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.

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The newspaper publishing industry itself is particularly interesting, since companies that have traditionally provided products in physical form are now actively pursuing digital options (Gallaughner 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).

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 (Gallaughner et al. 2001). The pioneering study by Gallaugner 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?

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 arrow (H2) describes that we assume a joint effect of the business model and the generic goal measures on success. 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 2. 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 1.

The most important resource and capability factors were annual online revenue, number of registered subscribers, number of weekly readers and number of special staff devoted to the online versions. 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.

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 3.6 persons.

4.2 Generic goals of the online newspapers and their achievement

Based on of the factorial analysis described in Appendix Table 2, 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)

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. In the case of four success dimensions, the degree of goal attainment (the difference between averages of the success and goal dimensions) was in significant correlation with this degree, also in the case of SUC-TECHN in almost significant correlation. Further, 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. 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).

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 2 and 3. Due to the large variances in the success scores, age alone was not a significant predictor of success.

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

Figure 3: 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.

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. 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. However, even a nice accumulation of revenue was not sufficient to turn the business success (or the overall success) scores up. We had to reject our hypothesis H2.

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 declining in the most experienced group of players (Figure 4). 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.

Figure 4: Average number of weekly readers (OVIKKO) 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.

6. REFERENCES

- Afuah Allan, Tucci Christopher L., *Internet Business Models and Strategies: Text and Cases*, McGraw-Hill Irwin, 2000.
- Choi, Soon-Young, Stahl Dale O., and Whinston Andrew B., *The Economics of Electronic Commerce: The Essential Economics of Doing Business in the Electronic Marketplace*, Macmillan Technical Publishing, 1997.
- Chyi Hsiang Iris, Lasorsa Dominic, *Access, use and preferences for online newspapers*, Newspaper Research Journal, Vol. 20 Issue 4, 1999
- Dibeau Wendy, Garrison Bruce, *How Six Online Newspapers Use Web Technologies*, Newspaper Research Journal, Spring 2001, Vol. 22 Issue 2, 79-94
- Gallaughier John M., Auger Pat, BarNir Anat, *Revenue streams and digital content providers an empirical investigation*, Information & Management, 2001, 38, 473-485
- Harper Christopher, *Online newspapers: Going somewhere or going nowhere?*, Newspaper Research Journal, Summer/Fall 1997, Vol. 17 Issue 3/4;
- Kirsner Scott, *Do newspapers have a future on the Net?* Editor & Publisher, New York, Apr 1999

- Neuberger Christoph, Tonnemacher Jan, Biebl Matthias, and Duck André, *Online -The Future of Newspapers? Germany's Dailies on the World Wide Web*, Journal of Computer-Mediated Communication, September 1998.
- Palmer, Jonathan W., Eriksen Lars Bo, *Digital newspapers explore marketing on the Internet*, Association for Computing Machinery, Communications of the ACM, New York; Sep 1999.
- Peng Foo Yeuh, Tham Naphtali Irene, and Xiaoming Hao, *Trends in Online Newspapers: A Look at the US Web*, Newspaper Research Journal, Spring 1999, 20 no. 2, 52-63.
- Rayport, Jeffrey F., Sviokla, John J., *Managing in the marketspace*, Harvard Business Review, Nov/Dec 1994, Vol. 72 Issue 6, 141-151
- Shapiro Carl and Varian Hal R., *Information Rules: A Strategic Guide to the Network Economy*, Harvard Business School Press Boston, Massachusetts, 1998a.
- Shapiro Carl and Varian Hal R., *Versioning: The smart way to sell information*, Harvard Business Review, November-December 1998b,
- Singer Jane B, *The metro wide Web: Changes in newspapers' gatekeeping role online* Journalism and Mass Communication Quarterly, Columbia, Spring 2001
- Stepp Carl Sessions, *The New Journalist: The On-Line Era Demands Added Skills and Innovative Ways of Looking at the Profession*, American Journalism Review, 1996, 18, no. 3
- Stone Martha L, *Print to Web: It takes teamwork*, Editor & Publisher; New York; Jul. 1999
- Tribute Andrew, *Newspapers wrestle with the online bear*, Seybold Report on Publishing Systems, 1996, 4/23, Vol. 25 Issue 14;
- Venkatraman N., Ramanujam V., *Planning Systems Success: a conceptualization and operational model*, Management Science, Vol 33, no 6, June 1987, 687-705
- Editor&Publisher, (2001), As of October 23, 2001 Editor&Publisher Online Media Directory contained 4,918 newspapers. The Newspaper Association of America (NAA) is also maintaining a comprehensive link list to newspapers all around the world in www.newspaperlinks.com web site.
- 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>

7. APPENDIX

	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 1: Descriptive statistics of the Generic Goals and Success

Factor	N	Mean	Std. Dev	Factor loading	Items correlation with total score	Eigenvalue
F1. Developing a Genuine Online Newspaper (G-ONLIN)						3.449
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**	
F2. Earning Extra Income for the Print Paper (G-BUSIN)						2.421
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**	
F3. Improving Cost-Efficiency (G-EFFIC)						1.984
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**	
F4. Gaining New Technology Skills (G-TECHN)						1.871
GOAL- 08	42	5.452	1.714	0.873	0.889**	
GOAL- 09	42	4.881	1.565	0.750	0.865**	
F5. Strengthening the Brand of the Print Paper (G-PRINT)						1.212
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: Factorial Analysis of the Generic Goals of Online Newspapers