



Teemu Santonen

FOUR ESSAYS STUDYING THE EFFECTS OF  
CUSTOMIZATION AND MARKET  
ENVIRONMENT ON THE BUSINESS SUCCESS OF  
ONLINE NEWSPAPERS IN FINLAND

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To Heidi and Saga

*Credo quod habes, et habes*

- Erasmus Roterodamus

## ABSTRACT

The literature on online newspapers includes fairly few empirical investigations of the factors affecting the business success of online newspapers, even though many business models and revenue logics have been presented. Moreover, practically the whole online newspaper literature has paid relatively little attention to the suggested effect of the market environment on business success.

In this dissertation we were especially interested in analyzing whether, as suggested, the better business success is achieved by applying the customization strategy rather than by producing pure standardized services. Moreover, we also wanted to test how the different factors besides customization, like the market environment, revenue logic, the importance of business objectives and experience in the online publishing, were directly or indirectly related to the business success of online newspapers. Since the majority of online publishing companies were having troubles in generating revenue, more comprehensive success measures than the typical annual revenue were needed. In this thesis, we considered comprehensive success in terms of capability to generate revenue, yet also in terms of the attainment of the strategic business objectives.

Based on the analyses of survey data from 42 online newspapers and case data from three online newspapers in the Finnish online newspaper market, the following conclusions were made. First of all our findings indicated that customization was not currently, or even in the short-term future plans, the main strategic option for online newspapers to achieve business success – even though especially process oriented customization seemed to provide some help in generating revenue. In general, mainly experienced online newspapers with a national-level geographical focus were interested in applying customization. Based on our case results, the following reasons for the low level of customization are suggested: content not suitable for customization, would not be profitable, current (low) level of customization is enough for end-users, users are not interested, online newspaper is highly differentiated even without customization. In addition, on the contrary to previous suggestions in the literature, we did not find a relationship between level of customization and level of perceived demand turbulence. Moreover, it appeared that experience in online publishing, the geographical focus of parent print newspaper, and the level of perceived demand turbulence and competition were individually and in combination related to the business success of online newspapers. Only national players seemed to improve their average success scores along with experience; the strongly geographically restricted online newspapers typically had declining trends in their success, especially in terms of business success.

**Key words:** Online newspaper, customization, market environment, business success

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Helsinki, September 2004  
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Appendix F: Open-ended questions for case interviews (in English)



## SECOND SECTION: THE ORIGINAL ESSAYS

**Essay 1:** Sääksjärvi Markku and Santonen Teemu (2002), Evolution and Success of Online Newspapers: an empirical investigation of goals, business models and success, in: "Towards the Knowledge Society, eCommerce, eBusiness and eGovernment", Edited by J.L. Monteiro, P.M.C. Swatman and L.V. Tavares (eds.), Proceedings of the Second IFIP Conference on E-Commerce, E-Business, E-Government (I3E 2002), October 7-9, 2002, Lisbon Portugal, pp. 649-665, ISBN 1-4020-7239-2

**Essay 2:** Sääksjärvi M., and Santonen T., (2003), Customization as A Business Model for Online Newspapers, in: "On-line proceeding of the 16th Bled eCommerce Conference, *eTransformation*, Research Volume, eMarketing 1: Channel Choice, Customization and Disintermediation", Edited by Rolf T. Wigand, Yao-Hua Tan, Joze Gricar, Andreja Pucihar, Tjasa Lunar, June 9-11, 2003, Bled, Slovenia, [www.bledconference.org](http://www.bledconference.org)

**Essay 3:** Santonen, T., (2003), The effect of mass customization on demand turbulence, in: "Proceedings of the IADIS International Conference, E-society 2003, Volume I", Edited by Antonio Palma dos Reis, Pedro Isaias, ISBN: 972-98947-0-1, Lisbon, Portugal, 3 - 6 June 2003, pp.356-364. Extended version published in IADIS International Journal on WWW/Internet, December 2003, Volume I, number 2, pp. 64-75, ISSN 1645-7641.

**Essay 4:** Santonen, T., (2004), Evaluating the effect of the market environment on the business success of online newspapers, Helsinki School of Economics, Working papers, W-375, ISSN 1795-1828, ISBN 951-791-873-9 (Electronic working paper), August

## **1 INTRODUCTION**

The first generation of online newspapers was born in the mid 1970s when videotex systems were developed in Europe for consumer applications (Cats-Baril et. al. 1994). Yet it was the commercialization and rapid growth of the World Wide Web (later Web) starting in the early 1990s that created the most promising platform for electronic publishing and simultaneously posed the greatest threat to traditional print publishing companies (e.g. Palmer and Eriksen 2000). Worldwide, there are currently thousands of online newspapers (e.g. [www.newspaperlinks.com](http://www.newspaperlinks.com)).

In the very beginning of the Web era it seemed possible that the print newspaper industry might come to an end because of the new digital revolution. Beyond dispute, similar speculations have arisen when the radio and television were introduced earlier in the 20<sup>th</sup> century. Even today, it is not yet fully clear what kind of a role newspapers' print and online versions will have in the future. However, publishers currently believe that there is only a slight chance that print newspapers will be totally replaced by the online version (Peng et. al. 1999).

The publishers are not alone in their beliefs. A study by Chyi and Lasorsa (1999) indicated that given the same price and the same content, the newspaper print format was clearly preferred among Web users. According to Mueller and Kameron (1995) the online version is more difficult to read, unappealing to browse through leisurely, and uncomfortable to travel through. In the future, as the technology evolves, these typically-named disadvantages may be defeated. However, these prior findings indicate that currently, online newspapers cannot compete merely by providing the same type of content as the print product, but they must also differentiate themselves from print newspapers by developing unique content or services

that are valued among Web users. However, the role of online content that is similar to the print content should not be neglected either. Fidler (1997) has suggested that new forms of media must be related to earlier forms and thereby create the bridge of familiarity between print and online versions of a newspaper. This kind of relation could also help online versions to inherit the positive reputation and brand directly from the traditional print paper (Neuberger, 1998) and thereby overcome their purely digital rivals. In a way the digital revolution in the publishing industry is still waiting for the major relative advantage, which could significantly speed up the rate of innovation adoption (Rogers, 1995). The phenomenon, which in the beginning appeared to be a revolution, has now actually turned into a slow incremental evolution, and the over-optimistic economic expectations grounded in the digital revolution and almost non-existent, muddled or monotonous business models, have been more or less washed away.

### **1.1 Structure of the study**

This dissertation is divided into two main parts. In the beginning of the first summary part, the theoretical background of the study is presented. We will continue by introducing the overall research framework and the detailed research frameworks for the individual essays in chapter 3. In chapter 4, we describe the research strategy and present in detail how the data for this thesis were collected. Chapter 5 reviews and summarizes the results from the individual essays. In chapter 6, we will more detail discuss the survey observations with the help of additional case data. Finally, in the chapter 7 the conclusions are drawn. In the second part of this dissertation, the original four research essays are presented.

## 2 THEORETICAL BACKGROUND

### 2.1 The definition of an online newspaper

The term *online newspaper*, which is used to describe the print newspaper's electronic publishing services distributed through the Internet or other electronic networks like GSM or WAP, has no universal definition in the literature. There are actually a few rival terms describing basically the same services. These terms include “online edition”, “digital newspaper”, “electronic newspaper” and even “E-paper”.

Likewise, the role of the online newspaper vis-a-vis the printed version lacks a shared definition. There is great variation in the complexity of content selection, the amount of online-specific content, and the technical and communication features of the Internet utilized. Some online newspapers are merely repositories of recycled print articles, while others are hybrids of printed newspapers with a wide selection of original content as well as additional services only available through the online service (Thalhimer 1994, Massey and Levy 1999, Lin and Jeffres 2001).

There have been several attempts to analyze Web the contents and features of Web sites. McMillan (2000) found that no standard list of content categories was used in the nineteen studies that applied content analysis techniques to the World Wide Web. Instead, the content categories seemed to depend on the specific goals of the given study. Lin and Jeffres (2001) have compared distinctions and similarities across websites of newspapers, radio stations and television stations. They generated the following content categories, which in our opinion describe relatively well the kind of general services online newspapers might include:

- 1) **Content elements:** Advertising, news, self-promotion and community service.

**2) Communication elements.** E-mail and feedback opportunities, letters to the editor, chat rooms, bulletin or message boards.

**3) Technical elements.** Hyperlinks, search engines, photos and other technological features.

Since in this dissertation the main focus is not on analyzing online newspaper content structure, we are satisfied with this content classification as a description of online newspapers.

## **2.2 The structure of online newspaper market is challenging**

Online newspapers, like the majority of advertiser-supported media, operate in a dual product market (Picard, 1989). The first market environment, the *information market*, is a market in which online newspapers try to attract as many Web users as possible with interesting content and additional services. Depending on the newspaper's subscription strategy, access to its online edition could be totally or partially free of charge. Basically, the current majority of newspapers' Web services are free of charge, since users are not willing to pay for the content if it is available for free somewhere else, even when users consider the content valuable for themselves (McMillan, 1998). For this reason, in the countries that have strong national broadcasting companies (e.g. BBC or Yleisradio in Finland), it may be nearly impossible to charge customers for the common news feeds. Therefore, the subscription-based strategy usually includes some kind of free section with limited content and services, while subscribers gain access to an enhanced online version with full-length articles and unique content and services (Palmer and Eriksen, 1999b). It has been suggested that a viable online newspaper gives out some free samples (Meyer, 1995), since online readers may be more likely to pay for content after a free trial (Donatello, 2004).

The second market environment, the *advertising market*, is based on the users collected in the information market. In the advertising market the Web users are the true commodity. The advertising market is generally divided into retail and classified advertising, while another classification could be made between

cross-advertising (advertising other products or services of the newspaper's publisher) and paid advertisements from other companies (Palmer and Eriksen, 1999).

Even though the Internet has significantly weakened the geographical boundaries in numerous market environments, online newspapers are still more or less restricted by geographical limits. These boundaries are unlikely to vanish until the balance changes between content adopted directly from the parent print newspaper and unique content available only on Internet. Chyi and Sylvie (1998, 2001) have suggested that the geographical market for online newspapers can be classified as local, regional, national or global. Based on these geographical dimensions and the dual product market classification introduced above, Chyi and Sylvie (1998) also defined a fairly useful model for analyzing the competitive conditions of the online newspaper market. Across these two main dimensions they identified the following four submarkets: 1) the local information market, 2) the long-distance information market, 3) the local advertising market and finally 4) the long-distance advertising market. In a wider perspective, the geographical market of the parent print newspapers can be regarded as only one of the possible ways to focus the content of the online newspaper. We could as easily expand the local vs. global dimension into a dimension of focused vs. widespread service selection.

On the other hand, Martin (1998) has also introduced a rather interesting model to describe and classify online content markets. He presented a model called the *Digital Estate U* model, and argued that the two top ends of the U-shaped curve in the model are the highest value points for publishers, whereas companies remaining in the center of the U-curve are operating in the danger zone. According to Martin the left end of the U-curve involves high traffic with a relatively low CPM (cost per thousand people reached) for advertiser, whereas the right end includes relatively low traffic and high CPM. Martin estimated that the mass advertising will eventually move into left side on the U where the majority of consumers are. In addition, he speculated that direct

marketing would go to the right side of the U, since those companies can offer highly segmented consumers.

Basically the U model is also rather closely connected to the generally-assumed “positive feedback” theory, which should dominate in the digital markets driven by the economics of networks (Shapiro and Varian, 1998). According to Shapiro and Varian, the positive feedback makes the strong get stronger whereas the weak get weaker and eventually it will lead to extreme outcomes. Probably the most classic example of the positive feedback theory is the operating systems battle between Apple and Microsoft, the outcome of which we all know. In practice this theory suggests that there will only be a few winners, while all the others will loose.

If Martin’s assumptions behind the U model and Shapiro and Varian’s positive feedback theory are relevant in the online newspaper market, then the most successful online newspapers should appear either from among the newspapers that are able to provide the largest portal and media services or other mass services like free web-mail or search engines, at least on the national level. However, competing in these markets probably requires a massive content and services selection that meets the preferences of the Web users. It will probably include an advanced and multidimensional business model with many elements that are not necessarily obvious for online newspapers (e.g. providing its own Internet access). It is equally possible that the real winners in the online newspaper market are found on the right side of the U model, which favours focused content and services. In the case of online newspapers, the most successful companies might then be found among those having only one dominant content selection (e.g. business news, entertainment or highly localized news). In order to deepen and enhance the customer relationship, these companies are probably required to offer specialized extra services in addition to the dominant content selection. However, because of the assumed positive feedback theory, the focused services need to be able to compete and clearly overtake – in the eyes of Web

users – the similar services offered by the companies operating on the left side of the U.

### **2.3 The unique features of digital information products makes profitable online business difficult**

For all companies, it is important to discover efficient means to secure continuous competitive advantage. Porter (1985) defined two primary types of competitive strategy that can provide a source of competitive advantage: product differentiation and the low cost strategy. The low cost strategy, which enables a price leader position, easily leads into price wars. Eventually only one company can be the price leader, thus all the other companies end up with some other strategies. However, for digital products like online newspapers, the low cost strategy is extremely dangerous.

An information product involves high fixed cost, but low marginal cost, which basically means that the information is costly to produce but cheap to reproduce or copy (Shapiro and Varian, 1998). In addition, according to Shapiro and Varian, most information products are experience products, meaning consumers must experience them to value them, and unfortunately many of them are purchased only once. For this reason the previously mentioned positive brand reputation adopted from the parent print newspaper is important or even necessary, and might partially explain why pure digital brands have failed in most cases. Moreover, we should take into account the indestructibility, transmutability, and reproducibility of digital products (Choi et. al., 1997), which enable the distribution of online newspapers through the Internet at almost zero cost. In summary, it seems obvious that online newspapers would adopt the product differentiation strategy, which has been suggested as the source of competitive advantage for most high-technology products (McGrath, 1995).



## **2.4 Online newspaper business models**

The term *business model* also lacks a single dominant definition in the management literature. Timmers (1998) and Rappa (2004) among many other authors, have presented their own definitions of a business model. According to Afuah and Tucci (2000), a business model is the method by which a firm builds and uses its resources to offer its customers better value than its competitors and to make money doing so, now and in the long term. A business model combines potential environmental factors and a firm's capability, and it combines the sustainable recipe to offer competitive products or services with a relevant revenue logic. For digital products like online newspapers, the right business recipe is critical and difficult to achieve, as customers are often spoiled with free offerings resulting from the structure of the online newspaper market and the unique features of digital information products.

Even though print newspapers have tried various ways to develop viable business models and revenue streams for their online services, these efforts have not yet been very successful (Harper 1997, Chyi and Lasorsa 1999, Chyi and Sylvie 2001). The suggested revenue sources for online newspapers include 1) advertising, 2) subscription fees, 3) archival access charges, 4) related Internet services including Internet access and Web design services, 5) customized news, 6) multimedia services and 7) alliance with partners (Gallaughier et al. 2001, Peng et al. 1999, Shapiro and Varian 1998, Ilhström and Palmer 2002, Palmer and Eriksen 1999a, b, Picard 2000, Steinbock 2000, Kalakota and Whinston 1996). Probably the most comprehensive list of revenue sources and business models for online newspaper is presented by Ilhström and Palmer (2002), which is suggested as additional reading for those who are interested in more detailed information.

In most cases, online newspapers lack substantial revenue flows and profitability. Thus, the existence of online newspapers has been justified by other reasons, such as reaching more readers for the print paper, promoting

the print product itself, staying ahead of technological developments, and reducing the costs of printing and distribution (e.g. Peng et al. 1999).

## **2.5 Objectives of this dissertation**

The literature on online newspapers includes fairly few empirical investigations of the factors affecting the business success of online newspapers, even though many revenue logics have been presented. The pioneering study by Gallauger et al. (2001), covering a plethora of revenue stream alternatives, has been able to explain only 15 percent of the variance in the performance of a hundred online magazines. Ilhström and Palmer (2002), on the other hand, have compared the users' and online newspapers managements' perceptions of different revenue approaches.

Moreover, practically the whole online newspaper literature has paid relatively little attention to the suggested effect of the market environment on business success (Afuah and Tucci, 2000). Prior studies by Chyi and Sylvie have only investigated some aspects of the market environment's effect, such as the structure of the online newspaper market (1998) and the role of geography (2001), but they have not empirically studied the relationship between business success and the market environment.

Especially now, after the Internet bubble has been burst and unrealistic market values and business expectations have diminished, it seems to be essential to expand the accumulated knowledge base by empirically testing what makes online newspaper successful when market environment factors are included into analysis. At the end of the day, from the shareholder's point of view, online newspapers are in business to make money.

In this dissertation we are especially interested in analyzing whether, as suggested, better business success is achieved by applying the customization strategy rather than producing pure standardized services (Pine 1993, Kalakota and Whinston 1996, Ilhström and Palmer, 2002). In addition to the fact that customized products take into account individual user needs and

thereby create superior value to users compared with standardized products, the applied customization strategy increases the possibility of lock-in. When the costs of switching from one brand to another are substantial, users face lock-in (Shapiro and Varian 1998). Amit and Zott (2001) have identified lock-in as a one primary source of value creation in e-business. Even though lock-in can be obtained in many different ways – e.g., loyalty programs (special bonuses) or the application of proprietary standards for products and services – we saw customization as one of the most promising methods for promoting lock-in. Especially in Finland and the other Nordic countries the print newspapers have had very loyal customers. However, this even life-long commitment to one brand – inherited in one’s mother’s milk – is clearly on the line in the digital environment, where the closest competitors are always only one click away. For this reason, all online services requires effective lock-in mechanisms to prevent the migration of customers to competitors, while persuading Web users into repeated transactions.

Moreover, besides customization we will also empirically test how different factors derived from our theoretical background can directly or indirectly benefit the success of online newspapers. Therefore, the outcome from this dissertation should also be very valuable also for practitioners, since business model changes in the digital environment involve substantial investment costs in technology, and in many cases requires changes in the publication processes, which are always challenging to implement. Based on these research objectives the following generic research questions were formulated:

**RQ A:** What kind of role customization strategy is playing in the online newspaper market? Does the applied customization strategy contribute to the business success of online newspaper?

**RQ B:** Besides customization strategy, how do other variables such as revenue logic, the importance of generic business goals, experience, and

market environment factors affects on the business success of online newspapers?

The above research questions raised a few important issues, which must be considered in this study. *First*, to extensively evaluate the role and importance of the customization strategy among online newspapers, one must in detail investigate what kind of customization approaches online newspapers have currently implemented and moreover, what kind of approaches they are planning to implement in the near future. To uncover this research issue one must not only look into present literature, but also widely to get known the current spectrum of online newspapers in the market. *Second*, to fully analyse does the identified customization approaches contribute to the business success of online newspaper, one must not only settle for on evaluation of direct effect of customization, but also investigate the indirect effect of customization with or through other potential business success predictors. *Third*, to really challenge and suspect the customization strategy as predictor of business success, one must also look for other predictors of business success from literature. By comparing the effect of customization as a predictor of business success with other predictors of business success, one can compare the genuine value and efficiency of customization strategy. *Finally*, one must determine comparable, yet simple enough success measures to detect the comprehensive business success of online newspapers.

Before constructing the conceptual research framework, which would solidly respond on above research challenges, we had to become familiar with wide variety of literature. Since we wanted to concentrate and deeply focus our research on digital information products, the reference disciplines presented in this theoretical background chapter were mainly related into digital products (e.g. Shapiro and Varian 1998, Martin 1998, Afuah and Tucci 2000, Amitt and Zott 2001). However, a few classic references were also placed under close observation (e.g. Porter 1985,

Pine 1993) and joint to our research framework. The theories grounded on the body of knowledge of digital information products as starting point following conceptual research frame was presented.

### 3 RESEACH FRAMEWORK

#### 3.1 Conceptual research model

To test how customization and the other factors derived from the theoretical background benefit the success of online newspaper, the conceptual research model described in Figure 1 was defined.

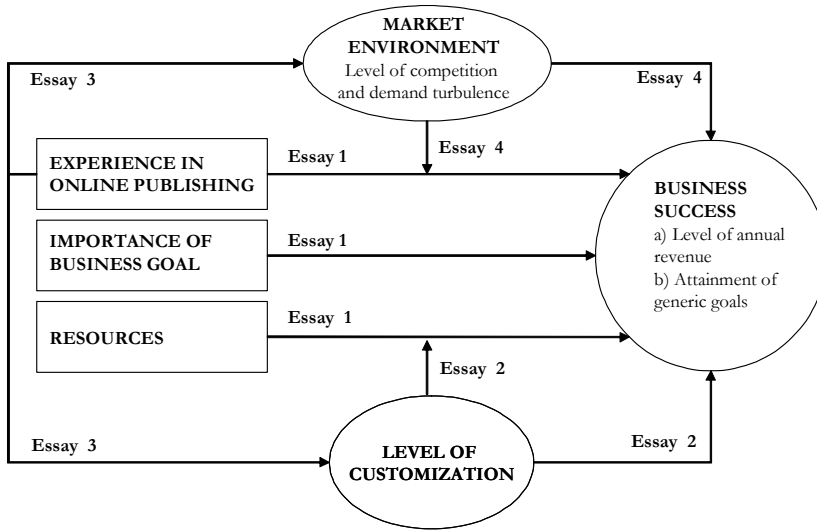


Figure 1: Conceptual research model

First of all, for this dissertation there was a need to construct more comprehensive success measures than the typically-used annual revenue, since media companies all over the world have had commonly-known troubles in generating substantial revenues with their online services. Therefore, we decided to expand the definition of success and considered comprehensive success as including both the capability to generate revenue and the ability to attain the strategic business objectives of the online newspaper.

This idea was grounded in the goals attainment -based success model, which was originally proposed and tested by Venkatraman and Rajanuman (1987) for evaluating the success of strategic planning. We compared the online newspapers to strategic planning since they also require new skills, and they may be targeted at very different objectives. Basically this construction means that instead of measuring several direct or indirect success effects of online versions (like increased readership for the printed paper or online version), we identified the generic business goals for online newspapers and evaluated the degree of their attainment. The greater the gap in the goal attainment is, the weaker the success is, and conversely, the greater the surplus is, the better the success is. In addition to this degree measure, the absolute level of attainment of goals was regarded as a success measure.

By presenting multiple business success measures – goal-based and absolute measures like revenue – we wanted to ensure that the statistical analyses would capture more than one success dimension. In addition, by introducing the more expansive success indicator, we were also able to compare the success achieved among the companies that have not yet been able to generate revenues. The right-hand circle in Figure 1 presents the defined success dimension. The theoretical background, more detailed research frameworks and statistical analyses for this dissertation were divided into four individual essays. In the following we will briefly summarize the objectives of the individual essays and the relationship of the essays to the overall research framework.

## **3.2 The detailed research frameworks of the individual essays**

### **3.2.1 Essay 1: *Evolution and success of online newspapers (Sääksjärvi and Santonen, 2001)***

In this essay the first objective was to evaluate the generic business goals for online newspapers and examine the level of goal attainment. By following the goal attainment -based success model, proposed by Venkatraman and Rajanuman (1987), we assumed that the attainment of each different generic

goal is in a positive relationship with the perceived importance of the objective itself. It was necessary that this hypothesis should gain support in order for my data to make sense and be appropriate for testing our other hypotheses. In addition, we were assuming that online newspapers should learn to adapt their objectives and learn to be more successful after a certain period of market presence on the Internet. Furthermore, two other explanations of the business success were introduced and tested. One of these was the assumption that the right revenue model would lead to business success (and also to greater overall success), and the other, that the generally assumed “positive feedback” theory should dominate (Shapiro and Varian, 1998), leaving only a few winners, and causing the others to loose in their brand (and revenue) accumulation. These simplified relationships are marked in the conceptual research model with the label Essay 1. For the first essay the following research questions were formulated:

RQ 1) What are the generic business goals of online newspapers and how well are they attained?

RQ 2) Which are the typical revenue models applied, and how do they contribute to business success?

RQ3) Is there evidence of the positive feedback effect (fast concentration) in the digital newspaper market?

The first essay as well as the following three essays are all purely based on empirical survey data. The more detailed research strategy is discussed in chapter 4.

### 3.2.2 *Essay 2: Customization as a business model for online newspapers (Sääksjärvi and Santonen, 2003)*

The second essay was dedicated to evaluating the possible contribution of the customization business model to business success. According to Shapiro and Varian (1998) online newspapers are so-called experience goods, which means



that charging the customers is difficult as they are not ex-ante assured of the utility of the product. Basically, this will easily lead to giving products for free, making it even more difficult for online newspapers to generate revenues. For this reason, both continuous investments in the existing user base and effective lock-in mechanisms are needed to achieve successful online newspaper. Users face lock-in when the costs of switching from one brand of technology to another are substantial (Shapiro and Varian, 1998). Among the various alternatives to create an effective lock-in, customization was one of the promising approaches not yet extensively studied empirically as a business model for online newspapers (Amit and Zott, 2001, Ihlström and Palmer, 2002). Therefore, this empirical investigation of customization as a lock-in business strategy for online newspapers was proposed.

In the second essay the main objective was to empirically explore to what degree customization affects online newspapers' ability to generate revenue. We were also interested in determining the generic approaches to customization, and also the synergetic impact of the accumulated customer base and degree of customization on online newspapers' ability to create revenue. These relationships are marked in the conceptual research model with the label Essay 2. The following two generic research questions were formulated for the second research essay:

RQ 4) What are the generic approaches to customization applied by online newspapers?

RQ 5) Do the observed customization approaches contribute the business success of online newspapers?

### *3.2.3 Essay 3: The effect of mass customization on demand turbulence (Santonen, 2003)*

Before testing the direct effect on success of the market environment, and especially of demand turbulence, we wanted to analyze how the accumulated experience influenced the demand turbulence levels, but also the online

newspapers' willingness to apply the customization business model. Moreover, there was a need to clarify whether the suggested relationship between the application of customization and demand turbulence was evident also in the online newspaper market environment. Previously, it had been argued that demand turbulence increases the level of customization (Pine 1993). However, in our opinion Pine's considerable and extensive research with hundreds of companies has paid less attention to the fundamental differences between physical and digital products (Choi et al. 1997) and to the potential impact of experience on the demand turbulence-customization relationship (Boynton and Victor, 1991). It has been argued that the unique characteristics of digital products by their nature demand either cost leadership or effective differentiation/customization (Shapiro and Varian, 1998). Since it was obvious that only one company can be the price leader, all the others should have adopted the product differentiation/customization strategy, regardless of demand turbulence.

In addition, Boynton and Victor (1991) have introduced a Product-Process change matrix, and argued that companies must learn mass customization through a continuous improvement process, before entering into the mass customization business model. It was obvious that this kind of process change would required time. Basically, we were assuming that the more experienced companies, which should also be more familiar with their customers' needs and wants, could be able reduce demand turbulence. If these experienced companies were also producing more customized products, like the theory suggests for the digital environment, then demand turbulence would decrease at the same time as the level of customization increases. This is in contrast to Pine's suggestion.

Based on the above-mentioned arguments, we were assured that a company's accumulated experience should be an important factor affecting both the levels of applied customization and demand turbulence. The above

relationships are marked in the conceptual research model with the label Essay 3. For the third essay we formulated the following research questions:

RQ 6) Does experience in Web publishing increase the level of customization?

RQ 7) Is it possible to lower the level of demand turbulence by applying the customization business model?

RQ 8) Are more experienced online newspapers able to control the level of demand turbulence?

#### *3.2.4 Essay 4: Evaluating the effect of the market environment on the business success of online newspapers (Santonen, 2004)*

Practically the whole online newspaper literature has overlooked the suggested effect of the market environment on business success (e.g. Afuah and Tucci, 2000). Prior studies by Chyi and Sylvie have only investigated some aspects of the effect of the market environment such as the structure of the online newspaper market (1998) and the role of geography (2001), while our essay 3 only tests how online newspapers' perceived demand turbulence was affected by experience and the application of a customization strategy. For this reason, it seemed to be useful and valuable to empirically test the suggested effect of the market environment on the business success of online newspapers.

When newspapers are operating in the restricted and fairly small market having many players with similar business models, we are assuming that they are easily ending to fight for the same advertisers and users. In addition if the online newspapers are not able to control the level of demand turbulence, it should weaken their ability to accumulate revenue. This assumption is mainly based on the general suggestion in marketing literature, which argues that a company that better satisfies its customers' individual wants and needs will eventually have greater sales (e.g. Pine, 1993). Moreover, if the experienced

online newspapers are able to control the level of demand turbulence and improve their success, we are assuming that the combined summary affect of market environmental factors and experience in online publishing should be better predictor of annual revenue than these items individually. The above described relationships are marked in the conceptual research model with the label Essay 4. Based on these research objectives final research questions we formulated:

- RQ 9) Is the higher level of demand turbulence making more difficult to accumulate revenue?
- RQ 10) Can we find evidence to the suggestion that the level of competition is related to revenue?
- RQ 11) Can we find evidence to the suggestion that the market environment factors and accumulated online publishing experience have interaction affect on revenue accumulation?

## 4 RESEARCH STRATEGY

### 4.1 Sample selection and unit of analysis

In chapter 2 we defined the online newspaper as a *print* newspaper's electronic publishing services. From the sample selection point of view, this somewhat limited definition was eliminating the need of expand our sample into pure digital brands, which have no direct relation to traditional print newspaper publishing companies (e.g. online media services published by telecom operators). The possible, yet interesting comparison between online brands of traditional publishing companies and newcomers would have required significantly different research arrangement. For example the organizational structure and publishing processes would have significantly differed in these two cases and therefore cause extra interference into our research.

For the research purposes, the Finnish online newspaper industry was identified as suitable target population. First, Finland is ranked third in the world statistics for the total print newspaper circulation in relation to the population (Statistics Finland, 2002). Secondly, in Finland the print newspapers reach a larger audience than any other means of communication, and are used more than the other media for advertising (Statistics Finland, 2002). Thirdly, the majority of print newspapers are delivered to homes in Finland. Fourthly, Finland is one of the leading countries in communication technologies and Internet accessibility (Statistics Finland, 2002). Based on above references we are convinced that Finnish online newspapers are one of the forerunners in the global online publishing industry. Therefore, the findings of this study maybe later on become valuable for those publishing companies operating in less developed market.

To even more simplify and rationalize the data collection and theoretical construction of this study, the unit of analysis was restricted into business unit level. For example the research focusing on whole corporate level success,

market environment and customization would have easily expanded the length of the survey questionnaire substantially. In addition, the theoretical framework would probably been too ambitious in the standpoint of one dissertation, especially when the body of knowledge regarding online newspapers is still in strong evolving phase. Therefore, more narrow focused exploratory studies like this thesis, is in our opinion first required to discover the most interesting future research directions. Finally, the homogeneous target population helped us to minimize interference in data collection and simultaneously maximize the statistical power of my study (Baroudi and Orlikowski, 1989).

## **4.2 Research principles**

The research strategy of this dissertation loosely followed the seven principles for interpretive field research presented by Klein and Myers (1999). In the following we will briefly contextualize these principles for our research purposes.

*First*, the fundamental principle of the Hermeneutic Circle suggests that we understand a complex phenomenon from preconceptions about the meanings of its parts and their interrelationships. The whole and parts consists the parts from the history with proper perspective to the historical context or alternatively the interpretive researchers' and other research participants preliminary understanding. It is in part for this reason that we decided to focus only on online newspapers published by traditional newspaper companies. Since the print newspapers have a long heritage to bear, we considered that pure digital online brands would probably have totally different business objectives and means to achieve these objectives. However, since the interpretive researcher (author of this dissertation) had extensive experience in electronic publishing in various digital media environments – from Finnish national television Web services to a start-up Internet publishing company – we were convinced that the effect of the short history of the field was adequately included into the research framework and strategy.

Since we were mostly interested in what makes online newspaper successful, and especially in whether the applied customization was helping them to perform better, we had to test the effect of various factors on success to really understand the big picture. The introduction of the multi-dimensional success scores was also part of our attempt to capture the completeness of the phenomenon and avoid concentrating too much on only one typically-named success dimension (e.g. annual revenue). In addition, besides pure customization we analyzed the interrelationships of many more possible success factors with success directly, and also indirectly thorough out the applied customization. This enables us to compare the effect of customization with other rival explanation of success and consider the effect of the customization in proportion to other factors.

*Secondly*, according Klein and Myers (1999) the principle of contextualization requires a critical reflection of the social and historical background of the research. It is evident that readers need to be introduced to how the current situation has emerged. In the introduction and theoretical chapter of this dissertation we try to draw a picture of how differently the online publishing environment was regarded in the emergent period of the Web. The phenomenon, which in the beginning appeared to be a revolution, later appeared to turn into an incremental evolution. Without understanding the short and dramatic history of the commercial Web, some of our findings might not make sense. In addition we must always remember to regard online newspapers as part of the larger business model led by the print newspapers. Therefore, the description of the structure of the online newspaper market also includes some information on the demands caused by the print publishing industry. Furthermore, some of our measures also included future dimensions which helped us to understand where the online newspapers were heading.

*Thirdly*, the principle of “interaction between the researchers and the subjects” argues for the critical interaction between the researches and other research

participants. For this reason two different methods were used to collect valuable feedback from the managers responsible for online newspaper activity. After we had analyzed the results from the mail survey, one extensive seminar was conducted with the managers responsible for the online newspaper business activities as auditors. In the seminars the results from our survey were presented and discussed to validate that no misinterpretations by the researchers had been made. On the basis of the feedback gained from the participants, the further research frameworks, hypotheses and explanations for our results were enhanced. To further deepen our understanding of online newspapers business models and the market environment, while intensifying the relationship between interpretive researchers and participants, multiple case studies were conducted.

*Finally*, the remaining four principles for interpretive field research include the principles of 1) abstraction and generalization, 2) dialogical reasoning, 3) multiple interpretations and 4) suspicion. Since these principles mainly influence the final stage of our dissertation, the results and the interpretation of the outcome of the results, we will just briefly present how the structure of this dissertation was created to support these principles. Presenting four individual research frameworks derived from the theoretical background, which furthermore had rather close and obvious relations with each other, helped us to look for multiple interpretations of the investigated phenomenon. In this study the customization was treated only as one possibility to explain the success of online newspapers. The principle of suspicion was observed in both parts of our data, the survey and the cases. The results provided by either data were always compared with the results from the other data to minimize the possibility of drawing false conclusions. If the data analysis indicated somewhat strange results, we looked at the data on the variable and respondent level to see if the data truly made sense. Also in the cases where perceptual measures had at least some kind of hard numeric counterpart, these figures were closely compared. Within the possibilities of questionnaire length, several variables were also used to collect



data for one measure. The preliminary research frameworks and results were presented in doctoral seminars and reviewed not only by the thesis supervisor, but also by other Ph.D. students of different nationalities and from different universities. In the case of the three final research essays presented at international conferences, the anonymous reviewers ensured that suspicion was applied carefully into those studies. Finally, yet most importantly, the final manuscript of this doctoral dissertation was pre-examined by two well-known and experienced researchers. The final principles, i.e., abstraction, generalization and dialogical reasoning, are included in the summarized results and presented in this integrative summary section.

### **4.3 Conducting the data collection**

The data collection was conducted at a time when the Finnish online newspapers' business models had started a new stage in their evolution after the Internet bubble had burst. Since the research objectives for this dissertation were rather ambitious and multivariate, and there was a special need to understand a complex entity, it was obvious that multiple methods for data collection were needed. Two main methods for data collection, the survey and the case study, were applied.

#### *4.3.1 The empirical survey*

We started our research by conducting a mail survey during November – December 2001. The survey questionnaire was finalized and pre-tested in a few interviews with specialists of the Finnish Newspapers Association (later FNA) to make sure that all questions were semantically precise and understandable. The names of the newspapers and personal addresses of the most potential respondents were collected with the help of The Finnish Newspapers Association. The pre-tested questionnaire was addressed directly to the managers responsible for the online newspaper business activity. If the name of responsible person was not certain, it was confirmed with a telephone call. According to the FNA's annual statistics (2001), 128 newspapers also published some sort of an online service. The accumulated

circulation of these newspapers covered 88 percent of the total circulation of newspapers in Finland.

The final version of the survey questionnaire was mailed on November 2001 to all 128 respondents. To encourage the highest possible response rate, all the respondents were invited to a seminar, which presented the survey results. Furthermore, in the survey cover letter, 30 minutes was indicated as the time required to fully complete the questionnaire. A follow-up letter was mailed on December 2001, and a week after that, 25 reminder phone calls were made to the online newspapers to ensure a satisfactory response rate. The cover letter and survey questionnaire are presented in Appendixes A and B in Finnish and in Appendixes C and D in English. Since it is always rather difficult to translate the exact tone and atmosphere of the other language, one must consider English translations more suggestive than accurate replication of the original Finnish material.

The structure of the survey questionnaire followed the theoretical background of this study. In the first section, *market environment*, we used Pine's (1993) modified market turbulence map instrument to measure the level of perceived demand turbulence and competition. Instead of using Pine's original per cent scale (range 0-100%), the market environment items were evaluated on the more common 7-point Likert scales. The goal attainment -based success model proposed by Venkatraman and Rajanuman (1987) was applied in the second section of the questionnaire, *business objectives and their achievement*. Both objectives and their achievement were also evaluated on 7-point Likert scales so that the statements were placed next to each other on the questionnaire in order to make sure that the respondents evaluated similarly both the importance of each objective and the success in achieving exactly that objective. The third section of the questionnaire included the *customization approaches* adopted from the literature review. In the fourth section, the typology of the *revenue model* was based on the number of important revenue streams. For this purpose, our questionnaire included a set of 13 different

revenue possibilities. We asked the respondents to fill in the exact figures of both the total value of the revenue and its distribution among different revenue streams. In the final section of the questionnaire, a few *demographic profile* variables were included.

In two months we had responses from 46 online newspapers, four of which were short announcements that the online version had been discontinued. Thus the overall response rate was very acceptable, about 32 per cent. Also the aggregated circulation of the respondents' print newspapers was satisfactory, since it covered 49 percent of the total circulation of Finnish print newspapers. Out of a total of 42 respondents, 27 belonged to the daily group (print newspapers with a frequency of 4-7 issues/week) and 15 belonged to the weekly group (frequency 1-3 issues/week). The response rate in the daily group climbed as high as 56%, but in proportion to total population of the weekly group, we only had a response rate of 18%. The substantial difference in response rates between the daily and weekly group was no surprise. As a consequence of their larger resources, daily newspapers are more likely to develop online editions, and therefore probably more eager to participate in our research.

In rough terms, the data consisted of 15 national level newspapers, the rest having a clearly more restricted, in some cases even local, readership. All respondents provided information on their job titles. Distinctly the largest respondent group consisted of editors-in-chief, making up 35 per cent of the respondents. Nearly 73 per cent of all respondents were directly involved in an editorial or management job, and only 11 percent of the job titles were directly related to development activities.

#### *4.3.2 The case research*

The use of multiple cases with a replication logic has been recommended and recognized as an important aspect of research in the IS field for understanding the complex interactions between technology, environment

and organizations (e.g. Bonoma 1985, Eisenhardt 1989, Yin 1989, Galliers 1992). The combination of survey and multiple-case research strategies offered us an excellent opportunity to confirm, clarify and broaden our survey findings. The second part of the data collection was conducted following Yin's and others' guidance on cross-case analysis. In Appendix E we have presented our open-ended questions in Finnish and in Appendix F in English. However, these questions must be considered more as guiding notes for the interpretive researcher than as exact questions asked from the respondent during the interview.

For our research purposes three successful online newspapers, which were somewhat familiar with customization, yet were operating in the *national market environment*, were identified as suitable case companies. Two of the case companies also participated in our mail survey. The one case company not included in our survey was identified in the additional statistics as one of the successful online newspapers, but was also on the basis of content analysis known to apply customization. Extending our case study companies outside our survey sample enhanced our possibilities to compare not only the individual cases, but also challenge and review our survey results.

However, because of confidentiality agreements with the respondents, the names of the online newspapers cannot be disclosed. Therefore, we have named our cases as online newspaper A, B and C. The comparison of the background profiles, individual case descriptions and summary results between cases are included in chapter 6. The individual case descriptions included the following four main topics: 1) evolution of the competitive conditions, 2) the development history of the online publishing applications, 3) evolution of the publishing processes and 4) the importance of customization.

Open-ended, focused interviews (Yin, 1989) were conducted with the managers responsible for the online newspaper business development during

the spring 2003. In the case of companies A and B, we interviewed one person in each company. In the case of company C we interviewed two persons. All our interviewees had long experience and leading role in the development of online newspaper alongside parent print newspaper. The interviewees were phoned and sent an email outlining the aims of this research project and indicating the specific areas that would be explored through the interviews. All interviews lasted about 1.5 hours and were tape-recorded with the permission of the interviewee. Appropriate notes during the interview were also taken. Right after the interview the contents of the recorded tapes were systematically listened through and the interview notes were complemented into a preliminary written case summary report. For each case, the summary reports were reviewed by the interviewed managers. All interpretations for this research were based on reviewed summary reports.

#### **4.4 Publishing strategy**

After collecting the data from the mail survey, three conference papers and one working paper were written, reviewed and presented during the winter 2002 - 2004. The first research essay "Evolution and Success of Online Newspapers" (Sääksjärvi and Santonen, 2002) was presented by the author of this dissertation *in the second IFIP Conference on E-commerce, E-business and E-government* during October 7-9, 2002 in Lisbon, Portugal. The second research essay "Customization as a Business Model for Online Newspapers" (Sääksjärvi and Santonen, 2003) was presented by the author of this dissertation *in the 16th Bled Electronic Commerce Conference eTransformation* in Bled Slovenia during the 9-11 June 2003. The last conference essay "The Effect of Mass Customization on Demand Turbulence" (Santonen, 2003) was presented by the author of this dissertation *in the IADIS International Conference on e-Society* during June 3-6, 2003 in Lisbon, Portugal. In addition this paper was considered among the best papers of the conference and an extended version was published in the *IADIS International Journal on WWW/Internet* (2003). The fourth and final research essay "Evaluating the effect of the market environment on the business success of online newspapers" has been

published as *a working paper in the Helsinki School of Economics publication series* (2004).

## **5 EMPIRICAL SURVEY RESULTS**

In this chapter, the main results of the four individual essays are presented and summarized. A more detailed presentation of the outcomes can be found in the individual essays. The intention of this chapter is to produce an overall picture of our findings.

### **5.1 Essay 1: Evolution and success of online newspapers**

For the first essay, the following three research questions were formulated.

#### **RQ 1) What are the generic business goals of online newspapers and how well are they attained?**

The statistical analyses of the survey data revealed that the online newspapers in Finland had the following five different generic goals:

- 1) developing a genuine online newspaper,
- 2) earning extra income (revenue) for the printed paper,
- 3) improving the cost-efficiency of the publication process,
- 4) gaining skills in the new technology and
- 5) strengthening the brand of the printed paper.

It appeared that in general for all the newspapers, the most important single goal was to support and strengthen the parent print newspaper. Nevertheless, some differences in goal-setting were identified between online newspapers in which the parent print versions had a broader geographical orientation and ones in which the print versions' orientation was strictly local. The online newspapers operating in the broader national market emphasized the importance of developing a genuine online version, whereas the local and also generally less experienced players were more keen on learning new technical skills. Interestingly, on an average, revenue accumulation was the least

significant goal, yet it was considered more important among the latecomers. Most importantly, only the national-level players seemed to learn their lessons since they were able to improve their average success scores along with experience. In contrast, the strongly geographically restricted online newspapers typically had declining trends in their success, especially in terms of business success.

**RQ 2) Which are the typical revenue models applied, and how are they contributing to business success?**

To test the impact of the revenue logic to the business success of online newspapers, the following three simplified revenue models were identified:

- 1) banner income (advertising as the only revenue source),
- 2) focused revenue logic (another dominating source besides banners) and
- 3) multiple revenue (at least three different important revenue sources).

It turned out that the online newspapers were using the banner advertising revenue model as the primary source of income. The banners were accumulating almost 70 percent of the absolute total value of the incomes. Interestingly, the smaller local newspapers relied much more on other than the pure banner strategies. Usually they had implemented a focused strategy, and had another dominating revenue source besides banners. In contrast to the hypothesis, the identified revenue models only had a marginal effect on the success scores compared with experience and geographical orientation.

**RQ 3) Is there evidence of positive feedback (fast concentration) in the digital newspaper market?**

As a summary of the tests regarding the positive feedback effect, the evolution of revenue seemed to be linear only in the national market, while the average number of subscribers seemed to grow exponentially. Evidently, despite the fact that only national players collected major revenue, there was



no dominating positive feedback effect, which would have left other experienced online newspapers except the winner without customers and income. Just the opposite, the online newspapers seemed to be able to increase their incomes by devoting resources to manpower and marketing.

## **5.2 Essay 2: Customization as a business model for online newspapers**

In our second essay we evaluated the effect of customization on the business success of online newspaper. The following two generic research questions were formulated.

### **RQ 4) What are the generic approaches to customization applied by online newspapers?**

On the basis of the empirical data, three main dimensions of customization were defined. These were named as personalization, versioning and process customization. Since the first two dimensions (personalization and versioning) appeared to directly affect the end-users of online newspaper, yet were related to product features, we combined these into a single dimension and re-named them as product customization (i.e. customer-oriented customization). As a result, two main approaches to customization were identified, the product and process oriented customization approaches.

### **RQ 5) Do the observed customization approaches contribute to the business success of online newspapers?**

The majority of online newspapers appeared to concentrate mainly on the process customization approach, while the level of product customization was still substantially low. It appeared that only the degree of process customization was an important predictor and moderator of annual income having a significant interaction effect on the impact of the number of both customers and editorial staff on annual income. Even if the level of product customization was still very low, it was a direct predictor of annual income. In

the case of product customization, the contribution to the synergetic relationship between customer base and revenue was not supported.

### **5.3 Essay 3: The effect of mass customization on demand turbulence**

For the third essay the following three research questions were formulated:

#### **RQ 6) Does experience in web publishing increase the level of customization?**

Based on our results it seems evident that the ability to customize requires a long and continuous learning process. The level of customization was higher among the most experienced online newspapers, which in addition were operating in the national market environment. In practice online newspapers with less than three years of experience had not customized at all. In general, our findings indicated that currently, but also in the short-term future plans, customization was not going to play a significant role for online newspapers in Finland.

#### **RQ 7) Is it possible to lower the level of demand turbulence by applying the customization business model?**

On the contrary to our assumptions that the higher level of customization could decrease the level of demand turbulence, we did not observe any relationship between the perceived demand turbulence and customization.

#### **RQ 8) Are more experienced online newspapers able to control the level of demand turbulence?**

Limited support was found for the suggestion that the more experienced online newspapers should be able to control the demand uncertainty.

### **5.4 Essay 4: Evaluating the effect of the market environment on the business success of online newspapers**

The fourth and final essay was built around the following research questions:

**RQ 9) Is the higher level of demand turbulence making it more difficult to accumulate revenue?**

On the basis of factor analysis it was identified that the overall level of demand turbulence was formed on two separate dimensions, unstable user needs and individual user needs. According to our results the high levels of perceived demand turbulence were related to difficulties in generating revenue, but mainly as a result of the unstable user needs.

**RQ 10) Can we find evidence for the suggestion that the level of competition is related to revenue?**

Also the perceived level of competition seemed to be connected with the revenue accumulation. Moreover, the harder the perceived competition appeared to be, the greater the effect of demand turbulence was.

**RQ 11) Can we find evidence for the suggestion that the market environment factors and accumulated online publishing experience have an interaction affect on revenue accumulation?**

It appeared that the accumulated experience in online publishing was a better predictor of annual revenue than the level of perceived demand turbulence or the level of perceived competition. However, the total effect of the market environment (i.e. the effect of perceived demand turbulence and competition together) exceeded the explanation power of accumulated experience as a predictor of annual revenue. Nevertheless, the best explanation power was achieved with a model having accumulated experience in online publishing, the level of perceived demand turbulence and the level of perceived competition as predictors of annual revenue.

## 5.5 Summarizing the survey findings

In Table 1, we have presented the hypotheses based on the literature review and the research questions, the main results of our analysis and the clarified conclusions.

| Essay | Hypothesis construction on the basis of research questions   | Results  | Conclusion       |
|-------|--|--|------------------|
| 1     | RQ 1) Success of online newspapers (attainment of goals) is in positive relationship with the importance of the goals, and experience affects the attainment of the goals positively.                    | Only national players seemed to improve their average success scores along with experience; the regional versions typically showed declining trends in the success dimensions, especially business success | Partly supported |
| 1     | RQ 2) The business success of online newspapers is more significantly affected by the revenue model applied than by experience in the online activity.   | Instead of the revenue model applied, the reach of the paper (national versus regional) and experience affected the revenue significantly  | Rejected         |
| 1     | RQ 3) The business success of online newspapers is not related to resources allocated to online newspapers or capability factors accumulated (because of fast concentration of the total revenue).       | There was no dominating positive feedback effect. Quite the opposite, the company-specific resources seemed to explain the variance in revenues  | Rejected         |
| 2     | RQ 4 and 5) The degree of customization is in a synergetic (interaction) relationship with the number of accumulated customers and the size of editorial staff in terms of its impact on online revenue. | Only process customization seemed to contribute to the synergetic relationship between 1) customer base and revenue 2) editorial resources devoted and revenue.  | Partly supported |
| 3     | RQ 6) The greater the experience in online publishing is, the higher the level of customization is.  | The experience affects positively both applied and future customization, however mainly national online newspapers are interested in the customization   | Supported        |
| 3     | RQ 7) The higher the level of customization is, the lower the level of demand turbulence is.   | We did not find any statistically significant relationship   | Rejected         |
| 3     | RQ 8) The greater the experience in web publishing is, the lower the level of demand turbulence is.  | The experience affected negatively only the items direct related to demand turbulence  | Partly supported |
| 4     | RQ 9,10) The level of perceived demand turbulence and competition (i.e. market environment) is related to the revenue accumulation of online newspaper   | Both factors, demand turbulence and competition, were individually and in combination related to revenue   | Supported        |
| 4     | RQ 11) The market environment factors and accumulated online publishing experience have an interaction affect on the revenue accumulation of online newspaper  | Market environment factors and experience had a strong interaction effect on the revenue accumulation of online newspaper  | Supported        |

**Table 1: Summary of the empirical survey findings**

According to our survey findings, the geographical orientation of the parent print newspaper, level of perceived demand turbulence, the level of perceived competition, the level of customization, and online publishing experience were all related to the business success of online newspapers in Finland. Moreover, the combined effect of market environment factors and online publishing experience was also confirmed. This indicates that the more

experienced online newspaper were better able to utilize their capabilities and understand the requirements of the digital domain.

Our findings also indicated that customization was not currently, or even in the short-term future plans, the main strategic option for online newspapers to attract and retain customers – even though especially process customization seemed to provide some help in generating revenue. Since the Finnish online newspaper industry in general did not appear to closely follow the suggestions about customization, a more detailed evaluation of the product and publication process features was desired.

## 6 CASE RESULTS

The main purpose of this chapter is to verify, clarify and enhance the previous survey findings with the help of our additional case data. This chapter proceeds by comparing the background profiles, presenting the individual case descriptions and summarizing the results concerning the individual online newspapers.

### 6.1 The comparison of the background profiles

The background profiles of our case online newspapers are presented in the Table 2.

|  | Newspaper A        | Newspaper B        | Newspaper C                                 |
|--|--------------------|--------------------|---|
| Print frequency                          | Daily group        | Daily group        | Daily group                                 |
| Geographical orientation                 | National           | National           | National                                    |
| Print circulation                        | circa 150.000      | circa 100.000      | circa 50.000                                |
| Individual weekly online users           | circa 400.000      | circa 150.000      | circa 25.000                                |
| Part of large media group                | Yes                | Yes                | Yes   |
| Has multi-channel distribution strategy  | Yes                | Yes                | Yes   |
| Level of experience in online publishing | Was among pioneers | Was among pioneers | Was among early adopters, but not a pioneer |

Table 2: The background profiles

On the basis of these profiles, we can make the following observations:

- 1) All cases belonged to the daily group (print newspapers with a frequency of 4-7 issues/week), and
- 2) were operating in the national market environment, and
- 3) were part of larger media group, which also published other media products, and

- 4) had implemented a multi-channel distribution strategy, which in addition to a print channel included several electronic channels (e.g. Internet and mobile).
- 5) The newspapers A and B were among the pioneers of commercial online publishing in Finland, whereas the newspaper C was among the early adopter but cannot be regarded as a pioneer.
- 6) The size of the online and print customer bases varied significantly between the three case companies. The newspaper A had by far the largest customer base, while the newspaper C had distinctly the smallest. In addition, the balance between the number of online and print customers differed greatly. In terms of its customer base balance, the newspaper A had been most successful in its online strategy. In the case of online newspaper A the number of weekly online users was three times as high as its print version's circulation. The online newspaper C was the only one having a "negative" balance between the online and offline version. In their case, the print version's circulation was twice as high as the number of weekly online users.

Because of the confidentiality agreements with the case companies, the more detailed profile descriptions are excluded. Basically, this comparison reveals that the case online newspapers can be arranged in size order from largest to smallest A, B and C, and in the same order on the basis of the balance between their online user and offline circulation numbers.

## **6.2 The case description of the online newspaper A**

### *6.2.1 Evolution of the competitive conditions*

In the case of online newspaper A (later case A), we found limited support for the previous arguments in the literature, which claimed that there were benefits for the first comers in the market. It appeared that in the beginning of its online era, case A had got a relatively easy start in terms of business success, because of the lack of real competition. According to respondent A,

during the early days of the commercial Internet, the newspaper had been able to operate all alone in its market segment. In addition, as a result of low investments and operational costs, it was actually able to generate a rather profitable business almost from the very start. The relatively easy start had also created an – at least partially false – impression of the online newspaper's true business profitability. However, very soon the online business environment's realities were faced when the amount of competition increased and the true nature of the market environment and customer behaviour was exposed.

A couple of years ago, case A had made a major and very radical change to its revenue model. In addition to a substantial amount of free content, case A had also had a large selection of extra subscription services for consumers. Even though the applied payment mechanisms were not causing trouble, and the total revenue flow from the extra subscription services had been substantial, case A decided to abandon the subscription services and re-focus its revenue logic. According to our respondent, the company felt that the subscription services were harming its most valuable asset, the print newspaper brand. Later on this initial assumption was verified on the basis of customer feedback and an additional customer survey conducted by an independent research company. Moreover, when case A had made an attempt to sell its online subscription services to business-to-business customers, the offer did not meet with significant interest.

The consumers' negative attitude and the lack of business-to-business customers' interest towards subscription services led to a re-evaluation of the core business of the online newspaper A. The outcome of the business analyses was that, at least for a while, the expected revenue flows from the subscription services would not exceed the losses caused to the print newspapers brand. At the time of the study, case A's primary and main goal had re-focused to support the print newspaper brand by increasing the size of the online customer base with the help of free services, but not to generate



income through subscriptions. The revenue logic was now based on banners and sponsor advertising, which were highly dependent on the size of the customer base. The new strategy appeared to be very successful, since the customer base balance between online and print was in favour for online version. Currently the number of weekly online users is three times as high as than print newspaper's circulation.

Significantly, our respondent argued that the above-mentioned learning expedition into subscription services was necessary to increase the company's understanding of what its number one business goal is. Nevertheless, the subscription phase had not left any permanent scars in the customer relationships. The subscription services were seen as a part of the Internet hype period, when belief in the astronomical value of individual online users was also prevalent within case A. Case A had not, however, totally forgotten the subscription services, but was ready to re-evaluate them if the market environment were to change. As a consequence of the online strategy change, case A was even allowed to operate a non-profitable online business. Now, case A had a clear business focus.

#### *6.2.2 The development history of online publication applications*

In the case of online newspaper A, the original print publishing applications were not directly suitable for multi-channel distribution. Therefore, according to our respondent, the company was forced to utilize a publishing process based on separate print and online publishing applications. Since the beginning of the multi-channel publishing era, case A had gone through many small and incremental application improvements. It is worth mentioning that the editorial personnel dedicated to online publishing activities had been deeply involved in the application development projects. Basically, the features and functionalities of the online publishing applications were determined by the editorial staff in close co-operation with the technical personnel.

In addition to small-scale incremental developments, case A had recently implemented a major upgrade, which involved both the print and the online applications. The modernized print publishing application was now capable of automatically producing most of the essential online content. The content structure underlying the applications was now in XML-format, which enabled smooth a publishing process between the different distribution channels. Before this enhancement, the underdeveloped publishing applications had caused extra manual work for the editorial staff. During that era the staff dedicated to online activities was forced to do jobs involving more technical and manual tasks than journalistic ones. On the other hand, our respondent argued that even today there were still some process phases, which from the narrow editorial perspective should probably not belong to editorial staff, but to technical staff. Beyond doubt, there was still room for process improvements.

### *6.2.3 Evolution of the publishing process*

Interestingly, in the case of online newspaper A, the process efficiency aspect had never been emphasized or written down as a business goal. Yet it was argued that the accumulated experience and better publishing application had somewhat smoothened and speeded up the publishing processes. The more significant aim in process terms for this online newspaper appeared to be the flexibility of publishing process. Case A wanted to be able to easily adapt and adjust to changes in the market environment and customer needs. Basically, case A wanted to be prepared in for any new situation that might arise.

Partly as result of the flexibility requirements, case A was still relied on the “dedicated online personnel” approach. In this approach, there is small number of staff devoted only to the online publishing processes. However, the majority of the content is still created by print personnel, and automatically or semi-automatically transferred to the online version. The dedicated online staff mainly converted the print content to an even more online-friendly structure (e.g. by adding extra links and pictures or by

shortening stories that were too long). In addition, the online staff also created and maintained the additional contents only available in the online version of the newspaper.

According to our respondent, there were few immediate problems with the dedicated online personnel approach. Since the online and print publishing processes were quite different, a journalist devoted to print was not immediately able to become a full member of the online staff. Proper training and guidance was needed for print personnel, since only the dedicated online editorial personnel had the full online publishing capabilities. It was also argued that in case A, there was only a limited number of print editorial staff with an interest in learning the full online publishing skills.

#### *6.2.4 Importance of customization*

According to our respondent A, the effect of customization on the business success of the company's online version was not considered critical. *First of all*, the respondent in case A argued that the newspaper's content selection and additional online services were not especially suitable for product customization. The most important objective for case A was to generate the hot topics, which their readers would be talking about with each other on their lunch or coffee breaks. It was argued that this kind of communal influence among multiple readers would be easily lost if the editorial selection was disposed of and replaced by the readers' own choices. For this particular reason the respondent in case A argued that the content customization in their case must always be considered as a parallel solution to editorial staff selection, and not as an alternative solution.

*The second major reason* why customization was not heavily implemented by case A, was the simple fact that the newspaper's online version was already a highly differentiated product even without intensively applied customization. This very favourable situation was partly a result of the strategic choices of the company's closest rival in the print publishing market. When case A's

most natural print counterpart entered the online market later, it had selected a distinctly different strategy for its online newspaper. Therefore the current very favourable arrangement for Case A had occurred.

*Thirdly*, in addition the unique content created by newspaper personnel, case A relied heavily on end-user driven content. The devotion to user participation went far beyond the typical and simple "letter to the editor" approach. The various methods used to mobilize readers as content providers included different kinds of contents, polls, voting, and discussion forums. By involving end-users as content providers, Case A was hoping that the readers' needs and wants would be better fulfilled and matched. Indeed, the feedback from the online customers indicated that the possibility to participate in the publishing process had clearly deepened the customer-newspaper relationship. The users especially valued the fact that their input could also end up in the printed version of the newspaper. Nevertheless, according to respondent A, only the most open-minded journalists were using the new online possibilities, although sometimes they were even used in a quite proactive way (e.g. for generating topics). Basically, there were still a lot of "old school" journalists, who were not able to fully understand the online possibilities, even though their attitude towards online version was generally positive. Finally, it was also claimed that it would not be wise to increase the amount of user-driven content from the current level, but the newspaper's next goal was to improve the quality of the content.

*Fourthly*, in addition to unique content, case A supported a unique feeling with the help of a very colourful and illustrative graphical user interface (GUI), which nobody else in the Finnish market was providing. The look and feel of the online GUI was also in a strong kinship with the parent print newspaper appearance. From the very beginning of the online era, the strong resemblance between the print and online versions had been major goal for online newspaper A. By having as identical appearances as possible, it was

argued that the online newspaper's strategic role as supporter of the print brand was enhanced.

Besides product customization, other methods were applied to achieve product differentiation. Case A had access to highly skilful technical staff with plentiful experience in digital product customization. In the case of online newspaper A, the low level of customization was definitely not a result of skill problems.

### **Approaches applied to customization**

Even though case A indicated the above-mentioned very practical reasons for the low level of customization, the online newspaper still provided some limited approaches for product customization. Among these was the possibility of selecting different content segments onto the front page of the online newspaper. Nevertheless, it had appeared that the usage of these applied customization features was not very high, even though they seemed to offer some help for end-users in navigating. The near future intention was to update the GUI and bring back the ease of use of the previous, simpler online version. The expansion of the content selection had resulted in some usability problems. However, in the future plans for the GUI, product customization was not going to play a significant role.

Interestingly, when case A had made a detailed analysis of the newspaper's web site usage patterns, different behaviour patterns were discovered. For example large groups of end-users were only quickly reading the main headline pages, just to get an idea what is an important hot topic today. For these readers the more detailed content selection was not a matter of great importance. Some other users, on the one hand, were crawling through the entire contents. In our opinion these observations on the usage patterns indicate that there might be a hidden demand for a more customized GUI. However, a more detailed end-user survey evaluating the end-users' attitudes towards different kinds of customization methods would be needed.

In addition, since all end-users of the online newspaper A were forced to register and login-in, targeted advertising which observed the end-users' demographic profiles was offered for advertisers. According to respondent A, this targeted advertising option was only occasionally demanded by the most experienced advertisers. Lastly, case A had implemented a multi-channel distribution strategy, which in addition to the print and web channel also included several other electronic channels (e.g. mobile and television).

### **6.3 The case description of the online newspaper B**

#### *6.3.1 Evolution of the competitive conditions*

In spite of the fact that the online newspaper B (later case B) was among the pioneers of online publishing in Finland, it faced competition from the very beginning of its Internet era. Case B's market segment was already crowded by other players at the time when they first introduced their online services. These rivals included, for example, international and domestic news agencies, since case B was also operating with business-to-business customers.

Interestingly, the economic cycles seemed to have a clear effect on the demand level experienced by case B. Recently, the general population's interest towards the content type provided by case B had notably calmed down. Therefore, according to our respondent it was not wise to try to attract new customers to the company's online service, since there was no major interest towards it. For case B, at the time of the study, the main idea especially in email marketing campaigns was the intention to keep and lock-in the already existing customers. The demand level of case B seemed to be dependent on a complex interrelation, which the company could not totally control.

However, as a validation to our previous survey findings there were simple methods, which case B was using to stabilize its demand levels. Among these were different kinds of marketing campaigns, contents and newsletters, but

also a more extensive range of products and content selection, which was helping to divide the demand into wider user segments.

According to our respondent, some of the company's closest competitors had lately disappeared from the market, thus making life at least partly easier for the remaining players in the market. Especially the content providers operating only in the digital domain had left the market. Currently the majority of the players in case B's market segment based their customer relationships on strong offline products. The business environment was now regarded as being healthier and the players in the market were clearly more focused on profitability than previously. The Internet hype phase had gone, and the market environment was considered a "business as usual" environment. There was no room left for the companies operating purely on capital investments.

As a result of higher requirements for profitability, the players in the market were forced to re-evaluate what their core business competences were and what the foundations of their revenue flows were. As a result of this phenomenon, case B had started to co-operate with some of their indirect competitors and was providing content for their online services. According to our respondent, this kind of co-operation is and will be the growing trend in the future of online publishing. The driving force behind this co-operation was the desire for cost efficiency.

### *6.3.2 The development history of online publication applications*

Case B had started its online voyage with a static service based on HTML-pages, while the current production version was based on XML-based content. Since the beginning of its first online version, case B had implemented many small and incremental application improvements. The enhanced publishing applications currently enabled richer possibilities to produce more online-friendly content. From a purely technological point of view, many things had substantially changed, yet many of these improvements

had been invisible to the common editorial personnel. Most interestingly, case B had been able to avoid major application upgrades. All the technical development had basically occurred through smaller incremental steps.

The foundation of the successful online publishing process in the case of online newspaper B was basically grounded on meta-information (i.e. information about information). Meta-data enabled the smooth delivery of content in the right place at the right time. According to our respondent, the content classification based on meta-information was currently a significant and important phase in their publishing process.

Nevertheless, the limitations of the different distribution channels were still causing extra work. Some of the content had to be re-shaped to fit the requirements of the different channels, even though the improvement of the publishing applications provided a major help.

### *6.3.3 Evolution of the publishing processes*

According to our respondent the nature of competition in Case B's market segment was strongly flavoured by the fast delivery of news and the range of additional online services. These factors were basically the main drivers of business success. To ensure the fast and extensive delivery of online services from the very start, Case B had launched its multi-channel publishing era by relying on the dedicated online personnel approach. In the dedicated approach, a small number of personnel was devoted purely to the online publishing processes. Narrowing the number of online personnel to a minimum enabled a sharper and quicker learning curve. The attainment of the business goals had required the centralization of the essential resources.

However, after experience in the multi-channel publishing had increased, Case B had re-structured its organization model from the dedicated online personnel approach to a clearly more decentralized online publishing model. In the decentralized approach, nearly all the activities required by online



publishing were integrated as part of the common publishing process, which produced most of the content in all distribution channels at once.

As a result of rapid delivery requirements, the efficiency of the online publishing process played a significant role in the case of online newspaper B. It was argued that the company's online publishing process did not tolerate manual stages. Therefore, from the very beginning of its online era, a significant aim for Case B had been the avoidance of any manual copy/paste processes. Basically, the inputs and outputs of different publication processes were determined in detail to ensure efficiency. Only pre-defined outputs were delivered.

When new outputs were desired in Case B, a detailed evaluation of the cost structure and business potential was conducted whenever it was possible. Only if the business case description indicated a business potential was Case B willing to extend or change the established publishing processes. As a result of the comprehensive discipline in business decisions, case B's processes were no longer vulnerable to demand changes. Now, only the profits would decrease during the low demand seasons, but no major losses were incurred. Nevertheless, even for case B, there had been some decisions in which the added value for customers had been the more important issue than process efficiency or profitability.

#### *6.3.4 The importance of customization*

In the case of online newspaper B, the product development strategy was founded on customer-orientation, in which the end-users' needs and wants were closely identified, on the basis of which these needs were fulfilled. The aim for case B was not to be different on purpose, but to be good and meet the customer needs. According to our respondent, it was not a wise strategy to create product features for end-users if they were not going to use them, even if those features could differentiate the company from its competitors. Basically, Case B was trying to offer a complete solution, which was based on

the comprehensive service around different distribution channels, not limited to the Internet. This complete solution could include a number of online functionalities, irrespective of whether they were different or the same as the rivals had.

It was argued that the content and the services that Case B was providing, were not especially suitable for product customization. As a result of the very complex and unpredictable relationships between different kinds of content sub-segments, it had appeared that end-users had to wade through the whole content selection, in any case, in order to generate an adequate understanding of what was important for them.

Although content customization was not seen as critical to end-users, Case B offered some limited methods for product customization. These methods included different kinds of subscription packages and simple methods to personalize the content in different manners. When the respondent in Case B was asked how they could survive without these simple customization features, he argued that it probably would be problematic. For Case B, the customized user interface was basically a function providing some extra help for navigation.

Significantly, the respondent in Case B explained that in their case, the product customization appeared to be more suitable for business-to-business (later B2B) than for the consumer purposes. The B2B-customers of Case B were able to subscribe to different content modules very flexibly. Moreover, in addition to bulk news feeds, Case B was able to cost-efficiently produce customized news feeds, which were seamlessly integrated in the B2B-customers' Intranet services. Basically, these features indicated the utilization of the modular product strategy.

Interestingly, the respondent in Case B argued that they were even able to offer more possibilities than B2B-customers were able to utilize. Therefore,

there was no immediate need to enhance the customization features, even for B2B-customers.

## **6.4 The case description of the online newspaper C**

### *6.4.1 Evolution of the competitive conditions*

According to our respondent, the online newspaper C (later Case C) had started by providing only business-to-business services (in the following B2B). It was not until later that the consumer service was launched, and it was partly founded on the basis of a cut-down version of the B2B-version. At the time of the appearance of the consumer services, Case C's market segment was already occupied by numerous rivals. Among these players were international and domestic news agencies, but also other consumer-focused services. In the consumer market, Case C regarded itself as a challenger.

Interestingly, it was suggested that the content published in the Finnish language was not a strong competitive advantage in the B2B-battlefield. The majority of the B2B-users were able to read content also in English. However, the competitive advantage was obtained by the specific Finnish point of view in the content. Our respondent suggested that because of the small markets in Finland, the international news agencies were not too keen to establish specific Finnish news feeds. Nevertheless, already in Sweden, which is only a slightly larger market, international news agencies were operating at the country level. Compared with Case C, in the Finnish market the international players were competing with the amount of content or with more comprehensive application features.

The economic cycles also seemed to heavily affect the demand levels in Case C. Lately, the general population's interest towards the content provided by case C had suffered a significant loss. However, Case C and all the other key players in this market segment seemed to continue their product development. The current wisdom was that the demand bottom had been

reached. In the longer perspective, the size of the customer base had been on the increase also in the case of online newspaper C.

#### *6.4.2 The development history of online publication applications*

In the beginning of its Internet era, Case C relied on disintegrated publishing applications. As a consequence of historical developments, Case C's B2B-services had their own proprietary publishing applications. However, since the B2B publishing applications were not suitable for multi-channel distribution, there was an obvious need to develop fresh applications for consumer online publishing. The integration between different application layers had been founded on a laborious copy/paste approach. At the end of the working-day, the editorial staff of the online version was transferring raw content from other publishing applications. It was obvious that in the long term this solution was not able to provide durable and rational publishing processes. Too much manpower was needed. Therefore, a major application upgrade had to be implemented.

The most important criterion in the new application selection had been the strong support for multi-channel distribution. The current publishing application enabled distribution in any channel in any format. The technical architecture of the publishing applications was now extremely flexible. For example, the modifications in the visual layout of the parent print newspaper and the online version did not cause any changes in processes.

#### *6.4.3 Evolution of the publishing processes*

As a consequence of the disintegrated publishing applications, Case C had started its multi-channel distribution journey by relying on the dedicated online personnel approach. In the dedicated approach there was a small amount of staff devoted only to the online publishing processes. However, as a result of the technical improvements described above and the current solid application architecture, the company had switched its organization model from the dedicated online personnel approach to the decentralized publishing

approach. In the decentralized approach, nearly all the activities required by online publishing were integrated as part of the common publishing process, which produced a major share of the content in all distribution channels at once.

The current decentralized publishing process produced the majority of the content in any technical format in any distribution channel without extra manual labour. The publishing process seemed to be extremely smooth and fine-tuned and the personnel were able to do more with less effort, and thus focus on the editorial process phases. Nevertheless, the mismatch between numerous distribution channels was still resulting in some additional process stages. Nevertheless, according to our respondent, significant savings in human resources were achieved.

In the case of online newspaper C, the cost-efficiency of the publishing process had increased greatly, which had now become the company's main objective concerning the process. Moreover, our respondent argued that the prior number of staff dedicated to online publishing would at the present day undeniably raise question among the top level management of the media group. These observations argue that the implementation of a "quick and dirty" technical architecture should only be a short term temporary solution since it clearly weakens the company's competitive position. On the other hand, one might argue that it is unnecessary to introduce unsound technical solutions at all, since the publishing processes are usually changed after the implementation of improved applications. Therefore, one should always evaluate in advance the long-term benefits of "quick and dirty" solutions, even though they might at first sight appear to provide some immediate help.

#### *6.4.4 The importance of customization*

In Case C, the main reason for the low level of product customization appeared to be the perceived cost of customization. Our respondent argued that the investments needed for customization would probably be costly.

Both the cost of the proper technology and the extra manpower needed in the publication process would easily climb too high to generate profitable business. As a result of increased costs, especially the consumers would not be willing to pay for the extra expenses. In addition, it was also thought that it would take too much effort for consumers to create their own personalized setting. Our respondent wanted to wait for the time when the technological solutions for consumer driven customization would be more inexpensive and therefore more tempting. Interestingly, during the Internet hype period, product customization had been much bigger issue for case C. It had generated all kinds of future plans, which have not yet materialized as a consequence of current doubts about their profitability .

According to our respondent, their B2B-customers had been inquiring for customized news feeds, but currently these were not supplied even though this would technically be possible. At the present day, the increase in print circulation was providing higher advertising incomes than the subscription incomes from customized news feeds would have generated. Therefore, to increase the circulation of printed version, one had to subscribe to the print newspaper to gain access to the large-scale online version. Customized news feeds would have jeopardized this blueprint.

However, what is important here is the fact that the consumer version was actually a reduced version of the B2B-service. Even though all the consumers had the same standard services, they had limited possibilities to select different subscription packages. These packages were rather easy to produce since a lot of content was already produced for B2B-purposes. In addition, few interactive services were offered to consumers.

Finally, the main driving force behind case C's product development strategy appeared to be the content quality. Basically our respondent thought that at the end of the day, the winner will be the company having the best content.

## 6.5 Summary of the case findings

In the Table 3 we have clarified our case observations by presenting only the main finding in each generic topic. In all three columns, we have made an attempt to generate as illustrative a profile as possible to ensure easy comparison between the individual online newspapers.

| Newspaper A   | Newspaper B   | Newspaper C   |
|---|---|---|
| 1. Easy start in business terms, faced no competition. Currently the only role is to support the print brand, even at the expense of subscription revenues. | 1. Has faced competition from the very start. Only profits are weakened as a result of demand changes, no losses are generated.             | 1. Has faced competition from the start. Economics cycles affect the demand levels heavily.       |
| 2. Has implemented major application upgrade  | 2. Has implemented only incremental application improvements.   | 2. Has implemented major application upgrade  |
| 3. Still operates using dedicated online staff to ensure maximum process flexibility.   | 3. Transformed from dedicated staff approach to decentralized staff to ensure process efficiency.   | 3. Transformed from dedicated staff approach to decentralized staff to ensure process efficiency. |
| 4. Low interest towards customization since the desired communal interaction would be easily lost and contents are already highly differentiated.           | 4. Strong customer-orientation. Was able to offer more customization possibilities than users could currently utilize. Too complex content. | 4. Low interest towards customization since it would not be profitable.                           |

Table 3: Comparison of the main case finding

Even though this might sound too naive, the level of competition appeared to dramatically decrease and the possibilities to make money to increase when the online newspaper was operating alone in its market segment. Therefore, it is still amazing to observe that the majority of online newspapers in Finland are still fighting for the same advertising revenues, basically with the same weapons. The online newspaper A had a much easier start in business terms than the two others, due to the lack of competition in the early stages of its online era. If online newspapers could found methods to differentiate their products sharply, while avoiding the easy copying of product features and still attracting customers, they would evidently be more successful.

Interestingly, the demand levels of online newspaper B and C seemed to be depended on the complex interrelation with the market environment, which these two online newspapers could not totally control by themselves. However, at least the online newspaper B had been able to adjust its processes in a way that ensured profitability in all cases. Since the main battlefield for online newspaper A appeared to be the print environment, the profitability of the online service was not an issue when the position of the print version was in danger. Therefore the subscription incomes were sacrificed.

Online newspapers A and C had gone through one major implementation project, in which several online and print applications were more deeply integrated as part of a common publishing process core. Only the online newspaper B had been able to avoid any major implementation projects. For this company, the avoidance of the manual copy/paste approach was a key issue from the very start.

During the early stages of their multi-channel publishing eras, all our case online newspapers had relied on a dedicated online personnel approach. However, after the initial learning phase, online newspapers B and C had switched from a dedicated staff approach to a decentralized staff to ensure an efficient process. For online newspaper A, the process efficiency was not a matter of great importance, but the process flexibility was. Therefore, this newspaper still relied on the dedicated online personnel approach.

All our case online newspapers considered that customization was not critical to them. However, the reasons varied. First of all, online newspaper A wanted to maintain the strong communal effect of the newspaper – i.e., the ability of the contents to generate discussions among users and thus enhance further interest. It was argued that the end-users' own customized settings would jeopardize this objective. Moreover, online newspaper A already had a highly



differentiated product, so there was no genuine need to enhance the feeling of differentiation.

Also in the case of online newspaper B, it was argued that its content was not especially suitable for consumer-driven content customization. As a result of the complex relationships between different kinds of content sub-segments, end-users had to read all the content selection, in any case, to generate a complete understanding on what is important for them. In addition, it was argued that newspaper B was actually able to offer more customization possibilities than the majority of the end-users could currently utilize.

Finally, the perceived cost of customization appeared to be the main reason for the low level of customization to online newspaper C. It was suggested that consumers would not be willing to pay for the extra expenses caused by customization. In addition, the increase in print circulation was currently providing more advertising incomes than the subscription incomes from customized news feeds could generate.

## 7 DISCUSSION AND CONCLUSIONS

### 7.1 The contributions of this dissertation

In the following we will summarize the main contributions of this dissertation. The main predictors of success – grounded on the basis of the theoretical background of this study – are collected in Table 4. Also the effect of these predictors on business success is described along with the other main findings.

| Predictor of success            | Effect on business success  | Other findings   |
|---------------------------------|---|--|
| Level of customization          | 1. Direct effect supported for process and product customization approaches<br><br>2. Moderating effect supported only for process customization approach.  | 1. Besides customization, online newspapers use – now and in the future - other approaches to achieve competitive advantage.<br><br>2. Main reasons for low level of customization include: content not suitable for customization, would not be profitable, current (low) level of customization is enough for end-users, users are not interested, product is highly differentiated even without customization<br><br>3. We did not find the suggested relationship between customization and demand turbulence. |
| Market environment              | Geographical focus of parent print newspaper, level of perceived demand turbulence and competition were individually and in combination related to the business success of online newspaper.                | 1. Mainly large national-level online newspapers are interested in applying customization.<br><br>2. The primary role of the online newspaper is to support the print version  |
| Experience in online publishing | Only national players seemed to improve their average success scores along with experience; the regional versions typically showed declining trends in the success dimensions, especially business success. | 1. Experience affects positively both applied and planned customization.<br><br>2. More experienced newspapers are somewhat able to control the demand level.  |

Table 4: Summary of the main contributions

### *7.1.1 Findings regarding customization*

Based on our original assumptions and the suggestions in the literature, we believed that customization might have been an important source of competitive advantage in the online newspaper market. However, online newspapers did not seem to agree with our assumptions. According to our results, the suggested customization was not regarded as a tempting approach to achieve success. The reasons for the low level of customization included difficulties with compatibility between content selection and customization, too weak profits compared with the risk of investment failure or the lack of customer interest towards higher levels of customization. However, the interest towards product customization appeared to increase when the amount of content and services increased. Basically, product customization was considered as being a good tool to help the end-users to navigate in a complex and extensive online service. Especially in the case of small local newspapers the content and service selection appears to be too simple for extensive product customization. In addition, local players did not have the necessary resources to develop the customized product or process features in a situation in which revenue flows are marginal.

In this study we have gained support for the previous suggestions that the path from mass production to mass customization is not straight and easy. Already the basic process changes, which enabled online publishing based on a print clone, caused major efforts for the newspapers. The first years of online publishing require companies to move back and forth between the invention and mass production quadrants. The possibility of easy copying, on the other hand, had led into a situation in which the content and services selections in most cases were rather similar. In our opinion the majority of the small local newspapers were still in this back-and-forth phase. Furthermore, many of these local players have more or less stopped making inventions as a result of low business success. In the future, these decisions will enhance the polarisation of the market environment, which was already observed.

On the contrary, the successful national players have utilized their larger resources and have been able to reach the continuous improvement stage. Instead of product customization, large online newspapers have first focused on process enhancements, which enabled a cost-efficient and/or flexible multi-channel publication. Since the process requirements varied greatly between online and print publishing, newspapers were forced to develop their publishing applications incrementally or sometimes even radically. Only lately have the joint print and online publishing processes achieved the level and flexibility that ensures rational operations. Now the most experienced companies have extra time to develop and maintain the product features that are more closely related to the online environment than to the print environment.

These extra efforts were not, however, dedicated to develop extensive product customization features, but to increase the standardized content and service selection. By increasing the amount of content and services, online newspapers were trying to create a solid foundation for steady demand. In our case studies, other methods to stabilize the demand levels were also identified (e.g. marketing and competitions). Basically, the simple product customization features merely provided some help in the usability problems, yet did not directly contribute to revenue accumulation. It appears that in the case of the newspaper industry, the mindset is very deeply grounded in a mass production model. End-users are still regarded as masses or large segments, not as individuals with dissimilar wants and needs. Since there are still many standard product features that are considered desirable by online newspapers' desires, a strong product customization is not a probable future scenario in the Finnish online newspaper market. Online newspapers believe that they are still able to gain competitive advantage more easily using more simple methods than customization. Mass production appears to be a much more natural approach for online newspaper. However, in our opinion a necessary condition for the large-scale product range is the efficient and/or flexible publishing process.

### 7.1.2 Market environment and strategic role of the online newspaper

First of all, the main purpose for the online newspapers in Finland is currently to support the parent print version. However, at the same time the requirements have grown for the return on investment in online newspapers. Major losses caused by online activities are not acceptable any longer. Basically, the roles of print and online counterparts can be simplified in to following statement made by one of our case respondents:

*There cannot be a successful online newspaper without a print counterpart, but there can be a successful print newspaper without an online service. However, all the considerable and noteworthy players in the newspaper market must have their own online service.*

Our survey observations and other academic findings, practical examples, data on total newspaper circulations and the trend in a number of newspaper statistics have all shown that the current form of the online newspaper is no great threat to the position of the print newspaper. However, it is still important to notice that, on an average, print newspaper circulation has been on the decline, which indicates some changes in the print reader's habits. Therefore, one role for online newspapers is to attract those readers who are not interested in print subscriptions.

All the actions aiming for improvements in the online service should be closely aligned with the overall strategy of the parent print newspaper. Even more, since the majority of the online content is still produced by the print personnel, one must have a good fit between the available resources (both human and technical), the desired outcomes of the publication process, and the expected profits. Since the revenues coming from online services are, now and in the near future, a fraction compared to the revenues generated by the print newspapers, this evidently restricts the possibilities to develop and produce new online services. It appeared that the most successful online

newspapers have replaced the "unlimited development budget" thinking with careful analyses of the real business potential.

In the long history of the rather static print newspapers industry, the current Internet era can be still seen as a short new product development period. In our study, it appeared in many cases that at the beginning of the newspaper's online era, there was no clear strategic vision about the future and role of the online newspaper. Moreover, if a clear strategic vision existed, it was probably too optimistic, when it comes to ease of implementation and business success. Partially as a result of these factors, the degree of goal attainment was generally weak especially in the case of the beginners, which were basically "shooting with a shotgun". The newcomers had to experiment and learn about what could be done in the online environment, and only after these accumulated experiences were companies actually able to set new yet more realistic goals.

It appeared that the attainment of the goals for the online version required process and publishing application changes. Without determined and continuous development and learning processes, success could not be achieved. In our study we identified weak signals of a polarisation of the market and a positive feedback effect, which will make the strong even stronger and the weak even weaker. However, online newspapers were still able to enhance the success by devoting more resources e.g. on marketing or personnel. Based on our results, the future does not look promising for the small local online newspaper. As a result of increased competition, the online newspaper must now devote even more human and financial resources to online activities if it wants to succeed in this field. However, at the same time the revenue expectations appear to be weak, turning large investment into high-risk projects. One rescue for the small player might be to co-operate with other small online newspapers. By dividing e.g. the publishing infrastructure costs, the small players that are not part of larger media groups could gain substantial costs benefits.

In the case of large online newspapers, the battle for the customers is still going on. There was no clear dominating positive feedback effect to be seen, since the online newspapers were able to increase their revenues by increasing resources to manpower and marketing. In Finland there are no ultimate winners in online newspaper market that could clear the whole table, even though we have identified a few successful players in the market.

Also the human resource commitment to the online service appeared to be only at a fair level. This also speaks for the strong supportive role of the online service. Since in general only a small part of the personnel was directly involved in online activities, it is evident that the overall learning process was just beginning. The newspapers were still a long way off from the stage at which the majority of personnel could understanding the Internet as a publishing environment.

### *7.1.3 Managerial implications*

Along the learning processes the ambitions and requirements for online newspapers have grown and been clarified. Online newspapers had usually started their online service with very close print clones. However, the very focused and narrow functionality in the early days made online newspaper vulnerable to market environment changes. Therefore, the majority of the players in the market had significantly expanded the content and service selection in order to attract more end-users. With increased diversification, the online newspapers have been able to somewhat decrease the demand risk.

As the companies operate in the digital domain, many of the new features were usually soon copied by competitors. In a way, competitors still tend to end up in a situation in which the majority of the services – excluding the small share of unique content – were identical between the closest rivals. By today it should be clear that the success of online newspapers cannot be based on technical gadgets or identical services among all players in the

market. As a result of this dissertation, we encourage online newspapers to develop more genuine services, which are hard to copy.

This suggestion is easy to give but hard to implement. Based on our findings we argue that significant and sustainable business success is only attained if newspapers are willing to systematically and continuously develop their services. Joining forces with customers appeared to be one clear path to better business success. By offering end-users possibilities to contribute in both content production and development of the online services, companies can probably enhance the total outcome. However, the new features should be considered only if they fit in with the overall strategy. The product differentiation strategy should be used only if varied features are valued among customers.

Another future step for online newspaper might include the development of services with the help of a systematic stage-gate decisions process, in which all development decisions are placed under a magnifying glass. Such careful business case analyses should keep online newspapers away from the disasters of the Internet hype period, when significant investments were made in business ideas lacking any possibilities to make a profit.

At the present day, the most successful online newspapers have paid their learning dues in trying to understand the requirements of the competition in the digital domain. Only very few of these winners have been able to collect substantial revenues. After the initial steps in the conquest of the new market environment, the second round has now started. In this “survival of the fittest” competition, only the strongest will survive. The newspapers, that do not have flexible and efficient publication processes enabled by the technical development of publishing applications will probably be the next losers in the never-ending battle for market shares. The future scenario also suggests that if an online newspaper is fighting this battle alone, the expected outcome is not as good as for the players that are able to establish partnerships.



From the partnership point of view, interesting scenario for local newspapers might be the subcontractor role for larger media groups. This kind of co-operation between small and large players would result nationally focused online newspapers with highly localized content or locally focused online newspapers with some national content. In our opinion the effect on traditional value-chain of print newspaper would in this case be substantial.

In the most extreme future scenario there will be only one integrated database, which includes all Finnish newspaper content or even all Finnish media content. This integrated technical platform could offer new and more out-of-box business models to all newspapers, which according to our findings are now mainly trusting on defensive strategies, while they are trying to create entry barriers for newcomers. It is obvious that this kind of revolutionary business model would require new revenue logic for all participants. On the other hand the usage based revenue models of scientific journal databases might solve the revenue sharing problems.

## **7.2 Limitations of the study**

### *7.2.1 The aspects of unit of analysis*

Mainly as a result of practical issues in data collection, the unit of analysis in this research was restricted to online newspaper business unit. Therefore, the research framework of this dissertation regarded a online newspaper more or less as an isolated and independent product without fully highlighting the importance of the strategic linkage between online version and parent print version. Beyond dispute, this practical driven conscious choice was leading a some what narrow minded view into very complex and moreover still strongly evolving phenomenon. As a result of selection of unit of analysis, some of the findings of this dissertation might have come out differently, if the corporate level strategies and success would have been fully included into our research framework.

### 7.2.2 *Ways to expand the sample size*

Following suggestions by Baroudi and Orlikowski (1989) concerning the nature of small and homogeneous sample groups, we can see that also the generalizability of our findings (*from online newspaper business unit point of view*) calls for further research. In the following we will point out a few possible dimensions to increase the sample size in future online newspaper studies.

*First*, since practically all our sample group newspapers were published only in the Finnish language, no true global market was available for them. Therefore, the expanded sample group should include also online newspapers in English or some other global language to add a global dimension to the online market environment.

*Secondly*, another sample group limitation which deserves attention concerns the different competitive conditions in the parent print newspaper markets in different countries. Typically the newspapers in Finland have durable and loyal annual subscribers for their print paper editions. Therefore, the majority of print newspapers are delivered to homes, while e.g. in the Southern European countries, the print newspaper are mainly bought from street vendors.

*Thirdly*, as we pointed out in the sample selection chapter, the newspapers in Finland are more important to consumers and companies than in the most other countries. Finland was ranked third in the world statistics for the total print newspaper circulation in relation to the population, and similarly the print newspapers reached a larger audience than any other media, and were used more than the other media for advertising (Statistics Finland, 2002).

*Fourthly*, the final environmental factor, which should be considered in future online newspapers studies, is the maturity of the national IT infrastructure. Since Finland is one of the leading countries in communication technologies and Internet accessibility, one should also evaluate the online newspapers'

business models and competitive conditions in the countries with less mature IT infrastructure.

As a summary, we have identified the following five dimensions in which to expand the sample group in future studies: 1) local vs. national vs. global operating region, 2) countries with annual subscription vs. street trading, 3) consumers' and companies' high vs. low interest towards print newspapers, and 4) countries with mature vs. undeveloped IT infrastructure.

### *7.2.3 Identifying the limitations due to the homogeneity of the respondents*

Even though we used two different research strategies – a survey and multiple cases – the respondents in both methods involved only the managers responsible for the online newspaper business development. Therefore, our results represent only an online managerial point of view, not that of the whole organization or its customers. It is possible, for example, that managers responsible for the print newspaper, who often are not the same as the managers in online newspapers, might have had different opinions about our research questions. Therefore, to increase the reliability of our research findings, one should also interview print version managers and the publishing companies' top management to truly clarify all the aspects of multi-channel publishing from management's point of view. While the management's viewpoint is important, so are the journalists' comments on the publishing process and product features.

In addition to an organizational perspective, our research totally neglected the consumer's standpoint. One should also survey the consumers' and business-to-business customers' perspective on online products and services, and compare them with the actual business model implemented. Only by evaluating online newspapers business models from all key players' points of view can one generate a comprehensive understanding of the success of online newspaper.

Also multiple sources of evidence could be used to increase the credibility of our results (e.g. Yin, 1990). For example, one could also analyze the level of applied product customization and other product features by using content analysis methods on the online newspapers' web sites. This could provide for a more reliable comparison and evaluation of the differences in the features implemented by the players in the market. Likewise, the previous versions of the online newspapers' graphical user interface (GUI) could be a valuable archive to track the actual changes in the evolution of the online newspapers. Also the project documentation from IT development and implementation projects might uncover more explicitly the flexibility and cost-efficiency aspects of the IT infrastructure.

#### *7.2.4 The limitations related to the statistical methods*

Our final remarks on the limitations of this study concern the statistical methods used. The total sample size in our empirical survey was only limited to 23-42 newspapers, depending on the statistical design. Therefore, especially the principal component factor analysis with different customization approaches and business goals must be seen more as an exploratory and trend-setting. Even if the factor dimensions were verified in the three case companies, one should conduct more extensive empirical analyses with a larger and more versatile sample. As we pointed out in the research methodology chapter, the results provided by both sets of data, the cases and the survey, were always compared with each other to minimize the possibility of false conclusions.

### **7.3 Suggestions for future research**

Our survey and case findings and limitations of this study raised multiple research areas, which should be evaluated in more detail in the future.

#### *7.3.1 The aspects of corporate level strategy and the definition of success*

The future research is definitely required to complement the big picture of the developing phenomenon of online newspaper as a subunit of corporate level

strategy. However, since the current trend among large media groups in Finland is the cross-branding between different distribution channels, one should not hold to only on the strategic linkage between online and print newspapers, but also evaluate the linkage between media groups all distribution channels and business units including radio, television and all sort of portable devices.

Most importantly, the research with corporate level strategy as unit of analysis inevitable recalls broader reference disciplines than the main body of knowledge presented in this dissertation. For example Amitt and Zott (2001) have introduced a promising looking model to determine the total value of e-business. In addition a well know models like balanced scorecard introduced by Kaplan and Norton (1992) and five forces determined by Porter (1980) would definitely add new dimensions to the measurement of success in corporate level strategy. In all these models might be very practical tools to uncover the true role and success of different distribution channels as a part of larger strategic palette.

### *7.3.2 The aspect of short- and long-term business success*

The short- and long-term business focus is also important for the online newspapers. According to McGrath (1995) the short term usually refers to achieving objectives within a two-to-three year period, and the long term refers to the more distant future, typically five to ten years ahead. One of our case online newspapers had strongly changed the strategic balance between short- and long-term benefits when it decided to drop consumer subscription services. In this case the substantial but not sufficient short-term revenues were sacrificed due to concerns about potential long-term losses in the print brand. Our survey and case studies mainly focused on general business objectives, not separating in detail between short- and long-term objectives or their possible positive or negative effects on each other. Therefore evaluating the online newspapers' comprehensive success will require additional and

extensive longitudinal studies with newspapers having heterogeneous long- and short-term business objectives.

### *7.3.3 The effect of publishing applications on process flexibility and efficiency*

In the beginning of the online newspaper era, the newspapers' application infrastructure was mainly constructed on many different and independent applications without proper integration between the applications. The lack of technological flexibility was causing extra manual work for editorial staff. After the necessary incremental and/or major improvements, the possibilities in editorial work had increased and amount of manual work had decreased. Based on our findings, it is obvious that the flexibility of the application infrastructure has had a critical role in managing multi-channel publishing. However, substantial investment costs are incurred when old print publishing systems are changed or modified to fit the new and more complex multi-channel environments. To create profitable business, newspapers must make compromises between fully automatic processes with highly integrated applications and fully manual processes with zero-integrated applications. Also the total effect of the publishing applications and its interrelations with other key business components requires further study. Especially the flexibility and cost-efficiency of the application infrastructure are issues which need more clarification.

### *7.3.4 The effect of organizational structure on business success*

We identified two main methods to organize the online publishing process. All our case online newspapers had started with the dedicated organization model, in which a small special staff was devoted solely to online publishing. However, the case companies B and C had changed over to a decentralized organization model, in which only one integrated process was needed. Since the objectives for the flexibility and cost-efficiency of the publication process varied among our cases, it was no surprise that the strategic balance between dedicated and decentralized organization models was also quite varied. It also seems evident that it is very difficult to jump directly into a decentralized

organization model in which nearly all personnel participate in the online publishing process. The larger the organization participating in the online activities is, and the more numerous the distribution channels are, the harder it is to remain flexible and slower it is to implement process changes. When the business model and the methods for achieving the business objectives are still evolving rapidly, it is more likely that online newspapers implement the dedicated organization model. Since the balance between pure dedicated vs. decentralized organization models affects both the product and the process features, it would be valuable to measure this effect in more detail in future studies.

In future studies, the effect of online publishing experience and the market environment on the key dimensions identified above, and these dimensions' relationships with each other, should be empirically analyzed. When adjusting the trade-offs between these dimensions, there is and will be numerous possibilities to find the perfect setting for the balance. It would also be valuable to analyze if there are some "balance" settings that generate better financial returns or other benefits than others, either through online or offline channels. These settings could then help managers to find out the right recipe for managing the online newspaper.

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## 9 APPENDIX

## Appendix A: The cover letter of survey (in Finnish)

HELSINGIN KAUPPAKORKEAKOULU  
Johtamisen laitos/Tietojärjestelmätiede

Marraskuu 2001

«Yritys2»

«Titteli» «Etunimi» «Sukunimi»

«Katuosoite»

«Postinumero» «Postitoimipaikka»

Arvoisa verkkolehden liiketoiminnasta vastaava,

Helsingin kauppakorkeakoulun johtamisen laitos tutkii maassamme julkaistavien verkkolehtien uusia ominaisuuksia (esimerkiksi asiakaskohtaista räätälöintiä) ja niiden vaikutusta verkkolehtien soveltamien liiketoimintamallien onnistuneisuuteen. Tutkimus pyrkii selvittämään paitsi vallitsevan tilanteen, myös verkkolehtien kehittämisestä vastaavien henkilöiden näkemykset tulevaisuudesta kolmen vuoden aikajänteellä.

Tutkimus toteutetaan Sanomalehtien liiton myötävaikutuksella, jonka kanssa yhteistoimin järjestämme tutkimuksen tuloksia esittelevän ja pohtivan työseminaarin välittömästi tulosten valmistuttua. Kaikki tähän kyselyyn vastanneet saavat kutsun osallistua maksutta kyseiseen seminaariin.

Toivomme arvokasta panostanne tutkimukseemme. Jokainen vastaus on meille tärkeä, koska saamme aineistosta sitä yleispätevämmän selityksen verkkolehtien ominaisuuksien ja niiden menestyksen välille mitä kattavampi vastausaineistomme on.

Toivomme Teidän täyttävän oheisen vastauslomakkeen, jonka vastaamisen pitäisi onnistua noin puolessa tunnissa. Uskomme jo vastaamisesta olevan hyötyä, koska kartoitamme myös verkkolehtien tulevia uusia ominaisuuksia, ja myös raportistamme, jossa tulemme esittämään mitkä ominaisuudet parhaiten selittävät verkkolehtien onnistuneisuutta.

Vaikka tutkimuksemme ei sisällä arkaluonteisia tulevaa strategiaa, tms. koskevia kysymyksiä, tulemme tiukkojen periaatteittemme mukaisesti käsittelemään jokaista saamaamme vastausta luottamuksellisena aineistona, emmekä tule julkaisemaan mitään sen sisältämiä yritys- tai vastaajakohtaisia tietoja.

Toivomme saavamme **vastauksenne mahdollisimman pian, viimeistään 15. marraskuuta 2001** mennessä lomakkeessa mainittuun osoitteeseen. Annamme mielellämme lisätietoja tutkimuksestamme (puhelin Teemu Santonen 050-365 8353).

Yhteistyöterveisin,

Markku Sääksjärvi  
Professori  
Tietojärjestelmätiede

Olavi Rantalainen  
Tiedotusjohtaja  
Sanomalehtien liitto

Liite: Vastauslomake

# HELSINGIN KAUPPAKORKEAKOULU



## **Verkkolehtien liiketoimintamallit 2001-2004**

## Vastaajien joukko

Tämä tutkimuksemme pyrkii selvittämään suomalaisten verkkolehtien liiketoimintamalleja liikkeenjohdon näkökulmasta. Siksi on tärkeää, että kyselymme vastaajat ovat verkkolehtien strategiasta, taloudesta, sisällöstä ja teknologiasta vastaavia johtajia, joilla on mahdollisimman hyvä kokonais käsitys yrityksensä julkaiseman verkkolehden seuraavista osa-alueista:

- 1) verkkolehden markkinatilanne,
- 2) verkkolehden liiketoiminnalle asetetut tavoitteet ja niiden saavuttaminen
- 3) verkkolehden tarjoamat tuotteet ja palvelut ja
- 4) verkkolehden tulojen profiili.

Tämä kyselylomake on lähetty kaikille suomalaiselle sanomalehdelle, jotka julkaisevat verkkolehteä. Sanomalehtien liiton tilaston mukaan verkkolehtiä on Suomessa yhteensä 128 kappaletta.

## Mikä on verkkolehti?

Käytämme vastauslomakkeessa termiä "verkkolehti" käsittämään koko sitä palvelukokonaisuutta, jonka verkkolehteä julkaiseva yritys tarjoaa verkkolehden www-osoitteessa. Mikäli verkkolehteen kuuluu oleellisena osana myös verkkopalveluja, jotka toimivat muissa www-osoitteissa, pyydetään vastaajaa merkitsemään kysymyskaavakkeeseen nuo kaikki muutkin www-osoitteet.

## Aineiston luottamuksellisuus

Tämän tutkimuksen vastausaineistoa käsitellään luottamuksellisena aineistona eikä yksittäisistä vastauksista tulla luovuttamaan kenellekään ulkopuoliselle mitään tietoja.

## Maksuton informaatiotilaisuus vastaajille

Vastaajille järjestetään tutkimuksen tuloksia esittelevä maksuton informaatiotilaisuus tutkimuksen valmistuttua.

## Kysymyslomakkeen palauttaminen

Lomake pyydetään ystävällisesti postittamaan 5.11.2001 mennessä osoitteella:

Professori Markku Sääksjärvi  
Helsingin kauppakorkeakoulu  
Johtamisen laitos/Tietojärjestelmätiede  
PL 1210  
00101 Helsinki

## Vastaajan yhteystiedot

Vastaajan nimi: \_\_\_\_\_

Yrityksen nimi: \_\_\_\_\_

Verkkolehden www-osoite(et): \_\_\_\_\_

Vastaajan asema \_\_\_\_\_

Puhelin: \_\_\_\_\_ Email: \_\_\_\_\_

## Kysymyksiin vastaaminen

Ympyröikää asteikolta 1 - 7 se vaihtoehto, joka vastaa parhaiten käsitystänne yrityksessänne vallitsevasta tilanteesta tänään ja noin kolmen vuoden kuluttua (vuonna 2004): oletteko täysin samaa vai täysin eri mieltä, vai jotakin siltä väliltä.

"Tänään"-vastauksenne tulisi heijastaa verkkolehdessäänne **nyt vallitsevaa todellista tilannetta**, riippumatta siitä kuinka itse haluaisitte asioiden olevan. Vastauksenne "1.1.2004"-tilannetta koskien tulisi puolestaan kuvata arviotanne siitä minkälainen tilanne verkkolehdessäänne tuona ajankohtana on, riippumatta siitä kuinka itse haluaisitte asioiden olevan.

Vain silloin kun ette tiedä tilannetta (tai kun tilanne on väittämän suhteen mielestänne todella neutraali) rengastakaa 4. Jos kysymys on mielestänne epäselvästi muotoiltu, merkitkää viereen kysymysmerkki.

Käytettävä asteikko on seuraava:

- 1 Täysin eri mieltä
- 2 Selvästi eri mieltä
- 3 Vain lievästi eri mieltä
- 4 En osaa sanoa (tai ei merkitystä)
- 5 Vain lievästi samaa mieltä
- 6 Selvästi samaa mieltä
- 7 Täysin samaa mieltä

**Voitte aloittaa kyselyyn vastaamisen seuraavalta sivulta.**

## 1. Verkkolehden markkinatilanne

|   |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|---|--------|-------------------|---|---|---------------------|---|---|---|
| 1.1. Johtamani verkkolehden kuluttaja-asiakkaiden tarpeet ja halut muuttuvat nopeasti   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.2. Johtamani verkkolehden (tai sen pääosien) elinkaaret ovat lyhyitä ja ennalta arvaamattomia   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.3. Johtamani verkkolehden käyttämiä teknisiä ratkaisuja on muutettava kehityksen takia hyvin tiheään tahtiin  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.4. Johtamani verkkolehden kuluttaja-asiakkaat haluavat saada käyttöönsä yksilöllisesti räätälöidyn verkkolehden   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.5. Johtamani verkkolehden tarjoamat tukipalvelut, kuten tilaajapalvelut ja lehden käyttöä helpottavat palvelut vaikuttavat asiakkaidemme päätöksiin käyttää verkkolehteämme | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.6. Kuluttaja-asiakkaidemme kokemus johtamani verkkolehden laatu vaikuttaa erittäin paljon heidän päätökseen käyttää verkkolehteämme   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.7. Johtamani verkkolehti kilpailee internet-palveluiden markkinaosuuksista  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 1.8. Taloudelliset syklit, kuten lasku- ja noususuhdanteet, vaikuttavat johtamani verkkolehden käyttöön   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

Kysely jatkuu seuraavalla sivulla....

|   |                | Täysin eri<br>mieltä |   |   |   | Täysin samaa<br>mieltä |   |   |  |
|---|----------------|----------------------|---|---|---|------------------------|---|---|--|
| 1.9. Johtamani verkkolehden kysyntä on epävakaata ja ennalta arvaamatonta   | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.10. Johtamani verkkolehti on yleisyystuote  | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.11. Johtamani verkkolehden kilpailustrategia perustuu tarjottavan palvelukokonaisuuden omaleimaisuuteen (erilaisuuteen muihin verrattuna)                       | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.12. Hinta vaikuttaa selvästi kuluttaja-asiakkaidemme päätökseen käyttää johtamaani verkkolehteä   | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.13. Johtamani verkkolehden kuluttaja-asiakkaiden tarpeet ja halut ovat epävakaat ja vaikeasti määriteltävissä   | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.14. Johtamani verkkolehti on helposti korvattavissa jollakin muulla tuotteella tai palvelulla, joka tarjoaa kuluttaja-asiakkaille vastaavat toiminnot           | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.15. Kuluttaja-asiakkaat voivat itse vaikuttaa johtamani verkkolehden tarjoamien tuotteiden ja palveluiden hintoihin, ominaisuuksiin, myynti- ja käyttöehtoihin. | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.16. Muoti-ilmiöt ja trendit vaikuttavat johtamani verkkolehden käyttöön   | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
| 1.17. Markkinat, joilla johtamani verkkolehti toimii, ovat tiukasti kilpaillut ja saturoituneet.  | Tänään<br>2004 | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |
|   |                | 1                    | 2 | 3 | 4 | 5                      | 6 | 7 |  |

Kysely jatkuu seuraavalla sivulla....



## 2. Verkkolehden asetetut tavoitteet ja niiden saavuttaminen

|   | Täysin eri mieltä |   |   |   | Täysin samaa mieltä |   |   |  |
|---|-------------------|---|---|---|---------------------|---|---|--|
| 2.1a. Johtamani verkkolehden tavoitteeksi on asetettu korkea asiakastytyväisyys   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.1b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.2a. Johtamani verkkolehden tavoitteeksi on asetettu suuret kävijämäärät   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.2b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.3a. Johtamani verkkolehden tavoitteeksi on asetettu uusien asiakkaiden tai asiakasryhmien tavoittaminen                   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.3b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.4a. Johtamani verkkolehden tavoitteeksi on asetettu painetun sanomalehden olemassa olevien asiakassuhteiden vahvistaminen | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.4b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.5a. Johtamani verkkolehden tavoitteeksi on asetettu verkkolehden brandin tunnetuksi tekeminen                             | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.5b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.6a. Johtamani verkkolehden tavoitteeksi on asetettu oman painetun sanomalehtemme brandin vahvistaminen                    | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.6b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.7a. Johtamani verkkolehden tavoitteeksi on asetettu painetun sanomalehden palvelujen monipuolistaminen ja lisääminen      | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.7b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.8a. Johtamani verkkolehden tavoitteeksi on asetettu kokemuksien hankinta verkkolehden julkaisuprosessissa                 | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |
| 2.8b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |  |

Kysely jatkuu seuraavalla sivulla....

|   | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|---|-------------------|---|---|---------------------|---|---|---|
| 2.9a. Johtamani verkkolehden tavoitteeksi on asetettu yrityksemme teknologia tuntemuksen ja osaamisen lisääminen                            | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.9b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin  | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.10a. Johtamani verkkolehden tavoitteeksi on asetettu painetun sanomalehden tilaus- ja irtonumeromyynnin kasvattaminen                     | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.10b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.11a. Johtamani verkkolehden tavoitteeksi on asetettu painetun sanomalehden ilmoitusmyynnin lisääminen                                     | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.11b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.12a. Johtamani verkkolehden tavoitteeksi on asetettu toiminnan tehokkuus  | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.12b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.13a. Johtamani verkkolehden tavoitteeksi on asetettu kustannus tehokkuus  | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.13b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.14a. Johtamani verkkolehden tavoitteeksi on asetettu taloudellinen kannattavuus   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.14b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.15a. Johtamani verkkolehden tavoitteeksi on asetettu painettuun sanomalehteen investoidun sijoituksen maksimointi                         | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.15b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.16a. Johtamani verkkolehden tavoitteeksi on asetettu uusien jakelukanavien tarjoaminen (esim. www-selain, sähköposti tai gsm/wap-puhelin) | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 2.16b. Olemme saavuttaneet tämän tavoitteen mielestämme hyvin   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

**Kysely jatkuu seuraavalla sivulla...**

### 3. Verkkolehden yksilöllinen kuluttaja-asiakkaille asiakaskohtainen

|   |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|---|--------|-------------------|---|---|---------------------|---|---|---|
|   |        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 3.1 Johtamani verkkolehti on standardoitu massatuote ja jokainen kuluttaja-asiakas saa käyttöönsä täysin samanlaisen verkkolehden | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

**VASTAUS OHJEET:** Mikäli olitte edellisen väittämän molempien vaihtoehtojen (= tänään ja 2004) kanssa **täysin samaa mieltä** (=rengastitte numeron 7) voitte siirtyä suoraan kysymyskaavakkeen osioon 4. Muuten voitte jatkakaa osioon 3 vastaamista.

|   |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|---|--------|-------------------|---|---|---------------------|---|---|---|
|   |        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 3.2 Yksittäinen kuluttaja-asiakas voi halutessaan muokata johtamani verkkolehden ulkoasuun vaikuttavaa väritystä tai muuta graafista ilmettä (esim. ennalta määriteltyjen vaihtoehtojen joukosta) | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|   | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

|   |        |   |   |   |   |   |   |   |
|---|--------|---|---|---|---|---|---|---|
| 3.3 Johtamani verkkolehden yksittäinen kuluttaja-asiakas voi halutessaan valita kiinnostusalueita (esim. aihealueita tai avainsanoja), joiden perusteella hän saa yksilöllisen näkymän verkkolehteen tai johonkin sen palveluun | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |        |   |   |   |   |   |   |   |
|---|--------|---|---|---|---|---|---|---|
| 3.4 Johtamassani verkkolehdessä on ainakin yksi sivu jonka taittoa (asettelua) yksittäinen kuluttaja-asiakas voi muokata lisäämällä, poistamalla tai vaihtamalla olemassa olevien osien paikkaa | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |        |   |   |   |   |   |   |   |
|--|--------|---|---|---|---|---|---|---|
| 3.5 Johtamani verkkolehden yksittäisen asiakkaan tarpeiden täyttäminen on toteutettu niin huomaamattomasti, että kuluttaja-asiakkaamme eivät välttämättä tiedosta sen olemassaoloa | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |        |   |   |   |   |   |   |   |
|--|--------|---|---|---|---|---|---|---|
| 3.6 Johtamassani verkkolehdessä on joustava koko arvoketjun läpi menevä julkaisu- ja toimitusprosessi, jonka avulla voimme toteuttaa yksittäisen kuluttaja-asiakkaan haluamat yksilölliset tarpeet | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |        |   |   |   |   |   |   |   |
|---|--------|---|---|---|---|---|---|---|
| 3.7 Kuluttaja-asiakas voi halutessaan valita johtamani verkkolehden tai jonkin sen palvelun jakelukanavan (esim. www-selain, sähköposti, wap/gsm-puhelin) | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |        |   |   |   |   |   |   |   |
|--|--------|---|---|---|---|---|---|---|
| 3.8 Johtamani verkkolehti mukautuu automaattisesti erilaisten päätelaitteiden, niiden selainohjelmistojen, käyttöjärjestelmien ja näytön koon ja resoluution asettamiin vaatimuksiin ja rajoituksiin | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |        |   |   |   |   |   |   |   |
|---|--------|---|---|---|---|---|---|---|
| 3.9 Johtamani verkkolehden asiakasrekisterissä olevien kontaktitietojen ostaja voi valita haluamillaan hakukriteereillä itselleen parhaiten sopivat kohderyhmät | Tänään | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Kysely jatkuu seuraavalla sivulla...**

|  |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|--|--------|-------------------|---|---|---------------------|---|---|---|
|  |        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 3.10 Johtamastani verkkolehdestä julkaistaan samanaikaisesti (rinnakkain) useampaa vakioversiota, joista kukin on suunnattu erilaiselle käyttäjäryhmälle (esim. ikään tai asuinpaikkaan perustuvat ryhmät)   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.11 Johtamassani verkkolehdessä yksittäiselle kuluttaja-asiakkaalle suositellaan tai näytetään  |        |                   |   |   |                     |   |   |   |
| a) sisältöjä (tms.) perustuen hänen demografiatietoihin (kuten ikä, asuinpaikka tai edellinen käynti verkkolehdessä)   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| b) vastaavanlaisia sisältöjä (tms.), jotka hän on aikaisemmin arvostellut (esim. antamalla 1-5 tähteä) ja joista hän on osoittanut pitävänsä   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| c) niitä sisältöjä (tms.), joista hänen kanssaan vastaavanlaisen mieltymyksen omaavat muut kuluttaja-asiakkaan ovat kiinnostuneet  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.12 Johtamassani verkkolehdessä kuluttaja-asiakas voi tallentaa muisti- tai suosikkilistalleen asioita, jotka erityisesti kiinnostavat häntä ja palata niihin myöhemmin (esim. mielenkiintoinen uutinen tai työpaikkailmoitus)                    | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.13 Johtamassani verkkolehdessä kuluttaja-asiakas voi tallentaa omat hakukriteerit vahti- tai päivystyspalveluun, joiden perusteella hän saa tiedot hakukriteerit täyttävistä asioista (esim. uutinen, asunto- tai työpaikkailmoitus)             | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.14 Johtamani verkkolehden (tai joidenkin sen osien) tilaus- ja maksuprosessit antavat kullekin asiakkaalle mahdollisuuden valita useammasta vaihtoehdosta juuri hänelle parhaiten sopivan tavan  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.15 Mainostajat voivat valita haluamillaan hakukriteereillä itselleen parhaiten sopivat kohderyhmät ostaessaan mainoksia (ns. bannerin) johtamani verkkolehden www-sivuille   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| <hr/>  |        |                   |   |   |                     |   |   |   |
| 3.16 Mainostaja voi valita haluamillaan hakukriteereillä itselleen parhaiten sopivan kohderyhmän ostaessaan mainoksen johtamani verkkolehden kuluttaja-asiakkaille lähettämään sähköpostiviestiin (esim. uutiskirjeen mukaan olevista mainoksista) | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

**Kysely jatkuu seuraavalla sivulla...**

## 4. Verkkolehden tulojen profiili

|  |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|--|--------|-------------------|---|---|---------------------|---|---|---|
|  |        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.1 Johtamani verkkolehti ei sisällä yhtään maksullista tuotetta tai palvelua kuluttaja- tai yritysasiakkaille | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

**VASTAUS OHJEET:** Mikäli olitte edellisen väittämän molempien vaihtoehtojen (= tänään ja 2004) kanssa **täysin samaa mieltä** (=rengastitte numeron 7) voitte siirtyä suoraan kysymyskaavakkeen osioon 5. Muuten voitte jatkkaa osioon 4 vastaamista.

|  |        | Täysin eri mieltä |   |   | Täysin samaa mieltä |   |   |   |
|--|--------|-------------------|---|---|---------------------|---|---|---|
|  |        | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.2. Johtamani verkkolehti saa tuloja kuluttaja-asiakkaiden maksamista verkkolehden tai sen sisältämien palveluiden tilausmaksuista  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.3 Johtamani verkkolehti saa tuloja mainonnasta (esim. bannerit, sponsorointi ja promootiosopimukset)   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.4 Johtamani verkkolehti saa tuloja työpaikka ilmoituksista   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.5 Johtamani verkkolehti saa tuloja asunto, kiinteistö tai tontti ilmoituksista (myynti, osto ja vuokraus)  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.6 Johtamani verkkolehti saa tuloja luokitelluista (pikku)ilmoituksista   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.7 Johtamani verkkolehti saa tuloja kuluttaja-asiakkaiden ja yritysten välillä tapahtuvista kaupallisista transaktioista tai transaktioiden välittämisestä  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.8 Johtamani verkkolehti saa tuloja kumppanitoiminnasta muiden yritysten kanssa (esim. internet-liittymä tai gsm-puhelimien soittoaänet ja logot kumppaniyrityksen kanssa)  | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.9 Johtamani verkkolehti saa tuloja verkkolehteä julkaisevan yrityksen muiden tuotteiden tai palveluiden ristiin mainostamisesta tai myymisestä ("cross selling")   | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
| 4.10 Johtamani verkkolehti saa tuloja maksullisista vahti- tai päivystyspalveluista, joissa kuluttaja-asiakkaille lähetetään heidän hakukriteerinsä täyttäviä asioita (esim. uutinen, asunto- tai työpaikkailmoitus) | Tänään | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4                   | 5 | 6 | 7 |

Kysely jatkuu seuraavalla sivulla...

|  |        | Täysin eri mieltä |   |   |   | Täysin samaa mieltä |   |   |
|--|--------|-------------------|---|---|---|---------------------|---|---|
| 4.11 Johtamani verkkolehti saa tuloja verkkopalvelussa julkaistujen juttujen maksullisen arkiston käytöstä   | Tänään | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |
| 4.12 Johtamani verkkolehti saa tuloja yrityksiltä, jotka ostavat mainoksia kuluttaja-asiakkaille lähettämiimme sähköpostiviesteihin (esim. uutiskirjeen mukaan olevista mainoksista) | Tänään | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |
| 4.13 Johtamani verkkolehti saa tuloja myymällä asiakasrekisterissämme olevien kuluttaja-asiakkaiden kontaktitietoja muille yrityksille (esim. suoramarkkinointiin)                   | Tänään | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |
|  | 2004   | 1                 | 2 | 3 | 4 | 5                   | 6 | 7 |

**4.14 VASTAUSOHJEET:** Merkitse sarakkeeseen kuinka monta prosenttia verkkolehtenne nykyisistä vuotuisista kokonaistuloista kyseessä oleva tulonlähte tuottaa tänään ja kuinka monta prosenttia arvioitte sen tuottavan kolmen vuoden kuluttua (vuonna 2004).

| Verkkolehden tulojen profiili   | Prosenttia tuloista tänään | Prosenttia tuloista 2004 |
|---|----------------------------|--------------------------|
| 1 Kuluttaja-asiakkaiden maksamat tilausmaksut   |                            |                          |
| 2 Maksullinen mainonta (bannerit, sponsorointi ja promootiosopimukset)  |                            |                          |
| 3 Työpaikka ilmoitukset   |                            |                          |
| 4 Asunto ilmoitukset  |                            |                          |
| 5 Luokitellut (pikku)ilmoitukset  |                            |                          |
| 6 Palkkiot kaupallisista transaktioista tai niiden välityksestä   |                            |                          |
| 7 Kumppanuuteen muiden yritysten kanssa, jonka tarkoituksena on saavuttaa tuloja (esim. ISP-toiminta)                       |                            |                          |
| 8 Verkkolehteä julkaisevan yrityksen muiden tuotteiden tai palveluiden ristiin mainostaminen tai myyminen ("cross selling") |                            |                          |
| 9 Maksullinen vahtipalvelu, jossa kuluttaja-asiakkaalle lähetetään ilmoitus hakukriteerin täyttäneistä asioista             |                            |                          |
| 10 Maksullinen julkaistujen juttujen arkisto  |                            |                          |
| 11 Mainoksia sisältävät sähköpostiviestit kuluttaja-asiakkaille   |                            |                          |
| 12 Asiakasrekisterissä olevien kontaktitietojen myyminen yrityksille  |                            |                          |
| 13 Muut tulon tulonlähteet  |                            |                          |
| <b>yhteensä</b>   | <b>100%</b>                | <b>100%</b>              |

Kysely jatkuu seuraavalla sivulla...

## 5. Vielä muutama kysymys

|   | Täysin eri mieltä    |   |   |   | Täysin samaa mieltä |   |   |
|---|----------------------|---|---|---|---------------------|---|---|
|   | 1                    | 2 | 3 | 4 | 5                   | 6 | 7 |
| 5.1 Johtamani verkkolehden tuotteiden ja palveluiden valikoima on tänään suurempi kuin se oli kolme vuotta sitten (vuonna 1998)                 |                      |   |   |   |                     |   |   |
| 5.2 Johtamani verkkolehti aikoo tarjota nykyistä huomattavasti suuremman valikoiman tuotteita ja palveluja kolmen vuoden kuluttua (vuonna 2004) |                      |   |   |   |                     |   |   |
| 5.3. Milloin johtamanne verkkolehden ilmestyi ensimmäisen kerran  | _____ (pp.kk.vv)     |   |   |   |                     |   |   |
| 5.4. Kuinka monta prosenttia painetun sanomalehtenne vuosikerran sisällöstä julkaisette verkkolehdessä  | _____ (%) prosenttia |   |   |   |                     |   |   |
| 5.5. Mikä oli johtamanne verkkolehden henkilöstön lukumäärä vuoden 2000 lopussa   | _____ henkilöä       |   |   |   |                     |   |   |
| 5.6. Kuinka paljon yrityksenne panosti verkkolehden markkinointiin vuonna 2000  | _____ mk             |   |   |   |                     |   |   |
| 5.7. Johtamani verkkolehden vuotuiset kokonaistulot olivat vuonna 2000 yhteensä   | _____ mk             |   |   |   |                     |   |   |
| 5.8. Verkkolehteä julkaisevan painetun sanomalehden vuotuiset kokonaistulot olivat vuonna 2000 yhteensä   | _____ mk             |   |   |   |                     |   |   |
| 5.9 Mikä on johtamanne verkkolehden rekisteröityneiden käyttäjien kokonaismäärä tänään  | _____ kpl            |   |   |   |                     |   |   |
| 5.10 Mikä on johtamanne verkkolehden viikoittainen käyttäjämäärä  | _____ kpl            |   |   |   |                     |   |   |
| 5.11 Mittaamme johtamassani verkkolehdessä säännöllisesti viikoittaista käyttäjämäärää  | <b>Kyllä</b>         |   |   |   | <b>Ei</b>           |   |   |

**Paljon kiitoksia vaivannäöstänne!**

**Lomake pyydetään ystävällisesti postittamaan 5.11.2001 mennessä osoitteella:**

Professori Markku Sääksjärvi  
Helsingin kauppakorkeakoulu  
Johtamisen laitos/Tietojärjestelmätiede  
PL 1210  
00101 Helsinki

## **Appendix C: The cover letter of survey (in English)**

HELSINKI SCHOOL OF ECONOMICS  
Department of Management/Information Systems Science

November 2001

«Company Name»  
«Title» «First Name» «Last Name»  
«Street Address»  
«Postal code» «Post Office»

Distinguished business manager of online newspaper

With this mail survey Helsinki School of Economic (Department of Management) is evaluating the level of business success of online newspapers in Finland. We are especially interested to study the relationship between business success and new features of online newspapers (e.g. customization). The main focus of this survey is to clarify the current state of affairs regarding business success and factors affecting the business success. In addition we are also looking for the future vision of the online newspapers in three years time period.

This survey is carried out with the help of Finnish Newspaper Association. All survey respondents will also be invited into research seminar, which is arranged by united efforts of Helsinki School of Economics and Finnish Newspaper Association. In the research seminar the survey result are presented and discussed. The seminar will be free of charge for all those who have given answer to this mail survey.

We will look for your valuable contribution to our research. All answers are equally important for us, since the more comprehensive our research data is, the more generally applicable our explanation between features of online newspaper and business success will be.

We invite you to answer the enclosed survey questionnaire. Answering should take less time than 30 minutes. We believe that already the answering itself will be profitable since we are evaluating and later reporting which forthcoming new features are best explaining the business success of online newspaper.

Even if our research data will not include sensitive questions (e.g. regarding future strategy) all answers are handled according with strict principles. The research data will be treated as confidential material and we will not publish any company or respondent specific information.

We wish to receive your answers as soon as possible but no later than 15 of November 2001. The return address is disclosed in the survey questionnaire. We are more than happy to give you additional information about our research (contact person Teemu Santonen 050-365 8353)

Best regards,

Markku Sääksjärvi  
Professor  
Information Systems Science

Olavi Rantalainen  
Communications Director  
Finnish Newspaper Association

Appendix: Survey Questionnaire



# HELSINKI SCHOOL OF ECONOMICS



## **The business models of online newspapers 2001-2004**

## **Respondent group**

This survey is evaluating the business models of online newspapers in Finland from the management point of view. Therefore it is important that our respondents are managers responsible for online newspaper strategy, finance, journalistic content and technology. Respondent should have a good overall impression about the current state of affairs in following areas

- 1) Competitive conditions of your online newspaper
- 2) Setting and meeting the business goals of your online newspaper
- 3) Features and services of your online newspaper
- 4) Revenue sources of your online newspaper

This survey questionnaire has been sent to all online newspapers in Finland which are published by print newspaper company. According to statistics of Finnish Newspaper Association there are altogether 128 online newspapers in Finland which are meeting this qualification.

## **What is online newspaper?**

In this survey questionnaire we are using the term "online newspaper" to contain the completeness of services, which the print newspaper company is providing in their web site. If there are any additional web sites, which are essential part of the company's online newspaper, but are currently operating under other web site addresses, we request the respondent to reveal also those web sites addresses.

## **Confidential promise**

The research data collected with this survey questionnaire will be held as confidential material and therefore we will not publish any company or respondent specific information to anybody outside our research team.

## **Free of charge research seminar for respondents**

For those who are participating in this survey, we are going to arrange a free of charge research seminar after finishing the results of this research.

## **Returning the questionnaire**

We wish to receive your answers on later than 15 of November 2001. The return address is following

Professor Markku Sääksjärvi  
Helsinki School of Economics  
Department of Management/Information Systems Science  
P.O. Box 1210  
00101 Helsinki

## Contact information

|  |
|--|
| Name of the respondent: _____              |
| Name of the company: _____                 |
| Web site address(es): _____                |
| Area of responsibility of respondent _____ |
| Telephone: _____ Email: _____              |

## Answering to questions

Mark from the scale the number (1 – 7) which is the most equivalent to your opinion regarding the state of affairs of current and year 2004 situation. Your opinion can range between fully agree and fully disagree.

Your "current" answer should reflect the actual state of affairs regardless how you wished the situation to be. Your "2004" answer on the other hand should reflect the most probable state of affairs in year 2004, regardless how you wished it to be.

Only when you do not know the state of affairs or the status of the matter is really neutral in your opinion mark the number 4. If you feel that the question is unclear, mark the question with additional question mark.

The interpretation of the numeric scale is following:

- 1 Totally/Fully disagree
- 2 Clearly disagree
- 3 Slightly disagree
- 4 I don't know (or neutral opinion)
- 5 Slightly agree
- 6 Clearly agree
- 7 Totally/Fully agree

**You can start answering the questions from the next page.**

## 1. Competitive conditions

|  |           | Totally disagree |   |   |   |   | Totally agree |   |  |
|--|-----------|------------------|---|---|---|---|---------------|---|--|
| 1.1 The wants and needs of our online newspaper customers are changing rapidly   | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.2. The life-cycle of our online newspaper (or major/essential parts of it) are short and unpredictable                               | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.3. The technological solutions of our online newspaper must be changed in very dense tempo.  | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.4. The customers of our online newspaper are desiring individually tailored/customized features                                      | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.5. The additional support services (like subscription services) have an influence on customers intention to use our online newspaper | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.6. The perceived quality of our online newspaper is greatly affecting on customers intention to use our online newspaper             | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.7. Our online newspaper is heavily participating in competition of market shares   | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |
| 1.8. Economical cycles (like declining and rising) are affecting on customers intention to use our online newspaper                    | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |  |
| <hr/>  |           |                  |   |   |   |   |               |   |  |

Continue in next page....

|   |           | <b>Totally disagree</b> |   |   |   |   | <b>Totally agree</b> |   |
|---|-----------|-------------------------|---|---|---|---|----------------------|---|
| 1.9. The demand level of our online newspaper is unstable and unpredictable   | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.10. Our online newspaper is a luxury product  | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.11. Our competitive strategy is based on product differentiation  | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.12. The (subscription) price of our online newspaper is greatly affecting on customers intention to use our online newspaper                            | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.13. The wants and needs of our online newspaper customers are unstable and hard to define   | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.14. It would be easy to replace our online newspaper with substitute product/service which would provide the same functionality as our online newspaper | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.15. The customers are able to affect the prices, features and conditions of usage of our online newspaper   | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.16. Fashion trends are affecting on customers intention to use our online newspaper   | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
| 1.17. The market environment where our online newspaper is operating is saturated and the competition is intensive  | Currently | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |
|   | 2004      | 1                       | 2 | 3 | 4 | 5 | 6                    | 7 |

**Continue in next page....**

## 2. Business objectives

|  | Totally disagree |   |   |   | Totally agree |   |   |
|--|------------------|---|---|---|---------------|---|---|
| 2.1a. We have defined high customer satisfaction as a business objective                                 | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.1b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.2a. We have defined the amount of online customers as a business objective                             | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.2b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.3a. We have defined the reach of new customers or customer segments as a business objective            | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.3b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.4a. We have defined the level of support to existing customer relationships as a business objective    | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.4b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.5a. We have defined the level of online newspaper brand recognition as a business objective            | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.5b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.6a. We have defined the level of support to print newspaper brand as a business objective              | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.6b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.7a. We have defined the level and versatility of product and service selection as a business objective | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.7b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.8a. We have defined learning new skills in online publishing process as a business objective           | 1                | 2 | 3 | 4 | 5             | 6 | 7 |
| 2.8b. In my opinion we have reach this objective well  | 1                | 2 | 3 | 4 | 5             | 6 | 7 |

**Continue in next page....**

|   | <b>Totally disagree</b> |   |   |   | <b>Totally agree</b> |   |   |
|---|-------------------------|---|---|---|----------------------|---|---|
| 2.9a. We have defined learning new technological skills as a business objective   | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.9b. In my opinion we have reach this objective well   | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.10a. We have defined the increase of print newspaper subscriptions and single-copy sales as a business objective      | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.10b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.11a. We have defined the increase of print newspaper advertising sales as a business objective                        | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.11b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.12a. We have defined the process efficiency as a business objective   | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.12b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.13a. We have defined the cost efficiency as a business objective  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.13b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.14a. We have defined the profitability as a business objective  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.14b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.15a. We have defined the maximization of return of investment of print newspaper as a business objective              | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.15b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.16a. We have defined the supply of new delivery channels as a business objective (e.g. Internet, email, mobile phone) | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |
| 2.16b. In my opinion we have reach this objective well  | 1                       | 2 | 3 | 4 | 5                    | 6 | 7 |

**Continue in next page....**

### 3. Level of customization

|  |           | Totally disagree |   |   |   |   | Totally agree |   |
|--|-----------|------------------|---|---|---|---|---------------|---|
|  |           | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| 3.1 Our online newspaper is a mass product. Each and every customer will receive identical product | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

**Instructions:** If you selected in both cases (=currently and 2004) option totally agree (= you marked number 7), we kindly ask you to move directly to questionnaire section 4. Otherwise you can continue answering from the question 3.2.

|   |           | Totally disagree |   |   |   |   | Totally agree |   |
|---|-----------|------------------|---|---|---|---|---------------|---|
|   |           | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| 3.2 Customers are able to change the colours or visual layout of our online newspaper (e.g. with the help of pre-defined options) | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|   | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

|  |           |   |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|---|
| 3.3 Customers are able to indicate interest areas (e.g by selecting topic sections or key words). Based on these preferences we are providing customized view to content | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 3.4 There is at least one page in our online newspaper, which layout or user interface individual customer can change by adding, deleting or changing the predefined modules (e.g. comparative to my.yahoo) | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 3.5 Our customization is based on invisible implementation. Customers are not necessarily realizing that they are using customized services or features | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 3.6 We have implemented a flexible process, which is covering our whole value chain. Because of that, we can easily fulfil individual customer needs. | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |           |   |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|---|
| 3.7 Customers can select from many different distribution channels (e.g. web browser, email, mobile phone) | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 3.8 Our online newspaper is automatically able to adjust itself to requirements and demands of different browsers/devices, screen resolutions and operating systems | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 3.9 Customer contact information buyer is able to pick a specific target group, based on desired selection criterions | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Continue in next page....**



|  |                   | Totally disagree |   |   |   |   | Totally agree |   |
|--|-------------------|------------------|---|---|---|---|---------------|---|
| 3.10 We are publishing many contemporary versions of our online newspaper, which all are aimed to specific user group (e.g. based on age or residence) | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.11 Content and services are recommended to individual customer   |                   |                  |   |   |   |   |               |   |
| a) based on demographic profile of customer (e.g. age, residence or duration of previous visit)  | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| b) based on content rating previously done by customer itself  | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| c) based on usage habits of other customers which have similar usage habits  | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.12 Customers can select items to his/hers own favourites/bookmark list (e.g. interesting news or job ads)  | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.13 Customers can save his/hers own search criterions. Based on these criterions we will send an alert to customer when his/her criterions are met.   | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.14 Customers can select the most suitable subscription and payment option from various possibilities   | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.15 In our online newspaper, web banner advertisers are able to pick a specific target group, based on desired selection criterions                   | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |                   |                  |   |   |   |   |               |   |
| 3.16 Within our online newspaper's email newsletter, advertisers are able to pick a specific target group, based on desired selection criterions       | Currently<br>2004 | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  |                   | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

**Continue in next page....**

#### 4. Revenue sources

|   |           | Totally disagree |   |   |   |   | Totally agree |   |
|---|-----------|------------------|---|---|---|---|---------------|---|
| 4.1 Our online newspaper does not include any fee based services for consumer or business customers | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|   | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

**Instructions:** If you selected in both cases (=currently and 2004) option totally agree (= you marked number 7), we kindly ask you to move directly to questionnaire section 5. Otherwise you can continue answering from the question 4.2

|   |           | Totally disagree |   |   |   |   | Totally agree |   |
|---|-----------|------------------|---|---|---|---|---------------|---|
| 4.2. Our online newspaper is having incomes from online subscriptions | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|   | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 4.3 Our online newspaper is having incomes from online advertising (e.g. web banners, sponsor and promotion agreements) | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |           |   |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|---|
| 4.4 Our online newspaper is having incomes from job advertisements | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |           |   |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|---|
| 4.5 Our online newspaper is having incomes from real estate and land advertisements (e.g. want to sell/buy/rent ads) | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 4.6 Our online newspaper is having incomes from classified advertisements | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|  |           |   |   |   |   |   |   |   |
|--|-----------|---|---|---|---|---|---|---|
| 4.7 Our online newspaper is having incomes from being a mediator between consumers and companies | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 4.8 Our online newspaper is having incomes from partnership/joint-venture agreements (e.g. partnerships with telecom operators) | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 4.9 Our online newspaper is having incomes from cross selling other products provided by our own publishing company | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|   |           |   |   |   |   |   |   |   |
|---|-----------|---|---|---|---|---|---|---|
| 4.10 Our online newspaper is having incomes from email and/or SMS-message alerts which are send to customers based on their saved search criterions | Currently | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|   | 2004      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Continue in next page....**

|  |           | Totally disagree |   |   |   |   | Totally agree |   |
|--|-----------|------------------|---|---|---|---|---------------|---|
| 4.11 Our online newspaper is having incomes from archives  | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |           |                  |   |   |   |   |               |   |
| 4.12 Our online newspaper is having incomes from ads which are included into email newsletters   | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
| <hr/>  |           |                  |   |   |   |   |               |   |
| 4.13 Our online newspaper is having incomes from selling our customers contact information to other companies (e.g. to direct marketing companies) | Currently | 1                | 2 | 3 | 4 | 5 | 6             | 7 |
|  | 2004      | 1                | 2 | 3 | 4 | 5 | 6             | 7 |

**4.14 Instructions:** Mark how many percentages of total annual incomes the particular revenue stream is bringing (currently and in year 2004).

| Revenue stream   | Percentage currently | Percentage 2004 |
|--|----------------------|-----------------|
| 1 Online subscription fees from consumers  |                      |                 |
| 2 Banner, sponsor and promotion advertising  |                      |                 |
| 3 Job advertisements   |                      |                 |
| 4 Real estate advertisements   |                      |                 |
| 5 Classified advertisements  |                      |                 |
| 6 Fees from commercial transactions between our customers and companies (being a mediator)                 |                      |                 |
| 7 Partnership/joint-venture agreements (e.g. partnerships with telecom operators)                          |                      |                 |
| 8 Cross selling other products provided by our own publishing company                                      |                      |                 |
| 9 Fee based agent/search service, where customer will receive an alert when his/her criterions are matched |                      |                 |
| 10 Archives  |                      |                 |
| 11 Email advertising (e.g. newsletter)   |                      |                 |
| 12 Selling the contact information of our customers  |                      |                 |
| 13 Other revenue sources   |                      |                 |
| <b>total</b>   | <b>100%</b>          | <b>100%</b>     |

**Continue in next page....**

## 5. Few additional questions

|   | Totally disagree     |   |    |   |   | Totally agree |   |
|---|----------------------|---|----|---|---|---------------|---|
|   | 1                    | 2 | 3  | 4 | 5 | 6             | 7 |
| 5.1 Our current product and service selection is greater than it was three years ago (in year 1998)   |                      |   |    |   |   |               |   |
| 5.2 By the year 2004 the product and service selection of our online newspaper is going to be substantially greater than today (in year 2004) |                      |   |    |   |   |               |   |
| 5.3. Our online newspaper was first time published in   | _____ (dd.mm.yy)     |   |    |   |   |               |   |
| 5.4. How many percentages of the content of the print newspaper is published in online version  | _____ (%) percentage |   |    |   |   |               |   |
| 5.5. How many employees were directly dedicated to online activities in the end of year 2000  | _____ persons        |   |    |   |   |               |   |
| 5.6. How much money your online newspaper dedicated to marketing in year 2000   | _____ mk             |   |    |   |   |               |   |
| 5.7. The total amount of annual revenue in year 2000 (online newspaper)   | _____ mk             |   |    |   |   |               |   |
| 5.8. The amount of annual revenue in year 2000 (print newspaper)  | _____ mk             |   |    |   |   |               |   |
| 5.9 How many registered users your online newspaper has today   | _____ users          |   |    |   |   |               |   |
| 5.10 How many weekly users your online newspaper has today  | _____ users          |   |    |   |   |               |   |
| 5.11 We are regularly tracking the amount of weekly users of our online newspaper   | Yes                  |   | No |   |   |               |   |

**Thank you for all the trouble you've taken!**

**We wish to receive your answers no later than 15 of November 2001  
in the following return address**

Professor Markku Sääksjärvi  
Helsinki School of Economics  
Department of management/Information Systems Science  
P.O. Box 1210  
00101 Helsinki

## **Appendix E: Open-ended questions for case interviews (in Finnish)**

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### **Verkkolehdelles asetetut tavoitteet ja ansaintalogiikka**

---

1. Miten verkkolehtien viisi pääavoitetta painottuvat omassa toiminnassanne ja kuinka tärkeitä eri tavoitteet ovat toiminnallenne?
  2. Tunnistatteko nämä tavoitteet ja ovatko nämä tavoitteet relevantteja verkkolehti toiminnassanne?
  3. Onko teillä jotain muita pääavoitteita verkkolehti toiminnassanne?
  4. Miksi olette päätyneet juuri näihin tavoitteisiin?
  5. Miksi olette päätyneet painottamaan tavoitteitanne juuri valitsemallanne tavalla?
  6. Miten tavoitteenne ovat muuttuneet ja miksi ne ovat muuttuneet?
  7. Miten arvioitte tavoitteidenne muuttuvan tulevaisuudessa ja miksi arvioitte niiden muuttuvan?
  8. Mikä on verkkolehden strateginen asema suhteessa painettuun lehteen? Miksi asema on kuvatuunlainen?
  9. Tuleeko verkkolehden olla itsessään taloudellisesti kannattava vai voiko verkkolehti olla tappiollinen?
  10. Verkkolehden ansaintalogiikka?
  11. Nykyinen ansaintalogiikka ja hinnoittelumalli (miksi)?
  12. Miten ansaintalogiikka on muuttunut (miksi)?
  13. Miten ansaintalogiikka on jatkossa muuttumassa (miksi)?
- 

---

### **Verkkolehden julkaisuprosessi**

---

1. Miten ja miksi verkkolehden tuotanto ja julkaisuprosessi muuttunut kokemuksen myötä?
  2. Onko tuotanto ja julkaisuprosessi nyt valmis vai onko muutoksia tiedossa? Miksi muutoksia on tulossa?
  3. Miten ja miksi verkkolehti on muuttanut printtilehden julkaisuprosessia?
  4. Onko printtilehden tekoprosessiin tulossa vielä muutoksia jotka johtuvat verkkolehdestä?
  5. Miten tuotantoprosessin ja teknisten alustoiden joustavuus on muuttunut (onko prosessi nyt joustavampi kuin aikaisemmin -> aikaisemmin vain yksi printtikanavan nyt monta kanavaa mahdollisimman monelle asiakkaalle)?
  6. Onko tavoitteenne kehittää "räätälöity ja joustava" tuotanto ja julkaisuprosessi vai optimoida standardi massatuotantoprosessi (miksi)?
  7. Miten prosessimuutokset ovat vaikuttaneet tuloihin/kannattavuuteen?
  8. Kumpi oli ensi tulot/kannattavuus vai muutokset prosessiin (onko prosessin muokkaaminen syy parempiin/huonompiin tuloihin/kannattavuuteen)?
-

---

### **Verkkolehden tuoteominaisuudet ja räätälöinti**

---

1. Onko verkkolehdenne tavoitteenne olla erilainen kuin kilpailijoihonne tuotteet (tuoteominaisuudet ja sisällöt)? (Miten ja miksi)
  2. Pyrittekö kustannus/hintajohtajuuteen? (olette halvin kuluttajille ja yritysasiakkaille)
  3. Miten asiakas voi räätälöidä/personoida verkkolehteänne ominaisuuksia ja sisältöjä?
  4. Miten suhtaudutte verkkolehden asiakaskohtaiseen räätälöintiin/personointiin (miksi, onko se relevantti strategia verkkolehdlle)?
  5. Kuinka kriittisenä koette verkkolehden asiakaskohtaiseen räätälöintiin/personoinnin (miksi)?
  6. Miten sitoutatte asiakkaittanne (ns. lock-in strategia)?
  7. Verkkolehden ovat keskittyneet enemmän joustavaan/räätälöityyn prosessin kuin räätälöineet/personoineet tuoteominaisuuksia (miksi)?
  8. Vain kokeneet verkkolehdet räätälöivät tuotteitaan ja prosesseitaan (miksi)?
  9. Vain valtakunnantasolla kilpailevat verkkolehdet näyttävät räätälöivän/personoivan tuotteitaan ja prosesseitaan (miksi)?
- 

---

### **Verkkolehtien markkinaympäristö ja kilpailutilanne**

---

1. Miten koette kilpailu tilanteen verkkolehti markkinoilla/ ylipäätään Internetissä?
  2. Ketkä ovat verkkolehdenne kilpailijoita (muut verkkolehdet, muut mediat, yms.)?
  3. Miten kova kilpailutilanne on mielestänne?
  4. Miten kilpailu ilmenee?
  5. Miksi kilpailutilanne on mielestänne kuvatulainen?
  6. Miten kilpailutilanne on muuttumassa (miksi)?
  7. Verkkolehden kysyntä?
  8. Kuinka tasaista verkkolehden kysyntä on?
  9. Miten kontrolloitte kysyntään/pystyttekö kontrolloimaan sitä?
  10. Miten kysyntä on muuttunut (miksi)?
  11. Miten arvioitte verkkolehden kysynnän muuttuvan tulevaisuudessa (miksi)?
-

## **Appendix F: Open-ended questions for case interviews (in English)**

---

### **Business goals and revenue logic**

---

1. How important the five generic goals of Finnish online newspapers are to your company. How these goals are emphasized?
  2. Do you identify these generic goals? How relevant these goal are for your company?
  3. What other business goals your online newspaper have?
  4. Why you have selected these business goals?
  5. Why you are emphasizing your business goals like you described?
  6. Are there any changes occurred with in your business goals? Why?
  7. Are you going to make changes in your business goals? Why you are going to make these changes?
  8. What kind of strategic position your online newspaper has (comparing to printed version)? Why?
  9. Is profitability an obligatory requirement or do you approve losses (at some level)?
  10. Describe your revenue logic?
  11. Why you are using your current revenue logic?
  12. Are there any changes occurred in your revenue logic? Why?
  13. Are you going to change your company's revenue logic? Why?
- 

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### **Online publishing process**

---

1. How and why your online publishing process has changed?
  2. Is your publishing process now ready or are you going to make some changes? Why?
  3. Has online version changed the publishing processes of printed version?
  4. Are you going to make changes to print publishing processes which are resulted because of online version?
  5. Is your publishing process now more flexible than previously when the number of distribution channels was more limited?
  6. Are you aiming at customized/flexible processes or are you trying to optimize mass production processes? Why?
  7. Have you identified relationship between process changes and profitability?
  8. Is the better profitability and higher revenues result of process changes?
-

---

**Features and customization of online newspaper**

---

1. Are you aiming at product differentiation? How and why?
  2. Are you aiming at price/cost leadership?
  3. What customization features you are offering to your customers?
  4. Is the aim of the individually customized online newspaper relevant strategy to you? Why?
  5. How critical customization strategy is for your company?
  6. What methods you are using to lock-in your customers?
  7. It appears that online newspapers in general have concentrated into process customization rather than product customization. Why?
  8. It appears that only the most experienced online newspaper have applied customization strategy? Why?
  9. It also appears that only the online newspapers operating in the larger geographical orientation have applied customization strategy? Why?
- 

---

**Competitive conditions of online newspapers**

---

1. What is your general impression of the current online newspaper and internet market environment?
  2. Who are your competitors?
  3. How intensive the competition is?
  4. How the competition is occurring?
  5. What are the reasons for current status of competition?
  6. Are you expecting any changes in competitive conditions? Why?
  7. Tell me about the demand level of your online newspaper?
  8. How steady is the demand of your online newspaper?
  9. Are you able to control the demand level of your online newspaper?
  10. Have you identified any changes in demand levels?
  11. Are you expecting any changes in near future? Why?
-



## **THE SECOND SECTION:**

**The original research essays**

# **Evolution and Success of Online Newspapers: an empirical investigation of goals, business models and success**

Sääksjärvi Markku and Santonen Teemu

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Towards the Knowledge Society, eCommerce, eBusiness and eGovernment

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# EVOLUTION AND SUCCESS OF ONLINE NEWSPAPERS

*An empirical investigation of goals, business models and success*

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**Abstract:** In the evolving IS literature on business models for digital products, there seems to be a common belief that the positive feedback effect will lead to price competition and biased concentration of the market. However, there are not many serious empirical analyses studying this assumption carefully. In this paper we propose an examination of the goals and success of online newspapers in a homogenous and well-developed market. We evaluate the generic goals and their attainment, growth and concentration patterns, and the business models applied in order to test our hypotheses on the effects of revenue logic and the concentration of business capabilities among the online newspapers. Our empirical tests with data from 42 online versions showed that online versions had different evolution trends in national versus regional markets. Contrary to our hypothesis, the business model had only a marginal effect on the success scores compared with experience and orientation. Our analyses indicated that there was non-linear growth in both revenue and key capability factors, but that companies were still able to increase their revenue by devoting resources to manpower and marketing. Therefore we rejected our hypothesis on a dominating positive feedback effect.

**Key words:** Online newspapers, Business models, Success, Evaluation

## 1. INTRODUCTION

World wide, there are currently almost 5000 newspapers online (Editor&Publisher 2001). While online newspapers are trying to identify their role, there seems to be no agreement yet as to whether the digital versions will be a financially viable medium for publishing companies.

The newspaper publishing industry itself is particularly interesting, since companies that have traditionally provided products in physical form are now actively pursuing digital options (Gallaughier et al. 2001). Marketing on the web offers interesting opportunities to search for and compare products in a global marketplace. This extends the regional focus, demands new considerations with respect to content, and provides opportunities to win new customers by offering customised products and services (Palmer and Eriksen 1999). However, companies are taking on a number of new challenges through their appearance on the net. It is well known that digital products are not easy to manage and require special skills, teamwork and strategies (Stone 1999, Neuberger et al 1998, Stepp 1996).

Publishing companies are obviously one set of influential players in the new digital economy, making markets and revenue streams with new digital products and services. As future forms of computer software may change in the direction of media content (Drummond 2002) the digital publishing companies may provide findings of interest for the new business models required by software innovators, too.

At least the following factors make online publishing problematic for print paper companies. Firstly, the unique characteristics of digital products demand either cost leadership, effective differentiation, and/or customisation (Shapiro and Varian 1998a, Choi et al. 1997), and may even lead to cannibalisation of the company's own printed products. This setting is not typical to strategies conventionally applied in the printed paper industry. Secondly, there are several factors that may limit the interest of print paper companies to online versions, like turbulence of the new marketplace, ambiguous business models, questionable profitability, and delays that may lead to peril as fast movers obtain financing and establish their brand (Harper 1999, Chyi and Lasorsa 1999).

Published empirical studies have not yet succeeded in providing any clear guidance on appropriate business strategies or models available for successful online newspapers (Gallaughier et al. 2001). The pioneering study by Gallaugier et al. (2001), covering a plethora of revenue stream alternatives, could only explain 15 percent of the variance in performance of a hundred online magazines. Other surveys, such as content analyses of the online versions (e.g. Dibeau and Garrison 2001, Singer 2001, Peng et al. 1999, Kirsner 1999), have obtained diverging results: some authors are proposing that online versions should apply customisation, and focus on the role of local lenses, whereas others propose that web versions should target readers outside of their general circulation area.

## **1.1 Objectives of this paper**

In this paper, we evaluate the goals and success of online newspapers among those print newspaper publishing companies that have also been transforming their business to include online versions. Concentrating on the publishing industry provides for a stable focus for the study and enables control of the representativity of the data collected. We are searching both for the generic reasons to establish online versions, and for the causes of their success, but also for the most effective business models (revenue logic) applied in terms of success achieved. In order to be able to present a valid and reliable evaluation of this complex transformation from print to online media, we will combine sets of both perceptual and absolute financial measures. The aim is to find out the major factors affecting success, especially in terms of business success, if there is any significant business success yet.

The paper is structured as follows. In chapter 2 we review the business models proposed for digital products in general and for online newspapers especially. Then, in chapter 3, we describe our research methodology and hypotheses. In chapter 4 we explain our data collection, the results from our analyses, and finally, in chapter 5, draw conclusions from our observations.

## **2. BUSINESS MODELS FOR ONLINE NEWSPAPERS**

According to Afuah and Tucci (2001), a business model is the method by which a firm builds and uses its resources to offer its customers better value than its competitors and to make money doing so. It describes how a firm makes money now and in the long term. A business model combines potential environmental factors and a firm's capability, and it combines the sustainable recipe to offer competitive products or services with a relevant revenue logic.

For digital products, the right business recipe is critical, as customers are spoiled with free offerings, making it difficult to reach profitability in the still turbulent markets (Shapiro and Varian 1998b). Even if online newspapers have searched for various ways to develop viable business models, these efforts have not yet been very successful (Chyi and Lasorsa 1999, Harper 1997, Tribute 1996). There are no universal patterns for how online editions generate revenue. The typical main sources of revenue are advertising, subscription fees, archival access charges, related Internet services, online ordering of information and syndication or revenue sharing with partners (Gallaughier et al. 2001, Peng et al. 1999, Rayport and Sviokla

1994, Shapiro and Varian 1998a). Most importantly, hybrid business models are needed when the direct relation between cost and income structures is missing. The typical banner strategy is an example of a hybrid business model, in which the products are free, and income is collected from advertising income from other bodies.

The most important difficulty related to analyses of business models and revenue accumulation in digital markets is the concentration of revenue, i.e., the positive feedback effect. It is well known that markets with digital products that typically have high fixed costs and only very marginal reproduction costs will lead to “positive feedback” (Shapiro and Varian 1998a), implying fast growth and concentration of revenue to a few companies with the dominating brand. Even more, information goods are so-called experience goods, which means that charging the customers is difficult as they are not ex-ante assured of the utility of the product. This also easily leads to free products, making it even more difficult for latecomers to get any compensation to cover their product development. On the other hand, in the newspaper industry, some online versions may inherit the positive reputation and brand directly from the traditional paper (Neuberger 1998), and this may create increasing returns. For these reasons, empirical surveys of online newspapers will demand a better coverage of the data than normally required.

There are also other reasons than revenue flows and profitability that justify online editions of printed newspapers. According to Peng et al. (1999), these include reaching more readers for the print paper and promoting the print product itself. According to them, objectives for online editions are not homogenous among national and regional newspapers. Other typical non-financial reasons for online versions are, e.g., staying ahead of technological developments, and reducing the costs of printing and distribution.

## **2.1 Research questions**

For our study, we formulated the following research questions:

RQ1) What are the generic business goals of online newspapers and how well are they attained?

RQ2) Which are the typical business models applied, and how are they contributing to business success?

RQ3) Is there evidence of the positive feedback (fast concentration) in the digital newspaper market?

From the above literature review it is very obvious that a reliable picture of the evolution and (business) success of online newspapers requires a survey with a better coverage of the field than normally required. A poor representation of the total market may not uncover the real phenomenon, the possible concentration of the revenue to only a handful of companies. A reliable and representative set of homogenous companies with a durable standing in the market is therefore essential.

Our empirical survey was carried out in an interesting and homogenous market, the Finnish newspaper industry. Finland is one of the globally leading countries regarding the national IT infrastructure available for online services. Also, the population's motivation and ability to read newspapers on a daily basis are the highest globally (Statistics Finland/Tilastokeskus 2002).

In the following we will report our research methodology, the hypotheses generated and then present the results from our analyses.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Framework and hypotheses**

In order to specify our research questions, we designed our research framework, in which detailed hypotheses were constructed. The idea of the framework is grounded in the goals attainment -based success model, originally proposed and tested by Venkatraman and Rajanuman (1987) for evaluating the success of strategic planning. Online versions of printed papers are comparable to strategic planning in the sense that they require new skills, and they may be targeted at very different objectives. In the model mentioned, "success" means not only that important goals are met, but also that the capability to cope with the complex phenomenon (online newspapers) has improved. This means that instead of evaluating several indirect effects of online versions (like increased readership for the printed paper), we just define the generic goals and evaluate the degree of their attainment. Experience should teach, and this should lead not only to adaptation of the goals, but also to better success.

The above idea is presented as our research framework in Figure 1. The framework is based on testing three different hypotheses: one to validate the basic requirements of the success model itself, and two others to test the competing explanations of the business success of online newspapers. One of these is the belief that the right business model (revenue logic) will lead to business success (and also to overall success), and the other, that the generally assumed "positive feedback" theory should dominate, leaving only

a few winners, and causing the others to loose in their brand (and revenue) accumulation.

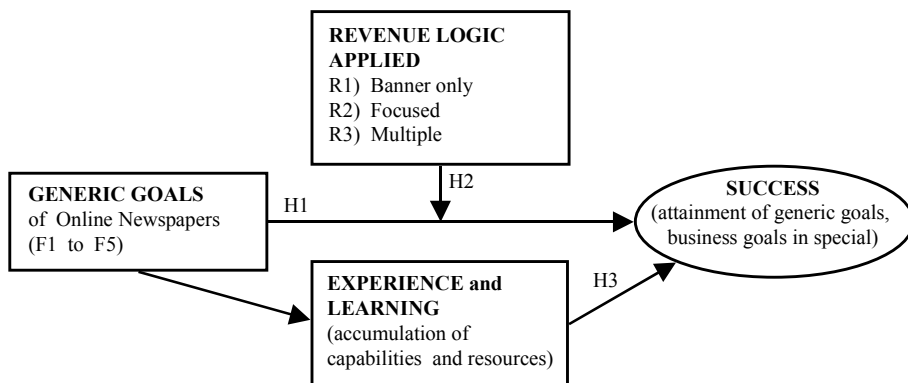


Figure 1. Research framework

The three hypotheses are the following:

H1) Success of online newspapers (attainment of goals) is in positive relationship with the importance of the goals, and experience affects the attainment of the goals positively.

H2) Business success of online newspapers is more significantly affected by the business model (revenue logic) applied than by experience of the online activity.

H3) Business success of online newspapers is not related to resources allocated to online newspapers or capability factors accumulated (because of fast concentration of the total revenue).

The left-hand box in Figure 1 presents the generic goals of the online newspapers surveyed. The basic assumption behind (H1) was that the attainment of each different goal is in a positive relationship with the perceived importance of the objective itself. Only if this hypothesis is supported, then our data make sense and are relevant. The additional criterion of success was that while staying a certain time on the net, online newspapers should learn to adapt their objectives, i.e., they should learn to be more realistic. The degree of goal attainment can be estimated as the difference (gap) between the average values of the goals and the average values of their attainment. Experience should reduce this difference, and the difference itself should be related (correlated) with success.



Hypothesis H2 assumes that the business models have a positive impact on the success in general, and that there are differences between the business models regarding their impact on business success. In Figure 1, the business model alternatives are in the middle box. The arrow (H2) describes that we assume a joint effect of the business model and the generic goal measures on success. Those online newspapers with significant business objectives and revenue should differ from the others. In brief, acceptance of H2 should indicate that revenue accumulation is dependent on the specific revenue logic used, and that attainment of the revenue goal is so essential that it also affects the overall success.

The positive feedback theory is formulated into our hypothesis H3 by assuming that if the concentration of the market is fast, then only a few companies collect the bulk of the revenue and all others loose. In that case, there should be no positive relationship between the resource allocation and success, as well as no relationship between experience (age) and level of revenue.

### **3.2 Construction of measures for generic objectives and success**

Both objectives and their achievement were evaluated on 7-point Likert scales so that the statements were placed on the questionnaire next to each other in order to make sure that the respondents evaluated similarly both the importance of each objective and the success in achieving exactly that objective. The original statements for each objective are presented in appendix (not included because of space limitations).

The original 16 items describing objectives were purified into compact factorial dimensions renamed on the basis of the items included in each factor. We used Varimax-rotation that resulted in a five component factorial model. The resulting generic dimensions with the significance statistics are documented in Appendix Table 1. The success scores used in the analyses were calculated according to exactly the same five dimensions. Their descriptive statistics are also collected into Appendix Table 2.

The resource and capability factors are also described in appendix Table 3. They were all collected in absolute values. To make sure that we got valid measures, we asked all respondents also to identify both themselves and the online newspaper in question.

The typology of the business model was based on the number of important revenue streams. For this purpose, our questionnaire included a set of 13 different revenue possibilities. We asked the respondents to fill in the exact figures of both the total value of the revenue and its division between

different revenue streams. These were then simply coded into three generic business models according to number and type of important revenue streams.

### **3.3 Data Collection**

We finalized and pre-tested the questionnaire in a few interviews with specialists of the Finnish Newspaper Association (a partner of our study) to make sure that all questions were semantically precise and understandable.

The names of the newspapers and personal addresses of the most potential respondents were collected with the help of The Finnish Newspapers Association. According to the Association's annual statistics (2001), 129 newspapers also published an online version. The accumulated circulation of these newspapers covered 88 percent of the total circulation of newspapers in Finland.

## **4. RESULTS**

### **4.1 Response**

The pre-tested questionnaire was addressed directly to the manager responsible for the online newspaper business activity. If there was no certainty over the right person, this was confirmed by a telephone call to the newspaper company.

After one follow-up letter and a few reminder phone calls to the largest online newspapers we had responses from 46 online newspapers. Four of these were short announcements that the online version had been discontinued, thus the overall response rate was very acceptable, about 32 percent. The data represent a very satisfactory sample of the target market, taking into consideration the fact that among the major newspapers (publication frequency 7 days per week), over 70 percent had responded. In rough terms, our data consisted of 15 national level newspapers, the rest having clearly more restricted regional or only local readership. Accordingly, we classified the online newspapers into two markets: national (15) and regional (27).

These online papers had generated an average annual (2001) revenue of about 274 000 FIM (46 000 euro), had 18 000 registered subscribers, and 11 000 weekly readers (October 2001). The accumulated online revenue was on average less than one percent of the annual income of the printed newspapers. These figures varied significantly between the national and regional players. The average age of the online versions was 3.6 years, and the average annual workforce, about 4 persons.

From the above figures, it was easy to see that on the whole the online newspaper publishing at the moment was not a profitable business. However, making money on the net was not the most important objective for the companies.

## **4.2 Generic goals of the online newspapers and their achievement**

Based on of the factorial analysis described in Appendix Table 1, we called the five generic objectives as follows (in the order of statistical significance):

- F1) Developing a genuine online newspaper (G-ONLIN)
- F2) Earning extra income (revenue) for the printed paper (G-BUSIN)
- F3) Improving cost-efficiency of the publication process (G-EFFIC)
- F4) Gaining skills in the new technology (G-TECHN)
- F5) Strengthening the brand of the printed paper (G-PRINT).

It was interesting to notice that supporting the print paper's brand, improvement of its services, and improvement of its customer relations were the three single original goal items with the highest averages, higher than any of the single variables loaded into G-ONLIN (Developing a genuine online newspaper). This indicates that developing a real online product was only in a supporting role for the newspaper industry at the time of the study.

## **4.3 Testing the basic relation (H1)**

As shown in Appendix Table 4, three of the success measures (SUC-PRINT, SUC-ONLIN and SUC-TECHN) correlated significantly with the goal values of the same variables. Also, the learning effect regarding goal setting was clearly evident. Appendix Table 5 describes the relationship between the degree of goal attainment and success, i.e., the difference between averages of the success and goal dimensions. Four of the five success measures were in significant correlation with this degree, also SUC-TECHN is almost significant. Further, as we can see in Figure 2, the degree of goal attainment of the key success measures (SUC-ONLIN and SUC-BUSIN) had a very large variance in the case of new online newspapers, however they converged nicely in the more experienced companies. Typically, online newspapers in the two most recent age categories had a large variation in the degree of goal attainment. Especially the SUC-BUSIN showed a positive evolution across the age groups (measured by the average of the degree of goal attainment of the business goal G-BUSIN).

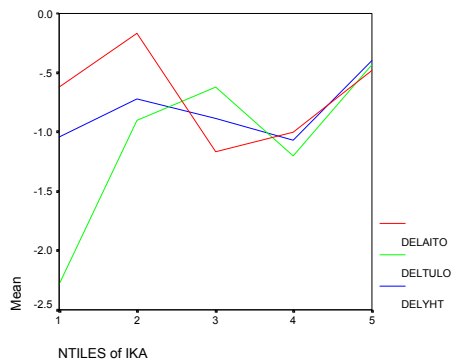


Figure 2. Degree of goal attainment in different age categories (IKA)

A more detailed study of the evolution of the various goal and success dimensions according to experience (age categories) indicated that the national and regional online versions were on different evolution tracks, implying that these two markets seemed to differ significantly. The overall success of the regional online newspapers seemed to develop negatively, declining with age, while the national papers had a more positive trend. Examples of the diverging success trends between national and regional online newspapers in different age categories are given in Figures 3 and 4, especially for the two “genuine” success dimensions. Due to the large variances in the success scores, age alone was not a significant predictor of success.

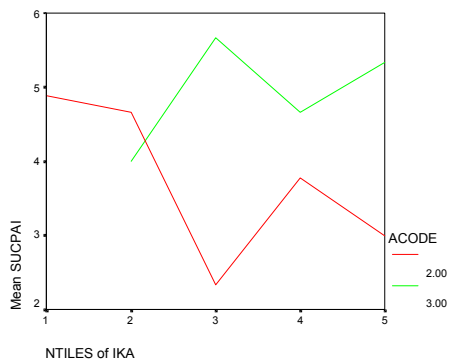


Figure 3. Success (SUC-PRINT) in different age categories (IKA). Separate lines for paper type (3=national, 2=regional)

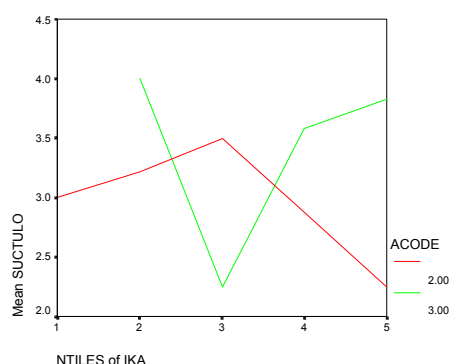


Figure 4. Business success (SUC-BUSIN) in different age categories (IKA) Separate lines for paper type (3=national, 2=regional)

The averages of the success scores measuring success especially in terms of “genuine online version” and business success were at a considerably low level in general. Two of the five factorial goal dimensions (SUC-TECHN and SUC-PRINT) had average values significantly higher than the overall success. Clearly, the online versions seem to be launched in order to support the printed paper, not to make money. This was demonstrated also by the low average value of the business goal (G-BUSIN), which had a significantly lower value than any of the other generic goals.

The above observations support our hypothesis H1. Online newspapers seem to be composed of several (five) generic orientations (goals), which differ significantly among the companies and seem to result in different success levels. Success values correlated positively with three goal measures, and importantly, the degree of goal attainment correlated significantly with both success and experience. On the basis of these observations, we are assured that both the success model used and the data collected make sense, and we can use them to test our hypotheses H2 and H3.

## 4.4 Testing hypothesis H2

Our assumption was that the business success of an online newspaper was affected by the business model (revenue logic) applied, more significantly so than by experience. In fact, we also assumed that the right revenue logic (and sufficient flow of income) is critical to all online newspapers, and therefore, the business success is positively related also to the overall success. The significance of the revenue logic was based on the well-known fact that digital products and services in general are very difficult to make money with.

In practice, only the national papers had a significant revenue stream. However, in some of the analyses we selected all cases having revenue, though always separating between the two different groups (national and regional) in order to manage the variance in the business success values. Almost all the companies reporting absolute values for resources, revenue and capability factors were in the national newspaper category.

To test the impact of the business model, we coded all cases into three typical alternatives on the basis of the revenue stream structure (percentage distribution of revenue among the alternative sources). The three business models used were the following:

BM1) Banner income (advertising the only revenue source) (15 cases)

BM2) Focused revenue logic (another dominating source besides banners) (5 cases)

BM3) Multiple revenue (at least three different important revenue sources) (2 cases).

It turned out that advertising (banner income) was by far the major revenue logic, used as the primary source of income in 15 cases of 22 and accumulating nearly 70 percent of the absolute total value of the income generated. The rest (7 cases) collected their major income from partnerships or syndication, and only two newspapers had a multiple revenue strategy. Online newspapers having income (and at least a considerable weight on making extra income) were equally distributed among the two markets. Interestingly, the business models followed different patterns as the regional versions had relied much more on other than the banner strategy, mostly on the focused strategy.

Looking at the revenue accumulation, the best business model seemed to be the banner approach alone. When related to perceived business success, however, the banner model seemed to lead to a very different outcome in the national and regional markets. Interestingly, on the regional markets the focused strategy (other than banner income as primary revenue stream) worked more effectively. Banner revenue seemed to be the only income stream for the most experienced companies, and it seemed to lead to tough competition. The above observations help to explain why the impact of the business model on success was not significant.

The low average values of business success demonstrated that business success was at the time of the survey still a utopia for both old and new online newspapers. Many of the national online versions seemed to fight for the same advertising income, relying on one revenue stream only. Those

regional versions that based their income on other primary revenue stream than the banner model seemed to be more successful. However, in the regional markets, online newspapers seemed to have negative trends both in their overall success and business success averages. For the national markets, business success had a very positive trend in the most experienced age groups, however this was not sufficient to also turn the overall success scores up.

A multivariate analysis testing the single and combined effects of the above-mentioned three key factors (paper type, age and business model) on all five success dimensions showed that both paper type (national versus regional) and age (experience) had significant individual effects on SUC-ONLIN, SUC-PRINT and SUC-EFFEC, and also a significant interaction effect on SUC-PRINT and SUC-TECHN. As shown in figure 3, SUC-PRINT had better scores for the national players. Instead, the business model had no significant effects on any of the success scores, most probably just because of the very opposite directions of the success trends between national and regional online papers.

In all, the above observations did not support our hypothesis H2, which had to be rejected. Instead of the business model applied, the reach of the paper (national versus regional) affected the revenue very radically (Figure 5). However, even a nice accumulation of revenue was not sufficient to turn the business success (or the overall success) scores up.

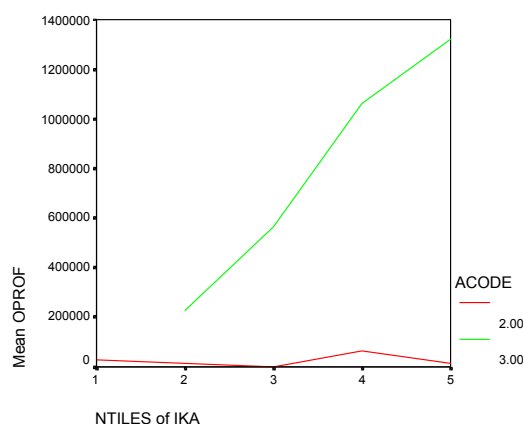


Figure 5. Average revenue in different age categories. Separate lines for paper type (3=national, 2=regional)

We have to search for additional explanation for factors affecting the business success among the capability accumulation factors collected.

## **4.5 Testing hypothesis H3**

Our assumption behind hypothesis H3 was that the success of online newspapers is affected (even dominated) by the positive feedback effect, which leads to strong concentration of income into the hands of the first strong players. If this phenomenon is typical in the national newspaper market, then it should imply real business successes only among the most experienced (first in the market) companies, and only poor success among all other companies, even in the same very experienced group of companies, independently of their capabilities and resources.

We tested our H3 by visual observation of the accumulation of capability factors (number of weekly readers and subscribers) and the resource factors (staff, marketing cost) in both national and regional markets, and tried to explain the variance of the success scores using a linear regression model with capability and resource factors as predictors (independent variables).

It turned out that accumulation of revenue and number of subscribers was quite dramatic according to age, however number of weekly readers seemingly stopping in the most experienced group of players (Figures 5 to 7). Regarding the revenue, the national players were outstanding in absolute terms. The average share of online revenue in relation to print paper income was very small, typically less than one percent. Therefore, it is no wonder that the business success scores were only satisfactory. The fact that only one of the online newspapers among the most experienced players had a high value of business success compared with all others could be seen as partial support for the positive feedback effect. However, the company had considerably high resource loads and very low percentage of the content copied from the print paper, thus apparently not having inherited the brand from the print paper directly.



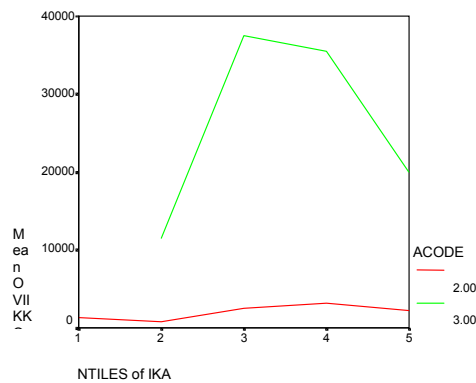


Figure 6. Average number of weekly readers (OVIKKO) in different age categories. Separate lines for paper type (3=national, 2=regional)

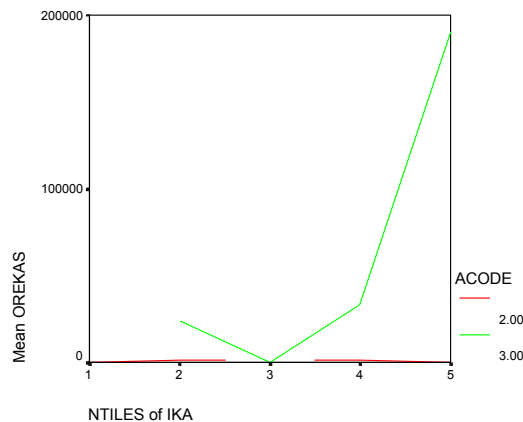


Figure 7. Average number of subscribers in different age categories. Separate lines for paper type (3=national, 2=regional)

The variance of the business success could be explained in a regression model in which paper type (national versus regional) alone explained 61 percent, and the number of weekly readers, 27 percent more. In an alternative model, the absolute revenue alone explained 59 percent of the same variance. Interestingly, the revenue could also explain as much as 65 percent of the variance of the overall success. This clearly indicates that revenue is critical for online newspapers, independently of other generic goals set.

It was also interesting to notice that the revenue itself could be explained by the two most important capability factors, weekly readers and number of

registered subscribers, but alternatively also by the resource factor, number of special staff, alone (42 percent). This means that both the resources allocated by the companies themselves, as well as the capability reserves accumulated, are in logical positive relationship with the revenue. These results are in contradiction of the dominating positive feedback hypothesis.

As a summary of our tests regarding the positive feedback effect, there was no very strong concentration of capability factors critical for revenue. The evolution of average revenue itself seemed to be linear (only in the national market), while the average number of subscribers seemed to grow exponentially. Evidently, despite the fact that only national players collected revenue, there was no dominating positive feedback effect; which would have left other experienced online newspapers except the winner without customers and income. Just the opposite, the company specific resources seemed to explain the variance in revenues. These observations are against our hypothesis H3 regarding the positive feedback effect.

## **5. CONCLUSIONS**

Our literature review on the business success of online versions of newspaper in publishing industry revealed that the transformation of printed papers into online form is not a simple process. This is due to the problematic characteristics of digital products that at least in theory make earning of money difficult and risky. Empirical studies, often based on only small data, have proposed contradictory opinions of the best strategy to survive in the online markets. Also, other than business goals were proposed to be among the most important, typically including various ways to support the printed version. There are no serious empirical studies, however, on how successful these other orientations could be compared to business success, which at least in theory is critical for any success in developing a genuine online newspaper. Although it is generally assumed that digital products lead to severe price competition ending up in the concentration of revenue to only a handful of first players on the market, there is no empirical evidence of this in the case of online newspapers.

Our analyses on data covering both national and regional levels of online newspapers in a country with well developed national IT infrastructure revealed that the online newspapers founded by publishing companies had several different generic goals. For both the national and regional online versions, the most important single goal was to support and strengthen the printed version of the newspaper. National online papers placed more weight on developing a genuine online version, as the regional and generally less experienced versions aimed primarily at gaining new technical skills. On

average, making extra money had the lowest average of all five goals; however, such goals were clearly more ambitious among the online versions that had appeared later on the market than among the pioneering versions.

The success scores followed different lines for national and regional online newspapers. Only national players seemed to improve their average success scores along with experience; the regional versions typically showed declining trends in the success dimensions, especially business success. The success scores turned out not to be dependent on the business models applied, although national orientation and extensive experience together resulted in significantly higher values in all other success dimensions than business success.

Our data provided some evidence of the revenue concentration effect typical to digital products. Yet the fact that both the capability factors and resource loading of the companies explained the variance of the revenue well was contrary to the positive feedback theory. In fact, at the stage of transformation to online versions, the companies seemed to be able to increase their revenue by investing more in skilful resources. The observation that revenue also significantly explained the variance in overall success, not in business success alone, is a signal of the critical importance of revenue streams for online newspapers.

In order to be able to accurately analyse the real business strategies of the online versions, we should survey the content and services of the online papers and relate diversification and/or customisation of the products and services with the success scores. This would indicate whether the latecomers have to create more innovative or more customer-oriented services to be able to compete with more experienced competitors that were in time in creating the winning brand.

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## 7. APPENDIX

*Table 1. Factorial Analysis of the Generic Goals of Online Newspapers*

| Factor  | N  | Mean  | Std. Dev | Factor loading | Items correlation with total score | Eigenvalue   |
|---|----|-------|----------|----------------|------------------------------------|--------------|
| <b>F1. Developing a Genuine Online Newspaper (G-ONLIN)</b>      |    |       |          |                |                                    | <b>3.449</b> |
| GOAL-03   | 42 | 5.024 | 1.388    | 0.702          | 0.811**                            |              |
| GOAL-05   | 42 | 3.976 | 1.704    | 0.570          | 0.755**                            |              |
| GOAL-16   | 42 | 4.381 | 2.141    | 0.841          | 0.833**                            |              |
| <b>F2. Earning Extra Income for the Print Paper (G-BUSIN)</b>   |    |       |          |                |                                    | <b>2.421</b> |
| GOAL-10   | 42 | 4.595 | 1.609    | 0.792          | 0.858**                            |              |
| GOAL-11   | 42 | 4.119 | 1.685    | 0.825          | 0.871**                            |              |
| GOAL-15   | 42 | 3.410 | 1.788    | 0.648          | 0.493**                            |              |
| <b>F3. Improving Cost-Efficiency (G-EFFIC)</b>                  |    |       |          |                |                                    | <b>1.984</b> |
| GOAL- 12  | 42 | 5.095 | 1.750    | 0.774          | 0.755**                            |              |
| GOAL- 13  | 42 | 4.810 | 1.728    | 0.865          | 0.842**                            |              |
| GOAL-14   | 42 | 3.833 | 2.011    | 0.546          | 0.695**                            |              |
| <b>F4. Gaining New Technology Skills (G-TECHN)</b>              |    |       |          |                |                                    | <b>1.871</b> |
| GOAL- 08  | 42 | 5.452 | 1.714    | 0.873          | 0.889**                            |              |
| GOAL- 09  | 42 | 4.881 | 1.565    | 0.750          | 0.865**                            |              |
| <b>F5. Strengthening the Brand of the Print Paper (G-PRINT)</b> |    |       |          |                |                                    | <b>1.212</b> |
| GOAL- 01  | 42 | 4.905 | 1.665    | 0.814          | 0.749**                            |              |
| GOAL- 06  | 42 | 6.143 | 0.751    | 0.836          | 0.542**                            |              |
| GOAL-07   | 42 | 5.905 | 1.321    | 0.808          | 0.786**                            |              |

\*\* Correlation is significant at the 0.01 level

*Table 2. Descriptive statistics of the Generic Goals and Success*

|           | N  | Minimum | Maximum | Mean   | Std. Deviation |
|-----------|----|---------|---------|--------|----------------|
| G-ONLIN   | 42 | 1.00    | 7.00    | 4.4603 | 1.3987         |
| G-BUSIN   | 42 | 1.00    | 7.00    | 4.3571 | 1.4240         |
| G-EFFIC   | 42 | 1.67    | 7.00    | 4.5794 | 1.3911         |
| G-TECHN   | 42 | 1.00    | 7.00    | 5.1667 | 1.4384         |
| G-PRINT   | 42 | 3.00    | 7.00    | 5.6508 | 0.8985         |
| SUC-ONLIN | 42 | 1.67    | 6.00    | 3.9048 | 1.1365         |
| SUC-BUSIN | 42 | 1.00    | 5.50    | 3.2024 | 1.1319         |
| SUC-EFFIC | 42 | 1.33    | 7.00    | 4.0794 | 1.3309         |
| SUC-TECHN | 42 | 1.00    | 7.00    | 4.6786 | 1.3244         |
| SUC-PRINT | 42 | 1.33    | 6.33    | 4.2937 | 1.1668         |

Table 3. Resource and capability factors

|   | Mean   | Std. Deviation |
|---|--------|----------------|
| OPROF (revenue FIM)                     | 274028 | 655129         |
| OREKAS (registered subscribers)         | 18130  | 67067          |
| OVIKKO (number of weekly readers 10/01) | 10525  | 29160          |
| OSTAFF (workforce: man years)           | 3.60   | 2.5            |
| OAD (marketing cost FIM)                | 36250  | 93246          |

Table 4. Correlation between goal (G) and success (S) measures (N=42)

|         |                 | S-ONLIN | S-BUSIN | S-EFFIC | S-TECHN | S-PRINT |
|---------|-----------------|---------|---------|---------|---------|---------|
| G-ONLIN | Pearson         | .402**  | -.083   | -.332*  | .097    | .016    |
|         | Correlation     |         |         |         |         |         |
|         | Sig. (2-tailed) | .008    | .600    | .032    | .540    | .918    |
| G-BUSIN | Pearson         | .125    | .034    | -.127   | .143    | .063    |
|         | Correlation     |         |         |         |         |         |
|         | Sig. (2-tailed) | .432    | .833    | .423    | .366    | .694    |
| G-EFFIC | Pearson         | .005    | -.056   | .194    | .059    | .138    |
|         | Correlation     |         |         |         |         |         |
|         | Sig. (2-tailed) | .975    | .726    | .218    | .709    | .383    |
| G-TECHN | Pearson         | -.144   | -.167   | -.009   | .631**  | -.136   |
|         | Correlation     |         |         |         |         |         |
|         | Sig. (2-tailed) | .362    | .290    | .954    | .000    | .389    |
| G-PRINT | Pearson         | .049    | .271    | -.201   | .248    | .436**  |
|         | Correlation     |         |         |         |         |         |
|         | Sig. (2-tailed) | .758    | .083    | .203    | .113    | .004    |
|         | N               | 42      | 42      | 42      | 42      | 42      |

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 5. Correlation between Degree of goal attainment (DEL-) and Success measures (N=42)

|         |                                    | DEL-<br>ONLIN | DEL-<br>BUSIN | DEL-<br>EFFIC | DEL-<br>TECHN | DEL-<br>PRINT |
|---------|------------------------------------|---------------|---------------|---------------|---------------|---------------|
| S-ONLIN | Pearson                            | .409**        | .091          | -.039         | .484**        | .290          |
|         | Correlation<br>Sig. (2-<br>tailed) | .007          | .569          | .808          | .001          | .063          |
| S-BUSIN | Pearson                            | .326*         | .606**        | .329          | .464**        | .248          |
|         | Correlation<br>Sig. (2-<br>tailed) | .035          | .000          | .033          | .002          | .114          |
| S-EFFIC | Pearson                            | .294          | .335*         | .614**        | .233          | .283          |
|         | Correlation<br>Sig. (2-<br>tailed) | .059          | .030          | .000          | .138          | .069          |
| S-TECHN | Pearson                            | .129          | .035          | .106          | .350*         | -.041         |
|         | Correlation<br>Sig. (2-<br>tailed) | .416          | .825          | .505          | .023          | .797          |
| S-PRINT | Pearson                            | .239          | .233          | -.021         | .334          | .692**        |
|         | Correlation<br>Sig. (2-<br>tailed) | .127          | .138          | .896          | .031          | .000          |

\* Correlation is significant at the 0.05 level (2-tailed)

\*\* Correlation is significant at the 0.01 level (2-tailed)

# **Customization as A Business Model for Online Newspapers**

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## CUSTOMIZATION AS A BUSINESS MODEL FOR ONLINE NEWSPAPERS

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### Abstract

*The evolving IS literature on business models for digital products assumes that the positive feedback effect will lead to price competition and biased concentration of the market. In theory, this will require companies to either differentiate or customize their products and services. In this paper we propose an empirical investigation of customization as a lock-in business strategy for online newspapers in a homogenous and well-developed market. We explore approaches taken to customization and evaluate their impact on revenue generation of online newspapers.*

*Our empirical tests with data from 42 online versions showed that mainly experienced, nation-wide online newspapers applied customization. We determined two main customization approaches for online newspapers, customer and process oriented customization. Interestingly, only the degree of process customization was an important predictor and moderator of revenue having a significant interaction effect on the impact of the number of both customers and editorial staff on revenue. Contrary to our main hypothesis that customization should help in increasing customer lock-in through personalization or versioning, the majority of online newspapers seemed to concentrate mainly on process customization in order to serve a maximal number of different types of customers and to increase their revenue. The promising positive effects of customization strengthen our belief that customization could be an effective business model for online newspapers.*

### 1. INTRODUCTION

World wide, there are currently almost 5000 newspapers online (Editor & Publisher 2001). While online newspapers are trying to identify their role, there seems to be no agreement yet as to whether the digital versions will be a financially viable medium for publishing companies.

The newspaper publishing industry itself is particularly interesting, since companies that have traditionally provided products in physical form are now actively pursuing digital options (Gallaugher et al. 2001, Sääksjärvi and Santonen 2002). Marketing on the web offers customers interesting opportunities to search for and compare products in a global marketplace. This extends the regional focus, demands new considerations with respect to content, and provides opportunities to win new customers by offering customized products and services (Palmer and Eriksen 1999). However, companies are taking on a number of new challenges through their appearance on the net. It is well known that digital products are not easy to manage and require special skills, teamwork and strategies (Neuberger et al 1998, Stepp 1996).

At least the following factors make online publishing problematic for print paper companies. Firstly, the unique characteristics of digital products demand either cost leadership, effective differentiation, and/or customization (Shapiro and Varian 1998, Choi et al. 1997), and may even lead to cannibalisation of the company's own printed products. This setting is not typical to strategies conventionally applied in the printed paper industry. Secondly, there are several factors that may limit the interest of print paper companies in online versions, like the turbulence of the new marketplace, ambiguous business models, questionable profitability, and delays that may lead to peril as fast movers obtain financing and establish their brand (Harper 1999, Chyi and Lasorsa 1999).

Published empirical studies have not yet succeeded in providing any clear guidance on appropriate business models that could help online newspapers to generate revenue effectively (e.g. Gallaugher et al. 2001, Sääksjärvi and Santonen 2002 includes further references). In digital markets, the greatest difficulty in business models and revenue accumulation is the concentration of revenue, i.e., the positive feedback effect. It is well known that markets with digital products, which typically have high fixed costs and only marginal re-production costs, will lead to "positive feedback" (Shapiro and Varian 1998), resulting in rapid growth and concentration of revenue to a few companies with the dominating brand. Even more, information goods, like online newspapers, are so-called experience goods, which means that charging the customers is difficult as they are not ex-ante assured of the utility of the product. This easily also leads to giving products for free, making it even more difficult for latecomers to get any compensation to cover their product development. For these reasons, both continuous investment in the existing customer base and effective lock-in mechanisms are needed.

According to Shapiro and Varian (1998), the basic strategy of a producer applying lock-in should be based on three key principles: effective investing in the customer base, entrenching customers so that they continue to invest in the producer's products, and leverage to maximise the value of loyal customers. Among the various alternatives to create an effective lock-in, customization is one of the promising approaches not yet empirically studied as a business model for online newspapers. Not much is known of how customization is applied to digital products in general, either. Therefore we focus our empirical evaluation on the interesting relationship between customization and online revenue.

### ***Objectives of this paper***

In this paper, we explore empirically how intensively online newspapers apply customization, and to what degree customization affects their ability to generate revenue. We are interested in defining the generic customization approaches implemented by online newspapers. Moreover, we will introduce a research framework that describes customization as a non-visible product strategy aiming at better satisfaction of the customers, and also effective lock-in. Therefore, customization may not be a direct predictor of business success (revenue) but it should affect the relationship between accumulated customer base and revenue positively. Customization, if effectively implemented, should help online newspapers to generate more revenue than other strategies. Therefore, we are interested in determining the generic approaches to customization, and also the synergetic impact of the accumulated customer base and degree of customization on online newspapers' ability to create revenue. In order to get valid and reliable knowledge of this complex phenomenon, we will combine sets of both perceptual and absolute financial measures in our survey instrument. In order to provide a stable focus for the study and enable better control of the representativity of the data collected, we have concentrated on only online version of companies that publish a print newspaper.

The paper is structured as follows. In chapter 2, we review the role of customization in the context of a business model for electronic commerce in general, and for online newspapers in particular. Then, in chapter 3, we describe our research methodology and hypotheses. In chapter 4, we explain our data collection and the results of our analyses. After a short discussion of our findings in chapter 5, we will finally conclude our observations in chapter 6.

## **2. CUSTOMIZATION AS A BUSINESS MODEL FOR ONLINE NEWSPAPERS**

According to Amit and Zott (2001) a business model depicts the design of transaction content, structure, and governance to create value through the exploitation of business opportunities. On the basis of their extensive empirical survey in fifty companies, they proposed that the value creation potential of e-business (in practice) hinges on four interdependent dimensions, namely: novelty, complementarities, efficiency, and lock-in. Each of these dimensions can be valuable and economically effective also for online newspapers.

Lock-in as a value dimension for digital products is related to the well-known difficulty to maintain and value the installed base of customers, very important also to national and local newspapers. Typically the print newspapers have durable and loyal customer bases (e.g., annual subscribers) for their print paper editions. However this favorable condition may be lost when launching an online version. Therefore, online customers have to be engaged in repeat transactions and to improve their associations with the online version. This requires effective lock-in mechanisms to prevent the migration of customers to competitors. Lock-in can be realized in several different ways, e.g., loyalty programs (special bonuses), application of proprietary standards for products and services, and through customization.

Customization has originally been seen mainly as a new paradigm for marketing (Davis 1987, Pine 1993), based on the idea of adapting the product or service to better satisfy the needs of individual customers or small segments of customers, at the same time benefiting from production economies. Gilmore and Pine (1997) identified four distinct approaches to product customization and named them collaborative, adaptive, cosmetic, and transparent customization. In the collaborative customization approach, companies help end-users to indicate their individual needs. Based on this, the product that fulfils the identified needs is prepared by the company. In adaptive customization, the product is designed so that end-users can modify it themselves without any direct interaction with the company. Both of these approaches involve end-users in a co-design process of the product that encourages the customer's purchase (Kahn 1998). The two other customization approaches introduced by Gilmore and Pine, cosmetic and transparent, are fundamentally different. Cosmetic customization changes only the representation, not the functionality of the products. Transparent customization provides tailored products without letting end-users explicitly know that those products have been modified to better fit their specific needs.

Several other customization approaches have only recently been proposed for web sites. Among these is the modular product approach (Manber et al. 2000), not far from other more general product platform approaches for effective generation of product variants (McGrath 1995, Meyer and Zack 1996, Sääksjärvi 2002). Other approaches proposed are the generation of recommendations based on user preferences or user similarity compared to other earlier users (Mobasher et al. 2000, Balabanovic and Shoham 1997). Also, search agents may help customers to find the products they really need (Palmer and Eriksen 1999). The creation of several simultaneous product versions designed for different target groups may also help customization (Lampel and Minzberg 1996).

As a summary, in the case of digital products, we can identify several specific approaches to customization. These may be potential value drivers of the business model applied, not only to achieve customer lock-in through personalization of products and services, but also to improve efficiency (flexibility of the publication process), and to generate complementarities (product versions). Not much is known of how comparable online newspapers are to other e-commerce businesses in terms of business models and specific revenue logics. According to the existing theory, customization should be an important driver of lock-in for online newspapers, and therefore, an important (strategic) factor affecting a company's ability to create revenue.

## Research questions

For our study, we formulated the following two general research questions. These will be later specified into detailed research hypotheses.

RQ1) What are the generic approaches to customization applied by online newspapers?

RQ2) Do the observed customization approaches contribute to the revenue accumulation of online newspapers?

Our empirical survey was carried out in an interesting and homogenous market, the Finnish newspaper industry. Finland is one of the globally leading countries regarding the national IT infrastructure available for online services. Also, the population's motivation and ability to read newspapers on a daily basis are the highest globally (Statistics Finland/Tilastokeskus 2002). In the following we will describe our research methodology and the hypotheses generated, and then present the results from our analyses.

## 3. RESEARCH MODEL AND HYPOTHESES

### Framework and hypotheses

In order to specify our research questions, we designed our research framework, which serves as the basis for our detailed hypotheses. The idea of the framework is grounded in the assumption that the intensity of customer oriented customization (e.g., personalization) should help online newspapers to better benefit from their accumulated base of customers. Customer oriented customization should help in satisfying the customers' individual needs better, making it easier for them to accept a certain price for the services. On the other hand, we assume that process oriented customization – e.g., by creating versions or complementarities resulting in a more effective lock-in of the existing customers – should help in generating more revenue. The framework is presented in Figure 1.

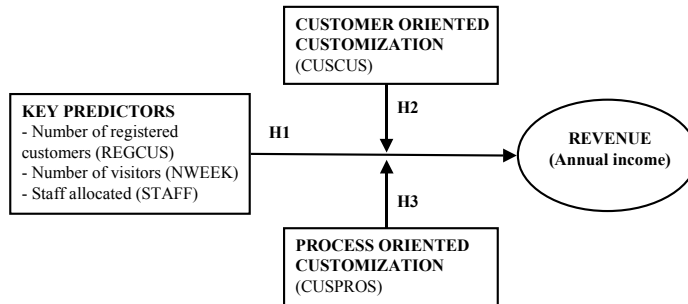


Figure 1. Research framework

It serves as a basis for testing the following three hypotheses:

H1) The customer base and size of editorial staff devoted to the online version are positively related to online revenue.

H2) The degree of customization is in a synergetic (interaction) relationship with the number of accumulated customers in terms of its impact on online revenue.

H3) The degree of customization is in a synergetic (interaction) relationship with size of editorial staff in terms of its impact on online revenue.

Hypothesis H1 serves mainly as a test of our basic assumption that the key predictors (customer base accumulated and editorial staff devoted) are positively related to revenue. Hypothesis H2 assumes that the degree of customization positively affects (moderates) the relationship between

the key predictor of revenue (accumulated customer base) and the revenue itself. The idea that the degree of customization is not a direct predictor but a moderator of revenue corresponds well to the theory of customization as a business model.

Lastly, hypothesis H3 assumes that the degree of customization positively affects the relationship between special editorial workforce allocated and revenue. Application of process customization should improve the ability of a given size of editorial staff to attract and serve more customers, thus leading to larger revenue.

In Figure 1, the key predictors explaining the revenue are described on the left. The arrow (H1) indicates that we assume a direct relationship between the annual revenue and these predictors, number of customers and the editorial staff resource measure. Hypotheses H2 and H3, on the other hand, describe the expected interaction effects caused by the customization approaches.

## 4. RESEARCH METHOD

### *Sample and data collection*

We finalized and pre-tested the questionnaire consisting of as many as 17 different variants of customization discussed briefly in the literature review, other key predictors of online revenue, and absolute figures of annual revenue in 2001. The questionnaire was pre-checked and improved in a few interviews with specialists of the Finnish Newspaper Association (a partner of our study) and a few development managers of leading online newspapers to make sure that all questions were semantically precise and understandable.

The names of the newspapers and personal addresses of the most potential respondents were collected with the help of The Finnish Newspapers Association. According to the Association's annual statistics, 129 newspapers also published an online version in 2000. The accumulated circulation of these newspapers covered 88 percent of the total circulation of newspapers in Finland.

The pre-tested questionnaire was addressed directly to the manager responsible for the online newspaper business activity. If there was no certainty over the right person, this was confirmed by a telephone call to the newspaper company. To improve the reliability of the responses we asked all respondents to identify themselves and include their contact number.

After one follow-up letter and a few reminder phone calls to the largest online newspapers, we had responses from 46 online newspapers. Four of these were short announcements that the online version had been discontinued, thus the overall response rate was better than merely acceptable, about 32 percent. The data represent a very satisfactory sample of the target market, taking into consideration the fact that among the major newspapers (publication frequency 7 days per week), over 70 percent had responded. In rough terms, our data consisted of 15 national level newspapers, the rest having clearly more restricted regional or only local readership. Accordingly, we classified the online newspapers into two markets: national (15) and regional (27). Based on telephone calls to a handful of the non-responding online newspapers, and comparison of the response group to the Finnish Newspaper Association's annually updated list of online papers convinced us of the representativity of our data.

As many as 23 of these 42 online papers had generated revenue, the annual (2001) average being about 46 000 euro, they had about 18 000 registered subscribers, and approximately 11 000 weekly visitors (October 2001). The accumulated online revenue was on average less than one percent of the annual income of the printed newspapers. These figures varied significantly between the national and regional players. The average age of the online versions was 3.6 years, and the average annual workforce, about 4 persons (minimum less than 1, maximum 9). From these figures, it is easy to see that on the whole, online newspaper publishing was not a profitable business at the period studied.

## Measurement of customization

In order to construct reliable customization dimensions, we applied factorial analysis only to those newspapers that had generated profit. We assumed that revenue is the real motivation to customize. Taking the fact that the size of our data was only limited, we could not fully use all the customization items collected. In three confirmatory factorial rounds (principal component analysis; rotation method: varimax with Kaiser normalization) we dropped, stage by stage, those six variables that loaded into more than one component. Among these were variables measuring alternative procedures available for advertising companies to select potential customer segments for their purpose, and the variable that defined the number of different payment methods available for customers. The outcome was a compact three-dimensional model described in Table 1 (appendix). Based on the items loaded into each dimension, we named these three dimensions as follows (in order of statistical significance):

F1) Personalization of online newspaper (CUSPERS).

F2) Versioning and adaptation of online newspaper (CUSVERS).

F3) Process customization of online newspaper (CUSPROS).

Of these three dimensions, both F1 and F2 are product or service oriented approaches, enabling or affecting the customers. Both of them seemed to be in line with what is said of typical lock-in strategies in the literature regarding better customer loyalty and commitment, both typical to lock-in strategies. In the following, we will, therefore, use the average of these two first customization dimensions and simply call it the customer oriented customization approach (CUSCUS).

On the other hand, F3 seemed to represent the process oriented customization approach. It seemed to aim at improving the flexibility of the publication process and offering a flexible product platform for transparent and automatic adaptation of products and services to a variety of customer needs and technologies.

As shown in Table 1, in general the averages of customization variables were only low. Evidently, customization was a main approach only for a handful of online newspapers. The degree of process customization had a higher average (2.04) than the degree of customer oriented customization (1.32). Altogether, only six online newspapers of these 23 had applied no sort of customization.

## 5. RESULTS

### Testing the base relation H1

In Figure 2, we have presented the correlations between the key variables. All key predictors of revenue were significantly related to revenue (number of registered customers REGCUS 0.693\*\*, number of weekly visitors N WEEK 0.658\*\*, and size of editorial staff STAFF 0.612\*). These observations support our hypothesis H1. Interestingly, only process customization was significantly related to revenue (0.640\*\*). Despite the low average of customization variables, both main approaches seemed to be important direct predictors of revenue.

### Testing hypothesis H2

Our hypothesis H2 assumed that at least the customer oriented customization (CUSCUS) is a moderator of the customer base and therefore, has a synergetic impact on the relationship between number of customers and revenue. In fact, we had collected figures on two different classes of customers, number of registered customers (REGCUS) and weekly visitors (N WEEK). Our basic assumption was that at least customer oriented customization should have a synergetic (moderated) impact on the relationship between the number of customers and revenue. This kind of an assumed synergetic relationship can be easily verified by comparing two regression models

predicting online revenue, one with the key predictors alone, another with the interaction term included. If there is a positive interaction (moderation effect) between customization and other key predictors of revenue, then the interaction term will improve the regression. According to Baron and Kenny (1986) a variable is a moderator if it is not correlated with the predictor (independent variable) and the interaction between the independent variable and the moderator (their product) is significant in a regression explaining the dependent variable. According to Sharma et al. (1981), a variable that is related to the independent predictor or criterion (dependent) variable and has an interaction effect with the predictor is a quasi moderator. In our case, the examined two customization approaches were non-symmetrically related with the key predictors. Therefore, we analyzed their moderation effects on revenue separately.

The results of three sets of regression models are collected in Figure 3, one for registered customers (REGCUS), another for weekly visitors (N WEEK), and the third for the size of editorial resources (STAFF). Interestingly, only the process oriented customization CUSPROS significantly increased the regression of all three key predictors. It significantly moderated the relationship between registered (probably more loyal) customers and revenue (the regression improved from 48 to 67 percent) but not the relationship between more random weekly visitors and revenue. According to the theory presented, process oriented customization seemed to work well in the case of more intimate (durable) customer relations, but not so well in the case of more random weekly visitors. These observations support our hypothesis H2.

Customer oriented customization was probably, on average, still too weak to moderate revenue. On the other hand, process oriented customization was an important direct predictor of revenue and therefore, not a pure but a quasi moderator. It seemed that online newspapers had started with more general process customization, concentrating perhaps on maximizing the total number of customers rather than on forming durable customer relations, as the theory of lock-in would advise. This could be well explained by the quite monotonous revenue logic generally applied, the banner revenue model.

Based on the above observations, we conclude that hypothesis H2 was only partially supported. Only process customization seemed to contribute to the synergetic relationship between customer base and revenue.

### **Testing hypothesis H3**

As we can notice from Figure 3 the interaction of CUSPROS and size of editorial staff (STAFF) was significant. The regression to revenue improved significantly, from 38 to 58 percent. Therefore, process customization seemed to be an important moderator of editorial resources devoted. The significant correlation between STAFF and CUSPROS indicated that CUSPROS was no pure moderator but a quasi moderator, partly competing with size of staff. However, these observations supported our hypothesis H3.

### **Discussion**

The results obtained supported our general assumption that customization should be an important factor contributing to revenue of online newspapers. The analyses indicated, however, that only process customization was in effective use and followed our assumptions underlying the hypotheses. Besides moderating revenue through its interaction with the registered customer base, process oriented customization also seemed to help online newspapers to better utilize their special staff. Accordingly to the lock-in theory, customization had a synergetic effect on revenue only with more durable registered customers, not with weekly visitors. This result supports the lock-in theory quite well, and provides some evidence that customization is systematically used as a business model. On the other hand, our data indicated that only experienced online newspapers start applying customization. As online newspapers are still evolving rapidly in Finland, companies are still increasing their online content and services to attract more customers (novelty and variety). Therefore, the balance between process and customer based customization approaches may change in the future. Also the fact that a great majority of the online newspapers applied a monotonous banner revenue logic – in which the revenue was almost linearly dependent on the total number of customers, not only the registered customers – may have influenced the

policy of starting with a more general process customization, not personalization or effective generation of variants.

## **6. CONCLUSIONS**

Our literature review on the business models of digital products in general, and online newspapers in particular, revealed that the transformation from printed newspapers to online form is no simple process. This is due to the problematic characteristics of digital products, which at least in theory make earning money difficult and risky. Our exploratory analyses of online newspapers in a country with a well-developed national IT infrastructure revealed that customization was evolving, but not very intensively implemented yet. From the empirical data, we could define three main dimensions of customization. These were personalization, versioning and process customization. After combining the two first into a single dimension (customer oriented customization), we had two main approaches to customization to analyze and compare: the customer and process oriented customization approaches.

Although the implementation of customization was still only weak and evolving, our data provided logical evidence of the importance of customization both as a direct contributor to revenue and as a moderator of revenue. The moderation effect was significant on the relationship between the more stable customer base (registered customers) and revenue, but not on that between more random weekly visitors and revenue. Because of the marginal role of customer oriented customization, we concluded that in general, instead of being an explicit business model aimed at customer lock-in, customization served more as a way to improve process efficiency. Because of the ongoing rapid evolution observed, lock-in may in the near future be an important driver of the business model. Very probably, all managers of online versions having a mixture of customers were not yet aware of the critical role of customer loyalty and lock-in for their revenue.

In order to get a more accurate picture of the evolution of online business models applied and of the related revenue logic, we should carefully run longitudinal case surveys of online newspapers. We should also survey the customer perspective on online products and services, and compare it with the actual business model implemented. It also seems that more research should be devoted to finding effective ways to create flexible (technical) product and process platforms for online newspapers to help them to create customized products and services.

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#### **Web links**

- Editor & Publisher, 2001. As of October 23, 2001 Editor & Publisher Online Media Directory contained 4,918 newspapers
- Statistics Finland/Tilastokeskus 2002, <http://statfin.stat.fi/statweb/>, Päivälehtien levikki 1000 asukasta kohden 1990-1998, Joukkoviestintä markkinat Suomessa ja Euroopassa 1996, Tietotekniikka kotitalouksissa 1990-1999, Tietotekniikan käyttö Suomessa ja EU-maissa 1997 ja 1999, Uusien viestimien käyttö Kevät 1999.
- The Finnish Newspapers Association, 2001, Links to web newspapers in Finland , <http://www.sanomalehdet.fi/en/linkit/index.shtml>

Table 1. Customization group factor model.

| Factor                           | N  | Factor loading | Mean  | Std. Dev | Items correlation with total score | Eigenvalue   |
|----------------------------------|----|----------------|-------|----------|------------------------------------|--------------|
| <b>F1</b>                        |    |                |       |          |                                    | <b>4.588</b> |
| C2 Select visual alternatives    | 23 | 0.800          | 1.174 | 0.576    | 0.912**                            |              |
| C10 Select content versions      | 23 | 0.980          | 1.043 | 0.209    | 0.926**                            |              |
| C12 Store favorite contents      | 23 | 0.980          | 1.043 | 0.209    | 0.926**                            |              |
| C13 Customized content           | 23 | 0.980          | 1.043 | 0.209    | 0.926**                            |              |
| <b>F2</b>                        |    |                |       |          |                                    | <b>3.283</b> |
| C3 Individual view on content    | 23 | 0.897          | 1.609 | 1.438    | 0.885**                            |              |
| C4 Modify outline of pages       | 23 | 0.831          | 1.609 | 1.530    | 0.864**                            |              |
| C9 Select objects of interest    | 23 | 0.689          | 1.696 | 1.579    | 0.731**                            |              |
| C11 Personal recommendations     | 23 | 0.837          | 1.217 | 0.850    | 0.820**                            |              |
| C15 Personal search criteria     | 23 | 0.760          | 1.652 | 1.496    | 0.776**                            |              |
| <b>F3</b>                        |    |                |       |          |                                    | <b>2.003</b> |
| C6 Flexible publication process  | 23 | 0.858          | 1.391 | 0.891    | 0.789**                            |              |
| C7 Distrib. channel alternatives | 23 | 0.699          | 2.696 | 2.141    | 0.835**                            |              |
| C8 Adaptation to technologies    | 23 | 0.728          | 2.826 | 1.946    | 0.736**                            |              |
| C17 Customer selection tools     | 23 | 0.912          | 1.957 | 1.965    | 0.905**                            |              |

\*\* Correlation is significant at the 0.01 level.

Figure 2. Correlation between key variables (N=23)

|         | CUSPROS | NWEEK   | REGCUS  | REVENUE | STAFF   |
|---------|---------|---------|---------|---------|---------|
| CUSCUS  | 0.268   | -0.161  | 0.907** | 0.466*  | 0.398   |
| CUSPROS | 1.000   | 0.574** | 0.390   | 0.640** | 0.658** |
| NWEEK   |         | 1.000   | -0.009  | 0.658** | 0.543*  |
| REGCUS  |         |         | 1.000   | 0.693** | 0.780** |
| REVENUE |         |         |         | 1.000   | 0.612** |

\* Correlation is significant at the 0.05 level, \*\* Correlation is significant at the 0.01 level

Figure 3. Comparison of regression models

| Variables in the regression model | R2    | Delta R Interaction | Signific. (model) | Std. Coeff Beta |
|-----------------------------------|-------|---------------------|-------------------|-----------------|
| REGCUS                            | 0.481 |                     | 0.001**           | 0.693           |
| CUSCUS                            | 0.217 |                     | 0.025*            | 0.466           |
| Interaction                       | 0.394 | 0.000               | 0.004**           | 0.628           |
| REGCUS                            | 0.481 |                     | 0.001**           | 0.693           |
| CUSPROS                           | 0.409 |                     | 0.001**           | 0.640           |
| Interaction                       | 0.672 | 0.191               | 0.001**           | 0.702           |
| NWEEK                             | 0.433 |                     | 0.001**           | 0.658           |
| CUSCUS                            | 0.217 |                     | 0.025*            | 0.466           |
| Interaction                       | 0.443 | 0.010               | 0.001**           | 0.665           |
| NWEEK                             | 0.433 |                     | 0.001**           | 0.658           |
| CUSPROS                           | 0.409 |                     | 0.001**           | 0.640           |
| Interaction                       | 0.442 | 0.009               | 0.001**           | 0.665           |
| STAFF                             | 0.375 |                     | 0.004**           | 0.612           |
| CUSCUS                            | 0.217 |                     | 0.025*            | 0.466           |
| Interaction                       | 0.224 | 0.000               | 0.035*            | 0.473           |
| STAFF                             | 0.375 |                     | 0.004**           | 0.612           |
| CUSPROS                           | 0.409 |                     | 0.001**           | 0.640           |
| Interaction                       | 0.580 | 0.205               | 0.000**           | 0.762           |

# **The effect of mass customization on demand turbulence**

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# THE EFFECT OF MASS CUSTOMIZATION ON DEMAND TURBULENCE

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## ABSTRACT

It has been argued that market turbulence, which includes demand and structural dimensions, is increasing the level of applied and future mass customization at least in the physical product environment. However, previous studies have paid less attention to the fundamental differences between physical and digital products, and the potential impact of experience on demand turbulence and customization. Therefore in this paper we will empirically evaluate how accumulated experience influences demand turbulence and mass customization in the case of digital information products. Our empirical tests with data from 42 online newspapers revealed that only experienced online newspapers on the national market had started applying the customization business model. This supports the suggestion that the path from mass production to mass customization is not direct, but requires continuous learning and improvement also in the web publishing environment. In addition, we found only limited support for the proposition that more experienced companies should be able to control the demand uncertainty. On the contrary to previous findings in the literature, we were not able to validate the demand turbulence-customization relationship. Due to our small and homogeneous sample group, the generalizability of our findings requires further research.

## KEYWORDS

Mass customization, market turbulence, demand turbulence, experience, online newspapers

## 1. INTRODUCTION

When customization is done on a mass basis, it is called mass customization (Pine 1993). Mass customization is basically a synthesis of the two management systems, mass production and customization. In the mass customization business model, the main aim is to create superior value for the customer, while keeping the production cost in control. Previously it has been suggested that companies operating in turbulent markets have a strong market orientation (Lusch and Laczniak 1987, Davis et. al 1991), which is closely related to the mass customization business model. This is consistent with Pine's (1993) findings, which suggested that the greater the market turbulence, which includes demand and structural turbulence dimensions, the more likely the industry is moving towards customization.

However, in our opinion Pine's considerable and extensive research with hundreds of companies gave less attention to the following things, which on closer thought might affect the demand turbulence-customization relationship. *First*, there are the fundamental differences between physical and digital products (Choi et al. 1997) and it has been argued that the unique characteristics of digital products by their nature demand either cost leadership or effective differentiation/customization (Shapiro and Varian 1998). Since it is obvious that only one company can be the price leader, all the others should have adopted the product differentiation/customization strategy, regardless of demand turbulence. *Secondly*, Boynton and Victor (1991) introduced a Product-Process change matrix and suggested that the path from mass production to mass customization is not direct. They argued that companies must learn mass customization through a continuous improvement process, before entering into the mass customization business model. This learning process requires time. *Thirdly*, the more experienced companies, which are also more familiar with their customers' needs and wants, should be able to reduce demand turbulence. If experienced companies are also producing more customized products, like the theory suggests for the digital environment, then demand

turbulence is decreasing, but the level of customization is increasing. This is in contrast to Pine's suggestion. Based on the above-mentioned arguments, we believe that a company's accumulated experience should be an important factor affecting both currently applied and future customization, and current and future demand turbulence levels.

Because of these possible logical contradictions, the main aims of the present paper are: *first*, to analyze how accumulated experience influences customization and demand turbulence levels in the digital product environment, and *secondly*, to test if the demand turbulence is increasing the level of customization in the case of digital information products. Our empirical survey was carried out in a homogenous market, the Finnish online newspaper industry. Finland is one of the globally leading countries regarding the national IT infrastructure available for online services (Statistics Finland, 2002a). Also, the population's motivation to read newspapers on a daily basis is one of the highest globally (Statistics Finland, 2002b). Companies that operate in the same industry segment, yet belong to different strategic groups, can still face different business environments and competitive conditions (Porter, 1980). Therefore, even if our data are based on a single-industry sample, we expect variations in the applied customization approaches and demand turbulence. The paper is structured as follows. In chapter 2 we briefly present the body of knowledge on producing customized products. Then we introduce Pine's market turbulence map instrument, which he used to determine the level and type of demand turbulence. In chapters 3 and 4 we will report our research framework and methodology. Chapter 5 explains the results of our analyses, and finally, in chapter 6 we draw conclusions from our observations.

## 2. CUSTOMIZATION IN THE LITERATURE

The history of mass customization started over thirty years ago (Toffler 1970, Davis 1987 and Pine 1993). In the mass customization management system, the goal is to develop, produce, market, and deliver affordable goods and services with enough variety and customization that nearly everyone finds exactly what they want (Pine, 1993). In practice, mass customization means that customers can select, order, and receive a specially configured product - often choosing from among hundreds of product options - to meet their specific needs (Bourke and Kempfer, 1999). Other similar definitions and descriptions have been presented (e.g., Hart 1995, Anderson 1998). The reason why customized products are superior compared to standard products is the following (Pine, 1993). The company that better satisfies its customers' individual wants and needs will have greater sales. With higher profits as well as a better understanding of the customers' requirements, the company can provide even more variety and customization, which further fragments the market. Because it is outdistancing its competitors in variety and customization, market fragmentation allows its once again to better satisfy its customers' individual wants and needs, and so on.

Many different approaches are applied to produce customized products. Gilmore and Pine (1997) identified four distinct approaches to product customization and named them the collaborative, adaptive, cosmetic and transparent approach. In the collaborative customization approach, companies help end-users to indicate their individual needs. After this dialogue, the product that fulfills the identified needs is made. In adaptive customization, the product is designed so that end-users can modify it themselves without any direct interaction with the company. Both the collaborative and adaptive approaches involve the end-users heavily in the product's co-design process, which encourages the customer's purchase (Kahn and Huffman, 1998).

The following collaborative and adaptive customization approaches are commonly used in web sites. *First*, the modular product approach, in which end-users can modify page(s) in the web site using predefined modules like in the case of my.yahoo (Manber et al 2000), is claimed to be one of the best methods to produce products (e.g. Pine 1993). *Secondly*, there are different kinds of content recommendation approaches, which could be based on user preferences, content or user similarity to other users (collaboration). Manual decision rule-based systems allow web site administrators to specify rules based on end-user preferences, demographics or static profiles, which are collected through a registration process or session history (Mobasher et al. 2000). According to Balabanovic and Shoham (1997), in a pure content-based recommendation system recommendations are made on the basis of a profile, which has been generated by analysing the content that the end-user has rated in the past. On the contrary, a pure collaborative recommendation system does not analyse the content at all, but recommends items that other similar end-users have liked (Balabanovic and Shoham, 1997). *Thirdly*, search agents technologies are used

to transmit filtered information from single or multiple sources (Palmer and Eriksen, 1999) to the end-users via email or through mobile channels. *Finally*, it is also important that the web site can automatically and technically adjust itself to the requirements of different kinds of browsers, operating systems and screen resolutions, like for example razors adapt to different kinds of human faces.

Two other generic approaches introduced by Gilmore and Pine (1997), cosmetic and transparent, are fundamentally different from the above-mentioned approaches. A cosmetic customizer changes only the representation of the web site (e.g., colors), while the functionality or content of the web site remains the same to all users. The transparent customizers provide customized products without letting end-users know explicitly that those products have been modified for them. On the Internet, targeted advertising is probably the most common form of transparent customization. Instead of offering standard banner space, many web sites deliver dynamic ads to targeted people by analyzing end-users' demographics or preferences. Some of the customization approaches are more closely related to process design customization than product design customization. It has been argued that process design-oriented customization is the obvious choice for most firms (McCutcheon et. al. 1994). By creating flexible process and technical platforms, the company can provide quick response to customer throughout the value chain (Pine, 1993). In conclusion, we have identified two main dimensions of customization, product vs. process dimension. This classification is consistent with the findings of Sääksjärvi and Santonen (2003).

## **2.1 Measuring the demand turbulence**

Market turbulence, the rate of change of customers and their preferences (Slater and Narver, 1994) indicates the amount of instability, uncertainty, and lack of control within a firm's market place (Pine, 1993). Market turbulence can also be defined as changes that are unpredictable and difficult to plan for (Dess and Beard, 1984). Market turbulence is also very similar to the market heterogeneity construct, which according to Miller (1987) refers to the change in diversity of production methods and marketing tactics required to serve the customers' needs. Companies operating in turbulent markets are more into market orientation than companies in general (Lusch and Laczniak 1987, Davis et. al 1991). Since the mass customization business model is closely related especially to customer orientation and interfunctional coordination, which are the market orientation dimensions (Narver and Slater, 1990), we suggest that this relationship might be inherited. This assumption is consistent with Pine's (1993) findings, which argued that the greater the perceived market turbulence is, the more likely the industry is moving towards customization.

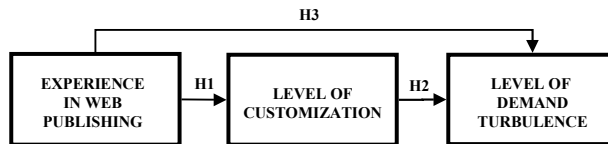
Pine introduced and used the market turbulence map instrument to determine the level and type of the market turbulence. His instrument included as many as seventeen individual items, which were divided into demand (9 items) and structural (8 items) categories. According to Pine, demand turbulence indicates the degree to which a company can control, stabilize, and reduce uncertainty within its markets. Structural turbulence reflects the basic nature of an industry and is therefore less subject to manipulation by individual companies. Pine found out that all his seventeen items were not equally related to customization. He argued that averaging (or weighting) the first seven variables alone would provide clear indications of the need to adopt the customization strategy. The following four demand turbulence items belonged into this "first seven" group: 1) rate of change in customer needs and wants, 2) homogeneous versus heterogeneous demand, 3) level of pre- and postsale service and 4) quality consciousness. In addition to these four items, Pine's demand turbulence construct included the following five items: 5) stability and predictability of demand levels, 6) basic necessities vs. complete luxuries, 7) price consciousness, 8) easily defined versus uncertain customer needs and wants and 9) fashion and style consciousness. However, in our opinion only four of these items are directly related to demand turbulence (items 1, 2, 5, 8) while the others have a more or less indirect affect on demand. Therefore in the research method section, we will construct four generic demand turbulence items, which all are based on Pine's original instrument. Next we will present our research framework and method.

## **3. RESEARCH MODEL AND HYPOTHESES**

### **3.1 Framework and hypotheses**

In order to specify the research objectives, we designed our research framework (Figure 1), in which detailed hypotheses were constructed.

Figure 1. Research framework



According to Sääksjärvi and Santonen (2002) the learning effect regarding goal setting and goal attainment among online newspaper is evident. Also Boynton and Victor (1991) and Pine (1993) argued that companies must first transform their processes and re-engineer the product architectures to fit with the customized products production. These transformation processes are often time-consuming. Because of these arguments, we assume that customization should be more common among more experienced companies. Stated formally:

*H1: The greater the experience in web publishing is, the higher the level of customization is.*

Pine's (1993) previous research established that market turbulence, which includes the demand and structural turbulence dimensions, should affect customization in the case of physical products. Market turbulence is also expected to increase the market orientation construct, which is closely related to customization (Lusch and Laczniak 1987, Davis et. al 1991). Even if digital products are fundamentally different from physical products, and in most cases by nature require effective differentiation or customization (Choi et al. 1997, Shapiro and Varian 1998), we are assuming that this relationship is inherited. However, in contrast to previous assumptions, we argue that in the case of the demand turbulence-customization relationship, the interaction effect is actually reverse. Since the customized products fit the customers' needs and wants better, the demand level should be more stable and certain. It can be expected that:

*H2: The higher the level of customization is, the lower the level of demand turbulence is.*

It is, of course, possible that experienced online newspaper have discovered and selected other methods than customization to reduce the demand turbulence (e.g., content differentiation with a local focus or marketing). Therefore we suggest that more experienced companies in general might be able reduce demand turbulence regardless of whether customization is applied.

*H3: The greater the experience in web publishing is, the lower the level of demand turbulence is.*

## 4. RESEARCH METHOD

### 4.1 Data collection and response

We finalized and pre-tested the questionnaire in a few interviews with specialists of the Finnish Newspaper Association (later FNA) to make sure that all questions were semantically precise and understandable. The names of the newspapers and personal addresses of the most potential respondents were collected with the help of the FNA. The pre-tested questionnaire was addressed directly to the manager responsible for the online newspaper business activity. If there was no certainty over the right person, this was confirmed by a telephone call to the newspaper. According to FNA annual statistics, 129 newspapers also published an online version in 2001 (FNA, 2001). The accumulated circulation of these newspapers covered 88 percent of the total circulation of newspapers in Finland.



After one follow-up letter and a few reminder phone calls to the largest online newspapers, we had 42 acceptable responses, which gave us a nice overall response rate (about 32 percent). The data provide a very satisfactory sample of the target market, taking into consideration the fact that over 70 percent of the largest newspapers (publication frequency 7 days per week) had responded. On an average these 42 online newspapers had a customer base of 11 000 weekly readers (October 2001). The average annual workforce was about 4 persons, while the average age of the online versions was about 3.6 years. Only 23 newspapers had generated revenue, which on an average (annual 2001) was about 46 000 Euro, and represented on an average less than one percent of the annual income of the parent print newspapers. However, all these above-mentioned figures varied significantly. In rough terms, our data consisted of 15 national-level newspapers, the rest clearly having a more restricted regional or only local readership. Accordingly, we classified the online newspapers into two markets: national (15) and regional (27).

## 4.2 Construction of demand turbulence measures

Pine's original market turbulence map instrument included as much as seventeen individual items, which were divided into demand (9 items) and structural (8 items) categories. In the literature section we introduced all the demand turbulence items and argued that only some of the items were directly related to demand, while other have a more or less indirect affect. As a result of this argument, we constructed the following four generic demand turbulence items: 1) The DALL item included all Pine's nine demand turbulence items, 2) DFOUR included only those items that were part of "first seven" group, 3) DDIRECT included four items, which in our opinion were directly related to demand uncertainty, and finally 4) DINDIRECT included all five items, which in our opinion were indirectly related to demand turbulence. All nine items were measured on 7-point Likert-scales, which asked for the respondents' opinion about the current and future (end of 2004) status of their business with respect to these items.

## 4.3 Construction of customization and experience measures

On the basis of the literature review, two different customization items were constructed. The first one was used to analyze pure customer-oriented customization (4 items), while the second item attempted to identify the more complex process-oriented customization approach (5 items). Also all 9 customization items were measured on 7-point Likert-scales.

The following very typical web customization approaches were selected to identify applied and future (end of 2004) customer oriented customization approaches: *first*, (C1) content recommendation based on user preferences or special keywords, *secondly*, (C2) modular page(s) like my.yahoo, *thirdly*, (C3) content recommendation based on end-user demographic profile or session history and *finally*, (C4) search agents, which send filtered information to end-users. The reliability of the applied and future customization constructs was estimated using Cronbach's alpha (applied customization 0.804, future customization 0.936). The average values of these four measures were used as a general customer-oriented customization items (CUS2001 and CUS2004). A correlation analysis was also conducted to make sure that individual customization items were truly related to the combined general customization items (Appendix Table 1). The correlations ranged from 0.797\*\* to 0.940\*\*.

The process-oriented customization items (PROS2001 and PROS2004) included the following five individual approaches: *first*, (C5) transparent customization, *secondly*, (C6) flexible process throughout whole value chain, *thirdly*, (C7) multi channel distribution (e.g., web, WAP, SMS and email), *fourthly*, (C8) the technically adaptive online newspaper, which is automatically able to adjust itself to different technical requirements (e.g., operating systems, browsers and screen resolution). and *finally*, (C9) the ability to produce dynamic ads to targeted people. Similar reliability tests were conducted. Cronbach's alpha in the case of applied process-customization was 0.748, while in the case of future process-oriented customization it was 0.919. The correlations ranged from 0.493\*\* to 0.922\*\* (Appendix Table 2). Based on these tests, we argue that both customer-oriented and process-oriented items achieved high levels of internal consistency, and hence can be used to measure applied and future customization among our sample group.

The age in months (EXP) was used as a base measurement of the web publishing experience, (based on the date when the online newspaper's first version was launch to the public). To make sure that we got valid

measures, we also asked all respondents to identify both themselves and the online and print newspaper in question.

## **5. RESULTS**

### **5.1 Testing the hypothesis H1**

The hypothesis H1 assumed that online newspapers' experience in electronic publishing should increase the degree of applied customization. Based on descriptive statistics in Appendix Table 3, it is evident that online newspapers have not proceeded far in applying the customization business model. However, the importance of customization is expected to increase in the future especially among national-level online newspapers. The correlation analyses in the Appendix Table 4 indicated that experience affects positively both applied and future customization (correlation ranged between 0.454\*\* - 0.588\*\*). Another correlation analysis was conducted to test how much the regional dimension (national vs. local readership) affected applied and future customization. Based on our results it seems that mainly national online newspapers are interested in the customization business model now and in the future (correlation ranged between 0.502\*\* - 0.602\*\*). These findings evidently support hypothesis H1, which was accepted.

### **5.2 Testing the hypothesis H2**

Hypothesis H2 assumed that the higher the level of customization is, the lower the level of demand turbulence is. Surprisingly, on the contrary to our assumptions, we could not find any statistically significant correlation between any of the customization and demand turbulence items (Appendix Table 4). As a result, we were forced to reject the hypothesis H2.

### **5.3 Testing the hypothesis H3**

Our hypothesis H3 assumed that the greater the experience in electronic publishing is, the lower the level of demand turbulence is. Based on descriptive statistics in Appendix (omitted), the expected variations in the demand turbulence were found. The correlation analyses between experience and demand turbulence items had some mixed outcomes (Appendix Table 4). The experience affected negatively both the direct demand turbulence items (DDIRECT2001 = -0.388\*, DDIRECT2004 = -0.403\*), but also the DALL2004 item (DALL2004 = -0.329\*), which included all Pine's nine demand turbulence items. The other demand turbulence items did not correlate with the experience item. These results only weakly support our hypothesis H3, which was rejected.

## **6. DISCUSSION AND CONCLUSION**

We found rather strong support for Boynton and Victor's (1991) suggestion that the path from mass production to mass customization is not direct and requires learning and continuous improvement. It seems evident that experience in web publishing has a strong effect on customization also in the online newspaper industry. In practice online newspapers with less than three years of experience had not applied any of the individual customization approaches, whereas customization is clearly most common among the most experienced online newspapers, which are competing in the national markets. Even if our research was not a true longitudinal study, it seems to support the fact that national-level online newspaper have consciously or unconsciously selected an incremental movement towards customization, which was one of the three main transformation strategies introduced by Pine (1993).

However, the mean value comparison indicated that the process-oriented customization approach was more commonly in use, whereas customer-oriented customization was still more or less in a very early and experimental stage. In the future, however, the balance between process and customer-oriented customization

approaches was expected to become more even. In general the findings indicate that currently, but also in the future, the customization business model is not the main strategic option for online newspapers to attract and retain customers. It appears that many online newspapers have actually adopted a variety-seeking strategy since they have continuously and heavily increased the amount of content and services, and also planned to do so in the future. This could partially also explain why online newspapers have focused more on the flexible or even customized production process approach. The flexibility of the production process is essential for companies that have an extensive product line selection.

When online newspapers become more familiar with the electronic publishing environment and start to truly understand the nature of web publishing and the characteristics of digital products, they slowly start to adjust their products and process to fit with the new and fundamentally different conditions. It is also possible that when online newspapers face hard competition from other media companies or newcomers, they realize that something else than a standard repository of recycled print articles is needed to attract customers and remain competitive (e.g., personalization or unique content). This kind of environmental effect is closely related to Pine's structural turbulence dimension, and therefore deserves more detailed analysis also in the online newspaper environment.

Our findings are also somewhat consistent with Pine's (1993) suggestion that more experienced companies should be able to control the demand uncertainty. However, since we found only limited support for this proposition – only for the items that were directly related to demand turbulence – more extensive studies will be needed in the future. On the contrary to the previous arguments, we were not able to validate the demand turbulence-customization relationship in the case of online newspapers. However, it is possible that the suggested positive relationship between demand turbulence and customization exists also in the online newspaper environment, but we were not able to detect it because of insufficient statistical power, or because of the young, inexperienced and undeveloped nature of the industry segment in general. Also the general level of applied customization was extremely low (especially customer-oriented customization), which might at least partly explain why the benefits from the customization applied were not realized. Another area that deserves our attention are the online newspaper business unit managers. The data in this research were mainly based on their perceptions of the demand turbulence and customization. Since the main goal of online newspapers in Finland is to support the print version (Sääksjärvi and Santonen, 2002), it is possible that, e.g., managers responsible for print newspaper, which often are not the same as the managers in online newspapers, might have had different opinions about the demand turbulence and customization.

Due to the nature of the small and homogeneous sample group in our study, the generalizability of our findings calls for further research. Future studies with larger sample groups will validate or reject the demand turbulence-customization relationship in the case of digital products. The expanded sample group should include, not only online newspapers in different global regions or other paper-based electronic publishing industries (e.g., magazines), but also other kinds of digital products (e.g., software). This would indicate whether the online newspaper industry is the exception to the rule, or whether the web publishing industry and digital products in general react differently to demand turbulence than physical product markets. Furthermore, one should also analyse the level of applied customization directly on the web sites using content analysis methods. These additional analyses would result in more reliable and comparable applied customization measures.

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## APPENDIX

Table 1 Individual customer-oriented customization items' correlation with CUS2001/2004 items. N=40-42,  
\*\* Correlation is significant at the 0.01 level.

|         |                 | C1 2001/2004 | C2 2001/2004 | C3 2001/2004 | C4 2001/2004 |
|---------|-----------------|--------------|--------------|--------------|--------------|
| CUS2001 | Pearson Corr.   | 0.834**      | 0.797**      | 0.829**      | 0.820**      |
|         | Sig. (2-tailed) | 0.000        | 0.000        | 0.000        | 0.000        |
| CUS2004 | Pearson Corr.   | 0.940**      | 0.875 **     | 0.923**      | 0.934**      |
|         | Sig. (2-tailed) | 0.000        | 0.000        | 0.000        | 0.000        |

Table 2. Individual process oriented customization items' correlation with PROS2001/2004 items. N=40-42,  
 \*\* Correlation is significant at the 0.01 level.

|          |                 | C5      | C6      | C7      | C8      | C9      |
|----------|-----------------|---------|---------|---------|---------|---------|
| PROS2001 | Pearson Corr.   | 0.678** | 0.827** | 0.794** | 0.493** | 0.817** |
|          | Sig. (2-tailed) | 0.000   | 0.000   | 0.000   | 0.001   | 0.000   |
| PROS2004 | Pearson Corr.   | 0.738** | 0.902** | 0.922** | 0.873** | 0.881** |
|          | Sig. (2-tailed) | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   |

Table 3. Generic customization items: descriptive statistics.

| Region   |           | CUS2001 | CUS2004 | PROS2001 | PROS2004 |
|----------|-----------|---------|---------|----------|----------|
| Local    | Mean      | 1.366   | 2.963   | 1.339    | 2.815    |
|          | N         | 28      | 27      | 28       | 27       |
|          | Std. Dev. | 0.806   | 1.729   | 0.674    | 1.612    |
| National | Mean      | 1.607   | 5.089   | 2.500    | 5.054    |
|          | N         | 14      | 14      | 14       | 14       |
|          | Std. Dev. | 1.296   | 1.129   | 1.390    | 1.025    |
| Both     | Mean      | 1.446   | 3.689   | 1.726    | 3.579    |
|          | N         | 42      | 41      | 42       | 41       |
|          | Std. Dev. | 0.987   | 1.844   | 1.104    | 1.785    |

Table 4. Correlation analyses between key variables

|               |                 | CUS2001 | CUS2004 | PROS2001 | PROS2004 | EXP     |
|---------------|-----------------|---------|---------|----------|----------|---------|
| EXP           | Pearson Corr.   | 0.244   | 0.514** | 0.454**  | 0.588**  |         |
|               | Sig. (2-tailed) | 0.140   | 0.001   | 0.004    | 0.000    |         |
|               | N               | 38      | 37      | 38       | 37       |         |
| REGION        | Pearson Corr.   | 0.82    | 0.554** | 0.502**  | 0.602**  | 0.581** |
|               | Sig. (2-tailed) | 0.605   | 0.000   | 0.001    | 0.000    | 0.000   |
|               | N               | 42      | 41      | 42       | 41       | 38      |
| DALL2001      | Pearson Corr.   | -0.123  | -0.069  | -0.078   | -0.128   | -0.278  |
|               | Sig. (2-tailed) | 0.439   | 0.669   | 0.622    | 0.424    | 0.091   |
|               | N               | 42      | 41      | 42       | 41       | 38      |
| DALL2004      | Pearson Corr.   | -0.103  | 0.057   | -0.082   | -0.016   | -0.329* |
|               | Sig. (2-tailed) | 0.527   | 0.732   | 0.614    | 0.924    | 0.050   |
|               | N               | 40      | 39      | 40       | 39       | 36      |
| DFOUR2001     | Pearson Corr.   | -0.069  | 0.020   | -0.117   | 0.013    | 0.002   |
|               | Sig. (2-tailed) | 0.663   | 0.901   | 0.462    | 0.936    | 0.992   |
|               | N               | 42      | 41      | 42       | 41       | 38      |
| DFOUR2004     | Pearson Corr.   | -0.162  | 0.154   | -0.210   | 0.072    | -0.173  |
|               | Sig. (2-tailed) | 0.317   | 0.349   | 0.193    | 0.663    | 0.314   |
|               | N               | 40      | 39      | 40       | 39       | 36      |
| DDIRECT2001   | Pearson Corr.   | -0.141  | -0.119  | -0.134   | -0.253   | -0.403* |
|               | Sig. (2-tailed) | 0.372   | 0.459   | 0.396    | 0.110    | 0.012   |
|               | N               | 42      | 41      | 42       | 41       | 38      |
| DDIRECT2004   | Pearson Corr.   | -0.069  | 0.006   | -0.097   | -0.119   | -0.388* |
|               | Sig. (2-tailed) | 0.672   | 0.971   | 0.551    | 0.472    | 0.019   |
|               | N               | 40      | 39      | 40       | 39       | 36      |
| DINDIRECT2001 | Pearson Corr.   | -0.071  | -0.015  | -0.012   | 0.006    | -0.087  |
|               | Sig. (2-tailed) | 0.655   | 0.926   | 0.940    | 0.972    | 0.605   |
|               | N               | 42      | 41      | 42       | 41       | 38      |
| DINDIRECT2004 | Pearson Corr.   | -0.100  | 0.078   | -0.036   | 0.092    | -0.140  |
|               | Sig. (2-tailed) | 0.537   | 0.637   | 0.824    | 0.579    | 0.415   |
|               | N               | 40      | 39      | 40       | 39       | 36      |

\*\* Correlation is significant at the 0.01 level (2-tailed), \* Correlation is significant at the 0.05 level (2-tailed).

# **Evaluating the effect of the market environment on the business success of online newspapers**

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# EVALUATING THE EFFECT OF THE MARKET ENVIRONMENT ON THE BUSINESS SUCCESS OF ONLINE NEWSPAPERS

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## ABSTRACT

In the management literature it has been argued that the market environment conditions should have a substantial effect on business success. However, the present literature regarding online newspapers has more or less neglected this viewpoint and investigated the effects of only some aspects of the market environment like the structure of the online newspaper market and the role of geography. Therefore, in this research our focus was on analyzing empirically how the market environment factors influenced the business success of online newspaper. As the outcome of our statistical analysis based on data from 42 online newspapers, we suggest that a high level of perceived demand turbulence (basically as a result of unstable user needs) was related to difficulties in generating revenue. Also the perceived level of competition seemed to be connected to revenue accumulation. The harder the perceived competition was, the greater the effect of demand turbulence appeared to be. The enhanced success model, including the company's experience in online publishing, the perceived level of demand turbulence and the intensity of competition as predictors of annual revenue, achieved a considerably high explanatory power. The management implications of these findings are discussed.

## KEYWORDS

Online newspaper, business success, demand turbulence, competition, market environment

## 1. INTRODUCTION

The first generation of online newspapers was born in the mid 1970s when videotex systems were developed in Europe for consumer applications (Cats-Baril et. al. 1994). The rapid growth of the World Wide Web (later web) starting in the early 1990s enabled a more commercially promising platform for electronic publishing. The birth of the web posed the greatest threat that traditional publishing companies had yet encountered, and for a while it even seemed possible that this digital revolution would bring the print newspaper industry to an end. Print newspapers have tried various ways to develop viable business models and revenue streams for their online services including advertising, subscription fees, archival access charges, related Internet services, customization, online ordering of information and syndication or revenue sharing with partners, but in general these efforts have not yet been very successful (Gallaughier et al. 2001, Peng et al. 1999, Rayport and Sviokla 1994, Shapiro and Varian 1998, Ilhström and Palmer 2002, Palmer and Eriksen 1999a, b, Picard 2000, Steinbock 2000, Kalakota and Whinston 1996, Sääksjärvi and Santonen 2002, Chyi and Lasorsa 1999, Harper 1997). Even though it is not yet fully clear what kind of a role online newspapers will have in the future, the current belief is that there is only a slight chance that print newspapers will be replaced by the online versions (Harper 1996, Peng et al. 1999, Chyi and Lasorsa 1999, Mueller and Kamerer 1995). The phenomenon that in the beginning appeared as a revolution, had turned into a slow incremental evolution, and the over-optimistic economic expectations about the digital revolution have been washed away.

## 1.1 Objectives of this paper

Sääksjärvi and Santonen (2002 and 2003), among others, have empirically explored how various factors like experience, the geographical focus of the parent print newspaper, the amount of online personnel, the size of the customer base and the applied customization or revenue logic affect the ability of online newspapers to generate revenue and achieve their generic business goals. However, these studies and practically the whole online newspaper literature have paid less attention to the suggested effect of the market environment on business success (eg. Afuah and Tucci, 2001). Prior studies by Chyi and Sylvie have investigated the effects of only some aspects of the market environment, such as the structure of the online newspaper market (1998) and the role of geography (2001), while Santonen (2003) has only tested how perceived demand turbulence is affected by experience and the customization strategy applied. For this reason, it seemed to be useful and valuable to empirically test the suggested effect of the market environment on the online newspapers' success.

This paper is structured as follows. In chapter 2 we briefly discuss how to measure the environmental effect on the online newspaper market. In chapter 3 we will report our research framework and methodology. Chapter 4 presents the results of our analyses, and finally, in chapter 5 and 6 we draw conclusions from our observations and present the most important limitations of this study.

## 2. MEASURING THE ENVIRONMENTAL EFFECT ON BUSINESS SUCCESS

Online newspapers, like the majority of advertiser-supported media, operate in a dual product market (Picard, 1989). The first market, the information market, is a market in which online newspapers try to attract as many web users as possible with interesting content and services, usually partially or totally free of charge (McMillan, 1998). The second market, the advertising market, is based on the users collected in the information market. Actually, it has been suggested that the advertising – mainly banner – incomes are by far the most common primary source of income for online newspapers (eg. Palmer and Eriksen 1999, Sääksjärvi and Santonen 2002). Another market environmental dimension, which can be used to classify the online newspaper market, is the geographical focus of the parent print newspaper. Even though the Internet has significantly decreased the relevance of geographical boundaries by creating online market environments, the online newspapers are still rather strongly restricted by geographical limits. Basically, the majority of content in online newspapers is still adopted from the parent print newspapers, making online newspapers closely dependent on the geographical focus of the print counterpart (Chyi and Sylvie 2001). Chyi and Sylvie (1998) suggested that the geographical market for the online newspapers can be classified as local, regional, national or even global.

Regardless of geographical orientation, however, the marketing literature usually divides the potential market environment factors into the following three dimensions: market turbulence, competitive intensity and technological turbulence (eg. Jaworski and Kohli 1993, Slater and Narver 1994). Environmental turbulence or more specifically market turbulence, ie., the rate of change of customers and their preferences (Slater and Narver, 1994), indicates the amount of instability, uncertainty, and lack of control within a firm's market place (Pine, 1993). The following measures have been used to estimate how competitive the market environment is: the rate of market growth (Kohli and Jaworski, 1990), the number and power of competitors (Day and Wensley, 1988), and competitor concentration and hostility (Narver and Slater, 1994). Technological turbulence, on the other hand, refers to the degree to which technology changes over time within the industry and the degree to which such changes affect the industry (Low and Mohr 2001).

In this study we are mainly interested in analyzing the effect of market turbulence and competitive intensity on business success, and therefore we will exclude the technological turbulence dimension. In addition, since we have already analyzed the effect of the geographical focus of the parent print newspaper on success (Sääksjärvi and Santonen, 2003), we will exclude this dimension as well.



## 2.1 Research questions

Since the products and services in the digital domain are so easily copied (Choi et. al 1997), we are assuming that the revenue accumulation should be related to the level of competition. Especially in the restricted and fairly small markets, the presence of many players with similar business models – commonly relying only one major banner revenue stream (Sääksjärvi and Santonen, 2003) – should unavoidably force the companies into a battle for the same advertisers and users. Stated formally as a research question:

*RQ 1) Can we find evidence for the suggestion that the level of competition is related to revenue?*

If the online newspapers are not able to control the level of demand turbulence, this should weaken their ability to accumulate revenue. The higher levels of demand turbulence might be a result of not understanding the end-users' true needs or because of extremely heterogeneous user wants, in a situation in which the company only has standardized services for the average customer (Sääksjärvi and Santonen, 2003). This assumption is mainly based on the general suggestion in the marketing literature, which argues that a company that satisfies its customers' individual wants and needs better will eventually have greater sales (e.g. Pine, 1993).

*RQ 2) Is the higher level of demand turbulence making it more difficult to accumulate revenue?*

Previously Santonen (2003) has suggested that the more experienced companies are to some extent able to control the level of demand turbulence. In addition, Sääksjärvi and Santonen (2003) argued that only national players seemed to improve their average success scores along with experience, whereas the regional online newspapers typically showed declining trends in the achievement of business success. By following these suggestions and the above-mentioned assumptions underlying research questions 1 and 2, we are assuming that the summary effect of market environment factors and experience in online publishing should be a better predictor of annual revenue than these items individually. Basically, we are wondering:

*RQ 3) Can we find evidence for the suggestion that the market environment factors and accumulated online publishing experience have an interaction effect on revenue accumulation?*

## 3. RESEARCH METHODOLOGY

### 3.1 Data collection and response

The Finnish online newspaper industry was identified as a suitable target population for our research, since Finland is one of the leading countries in communication technologies and Internet accessibility, yet the Finnish population's motivation to read newspapers on a daily basis is one of the highest globally (Statistics Finland, 2002a,b). The mail survey questionnaire was finalized and pre-tested on the basis of a few interviews with specialists of the Finnish Newspapers Association (later FNA) to make sure that all questions were understandable. The names of the newspapers and personal addresses of the most potential respondents were collected with the help of the FNA. The pre-tested questionnaire was addressed directly to the manager responsible for the online newspaper business activity. If there was no certainty over the right person, this was confirmed by a telephone call to the newspaper. According to FNA annual statistics, 129 newspapers also published an online version in 2001 (FNA, 2001).

After one follow-up letter and a few reminder phone calls to the largest online newspapers, we had 42 acceptable responses, which gave us a nice overall response rate (about 32 per cent). The data provide a very satisfactory sample of the target market, taking into consideration the fact that over 70 per cent of the largest newspapers (publication frequency 7 days per week) had responded. On an average, these 42 online newspapers had a customer base of 11 000 weekly readers (October 2001). The average annual workforce was about 4 persons, while the average age of the online versions was about 3.6 years. Only 23 newspapers

had generated revenue, which on an average (annual 2001) was about 46 000 euros, and represented on an average less than one per cent of the annual income of the parent print newspapers.

## **3.2 Construction of the market environment measures**

In the marketing literature, the potential market environment factors are usually divided into the following three dimensions: market turbulence, competitive intensity and technological turbulence (eg. Jaworski and Kohli 1993, Slater and Narver 1994). Previously, Pine (1993) has defined an extensive market turbulence map instrument to determine the level and type of the market environmental turbulence. His instrument was based on seventeen individual variables, which were logically divided into demand and structural categories. According to Pine, demand turbulence indicates the degree to which a company can control, stabilize, and reduce uncertainty within its markets, whereas structural turbulence reflects the basic nature of an industry. On the contrary to the more commonly used and previously introduced three-dimensional classification from the marketing literature, Pine included the dimensions of competitive intensity and technological turbulence as a part of the structural turbulence items. However, in this study we are mainly interested in analyzing the effect of market turbulence and competitive intensity on success, and therefore we will exclude the technological turbulence dimension.

In the survey questionnaire, we used the modified market turbulence map instrument introduced by Pine (1993). Instead of using Pine's original per cent scale (range 0-100%), the turbulence items were evaluated on the more common 7-point Likert scales. Taking into account the fact that the size of our data was only limited, we could not fully use all the market environment items collected. Therefore, Pine's original demand turbulence and structural turbulence dimensions were simplified.

**Demand turbulence.** In order to construct reliable demand turbulence dimensions, we applied factorial analysis to only those four items that in our opinion were directly related to demand turbulence. The selected items included 1) rate of change in customer needs and wants, 2) homogeneous versus heterogeneous demand, 3) stability and predictability of demand levels, and 4) easily defined versus uncertain customer needs and wants. The indirect demand turbulence variables adopted from Pine's survey instrument that we dropped would have measured service levels, fashion, price and quality consciousness. The outcome of the factor analysis was a simple two-dimensional model described in Table 1 (Appendix). Based on the items loaded into each dimension, we named these two dimensions as : F1) Unstable user needs and F2) Individual user needs. In addition, an item for the overall level of demand turbulence was formed on the basis of the mean values of the two demand turbulence factors.

**Level of competition.** The individual items for the overall level of competition measure were adopted from Pine's structural turbulence category. In order to simplify the level of competition measure, several exploratory factor analyses with all Pine's structural turbulence items were conducted. Based on their results, the following three individual items, which formed a one-dimensional competition measure, were selected to evaluate the dimension of non-existent vs. intense competition: 1) competitive intensity, 2) economic cycle dependence and 3) buyer power. The mean value of these three items was considered to represent the overall level of competition.

In Appendix Table 2, we have presented the results of the correlation analysis between the overall and individual competition items. All individual competition items had a significant relationship (sig. < 0.01) with the overall level of competition item. The Pearson correlation coefficient measures (2-tailed) ranged between 0.622 – 0.805. In addition, a correlation analysis of the demand turbulence and level of competition items was conducted to evaluate if our key measures were interrelated (Table omitted). Since we did not detect any significant relationships, we were assured that both the perceived demand turbulence and level of competition items achieved high levels of internal consistency, yet were truly measuring different dimensions of the market environment.

The typology of business models was based on the number of important revenue streams. For this purpose, our questionnaire included a set of 13 different revenue possibilities. We asked the respondents to fill in the exact figures for both the total value of the annual revenue, and its distribution among different revenue streams.

### 3.3 Constructing the subgroups for statistical testing

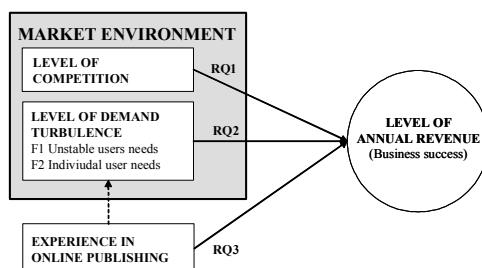
In this research we wanted to evaluate the market environment's effect on online newspapers' ability to generate revenue. Based on the literature review regarding the measurement of the market environment effect, we identified two market environment dimensions: demand turbulence and level of competition. We attempted to isolate, yet also to summarize the effect of both market environment factors by dividing our total sample group into smaller groups. Based on the level of demand turbulence and level of competition dimensions, the online newspapers having revenue (N=23) were roughly divided into two groups according to both of these dimensions. Based on this classification we had four groups, from the "low level of demand turbulence and competition" subgroup to the "high level of demand turbulence and competition" subgroup.

In the Appendix tables 3 and 4 we have presented the mean values of the demand turbulence and level of competition items in the four particular subgroups. Based on the t-test for equality of means, it appears that the mean values of demand turbulence and level of competition differ significantly between our main market environment dimensions. In addition, we conducted Levene's test of equality of error variances to make sure that the differences in the variances in demand turbulence and level of competition among the four subgroups were not in violation of the equal variance assumption. Since the significance values of the test in the case of demand turbulence (0.487) and in the case of level of competition (0.147) were greater than 0.10, there was no reason to believe that the equal variances assumption was violated. Therefore, the small differences in group standard deviations observed in the descriptive statistics (tables 3 and 4) were due to random variation. As a result, we were assured that all the four groups are truly different in terms of the mean values for market environment conditions, and therefore can be used to test our hypothesis.

### 3.5 Research framework

The final research framework summarizes the results of our construction of the key measures (Figure 1). In the research framework the circle on the right depicts the amount of annual revenue, which we used as a criterion for business success. The box on the top left includes our two market environment dimensions: overall level of competition and demand turbulence. The overall level of demand turbulence was formed on the basis of factor analysis, which resulted in a two-dimensional demand turbulence measure: unstable user needs (F1) and individual user needs (F2). Finally, the "experience in online publishing" measure is presented in the lower left-hand box.

Figure 1: Research framework



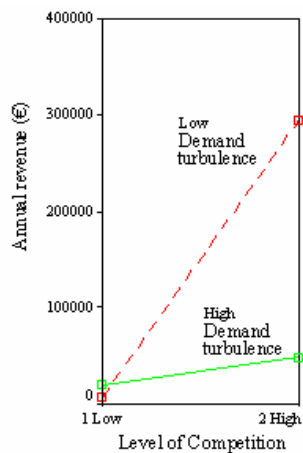
## 4. RESULTS

### 4.1 Answering research questions 1 and 2: The effect of the market environment on business success

The simple mean value comparison between our four subgroups suggests that the group means for ability to generate revenue might be different (Appendix Table 5). In addition, the significance value from Levene's

test (0.000) indicated that there were also differences in the variances of annual revenue among the four groups. In figure 2 we have graphically presented the estimated marginal means of annual revenue according to our main market environment dimensions, level of demand turbulence and competition. In the figure, it is easy to observe that the higher the level of competition grew, the greater the effect of demand turbulence appeared to be. In addition, we suggest that the substantial revenue accumulation was inevitably leading to intensified competition.

Figure 2: Estimated marginal mean of revenue (€)



To evaluate how strongly the variance of the annual revenue was affected by market environment conditions in our four quadrants, we applied univariate analysis of variance (Appendix Table 6). It allowed us to model the value of annual revenue based on its relationship to our between-subject factors, demand turbulence and level of competition. The significance values for all our market environment terms are clearly less than 0.05. Therefore, the level of demand turbulence and competition items have, individually and also in combination, a significant effect on the variance of the annual revenue. The partial eta squared statistic in the Appendix Table 6 reports the "practical" significance of each term. The larger values indicate a greater amount of variation accounted for by the model term, to a maximum of 1. The highest significance value (0.497) was detected in the case of the level of competition item, while the second highest value (0.403) was observed in the case of the summary effect of the demand turbulence and competition items. It appeared that the level of demand turbulence had the weakest effect (0.350).

Based on the above-mentioned observations we tried to explain the variance of the annual revenue item by using a stepwise linear regression analysis with the demand turbulence and level of competition as predictors of annual revenue. The results of this regression model including all the cases having revenue are collected in Appendix Table 7. When the effect of market environmental factors was evaluated individually, the level of demand turbulence appeared to be slightly better in explaining the variance of annual revenue. The level of demand turbulence (model 1) explained 25 per cent of the variance of the annual revenue, while the level of competition (model 2) explained 23 per cent. However, the regression to annual revenue improved significantly when both market environment factors were used (model 3). Adding the level of competition to the model with the level of demand turbulence increased the explanatory power of the model by 19 per cent and the total explanatory power increased to as much as 44 per cent. Furthermore, we conducted additional linear regression analyses with all our four subgroup as sample groups. However, this analysis did not result in significant relationships, probably partly due to the very limited sample size in the subgroups.

The additional regression analysis was conducted to evaluate which demand turbulence dimension, unstable user needs or individual user needs, was the main cause of the above-observed effect. It turned out that only the unstable user needs explained the variance of the annual revenue (model 4). The unstable user

needs factor alone explained only 17 per cent of the revenue, but together with the level of competition it explained 38 per cent (model 5). When comparing this outcome with the results for the overall demand turbulence measure, it is suggested that the overall demand turbulence measure was a better predictor of annual revenue than the unstable user needs factor, when considering the summarized effect together with the level of competition (44 per cent vs. 38 per cent). Indeed, the higher the levels of demand turbulence (basically as a result of the unstable user needs), the more difficult it was for companies to generate revenue.

## **4.2 Answering research question 3: Enhancing the model with experience**

We expanded our regression model based on purely market environment factors with the companies' online publishing experience as a additional predictor of annual revenue. The results of this model are also collected in Appendix Table 7.

It appeared that the accumulated experience in online publishing was a better individual predictor of annual revenue than our individual market environment items. Experience alone was able to explain about 34 per cent of the variance of annual revenue (model 6). However, this was still less than the combined effect of demand turbulence and level of competition (34 per cent vs. 44 per cent). Nevertheless, the best model (model 7) to explain the revenue accumulation included all our identified predictors of revenue: experience, demand turbulence and level of competition. These items together resulted in a very satisfactory 64 per cent explanatory power.

## **4.3 Discussion**

To summarize all our findings, we suggest that the attempt to accumulate substantial revenue in the restricted online newspaper market was leading to intensified competition. Since the business models, revenue sources, content and service selections were currently very similar among the major competitors (Sääksjärvi and Santonen, 2002), end-users and advertisers probably had ample opportunities to select the best and cheapest services at any given time. These opportunities apparently roused up the competition. Ensuring true business success in the future and avoiding a useless battle for the same advertisers and end-users will require more innovative business models. These might be based on, e.g., interactivity like having end-users as content providers, differentiated yet sufficient content selection, faster delivery of news, complementary services with partners, or other efficient mechanisms that might attract customers back. The path to success also calls for continuous and sensitive observation of the ever-growing end-user needs. According to our results, at least some of the more experienced online newspapers had discovered partial methods to control the level of demand turbulence, and this was helping them to generate higher revenues. These methods included advertising, newsletters, competitions for end-users, and smooth linkages between print and online version content. The loyalty of the current customer base, which in the case of print newspapers is usually very high, is easily lost in the digital domain as a result of the characteristics of digital products (Choi et. al 1997). Therefore, more innovative and hard-to-copy business models are required to lock-in customers and increase their loyalty (Shapiro and Varian, 1998). In a way, the level of demand turbulence could be used as a one potential measure to evaluate the true loyalty of the customer base.

It has been suggested that the online newspapers will have two main strategic options to go forward. They can either try to collect as many customers as they can and attract the advertisers with the size of their customer base, or they can focus on smaller niche customer segments, which are highly valued among targeted advertisers (Martin, 1998). However, from the point of view of the market environment, the outcomes of these two strategic options are radically different. In the mass market, dependent on the size of the customer base, online newspapers will have to compete not only with other online newspapers, but also with other major online players like search engines and portals. According to Martin's suggestions, the advertisers in these markets are not interested in the quality of the customers, but in their total numbers. At least currently, the individual online newspapers in Finland have clearly smaller customer bases than the largest players in the market (<http://www.gallupweb.com/redmeasure/>). On the other hand, in the niche markets the newspapers must find interesting and sufficiently large customer segments, while keeping up the delicate balance between sufficient content selection and affordable production costs. Yet the company must also make certain that the niche is not too crowded by other competitors or too easy to enter by other companies. One of the most obvious niches for online newspapers is naturally the geographical orientation.

However, both of these strategic options could cause problems for online newspapers from the point of view of the market environmental effect. The main objective for online newspapers in Finland is to support the parent print newspaper (Sääksjärvi and Santonen, 2002). Therefore, all the actions taken for the benefit of the online service should also be closely aligned with the interests of the parent print newspaper. In addition, the expected total amount of annual revenue coming from online services is anyway still a fraction compared to the revenues generated by the parent print newspapers. This obviously limits the possibilities to introduce new online services. In future studies, we should not only analyze the effect of the online market environment on the success of the online business, but also the effect of the print market environment. This might uncover that some of the online newspaper are actually voluntarily sacrificing their online revenues on behalf of the print version.

## **5. CONCLUSION**

The present study aimed to analyze the suggested effect of the market environment on the business success of Finnish online newspapers. In addition, we were interested in evaluating whether we could enhance the explanatory power of our success model by introducing the company's experience in the online publishing market alongside the market environment factors as a predictor of business success. To isolate the effect of different market environment factors, we formed four sample groups based on the dimensions of non-existent vs. intense competition and low vs. high demand turbulence. As an outcome of our statistical analyses we suggested that a higher level of perceived demand turbulence (basically as a result of the unstable user needs) was related to difficulties in generating revenue. In addition, the perceived level of competition seemed to be connected to the revenue accumulation. Our enhanced regression model, including experience in online publishing, level of demand turbulence and competition as predictors of annual revenue, achieved a very satisfactory explanatory power of 64 per cent.

These results are also consistent with previous findings by Sääksjärvi and Santonen (2003), which suggested that customization could be an effective business model for online newspapers. By implementing the customization business model, online newspapers could differentiate their online services, avoid direct competition with other rivals and increase their business performance. The customized online newspapers using flexible publication processes should unavoidably result in better success, since the customized products take better account of individual user needs and thereby create superior value to users compared with standardized products. In addition, the implementation of a customization business model requires a better understanding of customer needs, which should help to reduce demand turbulence, even though Santonen (2003) was not able to establish the suggested relationship between demand turbulence and customization in the case of Finnish online newspapers.

As a final outcome of this study, we suggest the market environment and especially the perceived level of competition and demand turbulence as extensions to the online newspaper success model originally based on the importance of the business goal, customization, experience, geographical focus of the parent print newspaper and size of the customer base (Sääksjärvi and Santonen 2002, Sääksjärvi and Santonen 2003).

## **6. LIMITATIONS**

Finally, we present the most important limitations of this study. Due to the nature of the small and homogeneous sample group, the generalizability of our findings calls for further research. Since practically all our sample group newspapers were published only in the Finnish language, no truly global markets are available for them. Therefore, the expanded sample group should also include online newspapers in English or some other global language to add a truly global dimension to the market environment. Future studies with larger sample groups will support or reject the observed results among local, national and global newspapers operating in different countries. In addition, our results were based purely on data collected through a mail survey, with respondents including only the managers responsible for the online newspaper business. Therefore, our results only represent an online-focused, managerial point of view, not that of the whole organization (eg. top management or journalists) or that of the customers. Evaluating online newspapers' success from all key players' points of view would generate a comprehensive understanding of the factors

affecting the online newspapers' success. In-depth interviews with all the key players, using multiple case companies, would probably give substantial insights into the online newspapers' business objectives, market environment and success. Extensive cross-case analyses might also reveal potential differences between online newspapers with niche customer segments (e.g. finance news) and ones with a mass-media orientation.

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## APPENDIX

Table 1. Factorial analysis of the perceived demand turbulence

| Factor name   | N         | Mean         | Std. Dev     | Factor loading | Items correlation with total score | Eigenvalue   |
|---|-----------|--------------|--------------|----------------|------------------------------------|--------------|
| <b>F1. Unstable user needs</b>  | <b>42</b> | <b>3.540</b> | <b>1.015</b> |                |                                    | <b>1.530</b> |
| D13 Our online newspaper's end-users needs and wants are unstable and difficult to define | 42        | 3.548        | 1.310        | 0.852          | 0.732(**)                          |              |
| D1 Our online newspaper's end-users have quickly changing needs and wants                 | 42        | 3.691        | 1.297        | 0.787          | 0.674(**)                          |              |
| D9 Our online newspaper has an unstable and unpredictable demand level                    | 42        | 3.381        | 1.738        | 0.419          | 0.696(**)                          |              |
| <b>F2. Individual user needs</b>  | <b>42</b> | <b>3.571</b> | <b>1.610</b> |                |                                    | <b>1.036</b> |
| D4 End-users have individual needs and wants  | 42        | 3.571        | 1.610        | 0.948          | 1.000(**)                          |              |

\*\* Correlation is significant at the 0.01 level



Table 2. The correlation analysis results between individual structural turbulence items and the overall level of the competition (N=42)

|                                | Level of competitive intensity | Economic cycle dependence | Level of buyer power | Overall level of competition |
|--------------------------------|--------------------------------|---------------------------|----------------------|------------------------------|
| Level of competitive intensity | 1                              | 0.393(*)                  | 0.302                | 0.805(**)                    |
| Economic cycle dependence      | 0.393(*)                       | 1                         | 0.112                | 0.701(**)                    |
| Level of buyer power           | 0.302                          | 0.112                     | 1                    | 0.622(**)                    |
| Overall level of competition   | 0.805(**)                      | 0.701(**)                 | 0.622(**)            | 1                            |

\*\* Correlation is significant at the 0.01 level (2-tailed), \* Correlation is significant at the 0.05 level (2-tailed).

Table 3. The mean values of the level of perceived demand turbulence

| Level of perceived demand turbulence | Level of perceived competition |       |           |      |       |           |
|--------------------------------------|--------------------------------|-------|-----------|------|-------|-----------|
|                                      | Low                            |       |           | High |       |           |
|                                      | N                              | Mean  | Std. Dev. | N    | Mean  | Std. Dev. |
| High                                 | 5                              | 4,033 | 0,415     | 7    | 4,119 | 0,416     |
| Low                                  | 7                              | 2,881 | 0,416     | 4    | 2,500 | 0,624     |

Table 4. The mean values of level of perceived competition

| Level of perceived demand turbulence | Level of perceived competition |       |           |      |       |           |
|--------------------------------------|--------------------------------|-------|-----------|------|-------|-----------|
|                                      | Low                            |       |           | High |       |           |
|                                      | N                              | Mean  | Std. Dev. | N    | Mean  | Std. Dev. |
| High                                 | 5                              | 2,400 | 0,683     | 7    | 4,429 | 0,713     |
| Low                                  | 7                              | 2,571 | 0,535     | 4    | 5,833 | 1,171     |

Table 5. The mean values of annual revenue (€)

| Level of perceived demand turbulence | Level of perceived competition |        |           |      |         |           |
|--------------------------------------|--------------------------------|--------|-----------|------|---------|-----------|
|                                      | Low                            |        |           | High |         |           |
|                                      | N                              | Mean   | Std. Dev. | N    | Mean    | Std. Dev. |
| High                                 | 5                              | 20.370 | 38.463    | 7    | 47.659  | 47.608    |
| Low                                  | 7                              | 6.579  | 5.767     | 4    | 294.118 | 197.196   |

Table 6. Univariate analysis of variance. Dependent variable annual revenue (€)

| Source                                    | F      | Sig.  | Partial Eta Squared |
|---|--------|-------|---------------------|
| Corrected Model                           | 11.368 | 0.000 | 0.642               |
| Intercept                                 | 25.746 | 0.000 | 0.575               |
| Level of demand turbulence (Low vs. High) | 10.251 | 0.005 | 0.350               |
| Level of competition (Low vs. High)       | 18.770 | 0.000 | 0.497               |
| Demand turbulence * Competition           | 12.826 | 0.002 | 0.403               |

Table 7. Result of stepwise regression analysis. Dependent variable annual revenue (€)

| Model | Variables           | R2    | Unstandardized Coefficients |            | Standardized Coefficients | Sig.  |
|-------|---------------------|-------|-----------------------------|------------|---------------------------|-------|
|       |                     |       | B                           | Std. Error | Beta                      |       |
| 1     | (Constant)          |       | 348.118                     | 107.931    |                           |       |
|       | Demand turb.        | 0.247 | -80.195                     | 30.547     | -0.497*                   | 0.016 |
| 2     | (Constant)          |       | -81.741                     | 66.034     |                           |       |
|       | Competition.        | 0.231 | 41.953                      | 16.709     | 0.481*                    | 0.020 |
| 3     | (Constant)          |       | 186.034                     | 113.458    |                           |       |
|       | Demand turb.        | 0.247 | -74.195                     | 27.070     |                           |       |
|       | Competition         | 0.441 | 38.573                      | 14.650     |                           |       |
| 4     | (Constant)          |       | 245.452                     | 86.690     |                           |       |
|       | Unstable user needs | 0.173 | -52.930                     | 25.291     | -0.415*                   | 0.049 |
| 5     | (Constant)          |       | 87.308                      | 98.381     |                           |       |
|       | Competition         | 0.231 | 39.768                      | 15.415     |                           |       |
|       | Unstable user needs | 0.379 | -49.166                     | 22.496     |                           |       |
| 6     | (Constant)          |       | -157.083                    | 73.432     |                           |       |
|       | Experience          | 0.339 | 3.919                       | 1.193      | 0.582**                   | 0.004 |
| 7     | (Constant)          |       | 3.735                       | 109.260    |                           |       |
|       | Experience          | 0.339 | 3.078                       | 953        |                           |       |
|       | Demand turb.        | 0.518 | -65.485                     | 22.480     |                           |       |
|       | Competition.        | 0.639 | 31.029                      | 12.302     |                           |       |

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)



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