Future scenarios for the tablet industry and the digital content business in Finland were identified: 1) Continuum 2) Disruption and 3) Chaos by a panel of industry experts.

The digital business model evolution in the eReading industry was researched by identifying the current strategy types in the market and imposing them on the three scenarios. New product development strategies were found from the Finnish publishing industry, based on the level of pro-activity and the desired level of innovation radicalness.

Learning in 2011-2017 was approached by examining how public-sector decision-makers adopt e-learning products and services. The aim was to gain insight into the possible strategic bundling options of online and offline learning material, by examining the buying behaviour and value drivers of decision-makers at public (state-funded) schools.

Digital advertising forms in 2011-2017. By benchmarking major U.S. newspapers and magazines, we were able to explore and classify eleven distinct advertising forms that are adapted from print, web and mobile media advertising.

Key findings of each working group are depicted in this report.

Digital service concepts and business models - Current state and future prospects

Leminen, S., Huhtala, J.-P., Könkkölä, S., Laivuori, T., Lindholm, J. & Sihvonen, A.
Seppo Leminen, Juho-Petteri Huhtala & Antti Sihvonen (Eds.)

Digital service concepts and business models - Current state and future prospects

Leminen S., Huhtala J.-P., Könkkölä S, Laivuori T., Lindholm J. & Sihvonen A.

This work was supported by TEKES as part of the Next Media programme of TIVIT (Finnish Strategic Centre for Science, Technology and Innovation in the field of ICT)

Laurea University of Applied Sciences, Leppävaara Unit 2012 Vantaa
Table of Content

1 Introduction .................................................................................................................. 10
   Antti Sihvonen, Juho-Petteri Huhtala & Seppo Leminen

2 Future scenarios for the tablet industry and the digital content business in Finland ...................................................................................................... 13
   Tommi Laivuori, Juho-Petteri Huhtala, Antti Sihvonen & Seppo Leminen
   2.1 Introduction ............................................................................................................ 13
   2.2 Theoretical approach .............................................................................................. 17
   2.3 Methodology .......................................................................................................... 20
   2.4 Findings and discussion ......................................................................................... 21

3 Digital strategy and business model evolution in emerging markets ........ 26
   Antti Sihvonen & Juho-Petteri Huhtala
   3.1 Introduction ............................................................................................................ 26
   3.2 Industry level analysis of the current new product development strategies ................................................................................................................. 27
   3.3 Industry evolution and strategic behaviour in future scenarios ...... 29
      3.3.1 Scenario 1: Three worlds, multiple business model opportunities for publishing ........................................................................................................... 29
      3.3.2 Scenario 2: Steady service development and predictable market dynamics between first movers and late entrants 30
      3.3.3 Scenario 3: Freezing markets, patience is rewarded as eReading remains a transition phase before something new ........... 31

4 Digital services – eLearning 2011-2017 ................................................................. 33
   Könkköla Saara
   4.1 Introduction ............................................................................................................. 33
   4.2 eLearning business models and strategic bundling .............................................. 34
   4.3 Schools as customers – specific characteristics of organizational buying behavior ................................................................. 35
      4.3.1 Personal characteristics .................................................................................. 36
      4.3.2 Organizational characteristics .................................................................. 36
4.3.3 Environmental conditions .................................................. 37
4.4 Learning in 2017 ........................................................................ 37
  4.4.1 Scenario 1: Compulsory printed material & optional electronic material .................................................. 37
  4.4.2 Scenario 2: Compulsory digital material + optional printed material .......................................................... 38
  4.4.3 Scenario 3: Only electronic material ....................................... 38
4.5 Discussion .................................................................................. 38

5 Digital services – advertising forms 2011–2017 ............................. 40
  Jerry Lindholm
  5.1 Introduction .............................................................................. 40
  5.2 Literature review ....................................................................... 41
  5.3 Data and methodology .............................................................. 42
  5.4 Advertising forms in the tablet and eReading medium ............ 42
  5.5 Advertising in 2017 ................................................................. 46
  5.6 Discussion ................................................................................. 47

6 Last words ..................................................................................... 49
  Seppo Leminen, Juho-Petteri Huhtala, Saara Könkkölä, Tommi Laivuori, Jerry Lindholm & Antti Sihvonen

References ........................................................................................ 52
Appendix ........................................................................................... 58
Figures

Figure 1  Newspaper earnings in US, billion $ (NAA,2011) .......................... 14
Figure 2  Devices for News and Magazine consumption (Itella and 1530 Research, 2011; Estimates by T.Laivuori) ............................... 15
Figure 3  Tablets are the fastest ramping mobile devices (Morgan & Stanley, 2011) ........................................................................ 16
Figure 4  Diffusion of innovations (Rogers, 1962 and Tablet estimates by Idean, 2001) ................................................................. 18
Figure 5  ILC Framework (McGahan, 2004) ......................................................... 19
Figure 6  Innovation potential per dimension (Next Media, 2011) .......... 22
Figure 7  Market types (Steven Blank, 2011) ....................................................... 23
Figure 8  Scenario 1 – Three markets, multiple business model opportunities ..................................................................................... 30
Figure 9  Scenario 2 – Steady service development, predictable market dynamics ..................................................................................... 31
Figure 10  Scenario 3 – Freezing markets, patience is rewarded .............. 32
Figure 11  Characteristics of the eLearning industry (Adapted from Garrido-Samaniego and Gutierrez-Cillian 2004) ......................... 36
Figure 12  Media characteristics in the publishing industry ..................... 41
Figure 13  Business models & concepts for future scenarios ..................... 49

Tables

Table 1  The generic research team - Activities and research in 2011 ........ 12
Table 2  Three future scenarios ........................................................................ 24
Table 3  New product development routes to digital products in the Finnish publishing industry ....................................................... 27
Table 4  Advertising forms in 2011 .................................................................. 46
Acknowledgements

This research was operated as a part of Next Media’s research program during 2011. We warmly acknowledge the Finnish Funding Agency for Technology and Innovation (TEKES), TIVIT (Finnish Strategic Centre for Science, Technology and Innovation in the field of ICT) and the Next Media research project for funding this research. Additionally, we wish to acknowledge Eskoensio Pipatti and Ismo Laukkanen for their help and support in financing this research project.

Helsinki, August 15th 2012

Seppo Leminen
Adjunct Professor
Aalto University,
School of Business
Department of Marketing &
Principal Lecturer
Laurea University of
Applied Sciences

Antti Sihvonen
Researcher and Doctoral candidate
Aalto University,
School of Business
Department of Marketing

Juho-Petteri Huhtala
Researcher and Doctoral candidate
Aalto University,
School of Business
Department of Marketing
Authors

Seppo Leminen
Aalto University School of Business and Laurea University of Applied Sciences

Juho-Petteri Huhtala
Aalto University School of Business

Saara Könkkölä
Aalto University School of Business

Tommi Laivuori
Aalto University School of Business

Jerry Lindholm
Aalto University School of Business

Antti Sihvonen
Aalto University School of Business
Executive summary

This generic research report focuses on predicting the future of eReading and eLearning by outlining the current state of the industries, generating alternative future visions for them and addressing their future from three different viewpoints: digital publishing, eLearning and eReading advertising. This executive summary highlights the key findings of the studies on the subject.

*Future scenarios for the tablet industry and the digital content business in Finland* were developed by utilizing a Delphi method on a panel of industry experts. Three scenarios for tablet markets were identified: 1) Continuum 2) Disruption and 3) Chaos.

In the continuum scenario, social and personalized aggregators will take over the global digital news industry. Thus, the aggregating industry can be seen as the emerging industry, disrupting traditional industry logic. This is already more or less the case on the internet, but similar development can be expected to occur on the mobile internet given certain circumstances.

In the disruption scenario, new media will develop suited to the current age, just as radio, film and television developed in the twentieth century. The digital marketing industry will first face a shake-out and then enter into industry maturity, with tablet marketing working as a dominant design. This is likely to give a rapid boost to the digital media industry and, at the same time, disrupt the established media industry.

In the chaos scenario, the magazine industry will quickly be disrupted by emerging social media and online communities. The tablets will be adapted too slowly, in a time of economic starvation, to affect this trend. Backed by political and national legislation and rebounding journalistic interests, the news industry will enter into maturity after a shake-out. Digital channels will work only as other cost-efficient distribution channels, from which earnings can be made, as they used to with print media.

*The digital business model evolution* in the eReading industry was researched by identifying the current strategy types in the market and imposing them on the three scenarios. Four types of new product development strategies were found from the Finnish publishing industry, based on the level of pro-activity and the desired level of innovation radicalness. Depending on the scenario, different strategy types appear to be more successful in certain scenarios than in others. However, the extremely polar strategy types appear to be the more successful in each of the scenarios, at least in the short term.
eLearning in 2011-2017 was approached by examining how public-sector decision-makers adopt e-learning products and services. The aim was to gain insight into the possible strategic bundling options of online and offline learning material, by examining the buying behaviour and value-drivers of decision-makers at public (state-funded) schools. The results indicate three different scenarios of how learning services can be bundled in the coming years: 1) Printed learning material is the dominant factor 2) Electronic material is a compulsory part of any bundle, while printed material can be purchased at extra cost. Printing is carried out on demand and is therefore very costly 3) The bundles consist of electronic material only. The learning material can be mass customized and personalized and innovatively adapted for daily use.

Digital advertising forms in 2011–2017. By benchmarking major U.S. newspapers and magazines, we were able to explore and classify eleven distinct advertising forms that are adapted from print, web and mobile media advertising. Web (online) advertising solutions especially play a central role in the tablet/eReading context; currently, most of the ad forms found in the research were adapted from this medium. In addition to known advertising solutions, the tablet/eReading medium offers an innovative way to utilize e-commercialism in electronic publications.
1 Introduction

Antti Sihvonen, Juho-Petteri Huhtala & Seppo Leminen

While eReading as a phenomenon has existed for quite some time (the first electronic newspapers were created in the 1970 by Nick Sheridon at Xerox's Palo Alto Research Center), the past two years have seen a rapid evolution of the industry. The highly dispersed industry was concentrated around Apple which, in 2010, dominated the industry with over 90% of the market share. The same situation appears to have persisted in 2011, with Apple's market share at around 61%, but an increase in competition and fragmentation of the market seems imminent (Morgan & Stanley 2011; PwC 2011). A major influence could be the introduction of Android devices onto the market (such as the Kindle Fire). The overall current market concentration appears to be untenable for Apple, resembling the situation of Nokia in its heyday, at the turn of the millennium.

The growth of the customer base for tablet-based products is also rapidly increasing. Overall, 71 million devices have been shipped during the past two years and the majority of experts have predicted that in the year 2012, the tablet markets will be at least twice as big as they are today (Morgan & Stanley 2011; PwC 2011). This makes the industry a hotbed of intensifying competition with regard to both tablet devices and applications.

Building on the rapid growth of the industry, both with regard to devices and applications, it is more than timely to ponder the question: How might the eReading industry evolve in the coming six years and what kind of business opportunities might it generate for advertising, eLearning and publishing? This is important, not only for
understanding the possible future of the industry, but also to reflect on the current situation and strategic choices that may persist in the future.

As companies such as Amazon, Google and Microsoft are currently designing their own closed ecosystems around tablet devices, the tablet markets are becoming more fragmented and the dominant position of Apple will have to be reconsidered in the future. This situation resembles migrations that have occurred in other industries, where dominant players aim to invade the emerging industry with their own products, as happened in the US TV-set industry (e.g. Klepper & Simons 2000). What this means is that the dominant participants of the content-focused IT business will aim to conquer the new and emerging markets by leveraging their IT related capabilities.

The demand for various kinds of tablet devices is increasing as customers and companies seek choices in functionality and price. It is likely, therefore, that in the near future, we will see both low-cost single- or dual-function tablets and more powerful devices that outperform the current iPad in certain areas (Rose et al. 2011). A good example of this is the new device under development in Metropolia (a Finnish University of Applied Sciences) which is aimed at the low-end and developing markets. In essence, this can polarize the market, making it increasingly important to choose which market we want to be in and how it complies with the current product portfolio and the company brand.

As the tablet market becomes more fragmented, new possibilities for innovative services, business models and advertising solutions are emerging. During our research in 2011, we first uncovered three possible scenarios for the years 2011–2017, then analysed the effects of these scenarios on digital advertising solutions and publishing and eLearning business models. The key findings of each of these studies are highlighted in the following four chapters (see Table 1).
First, Chapter 2 introduces the three possible scenarios for the industry that we identified. These scenarios were developed in a five stage Delphi-analysis with input from industry experts. Building on this, the subsequent chapters apply these scenarios to two different environments in the wider industry (i.e. digital publishing and digital learning). Chapters 3 and 4 unravel the development of business models and their development with regard to the identified scenarios. Chapter 5 reflects on the development of advertising and advertising models in the eReading industry with regard to the three scenarios. Finally, Chapter 6 draws these studies together and introduces a broader perspective on the development of the industry from all these differing angles.
2 Future scenarios for the tablet industry and the digital content business in Finland

Tommi Laivuori, Juho-Petteri Huhtala, Antti Sihvonen & Seppo Leminen

2.1 Introduction

Until the early 19th century, news travelled as people chatted in marketplaces and taverns or exchanged letters with their friends. Now, technology is in many ways returning the industry to the more vibrant, freewheeling and discursive ways of the pre-industrial era. Since blogging tools first became widely available around 1999, news is no longer gathered exclusively by reporters and turned into a story, but rather it emerges from an ecosystem in which journalists, sources, readers and viewers exchange information. As outlined in the Next Media research programme statement, the production, distribution and consumption of media is under radical transformation. Thus, digitalization causes a shift towards co-creation, interactivity and independence of time and place.

The underlying behaviour has been there for a long time – but from the media incumbents’ standpoint the situation has recently changed dramatically. The financial crisis which spread from the USA to Europe in 2008, changed the consumption from traditional to digital media, which provided a cheaper option and this situation is not likely to revert. (see Figure 1). Gregor Waller, a former Head of Strategy at Axel Springer, estimates that by 2020 newspaper circulation will have fallen by 50%, classified advertising revenue by 90% and display advertising revenue by 30%. This scarcity of distribution has enabled the owners of those resources to command a premium from advertisers and consumers and, thereby, to support the sometimes significant costs of production. The media industry, therefore, appears to be moving towards a more horizontal structure, differentiated
by the capability of each function – such as production, aggregation or distribution – rather than the control of scarce resources.

Figure 1  Newspaper earnings in US, billion $ (NAA,2011)

In Finland the change has not been as dramatic to date. In the economic downturn in 2008 and 2009 advertising spend decreased by 22 % in newspapers and 23 % in magazines, but the decrease in subscriptions was moderate. According to the Ministry of Transport and Communications (LVM) (2011), this is mainly a result of an exceptional feature in the Finnish market where there is a large share of subscribers both in newspapers and magazines, while in many other countries, the vast majority of papers are purchased copies. However, this is expected to change, since the diversity of terminals and devices in consumers’ everyday lives are increasing and the significance of mobility is reinforced (see Figure 2).

Today, it is usually cheaper and easier to reach customers through digital rather than traditional media, according to Ritva Hanski-Pitkäkoski, CEO of the Finnish Society of Marketers. She also states that the decreased effectiveness of print media has been evident for a long time, but the change has been slow.
The digitalization of distribution has increased delivery costs per newspaper, enhanced the buying power of consumers, brought consumers closer to content providers, changed the earning capacity of advertising and opened up global competition.

How the internet and downloadable digital media have disrupted the CD and DVD markets has been a much researched topic. As the music industry phased out singles in the 1990s, it left consumers with no means of purchasing individual songs. This market was first filled by peer-to-peer file sharing technologies (such as Napster), which initially were free, and then by online retailers such as the iTunes music store and Amazon.com. This low-end disruption eventually undermined the sales of high-cost CDs. Much of this disruption has been analysed by relating to Apple’s business model, where portable iPod players created the revenue and iTunes was, at first, mainly added value. A similar phenomenon could be expected to occur with newspapers and magazines since Google and Facebook resemble free peer-to-peer file sharing, and the Kindle and iPad could be seen as similar to the iPod. Only this time, the disruption could be even faster (see Figure 3).
There are many well documented studies of the managerial challenges that media companies face in relation to the digitalization of business at present. Leminen et al. (2011, p. 138-139) concluded from their interviews that the main challenge that Finnish magazine publishers face at present is how to earn from high quality content, since growing internet advertising alone is not sufficient. They also discovered other managerial challenges such as the diversity and burgeoning number of end user device platforms, intellectual property rights, payment systems and electronic commerce, as well as standards and their deficiencies. The Finnish newspaper publishers, on the other hand, saw round-the-clock publishing and changing consumer habits as their main challenge. In addition, interviewees appeared to pay more attention to what is being published through the different channels, how the content is priced and the sort of content that will be being offered for free.

While the current situation brings much distress to media incumbents, the oncoming change also presents opportunities. The aim of this study is to give a long-term perspective of the situation in alternative business environments. In future scenarios it will be possible to innovate new business models and plan strategies to reach those targets.
2.2 Theoretical approach

Two different lines of research were used as a theoretical background: 1) the diffusion of innovations and 2) the industry life-cycle (ILC). The ILC perspective offers a reverse looking perspective depicting the current situation and how the tablet markets have evolved thus far, while the diffusion framework is suitable for analysing how, and how fast, the tablets and new media services could spread throughout the population. Therefore, these two perspectives complement each other.

Diffusion of Innovations offers three valuable insights into the process of social change: 1) What kind of qualities make an innovation spread successfully; 2) what is the importance of peer-to-peer conversations and networks and 3), what are the needs of different user segments (Rogers 1962). These insights have been tested in more than 6000 research studies and field tests, so are amongst the most reliable in the social sciences.

Diffusion scholars recognize five qualities that determine the success and the speed of an innovation being adopted into the market: 1) relative advantage, 2) compatibility with existing values and practices, 3) simplicity and ease of use, 4) trial-ability and 5), observable results. Thus, the success of an innovation depends on how well it evolves to meet the needs of more and more demanding and risk-averse individuals within a population. The history of the mobile phone is a good example. As Chesbrough (2003) noted, a good way to achieve this is to make users into partners in a continuous process of redevelopment.

The second important insight is that impersonal marketing methods, such as advertising and media stories, may spread information about new innovations, but it is through conversation that they are adopted. This is because the adoption of new products or types of behaviour involve risk and uncertainty management. It is usually only the people we personally know and trust – and who we know to have successfully adopted the innovation themselves – who can give us credible reassurances that our attempts to change will not result in embarrassment, humiliation, financial loss or wasted time.
Diffusion researchers believe that a population can be broken down into five different segments, based on their propensity to adopt a specific innovation: innovators, early adopters, early majorities, late majorities and those who lag behind. Each group has its own “personality”, at least as far as its attitude to a particular innovation goes. Innovations spread when they change to meet the needs of successive segments. The most challenging phase is to get the early majority interested and to adapt a new innovation.

The search for regularities in the ageing patterns of different industries has inspired the development of the industry life-cycle theory. The theory aims to explain changes in technological development and industry structure over the period that the industry has existed.

The ILC theory sees that the new revolutionary or architectural innovations are released through opportunities created by changes in technological possibilities, customer preferences or government policy (Abernathy & Clark 1985). The industry emergence is also a product of a (technological) opportunity that encourages the entry of a large number of firms and the introduction of various product innovations (Klepper 1996). Even though discontinuity is vital for industry emergence, it is only a starting point for the innovative activity that follows.

Young industries are characterized by shake-out due to frequent entries and exits. As new firms enter and bring about increasing rivalry, the quality of the product improves and the price may also decline, which makes the product more valuable for buyers and sales take-offs follow (Agarwal & Bayus 2002). The population of innovators changes substantially over time because most innovative entrants are occasional innovators and only some become persistent innovators (Malerba & Orsenigo 1999).
Industry maturity is signalled by a shift from product to process R&D, which is also called dominant design. A dominant design transforms the initial ill-defined and uncertain performance criteria into well-defined metrics with which to compare products (Abernathy 1978; Abernathy & Utterback 1978). Anderson and Tushman (1990) add that the emergence of a dominant design decreases variation in, and uncertainty over, product characteristics and relationships with suppliers, vendors and customers become more stable. Thus, knowledge internal to the industry becomes valuable for keeping up with technological developments and past learning-by-doing gives an advantage to incumbents over entrants (Gort & Klepper 1982).

Figure 5  ILC Framework (McGahan, 2004)

According to Peltoniemi (2010), to date, industry life-cycle studies have not paid much attention to the interconnectedness of industries and how this affects their life cycles. Mature industries do not simply wait for the next discontinuity to take place within their own realm, but may enable the birth of new industries that are technologically related. Vertical exchange relationships between industries transmit firm numbers, entries, exits and upstream concentration (Bonaccorsi & Giuri 2001) and strategies by firms in dominant supplying industries can cause shake-outs in
complementary industries (Pierce 2009). McGahan illustrates the two types of industries in Figure 5.

2.3 Methodology

Futures studies are a multi-disciplinary field and are concerned with a wide range of views about possible, probably and preferable futures. Unlike science where narrower, more specified systems are studied (such as natural sciences, sociology or economics), futures studies concern a much wider and more complex world system. There are at least three methodological ways to study the future: straightforward ‘business-as-usual’ mathematical models such as trend extrapolations; more sophisticated and policy-oriented ‘what if’ models based on econometrics and statistical information; and the studying of future prospects by gathering information from experts to systematically develop different alternative future images or scenarios for public policy purposes with the Delphi technique for example (Tapio 2002; see also Armstrong 2001).

In this study the Delphi technique was combined with scenarios, as Rikkonen (2005) proposed and the study was conducted in five phases.

During the first phase, an initial study was conducted on trends and drivers affecting the newspaper and magazine industry. Data was gathered from existing academic literature, online data sources, and presentations given by focus companies (Sanoma Media Finland and KSF Media). Trends were shaped to arguments and formulated in PEST framework (Political, Economical, Social and Technological).

Before the second phase, the criteria for Delphi-panelists were chosen and panelists were selected via a snowball-technique. The aim of the selection criteria was based both on interests (academic, business and consulting) and competency (customer behaviour, professional journalism, marketing processes and media technology). In the second phase, the trends were discussed in open format with the 10 panelists. Comments on the probability, importance and priority of the arguments were gathered.

In the third phase, initial future business environments were created. The diffusion of tablets and new service trends were first cross-analysed with the macro-economic drivers. The light version of the field anomaly relaxation (FAR) method was then used to identify internally coherent scenario variables. Scenarios were then constructed in the narrative manner.

In the fourth phase, the scenarios were validated by the Delphi panel. This questionnaire round focused on commenting on and criticizing a) the scenarios and
b) the timing and impact of the crossing effects (for example economic downturn and diffusion of tablets). The scenarios were further developed based on each interview and then re-narrated.

In the last phase, the scenarios were analysed through the industry life-cycle (ILC) theory framework. The coherent description of alternative industry structures for the year 2020 was generated. The focus of the structures was to describe the business environment for new media services and Alex Osterwalder’s (2009) framework was used to illustrate the outcome.

2.4 Findings and discussion

Scenario planning is a method that some organizations use to make flexible long-term plans. The method allows the inclusion of factors that are difficult to formalize, such as new insights into the future, deep shifts in values, unprecedented regulations or inventions. (Wikipedia 20.12.2011) Since the media industry is currently in a turbulent and uncertain phase, this method was deemed suitable. Since scenario planning is an “information hungry” method, it was decided to combine it with the systematic expert opinion, the Delphi method. The methodology decision turned out to be useful, but also very time consuming.

Next, Media's Visio2020 task was aimed to provide both industrial guidance, and clear recommendations on media related research. The vision was intended to be bright and inspiring:

*By 2020 customer needs and networks are well understood and exploited. Media explores the playful society through assimilating gaming logics into a wide media spectrum. New earning sources are identified and business logics are developed. The local media hubs are enabled to proceed to a multi-locality way of influencing. Thus media is able to produce massively customised quality content. The whole media ecosystem meets or exceeds international excellence criteria. This means that excellence is being demanded throughout the whole media supply chain.*

Based on the nine dimensions (clusters) of business drivers (Giesecke et al. 2010), the Visio2020 team also used Verganti’s (2010) technology epiphany diagram to display the innovation potential of possible future business drivers (see Figure 6).
The Visio2020 task also created a positive integrated example scenario of “Human Media” which worked as a good starting point for this research. This scenario planning research was designed to target the causal effects of the identified trends and drivers, as well as the timing of these changes. The aim was also to take tablets further into account in describing the future business environments under which media companies could be operating.

When a new technological opportunity occurs, there are emerging needs for products or services in three different market types (see Figure 7). According to Steven Blank, the standard product development model is not only useless, but also dangerous, since it tells neither how to uniquely market and sell, nor how to predict the resources needed for success. The Market Type denominates how to evaluate customer needs, customer adoption rate, how the customer understands his needs and how to position the product to the customer. As a result, different market types require dramatically different sales and marketing strategies. (Steven Blank 2011)
In this framework, the tablets can be viewed as enabling a market for three different kinds of services:

- Tablets offer higher performance for news and magazines. Compared to newspapers they have better user-experience, while in comparison to the internet they enable more social features (hyper text, gamification, multimedia etc.) Media use changes little and old brands are likely to keep existing customers.
- Tablet solutions which target either low-cost or niche customers (and advertisers) will encounter a small halt before majority adoption. A low-cost market accepts worse performance, such as crowd-sourced content, while a niche market addresses specific needs with greater performance, such as personalized content. Likely winners of these solutions are aggregators such as Google, Facebook, Flipboard or Zite.

- New publications solutions may also provide something customers (or advertisers) had not even have thought of doing previously. These solutions may solve availability, convenience, skill or location issues in unexpected ways. Such solutions could evolve from augmented reality, social games, personal assistance, etc. The market is usually only dominated by start-ups at first and then the products could face 1–5 years stagnation before becoming profitable.

These three possible market types were cross-analysed with three alternative market drivers to build up the three scenarios (see Table 2 and Appendix 1,2,3). The selected market drivers were “lost decade”, “virtual entrepreneurship” and “hyper-inflation”. Lost decade was selected to represent economist-made forecasts in which Europe is sliding towards a long period of slow or no growth, similar to Japan in the 2000s. Virtual entrepreneurship originates from the future job market research (See for example Halava and Pantzar). Chaos scenarios are not common in scenario planning work but, due to the current economic instability, hyper-inflation was selected. There is reasonable potential for indebted countries to solve their problems by the printing of new money which, historically, has lead to international crisis etc.

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main driver</strong></td>
<td>Lost decade</td>
<td>Virtual entrepreneurship</td>
</tr>
<tr>
<td><strong>Advertisement</strong></td>
<td>Stagnation</td>
<td>Growth</td>
</tr>
<tr>
<td><strong>Journalism</strong></td>
<td>Surge</td>
<td>Growth</td>
</tr>
<tr>
<td><strong>Tablet diffusion</strong></td>
<td>As expected</td>
<td>Faster</td>
</tr>
<tr>
<td><strong>Phase 1</strong></td>
<td>Existing services</td>
<td>Aggregating services</td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td>Aggregating services</td>
<td>New services</td>
</tr>
</tbody>
</table>

Table 2  Three future scenarios

Analysing the different scenario outcomes in the ILC framework, leads to the following conclusions:
In the continuum scenario, social and personalized aggregators will take over the global digital news industry. Therefore, an aggregating industry can be seen as an emerging industry disrupting an established industry. This is already more or less the case on the internet, but similar development can be expected to occur on the mobile internet under certain circumstances. The digital news industry will still make some of the content, but the customers will be owned by aggregators such as Google and Facebook. The case is different with the local news and magazines industries, which are likely to converge with the entertainment, communication and gaming industries and operate with a wider variety of business models.

In the second scenario, new media will develop to suit the current age, just as radio, film and television did in the twentieth century. The digital marketing industry will initially face a shake-out and then enter into industry maturity with tablet marketing working as a dominant design. This is likely to give a rapid boost to the digital media industry and, at the same time, disrupt the established media industry. Thus, new media solutions will change the industry’s core activities of attracting and retaining suppliers and buyers. Structures emerge for building an accurate view of breaking news from the opposing viewpoints of multiple observers. New opportunities for money-making are to be found within news and culture, perhaps totally different from the advertising, subscription and other models of the past.

In the chaos scenario, the magazines industry will quickly be disrupted with emerging social media and online communities. Tablets will be adapted too slowly, in a time of economic stagnation, to affect this trend. Backed by political and national legislation and rebounding journalistic interests, the news industry will enter into maturity after a shake-out. Digital channels will work only as other cost-efficient distribution channels, from which earnings can be made as used to happen with the print media.

The scenarios created could be used 1) to develop new business models for media companies, or 2) to evaluate the possible product development paths for current media products and services. Based on research, Alex Osterwalder’s Business Model Canvas (BMC) could be an ideal framework to help visualize the present and new business models. To help the analysis, we have gathered together future business environment trends in each scenario (see Appendices 4, 5 and 6).
3 Digital strategy and business model evolution in emerging markets

Antti Sihvonen & Juho-Petteri Huhtala

3.1 Introduction

During the last ten years, the development of the internet and the digitalization of content in industries such as TV and music have had a strong influence on the future outlook of the publishing industry (Fetschering & Knolmayer 2004). As recent studies show, digital technologies provide multiple opportunities for publishing companies to expand their ways of conducting business (e.g. Huhtala, Sihvonen & Leminen 2011; Tian, Martin & Deng 2008). Innovations and innovation strategy play a central role in defining these emerging industries (Klepper 1996).

When industries change, the population ecology provides a foundation for understanding the behaviour of the populations of organizations (Aldrich 1979, p. 27; Hannan & Freeman 1977). Furthermore, these populations are divided into niches. A niche can be defined as an environmental location that is populated by a number of organizations (Cameron & Zammuto 1983; Zammuto & Cameron 1985, p. 226). This perspective enables an understanding of how the populations of organizations act as a whole.

On an individual firm level, we embrace the strategic choice perspective which draws attention to the various possibilities enabling a choice on the part of the organizational players and argue that organizations act to create their environments (Child 1977; Miles & Snow 2003, p. 5). Furthermore, we define strategy as a pattern in a stream of actions made by the organisation (Mitzberg 1978; Mintzberg & Waters 1982; 1985; Miles & Snow 2007, p. 7). Finally, we perceive strategy as the operationalization of a firm’s business model.
Building on these two perspectives, we aim to understand the dynamics of the populations and the individual strategic behaviour, in relation to the developing niche for eReading and its relation to the traditional printed media niche. While such an approach is deemed challenging (Astley & Van De Ven 1983), these two perspectives can work simultaneously to produce a multi-level perspective (Hrebiniak & Joyce 1985; Sihvonen et al. 2010; Zammuto 1988).

The study is operationalized by first mapping the different strategies that firms currently use in the industry. This is done through a configurational analysis (QCA) to infer their strategy types from their actions. Then these strategy types are exposed to three different scenarios identified in Chapter 2 in order to reveal the individual and industry level behaviour.

3.2 Industry level analysis of the current new product development strategies

On the basis of the crisp-set qualitative comparative analysis, new product development routes to the digital publishing industry can be developed (see Table 3). This enabled us to build configurations of the chosen variables (i.e. how different conditions were combined to produce different outcomes).

### Table 3

<table>
<thead>
<tr>
<th>Cases</th>
<th>Use of external market information</th>
<th>Use of internal market information</th>
<th>Experiential learning</th>
<th>Learning with traditional industry</th>
<th>Learning with digital partners</th>
<th>New to market product</th>
<th>New to company product</th>
<th>Strategy type</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1, N2, N6</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Market duplication</td>
</tr>
<tr>
<td>B2</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Market duplication</td>
</tr>
<tr>
<td>B3</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Market duplication</td>
</tr>
<tr>
<td>N5</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>No</td>
<td>Yes</td>
<td>Market duplication</td>
</tr>
<tr>
<td>N1</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>No</td>
<td>No</td>
<td>Strategic patience</td>
</tr>
<tr>
<td>N7</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>No</td>
<td>No</td>
<td>Strategic patience</td>
</tr>
<tr>
<td>N3, N4, M1</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Yes</td>
<td>No</td>
<td>New to market innovation</td>
</tr>
<tr>
<td>M2</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Yes</td>
<td>No</td>
<td>Innovation adaptation</td>
</tr>
</tbody>
</table>

Table 3: New product development routes to digital products in the Finnish publishing industry
Based on the new product development routes, four different strategy types were identified. These are:

1. Market duplication strategy (incremental, proactive)
2. Strategic patience (incremental, reactive)
3. New to market innovation strategy (radical, proactive)
4. Innovation adaptation strategy (radical, reactive)

Market duplication strategy builds on copying the old industry logic into a new context. This, essentially, results in taking the traditional logic of publishing industry into a new context (i.e. an incremental innovation). Market duplicators are, however, proactive players in the sense that they create markets but are not capable of disrupting them (creating something radically new). An example of a market duplicator strategy could be the formation of internet banking in Finland where the core service was copied into a new context.

Strategic patience pertains to a strategy type that focuses on reactively waiting for market development (i.e. the emergence of a market) where they can generate similar products as their competitors at low risk. An example of strategic patience could be the generic medicine industry that capitalizes on the market generated by the medicine originator companies.

New to the market innovation, the strategy type tries to generate a wholly new offering to the market, independent of what their competitors do. This can result in proactive and disruptive innovations that change the market altogether and create new dominant designs. An example of a new to the market innovation strategy could be the Nintendo WII that generated a totally new gaming experience in the console gaming industry.

The innovation adaptation strategy type builds on the fast replication of the cutting edge innovative products by capitalizing on them in their own domain. An example of the innovation adaptation strategy could be the presentation of the Elisa IPTV solution immediately after a new to market IPTV innovation by TeliaSonera.

Based on the analysis, most the companies employ a duplication strategy. However, based on our analysis, those companies seeking to create an opportunity themselves through experiential learning, are able to realize radical innovations.
3.3 Industry evolution and strategic behaviour in future scenarios

After identifying the four different strategy types for new product development in the publishing context, we apply these types and their predicted behaviour to the three scenarios described in Chapter 2. The behaviour of each strategy type is described separately in each of these scenarios.

3.3.1 Scenario 1: Three worlds, multiple business model opportunities for publishing

In the first scenario originally termed lost decade in Chapter 2, the behaviour will resemble a dissolution of the ecological niche, that is, a niche gradually transforms into another as the shape of the niche changes and the carrying capacity transforms (Cameron & Zammuto 1983; Zammuto & Cameron 1985, p. 231). For strategic behaviour this would result in what Sihvonen et al. (2010) have suggested to be the behaviour of strategic types in declining industries. This would lead to a polarization of the market, in the sense that companies adopting a new to market innovation strategy, would move into the aggregating business, closely followed by companies adopting the innovation adaptation strategy. As the phase-out period in traditional printed media will be a long one, the companies adopting strategic patience would continue in traditional print and not move into new market niches. Meanwhile companies adopting market duplication strategies would remain in the traditional industry and struggle to escape the diminishing market. This would result in the separation of this once coherent niche. In other words, this would mean that the traditional print market would separate into three distinct markets (i.e. niches). These would be the traditional print market, the aggregation market and the new service market. See Figure 8 for an illustration.
If this kind of scenario came about, it would lead to two outcomes. First, in the short-term, the market duplicators and strategic patient operators would be profitable (as the traditional print niche declines). On the other hand, in the long run, those moving to aggregation will be successful. However, in the short run, their profitability depends largely on their capacity to create a local niche that they can profitably dominate. If the niche were more transnational, it would erode profits. This, however, depends largely on the developments in consumer behaviour.

3.3.2 Scenario 2: Steady service development and predictable market dynamics between first movers and late entrants

In the second scenario, originally termed virtual entrepreneurship in Chapter 2, the current niche structure would persist into the future. This would lead companies to adopt a new to market innovation strategy in order to generate the new local niches, followed by innovation adapters. As the new niche starts to grow, market duplicators will move into the new niche. Their aim will be to move the old industrial structure into it, in order to stabilize the niche and assimilate its structure to the former. Lastly, strategically patient ones will move into the market, as it has grown sufficiently and the industry structure has stabilized enough. See Figure 9 for an illustration of this transformation.
If this kind of scenario came about, it would lead to the following outcomes. First, new to market innovators define the market, which means that they are able to reap the rewards of being a first mover. These are closely followed by innovation adapters that in part define the emergence of the market, but will not have the advantage of first movers, although they can trade this to achieve greater financial security. Market duplicators and strategically patient operators will have most financial security, but they will also lack the capacity to reap greater rewards in the new market as they are slower to move into it.

3.3.3 Scenario 3: Freezing markets, patience is rewarded as eReading remains a transition phase before something new

In the final scenario, termed hyper-inflation, the market will freeze on its standpoints. In this scenario, only the new to market innovators will move into the emerging niche. Due to the slow tablet diffusion and the lack of participants in this niche, the currently emerging service niche will either be a passing phase or its emergence will be severely delayed. See Figure 10 for an illustration of this transformation.
This scenario will lead those who have already established themselves in the niche to transform it to be just a channel much like any other. If such a scenario came about, the winners would be those that have been patient in not investing in the new niche and been focused on their current operations.

While these scenarios position different kinds of behaviour with different strategy types, one must keep in mind that the firm size mediates the niche behaviour as larger companies are able to generate new niches more easily (i.e. to assume critical mass) and also have more financial resources to secure their operations.
4  Digital services – eLearning
2011-2017
Könkköla Saara

4.1 Introduction

eLearning is taking over schools and businesses. According to Seufert (2002, p. 110), “it removes the barriers of time and location.” The industry is changing tremendously, regarding the ways of teaching and learning. This change, turbulence even, is still taking place almost ten years after previously stated. A general view in the industry is that by the year 2017, most of the nationwide learning material will be electronic. This is also the goal of the Board of Education in Finland. Today, learning material used in schools usually includes electronic content, but the printed book is still the most widely used material. Publishers agree that teachers are in a key position in the evolution process, as they decide how they want to teach in their classrooms.

This study looks into the value perceptions of organisational buyers, – the teachers and headteachers – who make the decisions on what learning material is used in and out of the classroom. The objective of the study is to better understand the personal, organisational and environmental factors that affect buying behaviour in the public school setting. Ultimately, the aim is to provide the necessary tools to companies operating in the eLearning industry, to help them understand their customers and the complex contexts in which they operate, in order to be able to offer clients bundles of online and offline learning that truly add to the customers’ perceived value. This report also provides the reader with three different scenarios of how services would look in the year 2017, the kind of bundles the services providers offer and how these bundles are priced.
4.2 eLearning business models and strategic bundling

Bundling is a common practice that involves combining two or more products or services and selling them at a set price (Stremersch & Tellis 2002; Yadav & Monroe 1993). According to Stremersch and Tellis (2002), there is no single universally accepted definition of bundling and the distinction between a product and a bundle is not clear. Generally, a bundle represents a package that contains at least two elements and presents a value-add to potential customers (Kohlborn et al. 2010). Ovans (1997) argues that the challenge in bundling is choosing the appropriate products to be bundled in order to achieve the expected performance, such as by creating new markets or increasing customer loyalty, sales or profits. In order to describe and explain bundling as a concept, it has been analysed in previous literature, both from the provider’s (Elberse, 2010) and the customer’s perspective (e.g. Hong, 2006; Johnson, Herrmann & Bauer 1999; Yadav, 1994). Often, the customer’s perspective focuses on measuring the utility of different bundles to customers and the provider’s perspective on potential competitive advantage and strategic implications.

Stremersch and Tellis (2002) draw a distinction between product and price bundling. They define price bundling (see e.g. Johnson et al. 1999; Naylor & Frank 2001) as “the sale of two or more separate products in a package at a discount, without any integration of the products”. Product bundling (see e.g. Simonin & Ruth 1995) on the other hand, is defined as the integration and sale of two or more separate products or services at any price. The authors further continue their definition by emphasizing that, while price bundling is a pricing and promotional tool, product bundling is more strategic in nature in that it creates added value. Hence, price bundling can be used as a short-term tactical tool, while product bundling is more of a long-term differentiation strategy and is often approached from a product development perspective.

Lawless (1991), in turn, uses the concept of commodity bundling. In his seminal article, he defines commodity bundling as grouping related products together into a unified market offering. The author further argues that one basis for bundling services and/or products (i.e. commodities) is that they can help lock customers into the future, particularly where information is difficult to obtain and uncertainty and contracting costs are both high. Consequently, buyers are presented with bundled products/services that together result in lower costs or increased benefits (Lawless 1991). For Shankar, Berry and Dotzel (2009), one of the main bases for bundling is dependency: some goods and services are highly dependent and therefore must be bundled together, while some other products and services are relatively independent.
The objective of bundling, according to Lawless (1991, p. 267) is “to develop a competitive position that produces value for customers and differentiates the bundling firm from its rivals.” Generally, a bundle represents a package that contains at least two elements and presents some kind of value-add to potential customers (Kohlborn et al. 2010, emphasis added). Obtaining a group of products from a familiar source can be an attractive substitute for a costly search for more information on each product, especially in cases where such information is scarce. Early adopters, in particular, find it difficult to obtain information on, for example, a product’s effectiveness, ease of use and comparative advantages, and on the availability of substitutes (Lawless 1991, p. 271).

4.3 Schools as customers – specific characteristics of organizational buying behavior

In their classic book, Webster and Wind (1972) define organizational buying behaviour as ‘the decision-making process by which formal organisations establish the need for purchased products and services and identify, evaluate and choose among alternative brands and suppliers’. Organizational buying is a multi-phased process involving multiple persons. Individuals participate in different parts of the decision-making process, where they exercise their influence and authority. The perceptions of these individuals about different issues over buying vary as well (Ghingold & Wilson, 1998). For example, people may have different opinions about the features they want to have in their service or product, or the opinions of individuals may differ over the price they are willing to pay.

However, understanding the customer’s decision-making in the eLearning sector and their perceptions of different online and offline bundles is a complex issue. The buying decisions are made in a multifaceted environment, which requires the provider to understand the different levels that affect the decision-making process. Figure 1, adapted from Garrido-Samaniego and Gutierrez-Cillan (2004), presents three different levels of conditions and characteristics that affect the decision-making process: personal, organizational, and environmental. To better understand the buying behaviour and value perceptions of their customers in a complex market in particular, the provider needs to have as clear a picture as possible of these different levels.

Further, in the eLearning industry and with schools as customers, additional specific characteristics apply. These characters are next discussed with reference to the framework (Figure 11).
4.3.1 Personal characteristics

The personal characteristics not only include the teacher’s previous experience and technology skills, but also the motivation required to acquire new skills and the teacher’s ability to use different teaching tools and methods creatively and innovatively. With complex and novel technologies in hand, the decision-makers may also have a sense of decision-making uncertainty, a concept discussed for example by Gao, Sirgy and Bird (2005, p. 397), who refer to ‘the difficulty experienced by the decision maker in predicting the outcomes of a purchase decision in terms of the likely benefits and costs’. In this context, these benefits and costs often include the teachers’ dubiousness of the pedagogical advantages of using digital technology, or the applicability of e-learning material to different learning settings.

4.3.2 Organizational characteristics

In the education industry, users are not necessarily payers and, according to Hoppe and Breitner (2003), costs are usually allocated per student. Thus, currently, annual contracts are usually made and pricing based on a certain amount per student per year. This enables usage of the electronic material for one year. The decisions over which the publication company’s electronic material is used, are usually made at school level and different publication companies are competing for the contracts. The final decisions are, however, twofold. The learning platform decisions are made within the municipal administration. The schools themselves are not so much
involved directly in the platform decisions. On the other hand, decisions over actual content and learning material, are made within the schools. These decisions are usually made amongst the teachers, with the headteachers having the final say.

4.3.3 Environmental conditions

Learning services and content require a platform from where the actual material is used and this varies from school to school. The challenge for school personnel and municipal decision-makers alike, is to provide each pupil with similar opportunities to use whichever learning content the school has decided to deploy, online or offline. The current situation, however, presents certain challenges. Some schools may have computers and smart boards in every classroom while in other schools even the teachers do not have the opportunity to use computers in class. This, as well as the pedagogical aspects of online and offline bundles, require increased attention from the content providers.

4.4 Learning in 2017

By 2017, the role of digital learning solutions will be notably bigger than it is today. However, the economic situation, technological developments and political decision-making (all of which are also interconnected) will set the directions for the development and adoption of new learning solutions. This part of the report sets future scenarios for the service packages based on the theoretical framework and empirical material collected at the schools.

4.4.1 Scenario 1: Compulsory printed material & optional electronic material

Owing to slow economic growth and political decision-making, students attending public schools cannot be provided with eLearning devices and other up-to-date digital platforms. Hence, traditional schoolbooks are still used as the main source of learning content and the books are circulated from student to student, as still happens in many cases today. However, multimedia services are also used as teaching aids in the classroom setting, as blackboards have been completely replaced with digital screens. Furthermore, optional and additional learning content is provided online and the correspondence between parents and teachers will be
communicated electronically. The printed materials are sold at fixed prices, with other components of the service packages being sold separately.

4.4.2 Scenario 2: Compulsory digital material + optional printed material

The municipal authorities are able to provide all students with suitable platforms for using electronic learning materials and the decision-makers in individual schools are increasingly buying learning material in electronic form. These new devices combine both the best parts of paper and computer interfaces, and the convergence of technology will integrate more and more devices onto the internet. The content providers will sell personalized services packages to schools and the digital material forms the main component of these packages. Printed material is still sold and used, but only as an optional component. Consequently, most printing is carried out on demand, which increases costs even further. However, the political decisions over the national curriculum set boundaries for how individual teachers can modify and personalise the content they use in teaching.

4.4.3 Scenario 3: Only electronic material

As the reading devices get smaller, more portable and easier to use, the digitalized content can be used with very small devices. These advanced platforms also allow teachers of younger students to make use of digitalized content in their teaching. For older students, online learning environments allow the students to attend courses and classes online, regardless of their location. The educational role of interactive gaming, used in different locations (at home, in the classroom, etc.) at different times, will have a tremendous role in learning, and the gap between physical and digital learning environments will narrow. The learning materials can increasingly be modified by individual teachers and the processes and practices of mass customization and open innovation (Chesbrough 2006), are embraced by the eLearning industry. This affects the pricing models of the service providers, as the learning content and services can be bought as individual applications. Each individual teacher and students’ role in modifying and personalizing the learning experience is crucial.

4.5 Discussion

A successful commodity bundle should be coherent from both the end-user and the buyers’ perspective. Having public schools as customers, however, sets particular challenges for the bundle provider with planning the offers in a way that attracts both the users and the actual decision-makers. Greater attention should also be paid to motivating the key users to explore different ways of teaching. However, as it is
not possible to provide all students with similar opportunities to use digital platforms, the hands of the teachers and the content producers remain somewhat tied.

Acknowledging these different opportunities – which are often determined by the financial conditions of the municipality – saves the provider from misguided strategic decisions. However, in the transition phase, during which the schools move from using printed learning material to potentially only using electronic material, the content providers may offer customers the choice of personalized bundles of both online and offline material. By doing this, they allow schools and, even individual teachers, to use mass customized content in a way that best suits their personal, organizational and environmental purposes.
5 Digital services –
advertising forms 2011–2017

Jerry Lindholm

5.1 Introduction

The rapid expansion of the tablet and eReading medium has impacted not only on media content consumption but also on advertising. As the major tipping point of eReading devices¹ and tablets² is still to come and the usage level of this particular medium being far less than other mass media formats, the role of eReading advertising is somewhat blurred. A deeper understanding of the strengths and opportunities of eReading advertising and its forms, is especially important for newspaper and magazine publishers, whose business models are highly dependent on advertising revenues (see e.g. Wirtz, Pelz, & Ullrich 2011).

The purpose of this study is to examine the kind of advertising possibilities in-application advertising in the tablet/eReading medium can offer both newspaper and magazine publishers. These new opportunities, brought by the advanced tablet medium, are compared with media forms that publishers have used previously. Ultimately, the study provides a comprehensive outlook of the potential strengths of tablet media.

¹ eReading devices are generally created for electronic reading purposes. Even if many eReading devices enable primitive computer-like functions, these devices are mainly intended for reading purposes. Distinctive examples of eReading devices would be Amazon's Kindle and Barnes & Noble's Nook.
² Tablets are more multifunctional devices than eReaders, as their main use is not solely limited to reading; other computer activities for example, such as web surfing, can be enabled. Prominent examples of such tablets would be Apple’s iPad and Samsung’s Galaxy Tab.
5.2 Literature review

From the viewpoint of newspaper and magazine publishers, the revenue generated by the tablet medium is central to their business. In order to be competitive, publishers operating in a mixed financing system must fulfil, not only the expectations of end-users or readers, but also the expectations of advertising partners (Wirtz, Pelz, & Ullrich 2011). In the latter case, the characteristics of a medium are essential when it comes to delivering advertising messages and editorial content to relevant audiences. For instance, in the publishing industry, it is common for companies to use various media channels, through which editorial content is provided to consumers. In addition to a physical print medium, the same content can be offered via an online venue, mobile channel or a tablet/eReading medium. However, from the advertising perspective, the channel plays a central role in delivering content to consumers. Currently, different advertising media carry different ad formats (Hoffman and Novak, 1996; Rodgers and Thorson, 2000) and each of these formats, within an advertising medium, possesses distinctive features (Burns & Lutz 2006). Figure 1 highlights the characteristics of commonly used advertising media (cf. Park, Shenoy & Salvendy 2008) that are especially relevant for publishing companies.

![Figure 12](image)

**Figure 12** Media characteristics in the publishing industry

It becomes evident from Figure 12 that there are several differences in media characteristics between the relevant publishing industry media. The characteristics of the new tablet/eReading medium are rather similar to the mobile media, although the physical and technical attributions of tablets enable greater freedom for visual aspects and information delivery. When compared with the online medium, the tablet/eReading medium has haptic elements that allow users to “touch” the medium. Probably the most distinctive feature in the tablet/eReading medium is its interactivity. Even if the content is structured in print-like manner (i.e. similar to the structure of physical newspapers or magazines), the entire publication can be
interactive. This in turn offers the possibility, not only for the interactivity of ads, but also for the editorial content to now be linked in a more dynamic manner with commercial interfaces such as affiliate marketing. This is very promising for publishers since advertising, not only aims at building the company image, but also stimulates direct purchase (see e.g. Park, Shenoy & Salvendy 2008). In the following sections, advertising forms that have been discovered in this research, are classified and analysed based on the above mentioned media characteristics framework.

5.3 Data and methodology

The data was collected (04/2011–11/2011) from five major US newspapers and 20 US magazines. In terms of newspapers, the term "major" is based on the statistics of a physical newspaper, according to which the studied newspapers have the broadest circulation in the United States (Audit Bureau of Circulation – US Newspapers) and/or popularity in the leading tablet/eReading medium (Apple iTunes Statistics). In terms of magazines, large US publications that have been available from the second quarter to the third quarter in 2011, have been included in the benchmark research. Herein, it is essential to notice that not all magazines are yet available in the tablet/eReading context. Hence, the circulation data has not been the main underlying reason for choosing particular magazines but, rather, the selection has been made based on the availability of magazines and their popularity in downloading terms.

5.4 Advertising forms in the tablet and eReading medium

Table 4 introduces the advertising forms found in the research and links them to previous advertising solutions that publishers use in other media. Even if certain ad forms can be utilized in different media channels, the categorization below takes into account only the channel where the ad form is primarily being used.
<table>
<thead>
<tr>
<th>Origin</th>
<th>Found Ad Formats</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Magazine and Newspaper Advertising</strong></td>
<td>1. Static Print Advertisements</td>
<td>Print-like advertisements are static photo-based, pictorial advertisements that do not contain any interactivity, such as animated movements or clickable links to external landing pages. These ads are identical copies of their print versions.</td>
</tr>
<tr>
<td></td>
<td>2. Sponsored Content</td>
<td>Sponsored content advertising refers to commercial messages that have been embedded into relevant, non-commercial context (cf. Rodgers and Thorson 2000). Sponsored content aims at offering useful information for consumers; thence offers companies a convenient way of becoming part of the community (Becker-Olsen, 2003). Since the tablet/eReading medium is inherently built around informational content sharing, sponsored content offers new kinds of commercial possibilities for magazines and newspapers.</td>
</tr>
<tr>
<td></td>
<td>3. Free Ad-Funded Content</td>
<td>The concept of 'free ad-funded content' is known both in print and online context. The concept refers to an idea that content is offered to consumers for free and a commercial party sponsors this content. In the tablet/eReading context, some newspapers and magazines are sponsored and thus free from the consumers’ viewpoint. Particularly newspapers utilize two types of publication simultaneously: they offer a limited version that is free ad-funded and an exclusive version that is purchasable and contains more content.</td>
</tr>
<tr>
<td><strong>Web Advertising</strong></td>
<td>4. Extended Print Advertisements</td>
<td>Extended print advertisements resemble static print advertisements in their visual layout but, unlike static print advertising, they contain some interactivity, such as clickable links to external online web pages.</td>
</tr>
<tr>
<td></td>
<td>5. Banners</td>
<td>Banners usually exist in contexts that structurally resemble traditional web pages. Most major newspapers in the U.S., such as USA Today, The New York Times, and The Washington Post, have built their eReading applications so that they resemble the newspaper’s online page rather than the physical newspaper. Therefore, the advertising in tablet/eReading applications is also congruent with other online advertising that takes place on the website.</td>
</tr>
</tbody>
</table>
6. Embedded Campaign Sites

Embedded campaign sites in the tablet/eReading context are website-like advertisements created around certain products or services and are embedded into electronic magazines and newspapers. There are distinct advertising elements inside these ads that are common both in print and online advertising. These elements include, for instance, texts, photos, videos, touchable content, social media linking, user-generated content, e-commerce solutions and lead generation.

Embedded campaign sites are being implemented in two ways: 1) there is either a full-page advertisement (i.e. embedded campaign site) between editorial pages that the reader comes across while browsing the magazine, or 2) there is an ad banner among editorial content via which the layer-based campaign site opens.

7. Functional & Commercially-Orientated Content

The product review pages of newspapers and magazines, such as fashion reviews, are a clear sign of how direct e-commerce may be embedded into independent editorial content. In terms of tablets and some eReading devices, advanced technological characteristics make it possible to seamlessly move away from non-commercial, unbiased editorial content to a commercial e-commerce environment. As it is, commercial content in eReading and tablet media resemble, to a great extent, the concept of ‘affiliate marketing’ where publishing parties direct consumers to the merchants’ environment (i.e. e-commerce platforms) and receive commissions on every action, such as site visits or realized sales.

8. Engaging Advertisements

Engaging ads are very like online ads. These highly interactive ads contain a lot of multimedia and are often built around a certain engaging element, such as a game or other similar activity. In contrast to online advertising, engaging advertisements can utilize a haptic element. In other words, consumers may touch or manage the ad physically. The haptic elements, essentially, not only take advantage of the possibilities of touch screens but also utilize the tilt and shake recognition of tablets. Fundamentally, these kinds of engaging ads are a clever combination of entertainment and online gaming.
9. Videos

Videos seem to be a relatively popular form of advertising in the U.S. tablet/eReading advertising context. Based on observation, it becomes evident that the role and prominence of videos can be categorized as follows:

1. Video only: the whole advertisement is designed according to a particular video, such as a TV commercial or movie trailer. When the video plays a central part in the ad, the video frame is embedded into an HTML5-based ad that usually covers the whole page. These ads do not offer much - if any - functionality, content, or links to other web pages but, rather, the main purpose of the ad is in the video.

2. Video as a part of entire ad: the video is just a secondary element in an advertisement. Another possibility is to utilize videos as a part of an entire ad. Here, the video is not the sole idea of the ad but, rather, the video supports the other elements of the ad. The purpose of the ad may be for instance, to direct consumers to an e-commerce platform or the company’s social media website.

10. Audio Advertisements

Even though audio-form advertising may not be fundamentally in the interests of newspaper or magazine publishers, it is noteworthy that companies may utilize these kinds of ads in tablet and eReading devices. Since tablet/eReading devices have also been designed for auditory uses, such music listening, publishing companies are able to utilize radio-like, spoken ads.
In this sense, one of the most interesting questions is whether the tablet/eReading medium is able to utilize location-based advertising and so become a ubiquitous advertising medium.

Despite the notion that tablet/eReading advertising offers several opportunities for both publishers and advertisers, it remains unclear how the medium will transform and stabilize in the near future. These medium-related changes stem mainly from the physical attributes of the devices, such as screen size, the technical ability to support...
different advertising formats and online accessibility regardless of time and space. As an example of this, mobile advertising has changed radically due to the development of smart phone devices. Similarly to the tablet/eReading context, the fundamental attributions of the devices have an important impact on matters such as how, where, when and for which purposes consumers use the medium. These behavioural factors mainly determine the extent to which advertising in the tablet/eReading medium covers online or mobile advertising. In this sense, one of the most interesting questions is whether the tablet/eReading medium is able to utilize location-based advertising and so become a ubiquitous advertising medium. This would mean that customers could be reached with location-specific ads when they are physically on-the-move.

From the viewpoint of newspaper and magazine publishers, it is highly likely that interactive advertising solutions will grow in popularity in the tablet/eReading context. The current situation strongly indicates that most publishers have adopted interactive, online-like ads. As noted previously, many publishers have also adopted affiliate marketing solutions in their publications and these kinds of e-commercialism approaches may offer several new and enticing commercial opportunities for publishers. In addition, it is also presumed that advertising in the tablet/eReading context moves towards personalised one-to-one advertising as data collection procedures develop. The same kind of shift has been happening in an online context, where commercial communication can be morphed, based on several factors such as the psychological or behavioural attributes of the users.

When we look at these possible future forms of advertising, their applicability in each of the scenarios is possible. However, the future role of advertising as a part of the publishing business might vary and this is discussed in Chapter 6 where the future of eReading advertising is exposed to the three scenarios depicted in Chapter 2.

5.6 Discussion

This research explored five different newspapers and 20 different magazines. The data collection and analysis took eight months. Based on the findings, it has been possible to augment the extant understanding of the contemporary tablet/eReading advertising solutions. In particular, the study addressed the types and forms of advertising that newspapers and magazines currently utilize in the tablet/eReading media. Traditionally, the publishing industry has been built upon the physical print medium, online medium and mobile medium. However, due to the current boom of the tablet/eReading medium, publishers are able to utilize the characteristics of each of these three different media and create novel advertising solutions (i.e. syntheses). An example of this is “extended print ads” that have a static print ad look and feel, but contain the functionalities of an online environment. The possibilities of this new
media are not restricted purely to advertising solutions; but rather that newspapers and magazines can utilize the innovative characteristics in the publications’ electronic commerce.

With regard to future advertising solutions, it is essential to understand how the consumption habits of consumers will affect the tablet/eReading medium; to what extent the device (and, thereby, the entire medium) starts to resemble the internet or mobile media and in what circumstances consumers use the medium and, thus, become exposed to advertising. If the devices and their usage become highly mobilized in future, it is likely that location-based advertising will benefit from this. Only in the near future will we see and understand more deeply how tablet/eReading advertising evolves and how different kinds of advertising forms change (e.g. become dominant) in the media.
6 Last words

Seppo Leminen, Juho-Petteri Huhtala, Saara Könkkölä, Tommi Laivuori, Jerry Lindholm & Antti Sihvonen

It is evident that, together, the three scenarios presented will have a differential impact on the development of the tablet content production industry. Figure 13 summarizes the main points from each of the studies in which these scenarios were employed.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The publishing industry business model</td>
<td>Three worlds, multiple business model opportunities for publishing</td>
<td>Steady service development, predictable market dynamics between first movers and late entrants</td>
<td>Freezing markets, patience is rewarded as eReading remains a transition phase for something new</td>
</tr>
<tr>
<td>eLearning business model</td>
<td>Compulsory printed material plus optional electronic material</td>
<td>Compulsory digital material plus optional printed material</td>
<td>Only electronic material</td>
</tr>
<tr>
<td>Advertising solutions</td>
<td>Fragmentation: the time is not yet ready for effective eReading/tablet advertising, as multiple markets exist.</td>
<td>Survival of the fittest: only very few major newspapers and magazines will set the rules for eReading advertising. Others will follow.</td>
<td>Major adoption: For those willing to go with the hype, the eReading/tablet medium substitutes physical print medium to a great extent and the eReading/tablet medium becomes, for a short time, an important medium for content consumption and advertising revenue.</td>
</tr>
</tbody>
</table>

Figure 13 Business models & concepts for future scenarios
For the publishing industry, the scenarios reveal that a central concern is the coherence of the industry in the future. Whereas Scenario 1 would result in the separation of the market, Scenario 2 implies a coherent development of the industry with quite stable roles for each of the players. The third scenario posits a retrenchment of the industry into the old print format, resulting in a degree of coherence. Simultaneously, the different strategies that firms use to operationalize their business model, result in differential impacts in each of the scenarios.

Altogether it is possible to note that in most of the scenarios, extreme operationalization of the business model, through strategy, result in success. This is contrary to general belief on the success of strategy types in different markets (Hambrick 1980; Snow & Hrebiniak 1983). However, this might be an indicator of the current development of digital industries that are constantly divided into distinct markets and, therefore, either rapid movement into new markets or, patiently waiting, may be the most coherent strategies, instead of trying to balance them simultaneously.

For eLearning industry, the realization of different scenarios depends strongly on the financial situation of, and political decision-making in, education: whether it is possible to provide students with the necessary equipment and platforms for virtual and digital learning. The first scenario implies that printed books are still the main platforms for learning material. This would mean that changes within the industry during the next five years would be somewhat marginal. In the second scenario, the digital content (eReading, social and virtual software) would have gained a notable foothold in the classroom. However, it is only the third scenario that implies that digital learning material has truly made a breakthrough in public schools. This scenario positions the e-learning industry in a situation in which it can offer its customers mass customized and personalized content and tools for learning.

The development of eReading/tablet advertising is mostly in the hands of consumers and depends on the changes in the consumption behaviour of newspapers and magazines. In this light, we may face one of the three scenarios.

In Scenario 1, the advertising in the eReading/tablet context remains insignificant in the Finnish publishing field. The adoption rate of eReading/tablet devices remains low and only a very limited number of consumers use eReading/tablet devices for active newspaper or magazine consumption. Even in 2017, the time is not right for a major adoption of eReading/tablets in terms of reading newspapers and/or magazines, as there are multiple worlds in the field of publishing. In Scenario 2, in the first phase, only a few major Finnish newspapers and magazines attract a sufficient critical mass and are actively utilizing the eReading/tablet medium for advertising revenue purposes. However, as the situation evolves, multiple players will be able to leverage such a source of revenue. In Scenario 3, eReading/tablet
advertising becomes one of the major advertising revenue sources for both newspaper and magazine publishers, but only for a short period. eReading advertising, therefore, would only become a dominant new design for digital advertising for a transitional period.
References


Blank, S.G. (2010), The Four Steps to Epiphany: Successful Strategies for Products that Win, Cafepress.com


Christensen, C.M. (2003), The Innovator’s Solution, Harvard Business School Publishing Corporation


Appendix

Appendix 1: Scenario 1: Continuum

“In the time of slow economic growth only ecommerce and cheap entertainment is booming”

Slow economic growth fastens the digital media consumption
Slow economic growth maintains the marketing budgets in total, but continues to shift them from print to digital media at an annual rate of 5%. Similarly the public is spending more time on internet and finding less reason to pay increased print costs (due to smaller circulations and increased VAT). Yellow press, recreational and local magazines are able to withstand the change better. Media Incumbents react to the decrease in marketing and circulation of magazines with digital editions of traditional papers and new packaging of existing content. This strategy will not work for smaller and less profitable brands, however, and many papers are either shut down or sold at a low price to bigger players.

Thus, strong brands are able to hold their consumer relationships, and with HTML5 standard, deliver content efficiently through many channels. Cheaper tablets such as Kindle Fire attract majority and they will reach 40% penetration in 2013 as expected. However there is little interest for media incumbents to develop innovative media solutions for mobile devices. Economically successful aggregators such as Google and Facebook develop their services to be more suitable for tablets and smart phones, and are able to increase mobile news and magazine market share.

People turn to online communities and marketers follow
Due to troubled times, people turn more to local issues and traditional news and the magazine business divides between global and local media. Global mass media is consumed on-demand in small chunks and mainly through social networks or other aggregators. Activism and shared interests drive the media consumed by local and other communities. Due to strong increase in consumer-mode content and mobile use of data, new opportunities have emerged (e.g. social gamification, augmented reality) and online communities are present everywhere. There is a demand for curators who make sense of all the data. As a counter-reaction some people seek refuge in other hobbies.

Persisting economic stagnation and advanced metrics forces digital marketing budgets to shift from image branding to transaction-based target marketing. Media companies are forced to follow this trend due to increased supply and competition of digital marketing solutions (i.e. Google, Groupon, Craigslist). Companies have invested heavily on their own channels and customer databases, and now eCommerce and mCommerce are finally paying off. Media incumbents are most competent in reaching local and ideological communities and the marketing efforts based on these generate 80% of turnover. The remaining 20% is from consumers who pay for entertaining content or services that increase their personal value.
Appendix 2: Scenario 2: Disruption

Scenario 3: Chaos

"After international crisis illegal online activism is the only threat for the few media companies in power”

Economic crisis consolidates the traditional media industry
USA and Europe are forced to tackle their massive public debts with printing of new money. People will not trust to have their assets in local currencies anymore and hyper-inflation occurs. The public reduce their expenses as much as possible and cheap media, such as TV, radio and free press sustains. Expenses are also cut from information technology, which had its long steady rise, which slows down the diffusion of tablets and smart phones as well as cuts down mobile internet use.

People seek strong authority among old reliable brands and established institutions, which leads to concentration in media industry. Only the strongest companies and those backed up with public money are to survive through legislations, illegal attempts and business overall. People will also seek strong leaders through internet and they are able to get a lot of authority. Populism is breeding due to the need of making complex things simple. Cheap entertainment is rising, because the public wants to turn away from depressive issues.

As the situation turns internationally tense, nations begin to promote their interests through different media. Governments become anxious of growing usage and lack of control on the internet, thus they start to monitor the data and tighten up the privacy legislations. Open internet is emerging to cover a lot of data with little reliability so that some people are willing to pay for truthful information in the middle of populism and propaganda. Thus media companies are able to put up their pay walls for digital content.

New digital media industry is booming with restructuring of the society
When the crisis finally veils around 2017 new industry design starts to emerge. The main technological evolution has focused in military purposes for the past years. There have been strong advancements in spying/surveillance and information security. New economies are based mainly on wireless telecom infrastructure and mobile use gets back on its growth track. New mobile solutions rely on security, authentication and finance services.

Existing companies and institutions have grown strong and the majority of media earnings are from them. While the public gets more and more concerned with the media’s high influence on politics, economics and user behavior, counter communities through social media, dark net and local activities are also raising.
Appendix 3: Scenario 3: Chaos

"After international crisis illgal online activism is the only threat for the few media companies in power"

Economic crisis consolidates the traditional media industry
USA and Europe are forced to tackle their massive public debts with printing of new money. People will not trust to have their assets in local currencies anymore and hyper-inflation occurs. The public reduce their expenses as much as possible and cheap media, such as TV, radio and free press sustain. Expenses are also cut from information technology, which had its long steady rise, which slows down the diffusion of tablets and smart phones as well as cuts down mobile internet use. People seek strong authority among old reliable brands and established institutions, which leads to concentration in media industry. Only the strongest companies and those backed up with public money are to survive through legislations, illegal attempts and business overall. People will also seek strong leaders through internet and they are able to get a lot of authority. Populism is breeding due to the need of making complex things simple. Cheap entertainment is rising, because the public wants to turn away from depressive issues. As the situation turns internationally tense, nations begin to promote their interests through different media. Governments become anxious of growing usage and lack of control on the internet, thus they start to monitor the data and tighten up the privacy legislations. Open internet is emerging to cover a lot of data with little reliability so that some people are willing to pay for truthful information in the middle of populism and propaganda. Thus media companies are able to put up their pay walls for digital content.

New digital media industry is booming with restructuring of the society
When the crisis finally veils around 2017 new industry design starts to emerge. The main technological evolution has focused in military purposes for the past years. There have been strong advancements in spying/surveillance and information security. New economies are based mainly on wireless telecom infrastructure and mobile use gets back on its growth track. New mobile solutions rely on security, authenticity and finance services. Existing companies and institutions have grown strong and the majority of media earnings are from them. While the public gets more and more concerned with the media’s high influence on politics, economics and user behavior, counter communities through social media, dark net and local activities are also raising.
Appendix 4: Scenario 1: Business environment

Scenario 1: Business Environment
(enforcing present brands)

KEY TRENDS

- **Political**
  - Promoting domestic business and employment

- **Economical**
  - Willingness to pay only from services that add personal value

- **Social**
  - Consumers are reluctant to let their personal information be used for marketing

- **Technological**
  - Common standards have made content delivery easy and cheap for different devices

INDUSTRY FORCES

- **Value chain**
  - Local content providers, advertisers

- **Stakeholder**
  - Entertainment industry (video, audio, gaming etc.)

- **Competitors**
  - Global aggregators for both local and global media use

- **New Entrants**
  - Start-ups enter and exit fast

- **Substitutes**
  - Non-media activities

MACRO-ECONOMIC FORCES

- **Global market**
  - Slow economic growth in Finland, better in developing countries

- **Capital market**
  - Difficulties in raising new money for investments

- **Econ. infrastr**
  - Easy to use micropayments

- **Resources**
  - Abundance of journalists

MARKET FORCES

- **Market segments**
  - Global and local

- **Needs & demands**
  - Quick on-demand news and social communications and personal assistance

- **Market issues**
  - Paper media remains for elites

- **Switching costs**
  - Inconvenience of changing information from service to another

- **Revenues**
  - 80% performance based marketing, 20% of subscriptions
Appendix 5: Scenario 2: Business environment

Scenario 2: Business Environment
(brand, parity & fragmentation)
Appendix 6: Scenario 3: Business environment

Scenario 3: Business Environment

(back to abundance)
Future scenarios for the tablet industry and the digital content business in Finland were identified: 1) Continuum 2) Disruption and 3) Chaos by a panel of industry experts.

The digital business model evolution in the eReading industry was researched by identifying the current strategy types in the market and imposing them on the three scenarios. New product development strategies were found from the Finnish publishing industry, based on the level of pro-activity and the desired level of innovation radicalness.

E-learning in 2011-2017 was approached by examining how public-sector decision-makers adopt e-learning products and services. The aim was to gain insight into the possible strategic bundling options of online and offline learning material, by examining the buying behaviour and value-drivers of decision-makers at public (state-funded) schools.

Digital advertising forms in 2011-2017. By benchmarking major U.S. newspapers and magazines, we were able to explore and classify eleven distinct advertising forms that are adapted from print, web and mobile media advertising.

Key findings of each working group are depicted in this report.