with the game engine after user registration. Accordingly, the business model of Clusterball was designed on the assumption that the gamers would find the game so appealing that they would purchase additional venues to the first two ones.

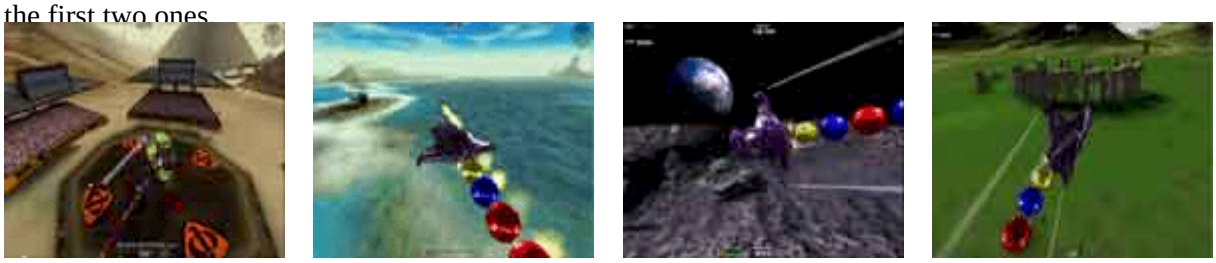

Figure 1: *Screen shots from the landscapes Egypt, Bora Bora, Lunar and Stonehenge.*

5 THE CLUSTERBALL CASE: IMPLEMENTING CUSTOMER REACH IN ONLINE ENTERTAINMENT

In what follows, we outline some of the organizational and technical challenges that Daydream confronted in their attempts to reach its customers with a strategy combining economics of scale and scope. The section describes this process in terms of three phases: going for an entertainment portal, going for online distribution, and going for multiple distribution channels.

5.1 Going for an Entertainment Portal (December 1999 – April 2000)

At the time we gained access to the research site (December 1999), Daydream planned to establish an entertainment portal for reaching potential Clusterball customers. Drawing on Datamontor's (1999) prediction that the future market growth primarily would be found with so-called "casual gamers", there were at least three important elements explaining this strategy. Firstly, it was considered important that the game did not require broadband technology but could be downloaded as well as played on ordinary 28,8 modems. In fact, Daydream invested much energy in slimming the graphical components in Clusterball. As a result, the size of the game only amounted to 14Mb, which made it sutiable for distribution over the Internet. The online distribution was considered important for market segments with low probability of purchasing computer games at traditional retailer shops, while low bandwidth was considered important for casual gamers in general. Secondly, because "casual gamers" is a very broad and diverse market segment, Daydream intended to implement as much flexibility as possible in terms of payment. In cooperation with the Swedish teleoperator Telia, Daydream intended to integrate the micro payment system Pay IT with Clusterball. PayIT would, for instance, allow different forms of payment: per game played, per tournament played, per time unit, or even a traditional software license for unlimited use of Clusterball. Thirdly, "casual gamers" were also expected to require customized communication. Inspired by one-to-one marketing (Peppers and Rogers 1997), the CEO and the marketing manager were both proponents of individualization, where a CRM database was an important part of the strategy of realizing the visions. As the CEO at the time expressed it in a financial prospect: "Our CRM database can handle large amounts of information about, for instance, the customer's individual wiches and requirements. With that, new possibilities to learn about each and every customer are created". As part of these efforts, the market department had several meetings on the so-called 1-2-3-method (a working name). This method was designed to provide the casual gamer with an easy method to register, download and pay for Clusterball via the Clusterball web site.

Daydream's entertainment portal strategy is indeed an example of a strategy aiming at a mass market by trying to implement uniqueness perceived by the customer. The handy format in terms of size, the micro-payment system, and the CRM database were all components in a combined strategy of scale and scope. By the end of April 2000, this strategy had to be postponed in part.

5.2 Going for Online Distribution (May 2000-September 2000)

Daydream had to postpone the entertainment portal strategy. This postponement was twofold. Firstly, the company dealt with immature tools (Scott, 2000), i.e., technologies used in new and yet unexplored ways. Daydream had no first movers to copy – they had to learn by trial and error. The micro payment system Telia PayIt, for instance, proved to be impossible to use globally because of the missing but needed global partners. Moreover, there were delays in establishing a proper test environment. As a result, and even though Daydream and the Swedish teleoperator Telia agreed on continuing their cooperation to facilitate future micro payments in Clusterball, the micro payment plans were partially put aside. Meanwhile, Daydream decided that traditional credit card payment would be used instead. An agreement between Daydream and IBM was signed on June 16, and accordingly, Daydream planned to release Clusterball with IBM's DebiTech credit card payment system. Secondly, Daydream had not been able to design an organization that could handle the entertainment portal strategy. The bypass of the publicists, distributors and retailers was not straightforward; it required new and changed work practices as Daydream had to build an organization that

could handle the distribution of the game. The need for reorganizing was discussed at a number of occasions during late spring 2000. For instance, as the necessity for additional co-workers was noticed, the size of the market department was put to the fore and the market department was requested to to express what kind of competens that was missing. It proved difficult to put the requirements into effect though. Due to the upcoming release, however, there was no time to train new workers, and accordingly, the market department remained rather unchanged.

Following the entertainment portal strategy, the new strategy can be described as "going for online distribution". This strategy shift can be illustrated by the replacement of the marketing manager for a new one (announced in a press release May 8, 2000). Daydream's CEO, commented this replacement as a step in Daydream's strategy of recruiting managers with focus on sales and profits. Up until then, the marketing department had worked with the entertainment portal strategy at the center of attention. Coinciding with the manager shift, new distribution channels were considered. For instance, Daydream worked on setting up agreements with pure online distributors, so-called ESDs (Electronic Software Distributors), and with distributors working with both online and traditional channels.

As the release date was approaching, the number of early players registered in the CRM database increased steadily. Primarily, these gamers consisted of the so-called "hard-core gamers "(Datamonitor 1999) – a group of gamers that is known for investing a lot of time and energy in computer gaming. Accordingly, the focus on "casual gamers" was no longer in the center of interest in the short run. Instead, Daydream put effort into attracting the "hard-core gamers" due to their expected ability to spread the rumor about Clusterball on the virtual arena. On June 30, Daydream informed the staff about a new function – a community manager, whose assignment was to hype Clusterball. By getting in contact with "hard-core gamers" and computer gaming websites, the community manager would help spreading the rumour about the not yet released game. The increasing number and the type of gamers might in part have been a result of the work done by this new manager.

Clusterball was released and available for downloads at clusterball.com on July 17 2000. The game was well received by the critics and the number of registered Clusterball gamers grew. On August 20, Clusterball was also made available at download.com. During the six weeks which followed the introduction at download.com, 17 161 downloads were made, contributing to a slowly growing number of Clusterball players.

Even though the number of Clusterball gamers grew, there were problems related to the business model. Because of the possibility to download the first venue for free without having to register in the CRM-database, there were a large number of unknown gamers playing Clusterball. Without the registration procedure, Daydream neither had the possibility to establish one-to-one relationships with these gamers, nor was the company able to estimate the number of gamers playing the game. Another problem was that the business model did not stimulate the purchase of additional venues. (As Daydream had postponed the introduction of the micro payment system, the gamers could not pay per play as it was planned initially, instead they had to purchase a whole venue or a venue pack.) Consequently, some of the venues suffered from a limited number of players, which in turn resulted in a dawning disenchantment among the Clusterball gamers. At a number of times, this was brought to attention within the Clusterball community at clusterball.com.

5.3 Going for Multiple Distribution Channels (August 2000 – October 2000)

By August 2000, the challenges involved in pursuing the online distrbution strategy had shown to be too much of a challenge. The game was not downloaded to the expected extent, the number of venues purchased was not sufficient and it had proved to be an extensive job to market the game globally. Simply, Daydream was not able to match the collected knowledge, experience and contacts of the three intermediaries bypassed.

To address these problems, Daydram focused on alternative distribution channels and planned for a boxed version of the game. In late August, Daydream announced that within the next few weeks they would arrange with one or more distributors to distribute Clusterball worldwide. Daydream published a press release

announcing their first agreement on September 21. The agreement was reached between Daydream and the German distributor Infomedia Software Publishing – a so-called traditional *and* online distributor and also one of Germany's leading distributors of interactive media. The German distributor published, distributed and offered Clusterball fore sale on the German speaking market – the largest market of interactive computer games.

While waiting for the German players to start playing online, Daydream took action to increase the number of gamers – the need for additional gamers within both the game and the virtual community was pressing. On September 14, a meeting was held were representatives of the market department discussed how to change the situation for the better. A previous proposal about the so-called Clusterball ambassadors was brought to the fore. The basic idea was to affiliate the most frequently playing and reliable gamers with Daydream and Clusterball. The conditions for the ambassadors would be to accept responsibility for helping other gamers and to contribute to disseminate the Clusterball concept.

During October, Daydream was negotiating with the American online distributor RealNetworks for a potential distribution deal. (The deal was made public on November 23.) RealNetworks constitute the world's greatest distributor of downloadable software with their good 200 million customers. As expressed in a press release, Daydream's CEO announced that the agreement would help Daydream to fulfill the promise of reaching two million gamers within the turn of the year 2001, and also, it would give Clusterball the chance of succeeding in becoming the world's most distributed computer game. The distribution agreement would open up the English speaking market and RealNetworks would become Daydream's only online distributor of the English version of the game. Besides market the game for downloading, RealNetworks would also offer Clusterball for distribution via their websites.

6 EXPLORING ONLINE CUSTOMER REACH: STUCK IN THE MIDDLE OR THE BEGINNING OF SOMETHING NEW?

The Clusterball case study illustrates an attempt to implement radical change in order to reach new customers. It was radical in that it represents a break with the common method of distributing computer games: Daydream by-passed three stages – publishers, distributors, and retailers – in the computer gaming value chain. The efforts to implement this change can be described as an unfolding process involving both organizational elements and technological ones. Gradually, and as illustrated in last section, Daydream had to adapt to existing information infrastructures in their customer reach efforts and thereby downplay some of the early ambitions.

At an early stage in launching Clusterball, Daydream combined a mass-market strategy with a differentiation one. Our case study documents several revisements of the initial strategy. "Going for an entertainment portal" was revised to "going for online distribution" and so on. Gradually, Daydream had to rethink its customer reach strategy in light of organizational and technical difficulties involving elements such as the micro-payment system and the market organization. Integrating several new and basically untested technologies required lots of negotiation and tinkering. How should we understand these revisements? Were they representations of strategic misconceptions or were they part of a new reality that faces companies that pursue internetworked reach?

In terms of Porter's (1980) work on competitive strategy, Daydream's strategy could be classified as one that eventually leads to "an extremely poor strategic situation" as a result of being "stuck in the middle" between two generic competitive strategies (p. 41). So, in the vein of Porter, our case illustrates bad competitive strategy. Being a small content provider in the entertainment business dominated by actors with high bargaining power, staying focused on a small segment would have been a wiser strategy.

However, interstingly enough, Daydream's strategy was not an example of bad strategy in terms of careless or unthoughtful strategy. In fact, Daydream intended the differentiation strategy (manifested in the use of micro-payments and a CRM database) as a means to reach the mass-market. In other words, treating the market in terms of segments was considered important in order to reach the full potential of the growing computer gaming market. This strategy built on the assumption that there is a difference between customer

reach of industrial organizations and internetworked customer reach. In light of this, the interesting issue is whether internetworked customer reach is something qualitatively different, requiring different measures and assessments of which we know little about. As noted earlier, there is a body of literature suggesting that the trade-off between economics of scale and scope is dissolving. However, we need more empirical studies of this emerging phenomenon. Companies like Daydream represent "organizational laboratories" (c.f., Braa and Vidgen 1999) in that they design and try out new organization-technology configurations of which we know little about. The introduction of Clusterball represents a real-life test of the potential dissolvance of the trade-off between scale and scope.

The Clusterball case cannot confirm or disconfirm the trade-off between reach and richness. The final result is yet to come. However, it nevertheless provides some useful insights about the complicated process of pursuing such a strategy in internetworked organizations. With the complexity of this case in mind, we cannot but search for new theories with which to explore whether companies like Daydream are stuck in the middle or represent the beginning of something new.

7 CONCLUSION

This paper explores the nature of online customer reach in the context of online entertainment. In particular, the paper takes a closer look at what strategies seem useful for practicing fruitful B2C Internet commerce. We argue that in order to understand internetworked customer reach and its potential to transcend the trade-off between economics of scale and scope, we need theoretical frameworks sensitive to the processual and intertwined nature of information technology and organizing. Informed by such theories, our understanding of how companies, going for the online customer, need to design their strategies is likely to increase. At this early stage, we suggest that theoretical frameworks such as the actor-network theory approach (Callon 1986, 1991, Walsham 1996) are promising vehicles for making sense of what is happening in leading online businesses such as online entertainment. This suggestion is based on these approaches' relative success in explaing both successes and failures of companies using information technology for core business processes.

The research presented in this paper adds to both the practice of computer gaming and the body of knowledge on competitive strategy. Firstly, computer game developers can learn that implementing new strategies for reaching online customers require a step-by-step process, where untested technologies are integrated with core business processes incrementally rather than radically. Secondly, the paper introduces some doubts about Porter's words published in the new 1998 introduction of *Competitive Strategy*, in which he quite boldly announces that "…the underlying forces of industry competition stay the same" no matter the advent of Internet or other triggers of societal change. In this regard, the paper provides an empirical contribution to the normative literature already existing on the subject matter.

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