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# Electronic Business Models: Five Cases from Five Industries

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# ELECTRONIC BUSINESS MODELS: FIVE CASES FROM FIVE INDUSTRIES

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## Abstract

*The term business model has been used loosely several times for describing a company's strategies, revenue model, processes and overall business logic both by researchers and practitioners. Several authors have defined a business model concept and described the constructs of a business model. Still, only a few studies, if any, concentrate on the evaluation of business models. Hence, this paper attempts to shed more light on this issue by evaluating five electronic business models from five different industries including travelling, media, logistics, telecommunication, and manufacturing.*

*Within electronic business model evaluation, we have emphasised the evolution and maturity of success in terms of critical success factors (CSF) and customer need factors (CNF). Results deriving from the five case studies indicate that traditional business fundamentals, such as running business at profit, abilities of personnel and long customer relationships, are essential in order to gain success in electronic business models. Furthermore, we noticed that success factors, CSFs and CNFs, are different depending of the maturity phase of an electronic business model. Finally, we argue that B2B and B2C businesses have, in fact, very similar kind of features in e-business.*

*Keywords: Business model, Life cycle model, E-business, Success, Critical success factor, Customer need.*

# 1 INTRODUCTION

During the last few years, the electronic business has become one of the main phenomena and topics discussed among the researchers and business practitioners. This discussion does not only apply in the case of the Internet hype, but also in terms of business opportunity, and the era of potential profitability. In this paper, we focus on electronic business models through five case companies representing the following industries: travelling, media, telecom, logistics, and paper. We have based the study on an electronic business model framework that aims at evaluating electronic business models according to the electronic business model life cycle. In evaluation, we have used critical success factors (CSF) and customer need factors (CNF) in order to analyse the maturity of success in these electronic business models. CSFs are those factors, which will ensure competitive success of a firm (Aaker, 1989, 1992; Day, 1984, 1986; Rockart, 1979). CNFs are derived from the customers' based on comprehensive market research. What individual customers really need may deviate from what a company needs to manage in order to ensure competitive success. It is, however, logical that the CSFs and CNFs fit. A mismatch is not uncommon and has extensively been studied in service quality – the Gap-model (Zeithaml and Bitner, 1996). The CSFs and CNFs are here seen as having a fundamental value-creating function for the firm and the customer. Therefore, they are important elements in a business model and they can be measured.

Several researchers (Afuah and Tucci, 2001; Amit and Zott, 2000; Applegate, 2001; Betz, 2002; Doig, 2000; Hedman and Kalling, 2003; Mahadevan, 2000; Peterovic et al., 2001; Rappa, 2000; Timmers, 1998; Trombly, 2000) from different disciplines have defined and discussed the business models. In order to define the term business model, we have chosen the following definition (Amit and Zott, 2001): “A business model depicts the design of transaction content (exchanged goods and information), structure (the links between transaction stakeholders), and governance (the control and management of the flows of goods, information and resources) so as to create value through the exploitation of business opportunities.” One characteristic is common to all of these definitions: they emphasise the value creation through activities or structures described by a business model. Amit and Zott (2001) see that total value is created in transactions regardless of the role of value-creating participant. On the basis of the studies referred herein, we could say that the value creation structures and processes commonly describe the various business actors and their roles. Furthermore, they concentrate on transaction flows between actors, whereas value-capturing processes describe mainly the sources of revenues, and the ways revenue is gathered from these sources. In addition, the researchers have a specific approach to present their contribution to the business model discussion. Firstly, some of the authors use taxonomy (Applegate, 2001; Mahadevan, 2000; Rappa, 2000; Timmers, 1998), component listing (Afuah and Tucci, 2001; Amit and Zott, 2001; Hedman and Kalling, 2003; Linder and Cantrell, 2000) or ontology (Osterwalder and Pigneur, 2002) in explaining the structure of business model concept. Secondly, authors describe business models with change model methodologies (Linder and Cantrell, 2000), quantitative and qualitative measures (Afuah and Tucci, 2001) or life cycle models (Applegate, 2001) in order to gain an understanding over the dynamic nature of a specific business model. Interestingly, Applegate (2001) discusses electronic business model evolution through four steps, but without any specific empirical evidence motivating the steps.

In this context, we have focused on electronic business models. Thus, we regard it relevant to discuss shortly the term e-business, as well. According to Kalakota et al. (1999), e-business refers to business models built around networking technologies. Turban et al. (2002) continue by stating more specifically that e-business is not just buying and selling of goods and services, but also serving customers, collaborating with business partners, and conducting electronic transactions within an organization. In other words, we can conclude that e-business links all relevant parties in the case of any business model in its environment and value chain with electronic networking technology, such as Internet.

Therefore, we argue that an overall understanding of business models is rare due to the relatively low number of academic studies with theoretical and, even more strikingly, empirical view on electronic business models. So far, researchers have not extensively studied the evolution of business model, but they have focused on describing the constructs of a business model instead. This creates an obvious need for the case study of business model evaluation based on the life cycle evolution. In this paper, we seek to answer the following research questions: 1) What are the factors that enable and create the success of a business model; 2) How does an electronic business model evolve, and what are the critical issues that affect success in each phase of evolution?

This paper is outlined as follows. In the next section, we describe an electronic business model framework, based on which we evaluate our electronic business model cases. Thereafter, we outline a field study methodology and data collection used for studying business models. In addition, we present the case descriptions of five companies. In section four, we present the analysis of the case studies using CSFs and CNFs. Finally, we present our results and make the conclusions of the research, and suggest promising areas for further research.

## **2 ELECTRONIC BUSINESS MODEL FRAMEWORK**

Since business models can better be regarded by using appropriate business model frameworks, we carried out the field study using an electronic business model framework. They are like tools or lenses that help to recognise, build and develop the constructs of a viable business model. Moreover, frameworks are suitable for evaluating existing business models.

There are only a few business model frameworks presented in earlier studies (see, for example, Afuah and Tucci, 2001; Applegate, 2001; Osterwalder and Pigneur, 2002), and they do not consider the evolution and maturity of business models. In other words, they concentrate on describing the static constructs of a business model instead of describing the dynamic nature and evolution of a business model. On the other hand, Applegate (2001) presents four steps of business model evolution focusing on portal business models. However, it lacks the theoretical basis to be regarded a business model framework. In order to serve our main research domain, i.e. the evaluation of a complete business model, we have used an electronic business model framework (see Figure 1) created by Horsti and Brännback (2003). The electronic business model framework is based on the wide literature review of IS (information systems), strategic management, and business model literatures. In the paper, authors raised also a need for the empirical testing of framework. This paper is a response to that call.

The business model framework is a tool, by which a business model evaluation is feasible. Our evaluation is based on the analysis of business model life cycle, in which CSFs and CNFs, are used to capture the value creating functions in each phase. Also Larsen and Myers (1999) see the factor research approach as one of the major streams to research success within IS. However, most of the success research has concentrated on the success of a specific IS implementation (see, for example, DeLone and McLean, 1992). We see that life cycle model is an appropriate way to analyse the maturity of business models, because they have an individual evolution path over a particular timeframe. In the framework, the business model life cycle consists of four phases: introduction, growth, maturity, and decline. In this study, we have focused on the three earliest phases excluding the decline phase, since none of our case companies has reached the decline phase in its electronic business – as a matter of fact none had reached maturity either. Hence, we cannot even be fully convinced that (in e-business) the maturity phase is followed by decline – it may, as well, lead to a new growth phase. In order to categorise the factors roughly, we used the division of factors into the prerequisites of success and the results of success. Firstly, in the introduction phase the prerequisites for success are stressed. Prerequisites for success are parameters that are crucial for the success of business models. Prerequisites compare with a long period of hard work before results can be reached. Thus, on one hand, without these prerequisites, success would be impossible, on the other, prerequisites are also needed to put forward and enable the continuity of gained success. Secondly, the results of success appear in growth and maturity phases. Without the results of success a business is

hopeless and miserable. Success can be measured by several factors and ways in electronic business models, and there is not one right solution to perform that.

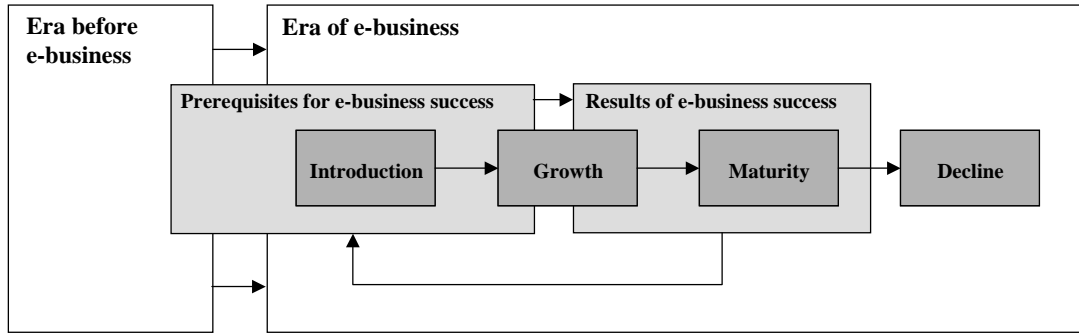


Figure 1. Electronic business model framework (adapted from Horsti and Brännback, 2003)

### 3 FIELD STUDY

#### 3.1 Field study design

We chose the case study method as the basis of our field study, in which we emphasise evaluating electronic business models and their evolution. According to Eisenhardt (1989), the case study is a research method that focuses on the dynamics within single case settings. Yin (1984) adds to single case settings a possibility of replication logic, i.e. multiple case studies. Replication logic is the logic of treating series of cases as a series of experiments in which each case serves to confirm or disconfirm the propositions. In order to take care of the replication logic, we chose several case companies. In the field study, we contacted five leading Finnish companies who have shown success in their electronic business, even though being in different maturity phases of applying electronic business in their operations.

Yin (1984) suggests also the usage of theoretical framework in the case studies in order to understand conditions of a particular phenomenon in the research context. Hence, our field study is based on the electronic business model framework, presented in the previous section. In the field study, we put great emphasis on covering and gathering the critical success factors and customer need factors in order to analyse the electronic business model evolution in selected case companies. In addition, we encouraged the interviewees to mention the most critical CSFs in order to see, if they have a clear connection to CSFs, and if they nourish each other in developing business models. Finally, all CSFs and CNFs were analysed by placing them onto the traditional lifecycle model. We divided CSFs and CNFs into the prerequisites for results and the results of success that served a) the division of large number of mentioned factors into groups and b) the enhancement/improvement of the business model framework (Horsti & Brännback, 2003) to better explain and analyse the evolution of business models as well as their different lifecycle phases.

#### 3.2 Data collection

Our primary data collection method was interviews that are suggested by Yin (1984). Before the interviews, the research group drew up a specified, tailor-made interview questionnaire. The summary of the interview questionnaire used is enclosed in Appendix 1. These 17 interviews were in-depth

ones, prevailingly as person-to-person sessions that took 1.5-2 hours. Interviews were conducted between April and June 2003. On the most essential interviews, two researchers were present. This procedure diminished the possibility of misunderstandings, i.e. contributed to the reliability and validity of the field study. At the same time, researchers were able to increase the richness and accurateness of the interviews. Interviews were documented as notes during each interview.

Furthermore, data collection was enriched by all documentation that case companies wanted to share with researchers. This data included essential business plans, strategy statements and figures that clarified the business of case company.

### 3.3 The selection of case companies

Firstly, we have seen three broad categories of business practice: pure Internet-based companies, i.e. dot coms or pure onlines, clicks-and-mortar, and bricks-and-mortar (see, for example, Enders and Jelassi, 2000; Porter, 2001; Subramani and Walden, 1999). Pure onliners emerged during the 1990's en masse, the most famous being Amazon.com and eBay. Clicks-and-mortars are companies, which have supplemented their existing business using the Internet in their operations. Bricks-and-mortars, in turn, are the traditional companies continuing to serve traditional markets. Consequently, these different categories obviously apply different business models. Secondly, every successful business model needs chargeable customers and viable customer relationships at least in the long run. Traditionally customers are divided into two groups (see, for example, Subramani and Walden, 1999): B2C and B2B.

We chose five leading Finnish-based companies who operate successfully in electronic business. They all are electronic business pioneers with proven merits, which was the main qualification criterion. The selected companies are either clicks-and-mortar or pure online players. In this study, a company performing over 50% of its turnover is defined to be a pure online player, and companies gaining 10-49% of its turnover via e-business are classified as clicks-and-mortar players. Traditional bricks-and-mortar companies were excluded, because their electronic business is limited to a modest web presence, such as own informative company homepage without any possibility to purchase goods or services online.

Case company	Line of business	Interview dates	Category	Number of interviewees
Ebookers Finland	Travelling	May 2003	Pure online	2
KauppaLehti Online	Media	April-May 2003	Pure online	4
Finland Post	Logistics	May 2003	Clicks-and-mortar	2
TeliaSonera Finland	Telecommunication	May-June 2003	Clicks-and-mortar	5
UPM-Kymmene	Paper	May-June 2003	Clicks-and-mortar	4

Table 1. Interview specifications.

### 3.4 Case descriptions

#### 3.4.1 Ebookers Finland

Ebookers Finland is classified as a pure online player in this study, since about 60% of its turnover is generated from electronic business. Ebookers has started as a bricks-and-mortar travel agency in two decades ago, and it is operating in 14 European countries. Its headquarters is situated in London, and R&D function in India. Ebookers Finland has been in electronic business nearly a decade, and had a turnover of 17 m€ in 2002. During the last three years ebookers has enjoyed annual growth rates of 45-50% in its electronic business. Ebookers is an almost purely B2C-oriented company, since about 90% of its customers are consumers.

### 3.4.2 *Kauppalehti Online*

Kauppalehti Online is a pure online company in this study, even though its business is based on both electronic business and printed media. Kauppalehti Online's electronic business has reached profitability in three years, after being running seven years. Its turnover totalled to 2,5 m€ in year 2002, and about 50% of the turnover comes from electronic business channels. Kauppalehti Online's customers are primarily B2B customers, the share of B2C-based income accounting for only 10%.

### 3.4.3 *Finland Post*

Finland Post is a logistics company of clicks-and-mortar nature. Approximately 12% of its turnover is generated from electronic business, but online business is remarkably more modest, being 2%. Total electronic business-based turnover is 128 m€ Finland Post has started electronic business in the early 1990s with EDI-based services, which still are the backbone of electronic business. B2B customers generate about 80% of the turnover.

### 3.4.4 *TeliaSonera Finland*

TeliaSonera Finland is the Finnish part of the largest Scandinavian and Baltic region telecommunication operator, TeliaSonera. TeliaSonera has a market-leading position and customer base of approximately 2.4 million mobile subscribers in Finland. TeliaSonera Finland is characterised as a clicks-and-mortar company because most of their revenues are generated from mobile operator business and not directly from electronic business operations. TeliaSonera Finland is seen strong both in B2B and B2C sides.

### 3.4.5 *UPM-Kymmene*

UPM-Kymmene is the second largest paper-manufacturing group of the world. UPM-Kymmene has since 1998 a special e-business centre, which works on digitalising manual business processes. Electronic business is directed to generate savings in internal and external business processes, thus, an electronic business-based turnover is difficult to state. UPM-Kymmene's electronic business has its roots in B2B EDI-traffic. UPM-Kymmene's entire customer base is B2B-type.

## 4 ANALYSIS

In this chapter we analyse the rich material gathered from the interviews. Firstly, we present views concerning the role of business model and electronic business in the case companies. Secondly, we discuss the analysis and results based on CSFs and CNFs and their role in the evolution of electronic business model framework. All interview citations are anonymous, since case companies required that.

### 4.1 Business models and electronic business in the case companies

*"Business model is a compact way to tell bad news in a good, optimistic way. Especially, when no one has a clear picture of what the word business model actually means!"* –Citation from an interview

Interviewees were encouraged to define the meaning of business model. Eleven interviewees saw the term business model as an earning logic, i.e. a statement or plan of how to make money profitably. The remaining interviewees saw the term business model *"as a tool to converge the strategy into reasonable actions"* or *"...an operational model or process that tells, how the business should be done by various actors and roles"*. In addition, some interviewees emphasised: *"...business model has to be concrete and simple so that it can be drawn into one page of paper."*

All case companies are in different stages of electronic business development, but they all have a long experience in their own line of business. Also the purest online company of the case companies, ebookers, emphasised that they have been in the bricks-and-mortar business for two decades, so they know what and which customers are willing to operate online. These companies have experienced both successes and drawbacks in their electronic business. The IT-hype has demystified the role of electronic business – most of the interviewees see electronic business as a great potential, but at the same time they regard it “...a customer channel among others”.

According to the interviewees, the main mousetrap of electronic business has been the following illusion: “*e-business is something that, as such, would accelerate the development of business*”. It led to exaggerated investments into IT-infrastructure, personnel, and business models, which were equal to a paper, showing skyscraping sales and results. One of the interviewees described this blindness: “*We bought a huge trailer to move the goods, although everything would have fit into a lousy van.*”

In addition, building up or changing a brand towards electronic business has been a challenging task. Case companies admit to have promised too much, too quickly to the customers. Furthermore, in some companies the role of electronic business is still being argued. It seems that electronic business has not found its own ecological box in a company’s ecosystem.

## 4.2 Critical success factor and customer need factor analysis

According to Aaker’s study (1989), there are on average 4-6 CSFs of a firm. It is not uncommon that when asked, managers often provide many more. Needless to say this is a result of the inability to determine which factors are important and which are critical. In interviews we asked interviewees to name the most important CSFs and CNFs related to their business model. This resulted in 41 CSFs and 42 CNFs. Hence, we have apparently success factors which are apparently important but not necessarily critical, on the other hand we do not regard an average of 8 as problematic at this stage. We divided these factors into the prerequisites and the results of success to evaluate and analyse their viability in different development phases of e-business lifecycle.

### 4.2.1 Critical success factors (CSF)

All our case companies have experienced both drawbacks and successes in their e-business history. Thus, the introduction phase of e-business has prolonged, and quick take-offs into skies have remained as opportunistic strategy statements. “*This has been more or less from flop-to-top, not a straight-forward success story*”, as one of the interviewees stated. The most typical CSFs of e-business introductory phase are almost identical with those of the normal business logic, long before e-business era. They include technological innovation and experienced, skilled personnel that are essential factors for starting e-business based on its planned, appropriate business model.

“*We built up e-business and fancy, gimmicky products around it. Then somebody remembered that we should, maybe, ask the customers if they need, or even more, want them.*” In the growth phase, case companies start getting conscious about customer-related CSFs, especially, strong customer view and its continuum: strong brand. On the other hand, and perhaps surprisingly, CSFs behind customer orientation are: reliability and operational trustworthiness of IT-infrastructure equal to the quality of company’s offering and brand image, as well. In addition, managerial capabilities and mastering of multi-channel environment are seen essential in the growth phase. True customer-centricity is, thus, still a mere objective in e-business. Main reason for this is that electronic channels are regarded supportive channels beside the traditional ones, such as telephoning.

When moving towards the maturity phase of e-business, the case companies had remarkable difficulties to define explicitly any prevailing CSFs. CSFs in the maturity phase touch areas of cost-efficiency, timing, customer independency (i.e. self-service), and wide product portfolios. “*I am not sure if we want to push our best-selling products towards declining or even maturity. E-business requires is about launching new, competitive products.*” In the maturity phase, nothing has changed,



business has to be financially acceptable to make sense in terms of a business model. In this phase, especially profitability and turnover are emphasised after the period of innovation and growth. Moreover, customer loyalty is seen important due to the maturation of a business model. Hence, this indicates a need to make result after the initial, loss-bearing years of the late 1990s and the beginning of this decade. *"Two, three years ago we were about making [e-business] history, now we are struggling with making business..."*

Furthermore, the companies stress that many of their e-business models include so called hybrid products or hybrid services that have both electronic and traditional features and components. A good example is ebookers, which generates leads via e-business channels, but in many cases closes the deal on the phone. Another comment strengthens this observation: *"...our e-business offering comprises 98,5% hybrid products and the rest is genuine e-business. Thus, we have added some electronic features, and through this face-lifting we landed in e-business."*

Surprisingly, the factor "market value of the company" was mentioned only once in interviews, whereas it was the mantra of the IT-hype only a few years ago. All in all, the overall economic situation seems to affect the evolution into a large extent parallel to other factors deriving from e-business itself. As one of the interviewees put it:

*"Managers want to see the money right away, even though they have forgotten that we started with the electronic business first three years ago and having the electronic business organisation has been up and running half a year. They seem to wait for a miracle with crossed fingers and by admitting minimum investments."*

To conclude the CSF analysis we can state that innovation, and especially, technological skills with functioning IT-infra are emphasised in the introduction phase of life cycle. The growth phase brings forward customer-related factors, like customer view and strong image. Another focus area comprises factors that accentuate accuracy of service and reliable IT-infra. First in the maturity phase, profitability and turnover along with increasing of customer loyalty play a crucial role as CSFs. Case companies feel comfortable with naming CSFs in introduction and growth phases, whereas the maturity phase is mostly a unconquered terrain for them.

#### 4.2.2 Customer need factors (CNF)

Customer needs are factors that drive or, at least, should drive the development and evolution of e-business models. Even though, interviewees put great emphasis on very traditional CNFs in the introduction phase. They comprise: the functionality of technologies, the ease use of electronic products, and an ability to identify total needs of all customers in general. The following comment summarises the overall thinking of case companies: *"Through e-business we are able to lock-in customer groups that are new ones or those who want to get mobile. Otherwise e-business is like our bricks-and-mortar business. It is a channel, not a business at itself."*

Most of the case companies argue being in the growth phase of the lifecycle. In the growth phase, case companies start slowly moving towards fulfilling customer needs. CNFs like modifying and improving offering, according to customer feedback, perceptions and desires, start playing a vital role. Since a company's own resources are limited, also partnering is seen as a strength and enabler in the growth phase. In addition, interviewees accentuated the importance of increasing customers' possibilities to enjoy a wider range of services almost where ever, whenever and through any desired customer channel in the growth phase of e-business models. *"Customers seem to think that order cycles will automatically shorten and ease of ordering will increase in e-business channels. The worst for us is that the customers think that e-business also make all this happen at lower prices."* Moreover, the case companies put great emphasis on CNFs knowing better the entire customer need assortment and diversifying customer offers accordingly.

When discussing CNFs of the maturity phase, the companies end up with problems. Case companies argue that they truly understand customers' needs *"You have to be on your customers' skin, learn to*

*feel and predict, what they might want you to offer.”* Case companies chose CNFs like customer profiling, targeted offering and ability to identify a customer’s individual needs in advance for the maturity phase. After having asked, if the companies have answered to those customer needs, the interviewees started hesitating and confessed themselves as follows: *“We are driven by result, and do just the necessary moves towards genuine customer-centricity, when competition sets pressure on us. It is wonderfully easy to say that we are customer-oriented, but it is painful to invest in it.”*

Concerning CNF analysis, we can draw a conclusion that in the introductory phase products and services have to be easy and simple to use. Furthermore, a company has to recognise the total needs of its customers in order to catch a critical mass of customers. During the growth phase, it is essential to start answering to customer needs, e.g. by building a partner network to serve the clientele. Finally, in the maturation phase, a company has to move from general customer needs into more specific and individual ones to create loyalty among customers. Our study shows that CNFs are easy to state, but seem difficult and far more demanding to fulfil and to use as strategic guidelines than what the case companies have imagined.

Anyhow, CNFs and CSFs seem to match each other, in the stages of business model lifecycle according to the e-business model framework. Thus, we found the e-business model framework a useful and concrete tool to evaluate e-business models.

## **5 DISCUSSION AND CONCLUSION**

Although the field study gave us a large amount of invaluable data, we now shortly condense the findings of the study based on the main objectives.

### **5.1 Electronic business models are based on traditional business fundamentals**

E-business seems to be a species that has not found yet its natural role in the overall business ecosystem. All case companies are still in introduction or growth phase of their electronic businesses. They have, in fact, undergone a metamorphosis from a brick-and-mortar company towards a clicks-and-mortar or pure online companies. This change has included both great successes as well as drawbacks. At the moment, e-business plays mainly a role in supporting the basic business, not driving the business. Very often companies seem to think that e-business products are like the traditional products, offered in traditional channels, and forget the customers assumptions of e-business being fast, easy to use and cheaper than other channels.

All case companies clearly stated that electronic business has to be based on the prerequisites for success that have already applied in the bricks-and-mortar world. The case companies regard electronic business and its channels only a supporting part of customer service and entire assortment of customer channels. Consequently, our first main finding is: e-business is based very strongly on success in traditional business models in era before e-business. Due to this fact, e-business plays a role of an additional customer channel among the traditional ones, and has problems to mature into a genuine business model of its own.

### **5.2 Factors shaping e-business models do change and vary**

Case companies seem to have succeeded in setting the basis for electronic business. In other words, electronic customer channels function reliably, companies possess services that have a solid customer base, and the electronic business is going at a profit.

In fact, the companies have only a few real e-business products, but they are hybrids, in other words, traditional products have electronic components or features. Companies seem to avoid pushing their genuine e-business products or services into the maturity nor decline phases.

When studying the nature of e-business, one has to separate the products and business from each other. Case companies are setting new electronic services and products onto the appropriate position on the e-business lifecycle. Moreover, companies are eager to launch frequently new products, and they do not even have intention to grow products into maturity phase. This phenomenon is parallel to the ideas of Ansoff (1987); high technologies shorten the life of products and development. On the other hand, this strengthens the first main finding of this study: companies do not want to be profiled as “e-business companies”, but e-business is and remains in the near future a supporting function or customer channel. Based on this discussion, we conclude our second main finding: Factors behind e-business model evolution vary widely from one lifecycle phase to another.

### 5.3 B2B and B2C-based e-businesses do not deviate remarkably from each other

In general, companies argue that they make great effort to diversify and tailor-made their offering according to the two dimensions: B2B and B2C. Anyhow, our results indicate something totally else in e-business: differences between the most important CSFs and CNFs in B2B and B2C-businesses seem to be remarkably smaller than what we expected. Why this? We draw attention to the finding that e-business plays a supportive (channel) role compared to the traditional customer channels and business. Consequently, the supply chain or production process of a company is diversified according to the customer type, but the e-business (channel) is similar both for companies and customers. This idea is seen in the following interviewee citation: “*We say that we have to separate B2B and B2C businesses and understand their uniqueness, but at the end of the day – our offering is the same.*” Another dear issue, the tailoring of services turns out to be a relative truth: “*Customers might have the illusion that they get tailor-made services, but we just combine basic modules and add something nice on it.*” The third main finding of our study is outlined as: Nature of B2C and B2B-based electronic businesses deviate from each other less than expected.

### 5.4 Conclusion

In this paper, we have discussed an interesting, but not entirely adopted topic: electronic business models. Empirical studies on e-business models, their success and evolution are rare. Thus, this paper is one the first ignitions to start academic and practitioners’ discussion on the theme.

Our main contribution was to introduce a well-functioning e-business model framework based on identifying CSFs and CNFs that drive the evolution of e-business models. We managed to analyse those factors and identify the connection between them in the lifecycle of e-business models. Anyhow, this study is based on a limited number of interviews, not a comprehensive, quantitative study design. Actually, our purpose is to continue the research with a large quantitative survey that may give more specific and interesting results.

Furthermore, this paper offers a snapshot of the first years of e-business era, but we have intent to shed light on the future development of e-business. Despite of some well-known pure online successes, such as Yahoo and Ebay, e-business as such is seeking for its role in the clicks-and-mortar companies. But what is the future?

One interviewee said ironically: “*Until recently, companies turned into e-business by nailing a sign “.com” after their company logo.*”

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## Appendix 1 – Questionnaire summary

- Demographic questions
  - General questions about interviewee, case company, and electronic business in case company
- Success questions
  - Definition of success according to interviewee, and questions about the CSFs both in case company and industry
- Financial questions
  - Questions about the revenue generation and profitability of electronic business, and the financial analysis practice of case company
- Technology-related questions
  - Questions about technologies in a customer interface, the criticality evaluation of technology, and company's general technology policy
- Competition questions
  - Questions about the competitive situation and features of electronic business, the list of competitors, and the list of five forces in the current market
- Cooperation questions
  - The list of companies and industries with which the case company cooperates, and a question about outsourcing policy
- Strategy questions
  - Questions about competitive strategy and how company attracts their customers
- Objectives and goals questions
  - Questions about company's objectives in electronic business, technological development, and products and services
- Lessons learned questions
  - The term "business model" definition, hints for other practicing persons in the field of electronic business, successes and perils that company or interviewee has faced, and the most critical challenges in electronic business