LAUREA

Seppo Leminen & Jari Salo (Eds.)

EREADING SERVICES, BUSINESS MODELS AND CONCEPTS IN MEDIA INDUSTRY

Seppo Leminen, Merja Helle, Juho-Petteri Huhtala, Markus Kivikangas, Esko Penttinen, Mervi Rajahonka, Riikka Siuruainen, Miikka Tölö

eReading Services, Business Models and Concepts in Media Industry

Seppo Leminen & Jari Salo (Eds.)

Seppo Leminen, Merja Helle, Juho-Petteri Huhtala, Markus Kivikangas,
Esko Penttinen, Mervi Rajahonka, Riikka Siuruainen, Miikka Tölö

Acknowledgements

Helsinki, February 14th 2011

Seppo Leminen
Adjunct Professor
Aalto University,
School of Economics
Principal Lecturer
Laurea University of
Applied Sciences

Jari Salo
Professor
Aalto University,
School of Economics

Contents

Table of Figures

Table of Figures

Participants	Name	Organisation
	Seppo Leminen	Aalto University, School of Economics, Laurea University of Applied Sciences
	Jari Salo	Aalto University, School of Economics
	Merja Helle	Aalto University, School of Art and Design
	Juho-Petteri Huhtala	Aalto University, School of Economics
	Markus Kivikangas	Helsinki University
	Esko Penttinen	Aalto University, School of Economics
	Mervi Rajahonka	Laurea University of Applied Sciences
	Riikka Siuruainen	Laurea University of Applied Sciences
	Miikka Tölö	Aalto University, School of Economics

Executive Summary

eReading devices and content (books, magazines and newspaper) markets have mushroomed in recent years, but they are still at an embryonic stage in Finland. The main objective of this study is to propose viable approaches to developing eReading business models for distributing chargeable newspaper, magazine and book content in the Finnish context. After conceptualizing the business model framework, defining existing challenges and benchmarking international business models through the lens of challenges faced by Finnish companies, suggestions for eReading business model development will be made.

Business model in digital landscape

The study describes the general meanings of business model and business models in both the media business and e-business. The literature on business models is ever growing. Business models have always existed, but have been of increased interest to practitioners and academics alike in recent years. However, there is much confusion about what business models are and how they can be used. A business model can be defined for instance as the logic and the activities that create and appropriate economic value, and the link between them. The study presents the traditional business model of the media industry and different ways in which advertising can be displayed and revenue generated.

In addition to that the study discusses the concepts and definitions related to modularity and the applicability of the modularity thinking in the media industry. Flexibility in production and cost-efficient mass-customization of offerings have been seen as benefits of modularity thinking in manufacturing industries. In the media industry context, *offerings* can consist of non-modular products (a book or a magazine etc.), or modular products built of modules that are combined (or "mixed and matched") into a package that is actually mass-customized for a particular customer (personalized media content). Correspondingly, the *production process* can be split into process modules that can be combined in different ways, for example the core process can be shared for content production for all distribution channels or devices, but in addition, different channels may demand some process modules that are specific for the particular channel. These may include for example process steps for editing of the content or for transforming the content into suitable file formats for different devices. Finally, if the media offerings and their production processes are built of well-defined modules, the implementation can easily be done by multiple actors in a modular *organizational network*. This study also suggests that it is possible to sketch relatively stable business model platforms, and add flexibility to *business models* by adding interchangeable business model modules to the platforms. For a single media company a modular business model makes it possible to have multiple business models simultaneously. For example Amazon has multiplied its business model after its success with books to many other products. In the following business

model platform thinking is exploited in the development of a business model framework for media industry (see chapter 3.7).

Further, the study discusses two-sided markets and alternative payment methods in electronic reading platforms. Electronic reading platforms can be analyzed as two-sided networks joining consumers and content providers. Critical strategic issues to be considered in platform mediated two sided networks are determining the money side and subsidy side, and deciding on the openness of the platform, either a shared platform or a proprietary platform. To decide on these, managers need to analyze network effects (both on the same side and cross side), and consider whether electronic reading platforms will converge towards one single platform. The notion of the *long tail* and the unbundling of information goods give rise to new payment systems with lower transaction costs than the current dominant payment methods. In order to succeed, these new payment systems enabling small micropayments and nanopayments must overcome three hurdles: transaction costs, usability issues, and reach.

 The media business model has traditionally been a two-tear model: selling content to the audiences and selling the audiences to advertisers. This model is changing with digital media and web publishing as audiences become more fragmented, autonomous and interactive. This phenomenon is apparent in book publishing, magazines and especially in digital news and journalism. It is not only a threat to publishers but also a possibility to create innovations in value proposals based on understanding meanings of media usage.

Value proposition for customers is inherent in all business models, but in practice the focus is often more on the production processes or delivery platforms and not on the why and how of people's media use and its meaning in their everyday life.

Interactivity is a major emerging trend in media practices. When using eReading devices, readers can annotate their favourite passages for others to see, see what their friends are reading at the same moment, form social online book club and loan, review and recommend books online. In online newspapers personalization, sharing, recommending, saving stories for later reading and navigating options are increasingly important elements of interactivity.

Understanding audience behavior as everyday practice and building innovative, useful and interesting content and service packages to help the everyday life of readers and users are the key to financial revenue and survival of media companies. This kind of thinking needs collaboration and innovation between research, technology experts, the marketing and content department and pooling their collective expertise.

Highlights of the eReading business model cases

Three types of eReading business model cases, eReading store business models, digital publishing around the globe and digital collaborative platforms are depicted.

eReading business models for bookstores

Global eReading stores, such as Amazon.com or Apple's iBookstore, have many similarities in their business model design. They have taken the platform provider role in digital content services, as they provide a viable channel for digital content publishers to reach a large number of customers. To attract customers, they offer a wide selection of eBooks for eReading devices at fairly low prices. Pricing for Kindle books currently starts at 9.99 USD. Additionally, an informal random audit of books indicated an average digital book price of 65% of the cost of paper books. Between eBook and hardback book prices the Barnes & Noble eBooks store sells eBooks at approximately 55% of the hardback cost. This is competitive relative to comparable sites. Additionally many free classics are available as well as newer books for $5.00 or less. Products on the Sony Reader Store website are, on average, a bit higher than comparable eBook sites like Amazon.com and Barnes & Noble. eBooks are priced at approximately 70% of the cost of their paperback versions. Apple's eBook application for the iPad is called iBooks. Apple sells only digital versions of books. After large iPad sales in 2010 in the U.S., some eReading stores changed their policy to offer the content only for certain hardware. Today, these stores compete more and more with the book selection: For example Amazon.com and Barnes & Noble developed applications to Apple store that provides the same digital content for Apple iPad users.

Digital publishing around the globe

Four cases of digital publishing around the globe, Les Echos, The New York Times, Bonnier and Financial Times, are presented. Les Echos's service includes dynamic and deeper content, videos, timely information and a knowledge store that also includes content from others. Their offering is targeted at people in management positions in companies. Their main partners have been France Telecom and Orange. An essential component of the Les Echos business model is that Les Echos has bundled their digital content with their print content and they offer incentives including television sets bundled with their subscriptions. There has been a shift in the Les Echos business model from a generic open business model to a modular open business model.

The New York Times has had a strong presence on the Web since 1996, and has been ranked one of the top Web sites. New York Times is to start charging

its readers on the internet from 2011. The electronic version of the New York Times has a pleasing layout that is very close to the layout of the print version. In addition, The Times is the first newspaper to offer a video game as part of its editorial content. Partners of the New York Times include Microsoft, Google and Adobe. The price of The New York Times Kindle edition in the United States is 90 per cent of the price of The New York Times print edition including The New York Times ePaper version. ePaper version is a digital reproduction of the printed newspaper page by page for reading on a computer screen. According to the March 2009 source, the average net paid circulation for the ePaper version between Monday and Friday was 43 884 when the total net paid circulation of printed paper between Monday and Friday was 1 039 031. Thus the average net paid circulation for the ePaper version was 4.2 per cent of the total net paid circulation between Monday and Friday. The New York Times has bundled its ePaper version with its print edition. Together with Adobe, the New York Times has developed an Adobe Air reader for reading electronic versions, and the Adobe Air reader is also used by many others currently. For instance, Mederra's solution to Huvudstadsbladet is based on the Adobe Air reader.

Bonnier started to publish all its fiction and textbook titles in digital format this year. The publisher has also developed digital versions of several hundred titles in their existing catalogue. Among the first of Bonnier's initiatives was the iPad magazine concept Mag+ that they use as a technical platform for their magazines. According to the design vision of Bonnier, reading from a tablet device should feel like touching the actual magazine, using natural body movements – not looking through the screen and layers of buttons. The first digital magazine to emerge from Bonnier using the Mag+ platform being an electronic version of *Popular Science*, *Popular Science+,* available on 3 April 2010 on the iPad .They also license the software/concept. Later Bonnier developed the News+ concept used for presenting newspapers. Bonnier's Mag+ and News+ concepts and some of the periodicals, such as Popular Science, are targeted at the global mass market. However, majority of magazines are targeted to national markets. The price of Popular Science+ is five times higher than print version in the United States. An average magazine issue for iPad in the United States is selling 10 000 copies at the time of writing. The iPad version single copy sales outperform single copy print version sales in the United States. Also, people who have downloaded PopularScience+ in the United States are not readers of the print version.

The Financial Times has been charging for online content since 2002 through its website FT.com. FT.com is best known for its meter model, which allows readers some free page views before requiring a subscription to gain further access. Mobile publishing in particular offers the Financial Times new opportunities around niching, creating targeted product for newly definable, on-the-move audiences, and helping its advertisers find those audiences and connect with them in an innovative way. Partners of the Financial Times include Google for instance. The Financial Times have earlier stated that 2010 would be the first year that revenues from content would surpass those from print advertising. Additionally, The Financial Times have projected that increasing content-derived reve-

nues should overtake all advertising revenues by 2012. Today most content revenue comes from print subscriptions, and if the publishing world is turning digital-first rapidly, it will face the same leap that all publishers face. Financial Times uses PayPal as an e-commerce engine to accept payment for daily and weekly passes.

Digital collaborative platforms

Three cases of digital collaborative platforms, US Next Issue Media (NIM), Swiss Project Codex and Norwegian "Lesebrettprosjektet", are presented. Next Issue Media (NIM) is an independent (market based) media coalition and joint venture of five Global Media /Publishing Companies; Condé Nast, Hearst, Meredith, News Corporation and Time Inc. Next Issue Media was formed to explore new opportunities for publishers, advertisers and consumers in the emerging environment of digital publishing and e-reading devices. NIM's aim is to take the reading experience to a totally new level; interactive magazines and newspapers represent a truly different experience, offering more than just a PDF replica or web print product. Interactive magazines and newspapers on touchscreen devices have great potential to, for example, use videos to create multimedia content, use interactive features to engage users in new ways, add enhanced content for a new "more than print" experience and also allow readers and users to personalize products according to their own interests.

NIM's five founders and equal partners represent around 80 percent of subscription volume in the U.S. According Mediamark Research & Intelligence study: The joint venture partners represent a unique audience of 144.6 million. Next Issue Media will launch its online store for magazines and newspapers on Google's Android Marketplace early next year, 2011.

Project Codex is a Swiss joint venture for e-reading. The participants in the project are publishing houses with a teleoperator and a book retailer. The project is currently in the testing phase. The objective of the pilot project is to build an open platform of paid content, and with it to solve the dependency on global equipment manufacturers. The possible commercial launch will be in 2011. Test users in the pilot project have used the iRex eReader which is a black and white 8.1" device with touch screen with stylus. The test users have had a virtual budget. The virtual price points for products have been roughly 70% of print price. However, customers expect that lower manufacturing costs in digital content decreases the prices of digital subscriptions of newspapers and magazines. In Switzerland, customers expect that the digital subscription is set to 50 % of the print subscription price, according to a test by Codex. For the pilot project a web platform has been built with a content store and forum. Future visions the eKiosk offer a central store with a broad portfolio of press titles and eBooks. The target customers are people who value written content and are willing to pay for it, and the value proposition for them is a full digital reading experience close to print. The role of advertising is under discussion. One of the major challenges in

the Swiss joint venture is how to create attractive offerings that the customers are willing to pay for.

Norwegian Newspapers have joined forces to develop a common channel of distribution. The main objective of this project called "Lesebrettprosjektet" , is to build the one common digital channel of distribution, an open platform for the all Norwegian newspapers and magazines i.e. to create a solution for both big and small media companies. Another key aspect of the approach is to establish a system for efficient delivery of products to those devices, currently on the market or anticipated in the near future.

This project has been prepared and developed since spring 2009 and it is currently in the testing phase. The project is being run in cooperation with the University of Stavanger. There are 10 media companies participating in this project; Aftenposten, A-pressen, Budstikka, Dagens Næringsliv, Edda Media, Hjemmet Mortensen, Nationen, Polaris, Vårt Land and VG. This project is managed by the Norwegian Media Businesses' Association (MBL, Mediebedriftenes Landsforening).

Summary and evaluation of different eReading business models

This study summarizes all the depicted business model cases and proposes a framework for analysing eReading business model cases in the digital media landscape. The framework revealed cases through four distinct eReading media scenarios: Scenario 1, ePaper business models (e.g. electronic pdf format version of traditional paper), Scenario 2, application world based business models (e.g. Apple's iPad platform based service content), Scenario 3, unified concept based business models (e.g. Bonnier Mag+ concept based services, aim for NIM and Codex), and Scenario 4, Web based business models (e.g. FT.com eReading content available through web). For academic research this provides a new perspective on the digitalization of companies and the possible business models enabling it. For managers, the media business model scenarios are especially interesting because they provide companies with a way of identifying where they are and would enable them to see the future directions of their eReading business model development.

Advertising effectiveness in the eReading context

This study investigated how advertising on eReader and print media will influence implicit attitudes towards advertised brands. Preliminary results show that there are no significant differences in the effectiveness of advertising between print and eReader.

Recommendations for the media industry

When gathered into Osterwalder's (2004) building blocks model, challenges in eReading business model development for the Finnish publishing industry can be found in every pillar of the business architecture. The key challenges for digital publishing are customer understanding, increasing customers willingness to pay for digital content, reaching economic profitability and increasing dynamics in the new competitive environment with for example scenario work combined with business model platform thinking.

It is useful to explicitly decide the strategic view – either reactive or proactive – that will be used. The appropriate view can be selected by comparing the present situation with the future scenarios: if the belief is that digital business will become a significant business area in the future, a proactive view is the most appropriate; if not, a reactive view can be more justified. After the view is selected, scenarios presented in this report can be useful when clarifying the position(s) to aim for in the value chain or network, including the question of whether to build an individual platform or not, and why. Subsequent questions will relate to the capabilities required, with who to partner etc. Progress from the early stages of digitization requires the capability to build value networks with partners that come from outside the traditional markets, and even with competitors. As network effects most probably will drive the business towards only a few dominant platforms, selecting or building and owning the "right" platform, and cooperation with the "right" partners will be crucial. Essential questions are whether to give away ownership of the customer (i.e. customer information) and to whom in order to enter the "right" platforms, or whether to join forces with peers in order to build attractive joint platforms and, in exchange, share some customer information with them to better exploit cross-selling opportunities. Following questions will relate to offerings, pricing etc. The challenges are slightly different for different actors in the Finnish media industry and also changing over time. However, as the involvement level in digital business increases, more understanding about the further development of the eReading business environment will be needed in the future.

1 Background

Seppo Leminen & Juho-Petteri Huhtala

Today digitalized content for eReading devices and tablets, such as Amazon's Kindle and Apple's iPad, are spawning opportunities for traditional publishing industries. Amazon expected 8 000 000 sales of its eReading device in 2010, and Apple's sales of its iPad reached 7 600 000 between May and September 2010 alone. Altogether, eReading is seen to consist of books, newspapers, magazines and social web sites read from different platforms like dedicated eReaders, tablets, net books, laptops or smart phones. All these different styles and platforms have their own logics considering content, technology, production, advertising and business models. During the past three years over 50 different eReading devices have been released and digital media services consumption through these devices has grown exponentially. The digital publishing market for eReading devices is booming, especially in the U.S where eBook sales January— October 2010 are up 171% reaching $345 300 000 compared to $127 300 000 from January—October 2009. eBook sales have reached 9 per cent of total book sales in the U.S book markets. Amazon takes the majority of the revenues in the digital publishing market. Though the growing sales level of digital media services is bringing new business opportunities for publishers, they would be wise to remember that in the digital industry they are competing for customers' attention with companies from a wide range of other electronic media industries. Publishers have started to look for new, innovative ways to incorporate digital technologies into their current business architecture.

In Finland, the research and development of eReading content businesses has begun with a wide-ranging co-operation. As a part of a Next Media research program, the eReading Services research and development project of Finnish publishers and researchers was launched at the beginning of 2010. The project studies the current state and future outlook of eReaders, as well as modes of application and content-oriented business models for the devices. The project team consists of an internationally remarkable range of businesses from the magazine and book publishing industry, as well as research institutes. The project members include the publishing companies and research institutions in Finland, such as Sanoma, Alma Media, Otavamedia, Talentum, Aalto University, and VTT Technical Research Centre of Finland as well as Metropolia and Laurea.

1.1 Objective of the study

The main objective of this study is to propose viable approaches to developing eReading business models for distributing chargeable newspaper, magazine and book contents in a Finnish context. As seen in Figure 1, this objective can be further divided into three sub-objectives, which specify the focus of this study. The first sub-objective is to conceptualize an eReading business model framework for the media industry based on the review of business model platforms and the service modularity literature. The second sub-objective is to specify the main challenges facing the media industry in eReading business model development in the Finnish context. The third sub-objective is to benchmark a wide range of international practices from various digital media industries. After conceptualizing the business model framework, defining existing challenges and benchmarking international business models through the lens of challenges faced by Finnish companies, suggestions for eReading business model development will be made.

```
┌─────────────────────────────────────────────────────────┐
│         Suggestions for eReading business               │
│         development in Finnish context                  │
│                    Chapter 7                            │
└─────────────────────────────────────────────────────────┘

┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│ Conceptualization │   │ Definition of the│   │ Benchmark of the │
│   of eReading     │──▶│ main challenges  │──▶│ existing digital │
│ business model    │   │ for Finnish      │   │ content business │
│   framework       │   │ eReading         │   │ model practises  │
│                   │   │ industry         │   │                  │
├──────────────────┤   ├──────────────────┤   ├──────────────────┤
│    Chapter 3      │   │    Chapter 4     │   │    Chapter 5     │
└──────────────────┘   └──────────────────┘   └──────────────────┘
```
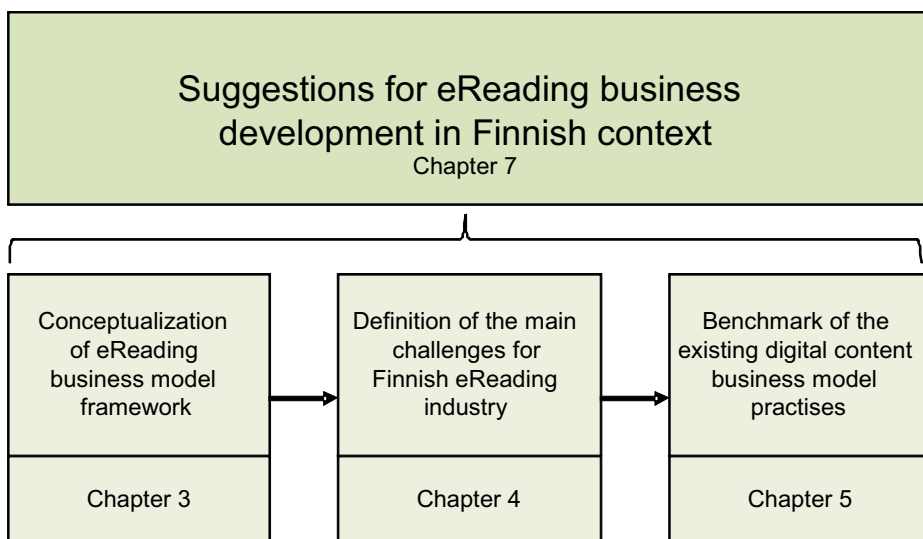
Figure 1 – Objectives of the study

1.2 Methods and Limitations of the study

This study is not intended to give any specific recommendation on which business model a company in a publishing industry should pursue. However, the study depicts different types of eReading business model options for a further intra and inter-organizational review.

The main data source through which eReading business models were captured and described, consists of public data available on the internet, on different

newspapers and on in-depth reports as well as expert statements and inter-views.

1.3   Structure of the study

The study is structured as follows. First, Chapter 1 outlines a brief introduction to the study. Media markets and user experience in digital landscape are revealed in Chapter 2. Chapter 3 depicts recent business model, platform mediated networks and service modularity literature where a conceptual framework is adapted in the digital landscape. Chapter 4 summarizes the current state of media industry analysis in Finland based on the previously conducted media industry analysis. Chapter 5 examines the emerging and existing business model cases representing eReading store business models, digital publishing from single company perspectives as well as digital collaborative platforms in the media industry in a digital landscape. Chapter 6 summarizes the preliminary findings of a study of advertising conducted in eReading. Finally, recommendations and managerial implications for the development of media industry business models are presented in Chapter 7.

Chapter 1: Introduction	Objective of the study, methods and framework of the study, structure of the study
Chapter 2: Media markets and user experience	User knowledge, and motives, media trends in digital landscape
Chapter 3: Business models in digital landscape	Business model, platform-mediated networks and service modularity literature
Chapter 4: Research insights of publishing industries	Newspaper, magazine and book industry analysis
Chapter 5: Business model cases	eReading store, digital publishing and digital collaborative platforms models
Chapter 6: Advertising effectiveness in eReading	Preliminary findings of advertising in eReading
Chapter 7: Recommendations for media industry	Main findings of the study, recommendations and managerial implications for the media industry

Figure 2 – Structure of the study

2 Media markets and user experience in the digital landscape

Merja Helle

This chapter emphasizes the importance of understanding audiences and their daily practice. E-book user tests (see report by Harri Heikkilä in Media Experience deliverable) depict what an important role the readability of the screen, ease of use of the devise and adaptability, as well as the navigation and the available content play in the experience of the users and thus also in the future purchasing decisions. Even more important in the future is the whole ecosystem of e-reading: amount of titles available, easy purchasing and payment – preferably a common market place by all Finnish publishers – so there is no need for customers to use different sites and payment systems.

This chapter starts with discussion about the changes in media practices and possibilities of new, technology based media products becoming a viable consumer business. The focus is not only on e-books but also on newspapers and magazines. A central trend in digital content production and reading is the increasing autonomy of the audience which has led to increasing possibilities and demands for interactivity with the content and between media users. This is manifested for example by personalization, sharing, recommending and commenting the content. The need for radical and design based innovations is emphasized in the media business. The crucial basis for media innovations is understanding the meaning and motivation of media in the everyday life of the people. This means paying more attention to the content of media products and on the other hand serving the advertisers in the digital landscape. Finally some examples and recommendations are presented.

2.1 Media use and media strategies are changing

Understanding the actual audience and its daily practices is the key to success in digital publishing but it is also difficult. Some general tends of changing media use have been captured by the Digital Life Research project (www.discoverdigitallife.com), which covered 46 countries and received almost 50 000 answers.

The general conclusion was that online behavior is somewhat different between different countries and regions and but it is generally "the media of choice". Attention should be paid to the fact that mobile use is increasing and is important, not only in the developing countries where broadband online access is scarce. Mobile use was focused on social networking on the go. When asked about how online media is used the axis is wide from entertainment to personal manage-

ment as the figure from the research report illustrates (See Figure 3). As Figure 4 shows, today in the digital landscape most of the time is spent in social media.
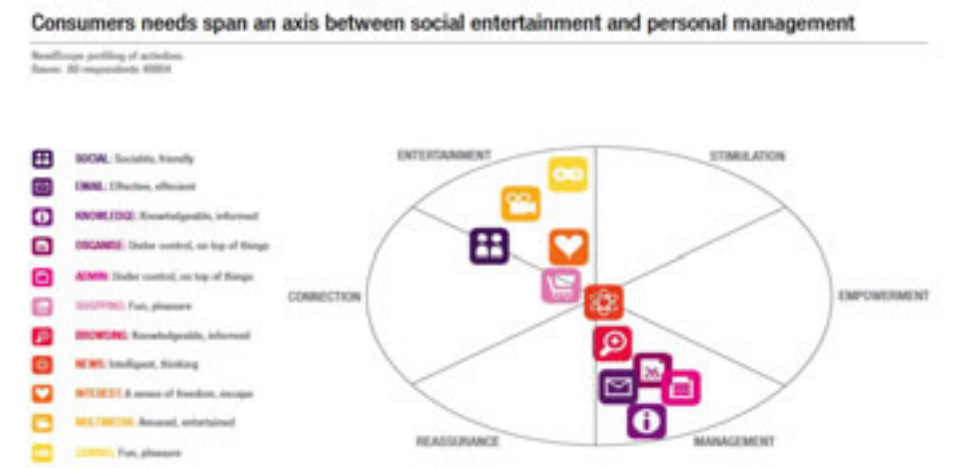
Figure 3 – Hybrid online practices (Source: www.discoverdigitallife.com)
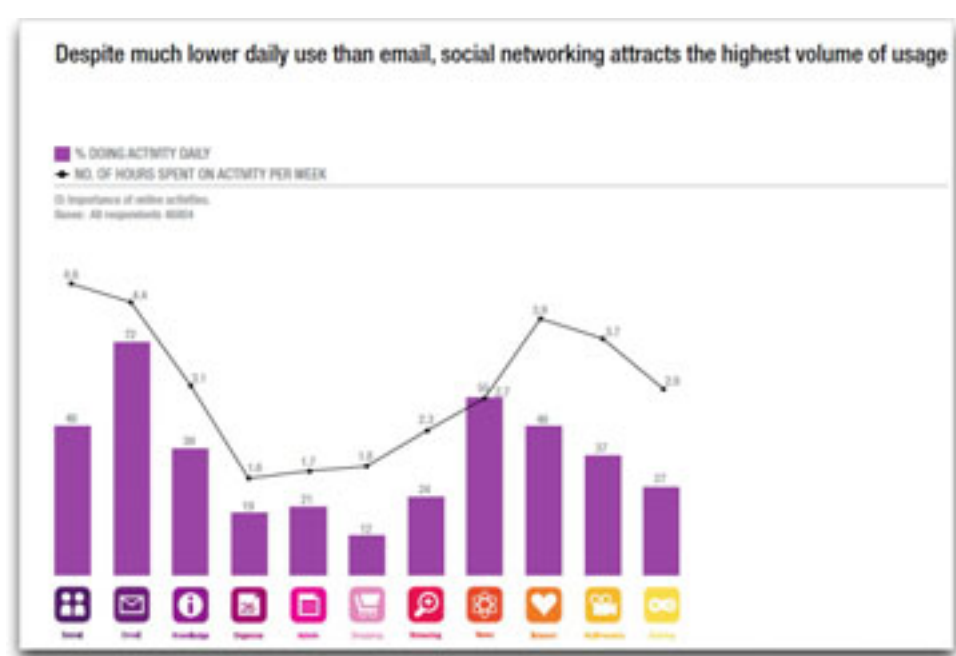
Figure 4 – Most time is spent in social media
(Source: www.discoverdigitallife.com)

As seen in Figure 5, when asked about media use the daily users of online accessed digital media most (61 %) followed by TV (54 %). Newspapers and magazines fell far behind[1].

Amongst online users, digital is the primary daily media channel and is already making inroads into rapid growth markets

Figure 5 – Digital media is the primary choice.
(Source: www.discoverdigitallife.com)

The changing media environment and media practices pose several problems for media companies. The Federation of Finnish Media Industry (Finnmedia) has produced a vision of the challenges for the near future (Finmedia/Idean, 2009). The strategy report presents central change factors that need to be addresses for the media companies to prosper and survive:

1. Message getting across. More efficient targeting and measurement of advertising.
2. Competence sets one apart. Consumer's and producer's roles getting mixed up.
3. Even the giants are faltering. An accelerating pace of change in the business environment.
4. Constant renewal, Innovation is not an alternative, but an inescapability.
5. Target groups getting smaller. Customers' special needs must be taken account of,
6. Ubiquitous advertising. The advertising volume is growing and modes of advertising diversifying.

---

[1] For explanations of the abbreviations see the original report at www.discoverdigitallife.com.

7. When it suits me. Consumers informed and more and more demanding.
8. You can't make it on your own. The importance of networking is growing.

The first driver highlights advertising, which is interesting in the light of Napoli's (2003) idea that first content is sold to readers and then the readers to the advertisers. The second driver deals with users and their contributions: "The hope of reputation and renown, and sometimes even of financial compensation, impels citizens to produce and distribute media content. At the same time, the developing hardware environment in which consumers live is creating new modes of participation. By involving consumers in production and content-distribution processes, professional producers will make their relations with their customers closer, produce material with a broader perspective and make it possible to economize on costs. What will matter in the future is how interesting the content you produce is, not what it says on your calling card."

Understanding customers is the first success factor in the SWOT analysis: "Predicting and recognizing customers' needs as well as responding to them are a prerequisite for the sector remaining attractive and its products and services continuing to be useful to customers and media users. The needs and consumption behavior of customers are changing along with the surrounding world. The sector must be sensitive to these changes."

The million dollar question is how this is to be accomplished in times of changing media habits between different age groups. Another big issue is how do we think of media users: passive recipients of advertising and content or contributors of content and re-using and re-directing media content i.e. through social networks.

2.2 Media contents and audiences products

Media organizations aim their products at specified audiences and have a purpose for publishing – either financial or ideological. In Napoli's (2003) terms management and marketing speak of predicted audiences when planning new media products and the audiences are more and more segmented and the segments clearly targeted. When media organizations gather statistical information about its audience the measured audience emerges. More and more information is also gathered about citizens/consumers and their media behaviour through ethnographic methods in the everyday life to try to understand what Napoli calls the actual audience - people who read or watch the media. However the actual audience always remains unknowable to a certain degree. It is always a perception of an audience by media firms and advertisers. (Napoli, 2003, 29-34).

Media industries are unlike many other industries because they operate in a"dual product marketplace". They seek to manufacture and sell content to the audiences and audiences to the advertisers. However these two are highly interrelated and have an effect on each other (Napoli 2009, 2003)

Several other facts also make media industry different (Chan-Olmstedt, 2006). The two above mentioned product lines need to be addressed differently as new media technology is likely to affect them differently. Secondly most media products are nonexcludable and nondepletable public goods. New readers/users add to the scale economies in production. Media companies need hybrid business models that generate sufficient revenue from both lines – advertisers and audiences. Chan-Olmsted (2006) warns that lack of initial profitability might lead to expenditure reduction in improving the products, which might not please audiences and could decrease revenue in the end.

Audiences consume media products in a repertoire fashion as they do not rely on only one medium or one media outlet. So media firms offer products that complement and compete their competitor's offerings. New media products become part of their portfolio management. According the Chan-Olmsted (2006) this makes the assessment of the potential utility of new media technology more difficult.

The crucial step is producing content that is useful and interesting to the consumers. Without content market there hardly is an audience market (Napoli 2003, 4). Thus in the business models and value propositions much more emphasis should be placed on the content from the viewpoint of media users and their practices. Is the content interesting, useful, engaging and enticing. Napoli uses the term audience market for the audience product, which is produced by measuring audiences. The measured audience represents central product of the audience marketplace (ibid. 33). In the United States audience measurements typically focus on measuring the audience for particular piece of media content, not on measuring the audience for the advertisement embedded within media content. The vehicle exposure (content) and the audience of advertising exposure can be quite different. For example almost half of the prime time television leave the room during commercial breaks in the US.

Napoli discusses the difficulties of getting accurate and meaningful data of audience behaviour in practice and writes that the actual audience is actually unknowable even though content audiences are the currency of exchange between advertisers and media organization. In the web it is easier to measure audience behaviour (content and ads) with different kinds of tracking methods and automated analytics. But the generalization and reliability also decreases with diminishing size of audience groups.

Napoli is quite critical of the audience measurements and their accuracy to predict the success of media products or advertising. He also challenges the idea that people actively choose what particular story or TV-program to watch. He points to research that shows that media consumption is more a function of availability than content preferences. This applies specially to TV as people still watch it even if their preferred program is not on. This points to the importance of understanding the habits and routines of cultural media practices, which have developed for example in Finland with the home delivery of newspapers and

magazines. What kind of changes happen with persons not getting print media delivered at home. Will they be the active users hopping from site to site in the web or googling for certain events or interests or building their own content packages with content aggregators? Or would they pay for the convenience of personalized content packages from established media brands? There is an urgent need to know how different media is used during the day, what platforms are visited and what kind of content consumed. This knowledge would provide media companies opportunities to tailor and bundle their content to different user groups across platforms, time, space and place.

Audience fragmentation refers according to Napoli (2009, 136-7) to the extent to which audiences are spread across a variety of content options. Intramedia fragmentation means the expansion of a medium's capability to deliver multiple content options – like the proliferation of cable-TV channels. Intermedia fragmentation refers to the new media technologies which increase the range of cross-media content options available to media consumers. The fragmentation of media users into more homogeneous small groupings can benefit advertisers and their overall value together can be higher than that of a mass audience. But fragmentation also has a negative effect on the traditional measured audience product Napoli (2009, 138). Also the difficulty and cost of reliable audience measurements and understanding media use increases.

Audience autonomy is increasing rapidly. Napoli (2009) means the degree to which audience members have control of the media products they use, when, how and where. This ability has existed before digitalization but has exploded with increasing variety of choices with digitalization and new devices. Napoli (2009) mentions how time shifting technologies are changing the way TV-programs are watched. People can choose when to watch, and with the smart phones and tablets TV watching has become mobile. However already the invention of remote control made it possible to skip ads easily or change channels. With the internet audience autonomy has reached perhaps its apex (Napoli 2009., 146-7).

Audiences are spending more time with direct-paid media than with advertising paid media in the US. For example pay-channels have multiplied. Printed newspapers in Finland have received most of their income from advertising, but this share is diminishing and the paid circulation is going down – rapidly in the States, more slowly in Finland. This means media content is increasingly targeted at those consumers who are willing to pay for it and this has a great effect also on the content produced. Recent years have shown that advertising revenue from internet is growing rapidly but only few media organizations can cover even the productions costs. This places a heavy emphasis in the future to create useful and interesting content that people would be willing to pay. I will return to this issue shortly in the last subchapter and present discussion about future of digital journalism and its evolving funding possibilities.

The problematic of digital content for digital and e-reading business models in media organizations are depicted in the Figure 6 below based on Napoli's (2009) definition of three kinds of audience conceptions

.

Figure 6 – Changing audiences (Napoli, 2009)

1. There is not enough knowledge about media use in everyday practice nor about how effective advertising is. The crucial issue in e-reading (digital reading) is what products or bundles to produce and for what kinds of audiences.

Media companies, as any large companies, tend to rely on proven successful products and are hesitant to spend money on e.g. new technological platforms and architectural innovations. What are the content strategies of media companies? Are they pushing the same content on different platforms or do they utilize the possibilities of new platforms and devices? Do companies have the necessary competencies for putting out new hybrid media products?

2. Is market research measuring the right things and how reliable are the measurements? With simultaneous use of several media use for example the value of media diaries has diminished. Are focus groups and questionnaires the right way to measure motivation and media experience in everyday life? Reliable measurements become even more difficult with the increasing fragmentation of audiences and increase of possible media choices. Page clicks are not enough and attention should be paid to the search paths and how much time users spend on each page/story of the web. Audiences are becoming fickle and do not remain as loyal as before to media brands. Audience autonomy is increasing with the possibilities internet offers and the younger generation is used to browsing and hopping from site to site.

3. The actual audience and their daily practices need to be researched in greater detail during their day and special attentions should be paid to the meaning media products have for people. This means new kinds of measurement devices, ethnographic research and for example media meaning diaries and discussion groups. Advertising should also be measured side by side with journalistic content as ads provide information and emotions and are an integral part of the content especially in the more and more segmented and target group focused magazines. Interactive news sites seem to draw more visitors than basic ones. The success of Facebook and Twitter have made it possible to share content with friends, people can personalize the content they get automatically with search engines, widgets or content aggregators in the web. Ampparit, Google news, RSS feeds of news are early examples.

The general belief is that audience members want to have the content they like, whenever they like and where ever they like. But this does not mean that they surf the net all the time, but they personalize content packages according to their own needs and make them "stable" packages. Or they might want to pay for content packages created by media companies. This bundling service is increasingly offered by aggregators of content (See examples in Figure 7), especially on the Ipad's clever applications like Flipboard, Flud and Pulse with which one can choose what media and topics to follow and get the latest content from them without going to the original sites. However media companies do not get any money from this but on the other hand the links lead to the original story sites and can increase readership dramatically and help sell ads to the sites. For example New York Times is developing an aggregation service of its own and offers it for other media companies. The present version of "Best of New York Times" for IPod includes stories from different quality media across the world.
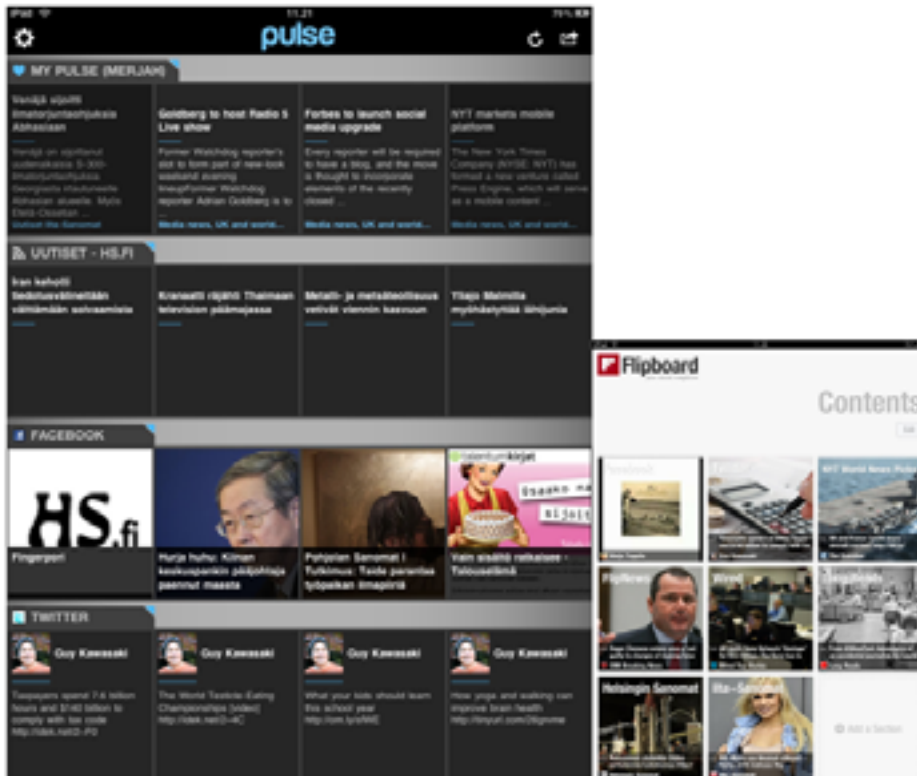
Figure 7 – Examples of content aggregators

2.3 Radical and design based innovations

"Market? What market! We make proposals to people" (Verganti, 2009, 2). There is wide agreement that radical innovations are the source of long-term financial gain, but they are mostly thought of as technological innovations. However it is often forgotten that people do not buy only products but also meanings. Verangati emphasizes that "firms should therefore look beyond features, functions and performance and understand the real meaning people give to things" (Verganti, 2009, 2-4).

Innovations are usually divided into two basic categories: radical or incremental (Henderson ja Clark, 1990; Tushman ja O'Reilly, 1996). Radical innovations are based on breakthrough technological innovations and incremental produce minor changes in the product based on studying the present needs of users. However, Incremental innovations can be great commercial value for companies. Modular innovations only change the core design concepts of a technology – like replacement of analog with digital phones, but does not change the product's ar-

chitecture. Henderson and Clark have proposed a fourth alternative, the concept of architectural innovation, which change the way in which the components of the product are linked together. Architectural innovations change the architecture of a product without changing its core components.

Printed books, newspapers and magazines are based on a dominant technology, the printing press and editorial systems. The architecture has been quite stable for decades, if not centuries. Digitalization of the content and publishing it on different platforms like the web or computers/tablets/e-readers which led to portability and ubiquitous use of media content can be called a radical innovation which has changed the whole industry. However the way the components of text, pictures and video are linked on the new publishing platforms like the web, smart phones and e-readers can be developed with architectural innovations. Multimedia content, increasing role of pictures and video, interactive graphics, audio reading of texts and so on are new possibilities to utilize the technological possibilities and attract users and advertisers. Henderson and Clark (1990) point out that architectural innovation demands new organizational learning and capabilities and makes many old competencies obsolete.

These distinctions between types of innovations are of course of degree but the types are important to understand. In digital e-reading the idea of e.g. The Guardian and New York Times to make their content available with API's to different distributors, either users or aggregators etc could be called an architectural innovation. It means moving from the present emphasis on user-generated-content to user-distributed content (see Kay and Quinn 2010). Also the multimodal eBook like Ken Follet's Pillars of Earth for Ipad is an architectural innovation. It includes video clips for the new TV-series based on the book. Also ads inside e-books or links to ads belong to this category. Or the book on Richard Nixon on the Ipad which shows and links you to original news clips from his career. Another example could be making elements of personalization, interactivity and social sharing into core elements of digital publishing instead of the old push model of delivering factual content produced by media professionals.

Another kind of innovation – design-driven innovation – is proposed by Verganti (2009). He describes it as radical innovation of meaning. Examples include Artemis lightning system to fit or change the mood of a person inside the room), Wii console (players move, not just sit), Alessi (kitchen utilities as objects of affection), Apple Itunes and Ipod (a system of producing and selecting one's own music), Whole Foods Market (shopping for organic and healthy foods as a pleasure).

"People buy and use products for deep reasons often not manifest, that include both functional utility and intangible psychological satisfaction" (Verganti, 2009, 20). Design is not just about functionality or visuality but according to Vengati design means making sense of things. The utilitarian meaning of design deals with function and performance and the other dimension concerns symbols, identity and emotions – that is meanings (Verganti, 2009, 25-29). Emphasis on a dis-

tribution model of content is based on the fundamental need to communicate on connect to other people, so it could be called a design-driven innovation.

Verganti (2009) central point is that radical innovations of meaning do not come from user-centered approaches of design although they are useful for incremental innovations. Instead companies research with networks of associates and their own employee's changes in the cultural dimensions of societies. The companies make proposals to people, a push model, and do not rely on market-driven and customer expressed needs – pull model (Verganti,2009, 10). The key question is "How could I make people's lives better?" The proposal is something people did not know until they saw it or used it in their everyday context, which is also changed by the new design innovations.

The three central phases in design-based innovations are 1. listening (to researchers, media, innovative designers, experts in the field etc) 2. interpreting (the new know knowledge, but not in brainstorming or other popular methods but research based exploratory experiments) 3. addressing (seducing) the consumers, who might first be confused or uncertain of the new proposals (Verganti, 2009, 13).

Developing innovations, either design-based or architectural means also radical changes in the ways organizations develop innovations and in the required organizational capabilities. An ambidextrous organization (Cummings ja Angwin, 2004; Tushman, 1997; Tushman ja O'Reilly, 1996) can handle both evolutionary and revolutionary change, multiple strategies, multiple competencies and multiple structures like mass production and R&D for agile innovations. Verganti proposes that no R&D is necessarily needed[2] but the mangers and heads of design play a key role by assembling a network of inside and outside interpreters of cultural change and its possibilities for developing and offering new products and services to people. Both approaches above have in common the idea variation: " the world of variation is please fail – by making many small mistakes, the organization learns".

The idea of innovations as central to the future of media business puts emphasis on understanding changes in societies ad their cultures, delivering novel proposals for citizens and thus placing the value offering/proposal at the center stage in business models.

2.4 Interactivity

Interactivity is a major emerging trend of media practices. It has become available in digital publishing in the web as well as in e-reading devices and programs as readers can annotate their favorite passages for others to see and see

---

[2] The companies Verganti studied had less than 500 employees.

what their friends are reading at the same moment, people can form social online book clubs, loan, review, and recommend books online. In newspapers recommendation is an important vehicle for spreading the stories as well as for buying decisions for consumer goods (see digital life report).In Finnish magazines interactivity is usually between readers in online conversations groups but magazines are experimenting with social media like Facebook and Twitter also to converse between readers themselves, and readers and journalists. This chapter deals with interactivity in online newspapers.

The definition and development of the concept of interactivity in journalism has been widened as technology, online journalism offerings and user practices have been expanding. Interactivity as a concept originally involves individuals and networked computers. There can be user interactivity with a computer or a Web site and interactivity with others through a computer network or website (Gerpott ja Wanke, 2004, 242).

Interactivity is a term that merits closer inspection because the way it is implemented by media organizations influences the choices available for the users to choose and personalize content and interact with each other. Interactivity is the key to the success of the internet because people want to interact with each other also directly person-to-person not just via content produced by media organizations (Odlyzko, 2001).

Content is not king, especially the content sold and produced by big media companies for profit challenged Odlyzko (2001) already ten years ago challenged the still prominent belief of commercial media companies and journalists. By content he means material prepared by professionals to be used by large numbers of people, material such as books, newspapers, movies. On the contrary he emphasized the importance of point-to-point (person-to person) communication in the online environment.

Interactivity and the relationship with users can be analyzed e.g. by the four categories suggested by Massey and Levy (1999, 526. Cited in Deuze 2003, 214):
- complexity of choice available
- responsiveness to the user
- facilitation of interpersonal communication
- ease of adding information.

Deuze (2003, 214): divides interactive options offered by websites into three categories:
- navigational interactivity (free and easy navigation through content)
- functional interactivity (with users or producers through mail to links, discussion lists etc)
- adaptive interactivity (sites adapt according to user behavior, e.g. most popular stories, implicit personalization of content etc).

Deuze (2003, 214): adds a fourth type of interactivity

- third person interactivity – meaning just following others who use the site interactively.

This chapter suggests adding a fifth type that has emerged in the last few years Social interactivity – the increased possibility to add content freely to the website, email, recommend, circulate, add links and create own forums for topics and stories that are chosen by the readers, not journalists – outside the control of mass media site owners but can be accessed through institutional media title sites.

Thurman (2011, 2) lists two types of interactivity: Deuze's (2003) functional interactivity and Jensen's (1998) conversational interactivity and proposes a third kind of interactivity: personalization which is based on Negroponte's idea of (1996, 153) of an electronic personalized newspaper, "The Daily Me, a printed in the edition of one".

Interactive elements in newspaper websites have increased during this decade. There has been a dramatic increase in the opportunities for readers to produces content for online in all major press-title sites. In the UK websites analyzed by Hermida and Thurman (2008, 346) saw significant growth between April 2005 to November 2006 in three formats: blogs, comments on stories and have your says.

Thurman (2011) analyzed 11 US and UK major media websites and lists several categories of functionality at news websites starting with email newsletters and ending with different kind of personalization widgets for example for getting sports results. However despite the increasing possibilities of personalization or instant access to news and events fairly few people go regularly to read the news online in Great Britain, but the figures are higher in the United States (Couldry et al. 2010).

Domingo's (2008, 680) findings suggest that interactivity might in practice be a myth in media title print sites because the traditional inertia in the online newsroom prevent them from developing the ideals of interactivity. Producing interactivity and interacting with uses goes against the standardized production routines in many newspapers.

The "work done by audiences" (Napoli, 2010) is a new theoretical insight into mass communication research. Napoli (2010) emphasizes that the term should include not just the receivers of content but the senders of content as well. The difference today is the ability for audiences to deliver content and this is more revolutionary than the ability to produce content, argues (Napoli, 2010). He suggests that even if audiences are more fragmented than ever before the ability of globalization of potential audiences in global online services like Youtube, MySpace, Facebook can outweigh the fragmentation. "The masses often reach the masses", (Napoli, 2010, 510).

Mass communication is no longer the sole domain of traditional institutional communicators, which have only lately to come into the grips with social media

and its potential. The creative work of the audience is an increasingly important source of economic value for media organization, Napoli points out.

What is remarkable with this new phenomenon is that audiences work mostly for free, maybe guided by pursuit of fame or recognition, not financial compensation. Besides working for content production audiences also work for advertisers in several ways. They can become partners in creating commercials, recommend and endorse, incorporate ads and brand messages into their own sites e.g. in Facebook.

Below in Figures 8, 9 and 10 are some examples of interactivity from newspaper news sites[3]. Navigational interactivity can also used to guide people to certain parts of the content by the newsroom.

Figure 8 – Navigational interactivity in The Guardian

---

[3] Slides from presentations by the Merja Helle on "Interactivity" and "Think out the box" which are found at the Amfi.

Figure 9 – Saving content for off-line reading in The Wall Street Journal.

Figure 10 – Sharing using social media in Helsingin Sanomat

Interactivity has also emerged in the e-book market. Users can lend electronic books to others, people can see what Kindle books others are reading, they can annotate and comment and publish them in the Amazon website for others to see. Kindle books show what passages have been commented on while reading the book and so on. Social book clubs have been established at newspaper web sites of by Google books or Living social. The latter is connected to Facebook, so Facebook friends know what others are reading and what they think of the books (examples are in the Interactivity slide set in Amfi).

2.5 Improving and funding digital journalism

In 2010 the focus in the user experiences of e-reading project has been on e-books and handheld e-reading devices but digital content in the web and mobile phones are still a major focus of newspapers and magazine companies. The search for profitable online business models is still on and online newspaper sites have been working with the assumption that the greater number of individual visitors the more interest there is also from advertisers. But the problem has been the low rates of online ads and small number of users who click on the ads and thus generate ad revenue (Kaye ja Quinn, 2010).

The advertising based model is not the viable way of funding online content "for the Internet generation "the internet is he land of the free", argue Kaye and Quinn (2010). Traditional news providers are competing for attention with outlets offering personality, partisanship and passion, argues Hamilton (Source: Breaux Symposium, 2008).

Hamilton (Source: Breaux Symposium, 2008) proposes that people have four information needs, which are directly connected, to benefits for people:

- producer information relating to how to do their jobs
- consumer information, what to buy
- entertainment information
- voter information, relates to their roles as citizens

Helle and Töyry (2009) add an important usage of media: identity building. However, instead of producing useful information which people might be willing to pay for, media companies have mainly focused on saving money and building revenue instead of focusing on the editorial product (Kay and Quinn 2010, 29). The approach has been reactive defense not pro-active innovation and experimentation.

In the early years of this decade newspapers experimented with charging content but fairly soon returned the back to the free model as customers were no willing to pay (Kay and Quinn, 2010, 37-8). Now the new catch word is micropayments - ways of paying for separate articles and other content in small amounts. Critics complain that people would have to constantly to stop reading and decide whether to buy or not. They cannot see in beforehand what they are paying for, but this has been answered e.g. by Financial Times which shows the some more general articles for free and shows the beginning of a pay wall article. Also a certain number of articles can be paid for in advance.

Kay and Quinn (2010) recommend a distributed content approach taking after Google's approach to gain advertisement revenue from visitor numbers. It is not anymore enough to sit back and wait for the readers to your website and come

to you. With the increasing ease of use and efficiency of search engines and aggregators media sites will not remain destination sites. Content should be sent to where users are. Kaye and Quinn (2010) cite J. Jarvis who has proposed three methods:

1. Widgets that enable people to embed your news (and links and brand) anywhere.
2. A platform strategy enabling people to build on your content, data, and functionality
3. A network strategy that includes blog networks (like Glam. Com which has 115 million unique users monthly worldwide).

This advice goes against the grain of traditional media strategy of guarding the content and emphasizing copyright. It is too early to see if this strategy will work, especially in small non-English countries, which cannot attract tens of millions of users. But clever use of Google-optimization, generating own aggregators and using social media for content distribution are viable options also here.

Another way of generating revenue and readers is the collaboration between mainstream media and citizen reporters (e.g. ohmynews.com, omakaupunki.fi, and local newspaper media cites all over the world). In Next Media Sano-maNews hyperlocal project is one pilot of the concept.

To remain in business "journalism has to innovate and create new means of gathering, processing and distributing information so it provides content and services that readers, listeners and viewers cannot find elsewhere. And they must provide sufficient value so audiences and users are willing to pay a reasonable price", writes Picard (2009) cited in (Kay and Quinn 2010, 106. Referring to mass media journalism Picard (2009) has critiqued harshly journalism and journalists of not providing value for readers: …"journalists simply are not creating much value these days. Until they come to grips with that issue, no amount of blogging, twittering, or micropayments is going to solve their failing business models" (cited ibid. 105).

Niche journalism can provide viable business models and find paying customers. The example of Financial Times is described earlier as an example of a specialty audience with narrow and deep special interests and this model is often tied to financial, lobbying and political interests. Another example is Politico web site in the United States, which started as a free, quality web site of professional political journalism. Now it also puts out a special interest free printed newspaper with a circulation of 32 000 which has doubled Politico's revenues (ibid.). Home delivery (outside Washington) is costs 200 US dollars. It is published daily when congress is in session and weekly when it is not. Politico also sells their articles to media institutions in collaboration with Reuters. This kind of journalism goes deep into the special interest topic and the quality and expertise required from journalists are much higher than in general newspapers and their political journalism.

Kay and Quinn (2010) are very sceptical about large numbers of consumers paying for general news freely available elsewhere. But niche and passion content are a different story. Financial and political information attract paying customers as well passion content for people passionate about some interests like sports or hobbies.

Establishing greater user loyalty and utilizing it for e-commerce can create additional revenue. For example New York Times wine club offers bundles of wine bottles home delivered at regular intervals for two different price ranges. Or Daily Telegraph e-commerce shop has lots of gardening tools help generate income besides advertisements in the paper. The Sunday Times wine club is one of the biggest wine dealers in the UK. This is a road taken by many magazines in their online strategy: having a brand presence in the web and using the customer loyalty for e-commerce and interactive, value added advertising concepts (an example from the 17 magazine is portrayed in the slides "Think Out of the Box).

Titterton (2010) points out the few customers are willing to pay for digital media content online: "With all eyes currently on the Times pay wall, or rather what some commentators are referring to as "News International's anti-social media experiment", we are witnessing a very real struggle as media owners attempt to map out the future of their industry and evaluate how they will build profitable relationships with their customer base" [4].
A recent survey of 3,000 members of the public, carried out by OnePoll on behalf of PR Week, found that 93 per cent of people thought newspapers should use advertising rather than a payments to make money online. Only time will tell if the pay wall works or not, but it would be inaccurate to say it's the only hope for publishers. There are other revenues streams, such as discounted reader offers and brand partnerships, and real potential in these areas, Titterton (2010) points out.

However recent research carried out by incremental revenue specialists Collinson Latitude found that one third of publishers are yet to tap into these revenue opportunities in any way and 40 per cent of publishers said that they have never considered providing customers with membership packages (ibid.).

The existing approach that media brands use for added value memberships is focused around discounts and offers. Times+ is the best current example, as it tries to differentiate its offers by themeing them around the readers' key areas of interest, such as culture, travel and food. "However, Times+ will struggle to provide differentiation and exclusivity to the discount based offering. Publishers can go much further than this to build sustainable relationships by offering mass market products and services of a high perceived value bundled into a membership, including benefits serving customer preferences such as travel or leisure",

---

[4] Source: "Publishers can go much further to building sustainable relationships by adding value" http://www.journalism.co.uk/6/articles/539838.phpPosted: 28/07/10 By: Janet Titterton

Titterton (2010) proposes.

The true opportunity for the publishing industry is to understand readers' life-styles and experiences, in the context of their brand and the customers' perspective of where they see value to develop new commercial membership propositions. So how can publishers do this in a way that will fit with the existing business model and produce sustainable results, asks Titterton (2010).

Hammersley from Wired magazine has suggested that there are only two ways of creating online revenue: aggregate fast and create mass readership or choose high quality content that attract fewer but more wealthy customers who are also valued by advertisers (ibid., 152).

The main lesson of this chapter is that understanding audience behaviour as everyday practice and building innovative, useful and interesting content and service packages to help the everyday life of readers and users are the key to financial revenue and survival of media companies. This kind of thinking needs collaboration and innovation between research, technology experts, the marketing and

3 Business models in the digital landscape

Juho-Petteri Huhtala, Miikka Tölö, Esko Penttinen, Mervi Rajahonka &
Seppo Leminen

3.1 Introduction

In the following three sections, we describe the general means of the terms
business model and business models in both the media business and e-
business. Finally, we develop a framework that describes the digital media ser-
vice business model.

"The literature on business models is ever growing" (Pateli & Giaglis, 2004).
Business models have always existed, but have come to be of increased interest
to practitioners and academics alike in recent years (Sosna, Trevinyo-Rodríguez
& Velamuri, 2010). Since the dotcom explosion and subsequent burst in the
2000s, business models have populated the economics world in an increasingly
expansive manner (Doganova & Eyquem-Renault, 2009).

Business models are about making money and most firms are in business to
make money (Afuah, 2004). A business model is the method of doing business
by which a company can sustain itself – that is, generate revenue (Chen, 2009).
Companies commercialise new ideas and technologies through their business
models (Chesbrough, 2010). Business model design affects firm performance
(Zott & Amit, 2007; Bornemann, 2009). A firm's business model is an important
locus of innovation and a crucial source of value creation for the firm and its
suppliers, partners and customers (Amit & Zott, 2001). The business model has
a link to value capture (Kamuriwo, 2009). Every company has a business model
(Gambardella & McGahan, 2010; Chesbrough, 2006). The business model con-
cept highlights how, within the same industry and enacting the same activity,
there are different ways to make money (Sabatier, Mangematin & Rousselle,
2010). The essence of a business model is in defining the manner in which the
enterprise delivers value to customers, entices customers to pay for value, and
converts those payments to profit (Teece, 2010). The business model concept
generally refers to the articulation between different areas of a firm's activity de-
signed to produce a proposition of value to customers (Demil & Lecocq, 2010).
Some observers suggest that a business model offers a new way of analysing
companies that is superior to traditional concepts such as position within an in-
dustry (McGrath, 2010). By business model, Smith, Binns and Tushman (2010)
mean the design through which an organization converts a given set of strategic
choices – about markets, customers, value propositions – into value, and uses a

particular organizational architecture – of people, competencies, processes, culture and measurement systems – in order to create and capture this value. Key components of the business model include the company's strategy and structure, its network of relationships and operations embodied in the company's business processes and resource base, and the finance and accounting concepts of the company (Rupik, 2009). Business models are depicted as organizational devices that reveal a company's logic for creating and capturing value, and also its approach to constant renewal (Svejenova, Planellas & Vives, 2010).

Companies experience difficulties and encounter barriers in renewing their business models (Svejenova, Planellas & Vives, 2010). Companies sometimes do not understand their current business model well enough to know if it would suit a new opportunity or hinder it (Johnson, Christensen & Kagermann, 2008). There is a great deal of confusion about what business models are and how they can be used (Shafer, Smith & Linder, 2005). There have been several attempts to classify all the business models to understand how companies are making or not making money (Dubosson-Torbay, Osterwalder & Pigneur, 2002).

"A business model is not a same thing as a strategy, even though many people use the terms interchangeably" (Magretta, 2002). A business model is a reflection of the firm's realized strategy (Casadenus-Masanell & Ricart, 2010). Strategic discontinuities and disruptions usually call for changes in business models (Doz & Kosonen, 2010). A business model is a useful framework with which to link technical decisions to economic outcomes (Chesbrough, 2003). There is virtual consensus that, to remain competitive, firms must continuously develop and adapt their business models (Wirtz, Schilke & Ullrich, 2010). The primary objective of understanding the business model of an organization is to comprehend the company's business logic of making money (Tankhiwale, 2009).

Business model design is a key decision for a new firm entrepreneur and a crucial task for managers charged with rethinking an old model to make their firm fit for the future (Zott & Amit, 2010). The literature suggests that business model innovation is facilitated by three major strategic moves: challenging conventional wisdom, setting up appropriate partnerships and undertaking experimentation (Yunus, Moingeon & Lehmann-Ortega, 2010).

Chesbrough (2006) proposes a definition of a business model. According to the definition the six functions of a business model are to:

1. Articulate the value proposition – that is, the value created for users by the offering

2. Identify a market segment – that is, the users to whom the offering and its purpose are useful

3. Define the structure of the value chain required by the firm to create and distribute the offering, and determine the complementary assets needed to support the firm's position in this chain

4. Specify the revenue generation mechanisms for the firm, and estimate the cost structure and profit potential of producing the offering, given the value proposition and value chain structure chosen

5. Describe the position of the firm within the value network, linking suppliers and customers, including identification of potential complementors and competitors

6. Formulating the competitive strategy by which the innovating firm will gain and hold an advantage over rivals

Technological issues constitute an important antecedent in all types of business models (Rajala, 2009). Many innovative ground-breaking business models have emerged, and the most innovative among them have been granted IPR protection (Äijö & Saarinen, 2001).

A firm should ask itself some questions at all times about its business model (Afuah & Tucci, 2001). These questions are presented in table 1.

Table 1 – Elements of a business model
(Adapted from Afuah & Tucci, 2001).

Component of business model	Questions for business models
Customer value	Is the firm offering its customers something distinctive or at a lower cost than its competitors?
Scope	To which customers (demographic and geographic) is the firm offering this value? What is the range of products/services offered that embody this value?
Pricing	How does the firm price the value?
Revenue source	Where do the dollars come from? Who pays for what value and when? What are the margins in each market and what drives them? What drives value in each source?
Connected activities	What set of activities does the firm have to perform to offer this value and when? How connected (in cross section and time) are these activities?
Implementation	What organizational structure, systems, people, and environment does the firm need to carry out these activities? What is the fit between them?
Capabilities	What are the firm's capabilities and capabilities gaps that need to be filled? How does a firm fill these capabilities gaps? Is there something distinctive about these capabilities that allows the firm to offer the value better than other firms and that makes them difficult to imitate? What are the sources of these capabilities?
Sustainability	What it is about the firm that makes it difficult for other firms to imitate it? How does the firm keep making money? How does the firm sustain its competitive advantage?

The figure below presents nine basic components or building blocks of a typical business model. In the following, a brief description of each of these components is presented:

- Core capabilities: What are the company's strengths/core competencies?

- Partner network: What is the partner network (supply chain components) which is helping to deliver the value proposition?

- Value configuration: What activities/resources does the company deploy to configure the value proposition?

- Value proposition: What does the firm sell?

- Cost structure: Where does the company incur cost in running the business?

- Customer relationship: What type of relationship does the company have with its customers?

- Distribution channel: Which distribution channels are deployed by the company to reach out to its customers?

- Target customers: What are the customers (market segments) to which the company is selling its products/services?

- Revenue stream: How does the company make money?

(Tankhiwale, 2009)
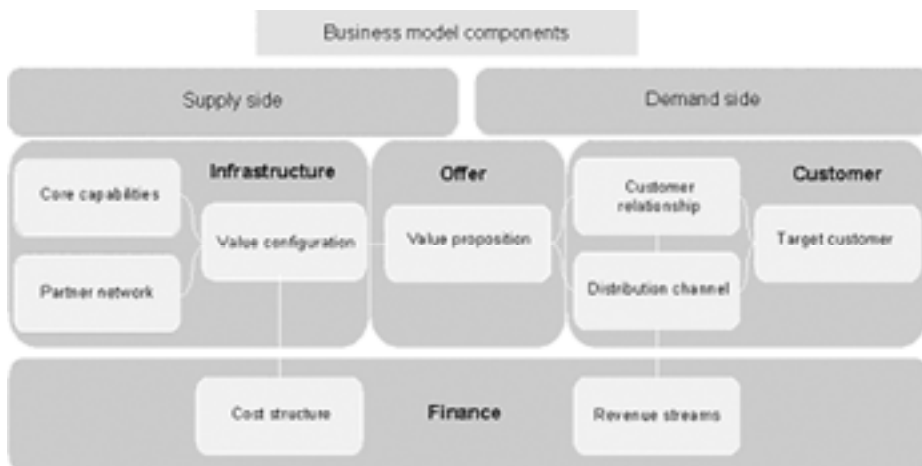
Figure 11 – Nine building blocks of a typical business model
(Source: Tankhiwale, 2009).

A firm can have more than one business model for different markets and customers (Kujala, Artto, Aaltonen & Turkulainen, 2010). Supply chain members use hybrid business models in order to respond to changes in the customers' demands (Martínez-Olvera, 2009). According to strategy theorists, most compa-

nies are unsuccessful in their efforts to compete with two business models at once because the two models can conflict with each other (Markides & Oyon, 2010).

3.2 Media business models

Merja Helle

Researchers of media economics and strategic management have since the 1990's emphasized the crucial role of understanding customers in developing new products (Grönroos, 2000; Normann & Ramirez, 2001; Normann & Ramirez, 1994; Osterwalder, Pigneur, & Tucci, 2005; Korkman 2006). Linder and Cantrell's (2000) business model concept explicitly puts understanding the customer at the center.
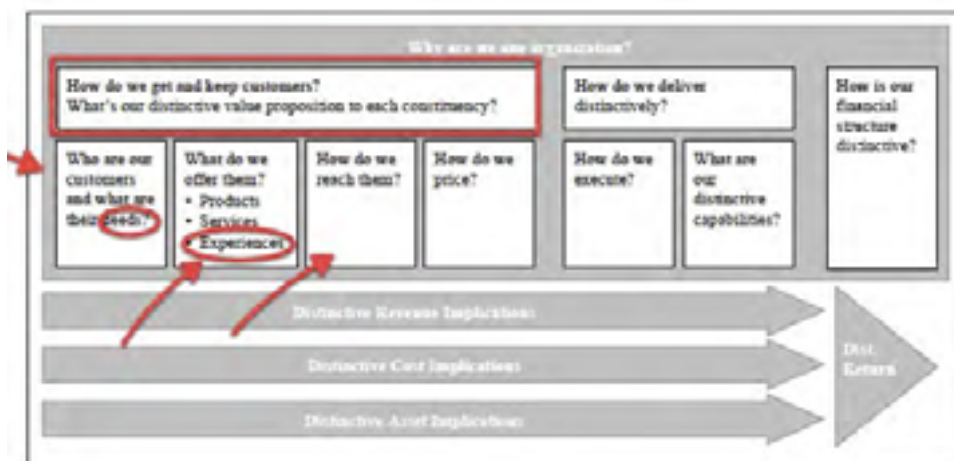
Figure 12 – Main issues in media business model design

The model (See Figure 12) addresses a most crucial issue in media business models: what is the value created for the customer. This same question has risen in other fields also and Korkman (2006) calls value proposition the buzz word in management. He asks skeptically what does it actually mean in practice. Korkman challenges established thinking and suggests that the focus should be on "how value appears for the customer as a part of everyday life, not as value assessments or judgments as the current tradition in service marketing and management literature tell us".

According to Korkman (2006) there are three different value theoretical starting points to discuss customer value:

- Customer value as cognitivistic process (Grönroos, 2000). The customer is seen as involved in abstract thinking rather than practical doing and as independent subject of choice and acts of consumption. Psychological concepts like decision-making, attitudes, needs, wants and perceptions are used to explain how people behave in the market. Value appears in the process of assessment, not in life per se.
- Experimental process (Holbrook 1999). Customer value is defined as an individualistic preferred experience of the customer.
- Resource-based production process (Normann, 2001; Normann ja Ramiretz, 1998; Normann ja Ramirez, 2001). Value is seen as practical and action oriented. Customers are resources in for developing value.

Korkman emphasizes that usage of services is practical and the customer should be seen as a practitioner of his or her everyday life. Services are used in specific contexts of everyday life. The context is materially and socially constructed and "the customer is de-centered in a systemic whole of other people, material and spaces" and possesses various degrees of agency (ibid., 3). Korkman calls his approach practice-theoretical 5 and emphasizes the role of signs and material tools in all practice (see, Engeström, 1987).

He suggests that the customer should be taken into account as a practitioner in a holistic fashion instead of emphasizing the voice of the customer as the only source of insight. The customer, the context and the interactions between the customer and his context should be the unit of analysis. The role of the serviced providers becomes a mere supporter of customer values and not the source of it. This means placing knowledge of the customer practices at the center of the research agenda. There are several examples e.g. in technological (incremental) design which examine the customer in practical terms and takes them as partners into development (contextual design, Bayer ja Holzblatt, 1998).

Most market research starts with the assumption that customers can rationally describe their needs and what is important to them. Methods like interviews, focus groups, questionnaires are used, but Korkman favors ethnographic research.

Service marketing has been more interested in the production of services than in the consumption of them, Korkman claims. The focus is on provider-centered issues and interactions between the provider and customer and their management are of central importance. However Korkman views services as deeply embedded in the customer's life so the consumption practice should be at the center of service marketing and management research.

Korkman's ideas are developing further the proposition of value put forward by Normann and Ramirez (Normann ja Ramirez, 1994, 2001) as a value constella-

---

[5] For Korkman's definition of practice see pages 17- 36. He cites Schatzki in describing practices as contexts in which actions are carried out.

tion, a system of network of different co-providers by different players in the market. This way of thinking resembles the way the concept of an e-reading ecosystem could be used in the Next Media project. In resource-based view the customer is approached as a resource for the provider and its production. The service or product must be useful for the customer so that the customer is willing to pay a company for it.

Value creation and value capture terms have been used in customer value based business models (Korkman, 2004). So value for the customer is use value in customer activity and basically consumption is the basis for value creation not production (Firat and Venkatesh, 1995; Firat, 2000). Korkman criticizes the concept of value chain (Porter, 1985) as suggesting that value is created in an organization's processes and transferred to the customer. This means that general information about customers is not enough but the context and situations of customer practices should be better understood.

The idea that the key for defining customer value and its dynamics (processes) by studying how value is formed in practice has several implications for the structure and focus of business models and for media industry.

3.3 A new techno-economic paradigm is rupturing old media business models

Merja Helle

A lot of hype has been produced about the wonderful possibilities for media production and consumption starting with the telegraph (Im, 1997), the internet (Negroponte, 1996) and in the past year Ipad or other multimodal tablet devices. However the rosy future does not always materialize and the consumers reject the offerings based on new technologies. Curran (2010) has presented four examples of the hype on digital "revolutionary" products that were supposed to transform media use and fill the coffins of media organizations. In the 1980's in England reporters and analysts put their faith in interactive cable-TV to become the entertainment center at home. In the 1990's the talk turned to digital TV as the solution for all communication and entertainment needs at home – this happened also in Finland. In England local community TV in the 1980's was the catch word. The collapse of the it-bubble around 2000 was an example of what happens when customers/media users do not care about the offerings or value proposals.

Nowadays buzz words like social media (Youtube, Facebook, Four Square) web journalism (Politico, Huffington Post, The Daily Beast, Topiikki in Finland), user-generated content, hyperlocal news, ebooks, ubimedia, smart phones, augmented reality, wearable media and so on circulate in board rooms and meetings of innovative companies with investors.

Technological innovations do not entail rapid growth only in new industries but it also rejuvenates many so called old industries, emphasizes Perez (2005). According to her technology does not determine the content or speed of change as technological change takes place through an interactive and social process which includes social, political and managerial change. Each recurring technological revolution has a double nature writes Perez. "The great wealth creating potential provided by each of them stems from the combination of the new technologies, industries and infrastructures with a set of generic technologies and organizational principles capable of modernizing the rest of the economy" (Perez, 2005, 5). Each technological revolution brings forth also a new techno-economic paradigm.

The another lesson media industry needs to take from Perez is that new technologies are not sufficient by themselves. To make them into viable business a comprehensive change is needed also in business models, in their offerings as well as in organizational and individual capabilities and practices in media companies. Innovative solutions can be copied from other organizations or cultures but creating sustainable change takes years or decades and might be hindered by organizational restraints or cultural practices of media users.

It is of extreme importance to take into account that technological changes also affect the production processes, tasks, work practices and cost structures of media companies (Aviles and Leon, 2002; Fenton,2010a; Nerone and Barnhurst, 2003) and on the other hand technologies change the behavior of different user groups and media practices. New media practices are predicted to emerge in the new few years especially in the under 30 age group but not as much as the techno-optimists have predicted (Aviles, Alberto and Carvajal, 2008; Jenkins, 2006, 2008; Livingstone, 2004). For example in England in 2009 15 million adults did not use internet at all and only one quarter of those who used to visited the web looked for news at least once a week (Couldry, Livingstone ja Markham, 2010). In the States over 90 % of the population use internet and in Finland according to Statics Finland 82 % of the Finnish people use internet almost daily and half visit the internet several times a day (http://www.stat.fi/artikkelit/2009/art_2009-09-30_007.html).

3.4 eBusiness models

eBusiness can be defined as marketing, buying, selling, delivering, servicing and paying for products, services and information across (non-proprietary) networks linking an enterprise and its prospects, customers, agents, suppliers, competitors, allies and complementors (Weill & Vitale, 2001).

Technology has facilitated the creation of an entirely new way of doing business – the eBusiness model (Wall, Jagdev & Browne, 2007). It is true that in recent years technology has revolutionised the speed and the geographical scope of businesses; however the key change is that enterprises are beginning to think of

new models for doing business that are not based on traditional rules (Wall, Jagdev & Browne, 2007). In the past few years, a number of new business models have emerged which could not have been imagined prior to the recent digital technology developments (Wall, Jagdev & Browne, 2007). For instance Dell has applied their model using the principles of just-in-time delivery of mass-customised products with zero inventories, but also based on underlying internet technology (Wall, Jagdev & Browne, 2007). General Motors and Ford are pursuing a similar model in the automotive industry (Wall, Jagdev & Browne, 2007). These eBusiness models have only come about because of the advances that have been made in technology and the willingness of value chain players to adopt these technologies (Wall, Jagdev & Browne, 2007). The eBusiness model can be defined as a description of the roles and relationships among a firm's consumers, customers, allies and suppliers that identifies the major flows of product, information and money, and the major benefits to participants (Weill & Vitale, 2001).

Table 2 below classifies different eBusiness models.

Table 2 – Classification of eBusiness models
(adapted from Rappa (2010) and Wall, Jagdev & Browne (2007)

Type of model	Instances
Brokerage model: Brokers bring buyers and sellers together and facilitate transactions.	Marketplace exchange, buy/sell fulfilment, demand collection system, auction broker, bounty broker, distributor, search agent, virtual mall.
Advertising model: The broadcaster is a web site, provides content and services mixed with advertising.	Portal, personalised portal, niche portal, classifieds, registered users, query-based paid placement, contextual advertising, ultramercials.
Infomediary model: Consumption information is analysed and used to target marketing campaigns.	Advertising networks, audience measurement services, incentive marketing, metamediary.
Merchant model: Wholesalers and retailers of goods and services sell on the Internet.	Virtual merchant, catalogue merchant, click and mortar, bit vendor.
Manufacturer (direct) model: Manufacturers reach buyers directly and compress the distribution channel.	Manufacturer model, brand integrated content, postpone/ warehouse manufacture.
Affiliate model: Enterprise seeks to drive a high volume of traffic to one site, the affiliate model.	Affiliate model offers financial incentives (a percentage of revenue) to affiliated partner sites.
Community model: Based on user loyalty. Users have a high investment in both time and emotion.	Open source model, public broadcasting model, knowledge networks.
Subscription model: Daily, monthly or annual fees are charged to subscribe to a service.	Content services, person-to-person networking services, trust services, Internet service providers.
Utility model: A 'pay as you go' approach.	Metered subscriptions.

Many of these models have been implemented successfully in companies worldwide (Wall, Jagdev & Browne, 2007). In some cases these models are the basis for the major source of revenue (for instance Amazon.com) while in other cases a new eBusiness model provides an additional revenue stream for an existing business (Wall, Jagdev & Browne, 2007). For example, in the european airline business, the virtual merchant model has been adopted very successfully by Ryanair as the primary means of selling product (i.e. low price airline tickets) (Wall, Jagdev & Browne, 2007). In the past few years the Irish national carrier,

Aer Lingus, has successfully adopted the virtual merchant model into part of its business in an attempt to reduce costs (Wall, Jagdev & Browne, 2007). However, it has maintained existing sales channels even though both business models are effectively in competition (Wall, Jagdev & Browne, 2007).

The implementation of a new eBusiness model is not always the solution to a problem (Wall, Jagdev & Browne, 2007). In the late 1990s eBusiness models were lauded as providing the opportunity to exploit new markets (Wall, Jagdev & Browne, 2007). While there have been success stories there have been some notable failures – Petshop.com and Boo.com being examples (Wall, Jagdev & Browne, 2007). The implementation of eBusiness models fails for a variety of reasons (Wall, Jagdev & Browne, 2007). One of the main reasons is the lack of a proper business plan by which to implement the model (Wall, Jagdev & Browne, 2007). Other reasons for failure include the inability to fulfil orders on time and the lack of cost controls (Wall, Jagdev & Browne, 2007).

The accelerating growth of eBusiness has raised the interest in transforming traditional business models or developing new ones that better exploit the opportunities brought about by technological innovations (Pateli & Giaglis, 2004). One of the major impacts of eBusiness on traditional business practices has been the multiplication of possible business configurations, which increases the complexity and difficulty of decisions to be made by managers (Pateli & Giaglis, 2004). The increase of choices has rendered the design and implementation of business models a rather complex and difficult task (Pateli & Giaglis, 2004).

eBusiness models can be combined to present a unique value proposition to a target customer segment and the initial business model can be enhanced with the addition of further models over time (Weill & Vitale, 2001). Also, some combinations of eBusiness models may be synergistic or conflictual (Weill & Vitale, 2001).

3.5 Modularity as a concept and its "moral" for media industry

Modularity has been a popular concept in research and managerial literature for decades (Starr, 2010). With modularity it has proved possible to achieve many benefits especially in product design and manufacturing, but also in for example IT architectures. These benefits include customization with only a minimum of extra costs. Schilling (2000) mentions an example of the use of modularity principles for customization in the media industry, namely text books, as many publishers enable teachers put together their own textbooks consisting of book chapters, articles, cases, or even the teacher's own materials.

Customization has become more important as customer needs have become more divergent. In the case of the manufacture of physical products, customization has typically been discussed in terms of "mass customization". The concept of mass customization, in turn, has usually been connected with modularity, as

modularity has been seen as one of the basic means enabling cost-efficient cus-
tomization of products (Starr, 1965 and 2010). Mass customization combines
efficiency, that is, the logics of mass production (economies of scale), with effec-
tiveness, customization and responsiveness to customer needs (economies of
scope) (Lampel and Mintzberg, 1996; Blecker et al., 2006). Customization can
be combinatorial, that is, the result of the combination of a set of processes and
products to create a unique offering for the customer (Voss and Hsuan, 2009).
As service industries are currently looking for tools for efficiency, modularity has
been recognized as a way to meet customers' divergent requirements efficiently
also in services (Bask et al., 2010).

There are also many other positive effects mentioned in the literature, that have
been seen to be achieved with modularity. It has been argued that modulariza-
tion makes complexity manageable, enables parallel work and improvement,
and fosters the adaptability to deal with uncertainty (Bask et al., 2010; Janssen
and Joha, 2008; Baldwin and Clark, 2000). Further benefits mentioned in the li-
terature are larger product variety, improved flexibility, and cost savings etc. (Jo-
se and Tollenaere, 2005; van Liere et al., 2004; Pekkarinen and Ulkuniemi,
2008). Modularity may help in creating more responsive supply chains that can
satisfy individual customer needs without higher production and inventory costs
(Tu et al., 2004).

The challenges of modularity presented in the literature include the impact of
modularity on companies' innovation capabilities. Ernst (2005) refers to the risk
of being caught in a "modularity trap", meaning that a firm focusing too much on
developing products within given interface standards, may erode its capability for
system integration. It is also worth remembering that mass customization is not
the only acceptable mode of operation, as there are always situations where ge-
nuine mass production or genuine customization are more appropriate (Womack
1993).

This chapter first discusses the concepts and definitions related to modularity
and then the applicability of modularity thinking in the media industry. Finally the
discussion on the concept of modularity will be connected to the discussion on
business models.

3.5.1 Concepts and definitions related to modularity

In the literature, the modularity concept is usually analyzed through four pers-
pectives, namely the contexts of: product, production and processes, organiza-
tion and supply chain, and service (Bask et al., 2010; Salvador, 2007).

Product modularity is the classic type of modularity. However, the attempts to
define the concept of product modularity have faced difficulties (Bask et al.,
2010; Campagnolo and Camuffo, 2010; Salvador, 2007). These difficulties stem
from the fact that the concept has been used in many different contexts (Cam-
pagnolo and Camuffo, 2010), as well as different levels of abstraction, or differ-
ent disciplinary areas (Salvador, 2007). Salvador (2007) points out that the basic

question is, whether there is a single concept or if modularity at all, or if the concept encompasses a number of different, but interrelated, concepts.

Key characteristics of modular products mentioned in the literature are that they are built of standardized, substitutable and loosely-coupled components, so that they can easily be decomposed into modules. The modules perform specific, that is, similar functions in many products, and they can be recombined and reconfigured to create variety. The interfaces between modules are highly standardized in modular products. (Bask et al., 2010; Campagnolo and Camuffo, 2010; Jacobs et al., 2007; Salvador, 2007; Mikkola, 2006). The essence of product modularity is the use of standardized and interchangeable components or units that enable the configuration of a wide variety of end products. (Jacobs et al 2007). The interface constitutes the critical element of the unit standardization (Sanchez and Mahoney, 1996). The basic idea in modularization is that a module can be substituted without affecting the thoroughly defined and standardized interfaces (Bask et al., 2010; Campagnolo and Camuffo, 2010; Jacobs et al 2007; Salvador, 2007; Mikkola, 2006).

Production and process modularity refers to breaking down the production processes into sub-processes. Standard sub-processes can be placed before the customization sub-processes to achieve flexibility. Modular processes enable postponed manufacturing, in which the final assembly can be done even in distribution centers or on customer sites. In modular production, workstations and units can be added, removed, or rearranged flexibly to create different process capabilities (Bask et al., 2010; Tu et al., 2004). Key issues defining production and process modularity are parallel to issues that define product modularity: loosely coupled sub-processes, standard interfaces between sub-processes or elements, and the opportunity to mix and match the elements in the production system. However, differences are caused by the fact that manufacturing processes involve humans and independent companies; standardizing the interfaces between the sub-processes may call for different means than in the case of products. Examples of these can include the use of information systems and contracts. (Bask et al., 2010)

It has been argued, that modularity of the organization and supply chain is increasing, and organizational systems are becoming increasingly modular, as firms begin to outsource functions and to use organizational components that lie outside the firm (Schilling and Steensma, 2001). Also related to other perspectives of modularity, the evolution of industries has been discussed. Ulrich and Tung (1991) state that most product architectures evolve from the modular to the integrated. The logic behind this argument is that dealing with uncertainty and complexity is easier in a modular fashion, and that is why in the early stages using modular architecture is preferable. Later, as the focus shifts from variety to performance, an integrated design will be the rational choice (Asan et al., 2004). On the contrary, Schilling (2000) maintains that many systems migrate toward increasing modularity, where mixing and matching of loosely coupled components allow greater flexibility in end configurations. To summarize, there seems to be no single evolution model of modularity, but the "optimal" degree of mod-

ularity related to products, production or organization depends on the business environment and the strategy of a firm.

In general, the growth of service industries has led to a growing interest in analyzing services. Meanwhile many traditional manufacturing industries have been increasing the proportion of services in their offerings which have changed into "product-service packages". This development has stimulated the construction of such concepts as the concept of the Product-Service System (PSS) for the conceptualization of the relationship between products and services in offerings (Baines et al., 2007 and 2009).

Service modularity is a rather new research theme (Bask et al., 2010; Pekkarinen and Ulkuniemi, 2008). Research on service modularity relates to increased automation of service processes and the use of IT in business, and service-oriented architecture (Bask et al., 2010). However, Voss and Hsuan (2009) point out that the concepts of "modularity" or "architecture" have rarely been used in the design of services. They cite that services are heterogeneous, that people have a big role in personalization and customization of services, and that services can be comprehended at the same time both as products or processes as possible reasons for this. The service modularity discussion has been greatly influenced by the earlier discussion on product-related modularity (Bask et al., 2010). Like product modularity, service modularity can also be discussed at different levels, that is, the service product level, service production or process level, and at the organizational and supply chain level (Bask et al., 2010; Pekkarinen and Ulkuniemi, 2008). A service module can be seen as one or more service elements offering one service characteristic. For example warehousing could be regarded as the service module and the space needed for a product in the warehouse as the service element. Service process modules are standardized, indivisible process steps. (Pekkarinen and Ulkuniemi, 2008)

Themes related to the concept of service modularity include packaging of functionalities, standardization of interfaces, and reusability and substitution of modules (Bask et al., 2010). According to Bask et al. (2010) the essential difference between product and service modularity is that service modularity has many of the characteristics of process modularity, and that the interfaces between service modules are more often "soft"/human interfaces than is the case with products.

In the literature, there is quite widespread agreement that modularity is a systems concept describing the relationships between components in the system. Another issue that is widely accepted is that modularity is a matter of degree, that is, modularity of a system may range from non-existent (when the system is highly integral) to highly modular (Ernst 2005, Mikkola and Skjøtt-Larsen 2004, Salvador et al. 2004, Brusoni and Prencipe 2001). A modular system can be defined as a system built of components, where the structure or "architecture" of the system, the functions of components or "modules", and the relations or "interfaces" of the components can be described so that the system is replicable,

the components are replaceable, and the system is manageable (Bask et al., 2010).

3.5.2 Modularity as a concept in the media industry

As mentioned previously, service modularity can be discussed on the three abovementioned levels: product, production process, and organizational. Offerings in the media industry consist mainly of digital services, but also physical products (such as devices) play significant roles. That is why the modularity of the product-service system (PSS) is an appropriate research object, and will be discussed below. The discussion on the modularity of product-service systems combines aspects of both product and service modularity. We combine these separate perspectives in this chapter, and discuss the modularity of offerings (consisting of product-service systems), their production processes, and organizational networks.

As an example from the media industry context, *offerings* can consist of non-modular product-service systems (a book, a magazine issue, a printed newspaper etc.), or they can consist of modules that are combined (or "mixed and matched") into a package that is mass-customized for a particular customer (personalized media content). Another example is that a particular news article, consisting of modules such as a certain heading module, text module and image module in the traditional print version of the newspaper, may have the same types of modules, but they are slightly different (presumably more compact) in the web or eReader versions.

Correspondingly, the *production process* can be split into process modules that can be combined in different ways, for example there can be a shared core process for content production for all distribution channels or devices, but in addition, different channels may demand some process modules that are specific. These may include for example additional process steps for editing the content or for transforming of the files into suitable file formats for different devices.

Finally, if the media offerings and their production processes are built of well-defined modules, the implementation can easily be done by multiple actors in a modular *organizational network*. In addition, it must be remembered that a successful division of work across the partner network – or even inside a company – has always actually required sufficiently accurate definitions of modules and interfaces and about who does what for what cost and price, and how the work is done and aggregated into a streamlined offering to the customer. As the significance of the partner network in value creation increases, management of the complex system with modular architecture as well as the definitions of modules and interfaces becomes more and more important.

Hyötyläinen and Möller (2007) categorize technologies that can be used when systematically industrializing services. Hard technology is used when human activities are replaced with technology-based processes (as in internet banking services); soft technology rationalizes, repackages and modularizes human ac-

tivities; and hybrid technology is a combination of hard and soft technologies. Following the categorization presented by Hyötyläinen and Möller (2007), we may argue that the interfaces in modular service systems tend to resemble process interfaces more and be "softer" than in modular product systems, that is, they more often include interfaces between human activities. These interfaces may be standards, contracts, definitions of division of labor and quality levels etc. (Bask et al., 2010)

In the following table, the characteristics of modularity – related to modules, interfaces and architecture - originally presented by Bask et al. (2010) are modified for the media industry where offerings are typically product-service systems.

Table 3 – Characteristics of modularity in media industry (adapted from Bask et al., 2010)

	Module	**Interface**	**Architecture**
Offering including physical products and services (product-service system)	**Product** component, part, subassembly, function, characteristics; **Service** type, characteristics, function, service sub-process, process step	Interfaces between product and service modules, or between product-service system and the customer -technological and other standards, contracts, definitions of division of labor and quality levels, prices, payments	Product-service blue-print -product-service catalogue, price list
Process / production	sub-process, process step	Interfaces between process modules (product; service; product and service); -technological and other standards, contracts, definitions of division of labor and quality levels	Process map -process description, description of work-flow
Organization/ network/ ecosystem	member of supply chain, organizational unit, strategic business unit	Interfaces between organizations/ organizational units; -technological and other standards, contracts, definitions of division of labor and quality levels, prices, payments, division of costs and revenues	Organization chart, network structure

Case Eidosmedia: *Italian company, Eidosmedia has developed a publishing platform called Méthode, a channel-neutral editorial system based on XML. Méthode is capable of feeding tailored content to a publishing spectrum spanning newspapers and magazines to web, wireless and broadcasting. Thus the same story with different formatting, typography and graphics – or even different headlines and text can be presented in different channels. The channel versions*

in a compound story are derived from a 'master' version, for example the main print version. Then the web version can inherit the summary from the master, while the headline and text are specific to the web channel. In addition, Méthode includes an iPhone 'app' that news providers can customize for their own publications and offer for iPhone users to download and install. In addition, an extension of the Méthode platform has been launched for the planning and production of iPad editions. (www.eidosmedia.com, accessed 2 Dec, 2010)

3.5.4 Modularity and platforms of business models

This study also suggests that with the modularity perspective, it is possible to sketch relatively stable business model platforms, and add flexibility to business models by adding interchangeable business model modules to the platform. For a single media company a modular business model makes it possible to outsource parts of its business model. Thus, for example some parts of customer information management for advertising can be implemented jointly with other companies from the industry in order to create more attractive entities for advertisers.

In recent years, platform thinking has become popular in technology industries where it has been used particularly in new product development, where its benefits have been accelerated development work and at the same time increased flexibility and adaptability to customer needs. A product platform provides stability that enables development of product families to be cost efficient and rapid (Meyer and de Tore, 2000). Platform thinking combined with modularity has enabled the division of labor and concurrent engineering in new product development. This has led to quicker development cycles. Modularization of products – combined with increased use of ICT in business and joint technology platforms – has affected the organizational structures in which the products are developed and manufactured, leading to increased networking. Thus, modularity thinking has allowed increased specialization and outsourcing of work to the business network.

As modularity and platform thinking has proved to be a powerful tool in product development and manufacturing, an important issue is whether modularity and platform thinking could also be applied in a way related to business models. In earlier discussions of business models, the business models have typically been presented as consisting of sub-models, for example an infrastructure model, an offer model, a customer model and a financing model. These sub-models can be called "modules". This kind of modularity in business models has been *vertical*. It may be concluded that, for the time being, modularity related to business models has not been combined with *horizontal* platform thinking. However, if we could merge platform and business model thinking, this could bring a new perspective and dynamics into business model development.

Business model modularity can be defined as combining a more stable business model platform with customer or situation specific and interchangeable business

model modules to achieve the flexibility to serve different customers and offer different services in the most efficient and profitable ways (Bask et al., 2010). The business model platform forms a common horizontal core of a company's different business models. These different business models may be either models for different business areas or the company's optional future business models. The business model platform may be modified with interchangeable modules. Scenario work can be combined with business model development when the company builds optional business models for different future scenarios and identifies and extracts the common core of these models as the business model platform.

Holding a platform view of business models can be especially useful in the era of rapid changes in the business environment or in the period of rapid growth of the company. With it the company can identify on one hand the more stable core of the future business model that constitutes the source of the future competitive advantage, and on the other hand the more flexible parts of the business model. This work can be based on the industry level scenario work when appropriate. An example of a more static use of platform thinking is a situation where a company or a network has different business models, for example for different customer segments. In that case those processes that can be shared for all business models form the business model platform. It can be concluded that business model flexibility can be accomplished with the same elements as flexibility in product development and manufacturing, that is, modularity and platform thinking. For example Amazon has built new modules on its basic business model platform, and this way multiplied its business model starting from books to movies, music and games, computers, electronics, home, garden and pets, grocery, health and beauty etc.

The use of business model platform thinking for sketching optional future business models combined with scenario work is presented in the following figure.
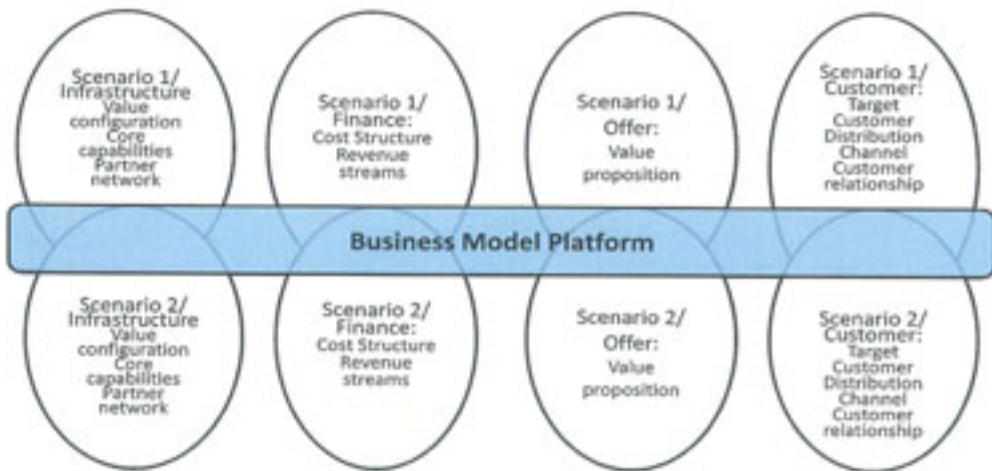
Figure 13 – Business model platform thinking connected with scenario work *(business model framework adapted from Osterwalder, 2004 and Osterwalder and Pigneur, 2010)*

3.5.3 Summary

Flexibility in production and cost-efficient mass-customization of offerings have been noted as benefits of modularity thinking in manufacturing industries. In the media industry context, *offerings* can consist of non-modular products (such as a book or a magazine), or modular products built of modules that are combined (or "mixed and matched") into a package that is actually mass-customized for a particular customer (personalized media content). Correspondingly, the *production process* can be split into process modules that can be combined in different ways, for example, the core process can be shared for content production for all distribution channels or devices, but in addition, different channels may demand some process modules that are specific for the particular channel. These may include for example process steps for editing the content or for transforming the content into suitable file formats for different devices. Finally, if the media offerings and their production processes are built of well-defined modules, the implementation can easily be done by multiple actors in a modular *organizational network*. This study also suggests that it is possible to sketch relatively stable business model platforms, and add flexibility to *business models* with the addition of interchangeable business model modules to the platforms. For a single media company a modular business model makes it possible to outsource parts of its business model. Thus, for example some parts of customer information management for advertising can be implemented jointly with other companies of the industry in order to create more attractive entities for advertisers. Another example of the use of a business model platform is Amazon which has multiplied its business model after its start with books to many other products. In the following business model platform thinking is exploited in the development of a business model framework for the media industry (see chapter 3.6).

3.6 Pricing strategies and alternative payment methods in electronic reading platforms

3.6.1 Two-sided markets

Surprisingly many of the leading global businesses are based on platforms that join two distinct user groups to form a two-sided network (see Figure 14 for examples of such businesses)[6]. Take for example video game devices that link gamers and game developers or credit cards that link consumers and merchants. These platform-mediated, two-sided networks offer many interesting avenues for strategic thinking in terms of pricing issues, network effects, and multi-homing costs for consumers.

The platform provides infrastructure and rules that facilitate the two groups' transactions and can take many guises. In some cases, platforms rely on physical products, as with consumers' credit cards and merchants' authorization terminals. In other cases, they are places providing services, like shopping malls or web sites such as Monster and eBay. Two-sided networks can be found in many industries, sharing the space with traditional product and service offerings.

NETWORKED MARKET	SIDE 1	SIDE 2	PLATFORM PROVIDERS
			Rival Providers of Proprietary Platforms
PC operating systems	Consumers	Application developers*	Windows, Macintosh
Online recruitment	Job seekers*	Employers	Monster, CareerBuilder
Miami Yellow Pages	Consumers*	Advertisers	BellSouth, Verizon
Web search	Searchers*	Advertisers	Google, Yahoo
HMOs	Patients*	Doctors	Kaiser, WellPoint
Video games	Players*	Developers	PlayStation, Xbox
Minneapolis shopping malls	Shoppers*	Retailers	Mall of America, Southdale Center
			Rival Providers of Shared Platforms
Linux application servers	Enterprises	Application developers	IBM, Hewlett-Packard, Dell
Wi-Fi equipment	Laptop users	Access points	Linksys, Cisco, Dell
DVD	Consumers	Studios	Sony, Toshiba, Samsung
Phoenix Realtors Association	Home buyers*	Home sellers	100+ real estate brokerage firms
Gasoline-powered engines	Auto owners	Fueling stations	GM, Toyota, Exxon, Shell
Universal Product Code	Product suppliers	Retailers	NCR, Symbol Technologies

*Denotes network's subsidy side

Figure 14 – Examples of two-sided markets (Eisenmann et al. 2006)

---

[6] This section is based on the concept of platform mediated two sided networks. Reference articles are Rochet, C. & Tirole, J. (2003); Parker, G. & Van Alstyne, M. (2005); Eisenmann, T., Parker, G. & Van Alstyne, M. (2006).

There are two kinds of platforms: one-sided platforms and two-sided platforms. In one-sided platforms, the users alternate in different roles (e.g. e-mailers send and receive, traders buy and sell). In two-sided platforms, the users are permanent members of one distinct side which transacts with the other side (e.g. job seekers and recruiters, card holders and merchants). From the platform's perspective, there are two levels of platform roles: platform owners and platform providers. Platform providers facilitate the platform's users' interactions and are the users' primary point of contact with the platform (e.g. issuing banks are the platform providers to card holders in the VISA platform, the software development kit is the platform provider to game developers in the Microsoft XBOX platform). Platform owners, on the other hand, typically do not deal directly with users; instead, platform owners hold the property rights that determine (1) who may change platform technology and (2) who may participate in the platform as a platform provider or a user. Examples of platform owners are VISA international (for VISA credit cards) and Microsoft (for the Microsoft gaming platform).

Platforms can be shared or proprietary. With shared platforms, different platform providers may serve the user groups. Take for example VISA International; the cardholder and the merchant may have different banks (platform providers), both of whom are members of the association that serves as the VISA International platform. Microsoft XBOX, on the other hand is an example of a proprietary platform. Microsoft provided both the console to the gamer and the software development kit to the developer. In shared platforms, there are strategic compatibility issues to be tackled. Shared platforms use compatible technologies, meaning that any platform user can switch providers and still interact with the same partners as before: one can change the issuing bank but still get the VISA card and conduct transactions with merchants. By contrast, rival platforms employ non-compatible technologies (e.g. Microsoft XBOX).

3.6.2 eReading Platforms

The strategies for two-sided markets can be used to analyze the eReading market. The electronic reading devices (e.g. Kindle, iPad, Nook or other tablets) and websites (iTunes, Nokia Ovi, barnesandnoble.com) are the platform providers to consumers (Side 1). The electronic reading formats (such as ePub) are the platform providers to the content providers such as authors and publishers (Side 2). Using the definitions above, the eReading platform is an example of a two-sided platform where users typically do not alternate roles but belong either to the consumer side or the content provider side (e.g. publishers and authors). In addition to consumers, content providers and the platform providers, it is important to note that advertisers play a role in eReading platforms as well. They are not an integral part of the platform. Nevertheless, they can provide mechanisms for the platform to pursue price discrimination so that price sensitive user groups are given low cost options with advertisements.

Consumers ↔ **Content providers** — User groups

eReading devices & websites — **Available formats (e.g. ePub)** — Platform provider

eReading platform — Platform owner
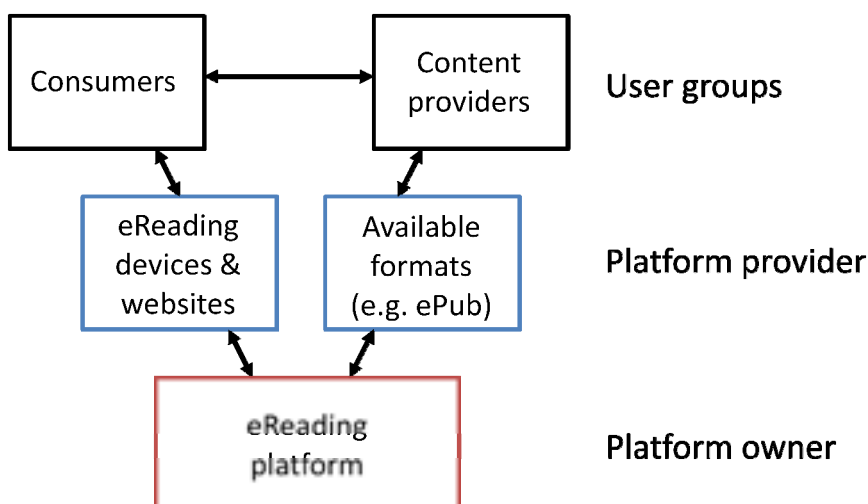
Figure 15 – Electronic reading platform linking consumers and content providers

3.6.3 Network effects and pricing issues in eReading platforms

Typically, the two user groups are attracted to each other, a phenomenon called the cross-side network effect. The value of the platform to a user depends on the number of users on the other side of the platform. In the eReading platform, consumers value a large number of content providers on the other side of the eReading platform. Conversely, content providers value eReading platforms that have a lot of consumers to whom they can sell their content. The nature and magnitude of the cross-side network effects have an impact on the pricing strategy of the platform. Typically, two-sided platforms have a "subsidy side", a group of users who are highly valued by the "money side", the other user group. As the number of subsidy side users is crucial to developing strong network effects, the platform owner sets prices for that side below the level it would charge if it viewed the subsidy side as an independent market. Conversely, the money side pays more than it would if it were viewed as an independent market. It is not obvious which side – if either – the platform should subsidize and which it should charge. Eisenmann et al. (2006) propose the following factors to determine the subsidy and money sides:

Ability to capture cross-side network effects. The giveaway for the subsidy side is wasted if the subsidy side can transact with a rival platform provider's money side. An example of this is Netscape, which subsidized its browser to individuals in the hope of selling Web servers to companies operating websites. However, websites did not have to buy Netscape's server in order to send pages to Netscape's big base of users, they could buy a rival's web server instead.

- In eReading platforms, consumers are free to choose the eReading platform as well as content providers being able to sell their content through several eReading platforms. Therefore, subsidizing either side makes no sense from the point of view of the ability to capture cross-side network effects.

User sensitivity to price. Generally, it makes sense to subsidize the network's more price-sensitive side and charge the side that increases its demand more strongly in response to the other side's growth. A suitable example for this is Adobe that has been able to create a huge user base by subsidizing the reader segment and charging from writers who greatly value the huge audience (consumers are very price sensitive and would not want to pay for Adobe Acrobat software).

- In eReading platforms, similarly to the Adobe example above, consumers are more price sensitive than content providers and the content providers value the user base (consumers) highly on the other side of the platform. Charging the content providers some small entrance fees to the eReading platform and giving consumers subsidies (e.g. in the form of free articles and books) makes sense, and has actually already been implemented (e.g. in the iBooks application for iPad, the consumer gets some basic books such as "Winnie the Pooh" free of charge).

User sensitivity to quality. High sensitivity to quality also marks the side you should subsidize. This pricing prescription can be counterintuitive: rather than charge the side that strongly demands quality, you charge the side that must supply quality. A good example comes from video gaming. To deliver compelling quality, game developers incur enormous fixed costs. To amortize these costs, they must be assured that the gaming platform has many users. Therefore, gamers are subsidized and game developers are charged a royalty fee.

- In eReading platforms, the product offered to the consumers is reading material in digital format. Content providers experience varying levels of fixed costs to produce these products. Some large novels might take long time to produce in order to deliver sufficient quality to the consumer, and, therefore, incurring high costs to the content provider. In these cases, it is absolutely crucial to have a large enough user base of consumers that will buy the product. In some cases, however, the costs for producing the product (e.g. certain news articles) the consumer might not demand a high level of quality from the news article. In addition, the cost of producing that material might be quite low, suggesting that neither side should be subsidized.

Output costs. Pricing decisions are more straightforward when it costs virtually nothing to add each new subsidy side user. However, when the giveaway product has appreciable unit costs as with tangible goods, platform providers must be more careful.

- In eReading platforms, the product exchanged is in digital format so the marginal output cost of one extra unit of the possible giveaway is very close to zero. This makes it easier for the platform providers to give free samples of the products to the consumers.

Same-side network effects. Surprisingly, sometimes it makes sense to exclude some users from the platform. For example, in many markets, sellers would be happy to see fewer direct rivals in the platform, resulting in negative same-side network effects.

- In eReading platforms, there are typically no negative same-side network effects on the consumer side. The only possible negative same-side network effect would come from congestion issues, but in the case of eReading platforms, this hardly presents any problem. On the content provider side, however, there might be publishers or authors that would not like to see certain rivals providing for the platform. This again accentuates the need to subsidize the consumer side of the platform and charge the content provider side.

User's brand value. All users of two-sided platforms are not created equal. The participation of "marquee users" can be especially important for attracting participants to the other side of the platform. Examples of these "marquee users" are big buyers or high-profile suppliers.

- In eReading platforms, there might be some high-profile content providers and authors that are simply required to be associated with the eReading platform in order to make the platform attractive to the consumers. In these cases, it makes sense to subsidize those important creators of best-sellers so that they will be part of the platform as content providers.

To conclude, in order to get a critical mass of consumers to join the platform, it makes sense to subsidize the consumers by giving away free products and offering discounts. The nature of the products (digital goods with marginal costs close to zero) and the dynamics of the platform (critical to get the user base) are the main arguments for this. The table below (Table 4) summarizes the discussion on pricing strategies for the eReading platform.

Table 4 – Money side vs. subsidy side in eReading platforms

Ability to capture cross-side net-work effects	No subsidies
User sensitivity to price	Subsidize the consumers
User sensitivity to quality	Depending on the type of product, subsidize the consumers or no subsidies
Output costs	Subsidize the consumers
Same-side network effects	Subsidize the consumers
User's brand value	Depending on the eReading platform, there might be some "marquee" content providers or authors to be subsidized

3.6.4 Winner-take-all dynamics and multi-homing costs for consumers

The prospect of increasing returns to scale in networked industries can lead to winner-take-all battles. This means that the platform owner must consider whether to share its platform with rivals. Coping with platform competition is a two-step process. First, the platform owner must determine whether the market is destined to be served by a single platform. A market is likely to be served by a single platform if (1) multi-homing costs are high for at least one user side, (2) network effects are positive and strong, and (3) neither side's users have a strong preference for special features. When this is the case, the second step – deciding whether to share the platform with rivals – is a crucial decision for the platform owner.

Multi-homing costs. In eReading platforms, it is relatively inexpensive for the consumer to maintain several eReading accounts on the eReading device. As an example, a consumer might have several eReading platforms (e.g. iBooks and KindleAmazon) installed on an iPad. It is naturally a hassle to coordinate the different accounts but there are, for example, no membership fees or hardware installation costs. This is based on the assumption that eReading devices are not tied to certain eReading platforms, so that, in other words, consumers can access all eReading platforms using a single device.

From the content provider's perspective, joining several eReading platforms might incur high costs due to contracting and formatting issues. If a content provider is affiliated with a number of eReading platforms, it must maintain contractual relationships with the platforms. Similarly, if the content provider must tailor-make the content and format it so that it corresponds to the requirements of the specific eReading platform, then that increases the multi-homing costs to the content provider.

Table 5 – Examples of multi-homing costs

Upfront	Search costs, Account setup (e.g. software configuration, initial hardware & software investment), Learning to use the system
Ongoing	Membership and transaction fees, Maintenance costs, Customer service hassles, Tenure or volume-based benefits
Exit	Account termination hassles and costs (e.g. changing e-mail address, moving funds and purchased content between eReading accounts)

Network effects. As already discussed in the section above, the cross-side network effects (between consumers and content providers) are positive and strong in the case of eReading platforms. According to the theory, markets with important positive network effects tend to converge on one platform. A small-scale platform is unlikely to be of interest to consumers or content providers. Same-side network effects in eReading platforms are, on the other hand, relatively small. There are hardly any secondary markets for the products on the consumer side (as is the case in the video gaming industry where gamers can swap games with each other). Similarly, content providers do not get direct benefits from a large base of other content providers on the platform.

Preference for special features. In addition to multi-homing costs and network effects, the third dimension to decide whether a market will be served by a single platform is the notion of preference for special features. It is predicted that if neither side of the platform has unique needs, then the market can be served by a single platform. In the case of eReading platforms, preferences for special features may emerge from the differing usage patterns of consumers on the eReading platform. Some consumers simply want to read books and news articles for recreational purposes, while some consumers want to make notes and, for example, copy paste text from the reading material. This might result in differing preferences for various technical platforms and eReading formats from the consumer side. Currently, there are many eReading devices on the market (such as iPad, Kindle, Nook), and some of these devices are more suitable for recreational reading and some of them more suitable for professional reading.

To conclude, on the issues of winner-take-all dynamics and eReading platforms converging to one single platform, the results are mixed. On one hand, the network effects (especially cross-side network effects) of eReading platforms are significant and consumers do not have strong preferences for special features, suggesting that the eReading market could be converging towards one dominant platform in the future. On the other hand, the multi-homing costs for the consumers are relatively low (provided that eReading platforms can be installed on various eReading devices), pointing to the possible co-existence of multiple eReading platforms.

3.6.5 Payment methods in electronic reading devices[7]

The notion of Long Tail (the trend running from big hits to large numbers of small volume sales) and the unbundling of information goods (in the music industry from albums to single tracks, in the journal industry from news journals to news articles) give rise to new payment systems with lower transaction costs than the current dominant payment methods. Therefore, recently, we have seen the traditional payment solutions (money, debit card/credit card payments, cheques, bank transfers) accompanied by new innovative micro or nano payment solutions such as PayPal and the Finnish innovation for nano-payments named APE. Typically, these are pre-paid accounts that allow easy payments on the Internet with low transaction costs.

A micro-payment is a financial transaction involving a very small amount of money. Definitions for the amount vary, but it is generally acknowledged that a payment can be categorized as a micro-payment is the amount is less than 10 euros. For example, PayPal defines a micropayment as a transaction of less than 12 USD. Though micro-payments were originally foreseen to involve much smaller sums of money, practical systems to allow transactions of less than one euro (so called nano-payments) have not been developed until very recently. The Finnish APE payment is an example of a nano-payment system which allows for transactions of just a few euro cents with very low transaction costs.

There are three hurdles that micropayment solutions must overcome: transaction costs, usability, and reach.

Transaction costs. Transaction values in micro and nano-payments are very low. In fact, transaction fees may exceed the total value of the payment in some cases. Therefore, conventional online payment methods such as credit cards and bank transfers cannot be used. See table below (Table 6) for examples of transaction costs in different categories of online payments.

Usability. Concerning usability, micro and nano-payments are purchases that are, typically, made frequently. Take for example a consumer reading a news site that charges a few cents per article. It is unlikely that the consumer will make the effort to go through the process of filling in personal details and credit card numbers for every article he wants to read. For the user, a micro-payment needs to be quick and simple to use while remaining relatively secure. One solution is to aggregate the micropayments into one larger payment to reduce the cost of the transaction. One example of this is Spare Change that enables payments on Facebook by leveraging PayPal and settling accounts periodically.

Reach. Consumers will not want to register with a large number of different online payment accounts with the need to login to each account when they need to make a transaction. PayPal already offers a micropayment option that charges a

---

[7] This section is based on Innopay 2010 report. The categorization of payment methods is adopted from Jaring, P., Matinmikko, T. & Abrahamsson paper.

lower fixed fee compared to normal PayPal transactions. However, it has not been widely adopted. The promising Finnish innovation, APE payments, offers nano-payments with very low transaction costs and a highly usable interface. So far, reach has been the hurdle for APE payments to overcome as well.

Table 6 – Payment methods in eReading devices

Method	Transaction fee	Real-Time Processing	Examples
Credit card payments	Cost structure based on a percentage per transaction (e.g. 1-5%, plus $0.25-$0.50 per transaction, possibly a minimum monthly transaction fee)	No	VISA, MC, American Express, Diners Club
Payment via Internet bank	Cost structure is based on a transaction fee and possibly monthly fee (e.g. verkkomaksut.fi: 0.35 euro cent per transaction, monthly fee–59 euros)	Yes	In Finland: Verkkomaksut.fi
Pre-paid account	Cost structure is based on a fee or percentage per transaction (varies)	Yes	Spare Change, APE, Digiraga, Mobiiliraha, PayPal, Moneybookers, click2pay, neteller
Mobile phone bill	The rate structure of telecom operators consists of an entry fee, a subscription fee and possibly specific phone number costs	No	SMS payments

3.7 Development of a business model framework for the media industry

In the next chapter, Osterwalder's (2004) business model concept is used as a framework for describing the results, as it contains the main elements at the architectural level of business, and works as a tool for both defining the current state of publishing industry and its recurring challenges for business in the digital landscape. Osterwalder (2004) defines nine building blocks and four pillars in the business model framework (See Figure 16).
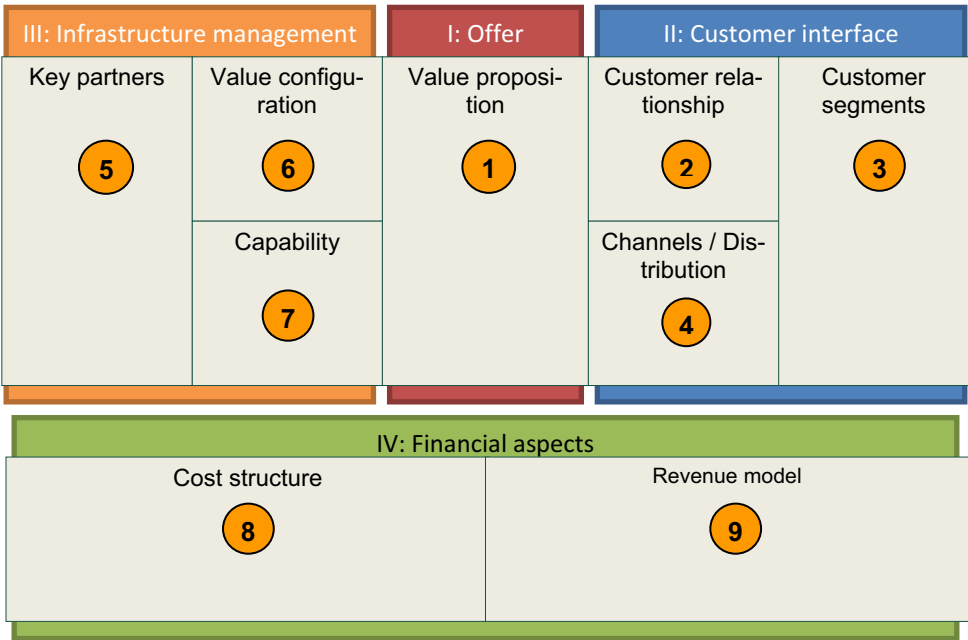
Figure 16 – Framework for current state of media industry analysis in Finland (Adapted from Osterwalder, 2004)

As illustrated in Figure 16, the pillars and blocks in Osterwalder's (2004) business model concept are similar to Tankhiwale's (2009) model. However, the Osterwalder (2004) framework is capable of describing only to the current state of the business model of one certain type of business. In order to capture the real dynamics of the digital content business, this conceptualization needs further development.

Figure 17 illustrates the eReading business model platform framework, which is based on relevant literature that has been represented in the preceding subchapters. A business model in the digital landscape may consist of multiple business model scenarios (Architecture adapted from Osterwalder, 2004), which

may or may not have a modular I) Offer, II) Customer interface, III) Infrastructure management and IV) Financial configurations. For example, The Financial Times runs one business model for its website based eReading business and another for its application based business (e.g. Apple iPad content). Moreover, these different business model scenarios are based on either a one-sided (e.g. Scenario 3) or a two-sided network (E.g. Scenario 1) of users. The two-sided platform ideology is likely to be adopted, when a company decides to run its own platform and offers it for business for other service providers/advertisers (E.g. Financial Times website FT.com). If the same company is selling content through an application for instance and providing value directly and only for the customer, the platform is one-sided.
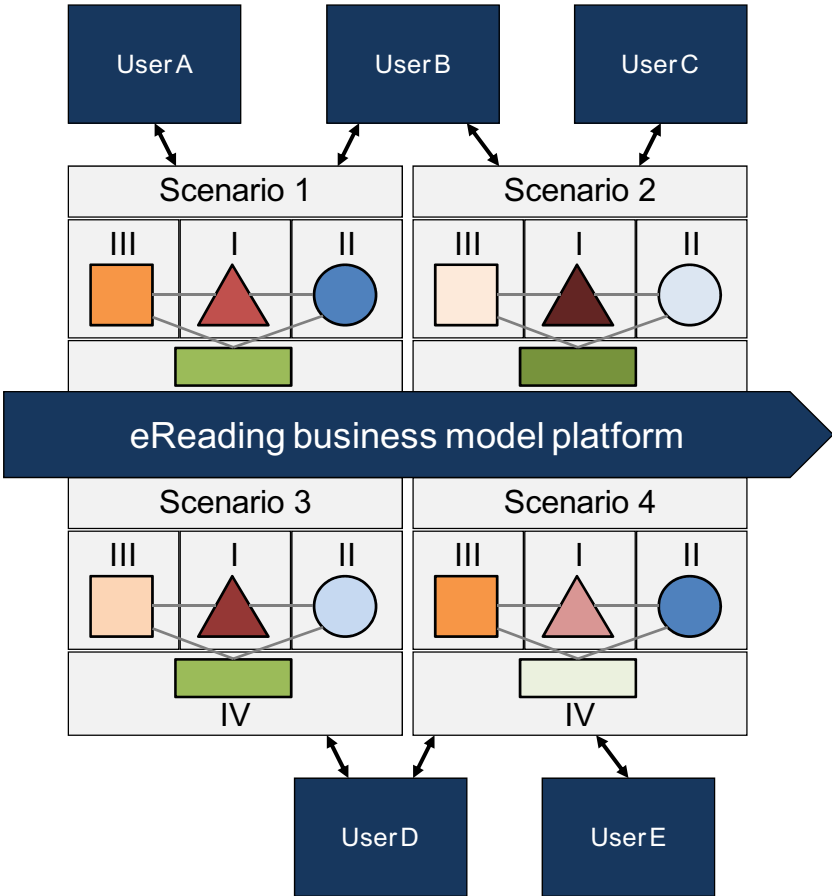
Figure 17 – eReading business model platform framework

4 Current state of media industry analysis in Finland

Seppo Leminen, Juho-Petteri Huhtala & Miikka Tölö

The following sub-chapter is based on a state-of-the-art-analysis report of business models (Leminen et al., 2010) as well as further interviews conducted within the digital media industry.

Overview of publishing industry: newspaper, magazine and book

Tables 7, 8, 9 and 10 below summarize the similarities and differences of the challenges and needs of the newspaper, magazine and book industries in the digital landscape in order to create and sustain growth of the profitable digital media services business.

Table 7 Similarities and differences of challenges and needs between newspaper, magazine and book industries in offer pillar.

Offer	Newspaper	Magazine	Book
Role in value proposition	More content aggregators	Content can be made by consumers, but provided by magazine	New delivery channels, more user generated content
The impact of cannibalization on print	Profiles of users are different, 15-20 per cent reads both media; half of internet side customers reads print version		20 per cent of book sales
Key issue in digital landscape	Consumers to pay for journalistic content	Making activity economically profitable	Understanding customers

4.1 Roles in the value proposition

The value chain and structures of digital media services are changing in the media field; for instance, the number of individual content aggregators continues to

increase, something evident particularly in the United States currently. In addi-tion, the newspaper industry is marked by intermediaries able to create a very strong intermediate authority which all the other players depend on.

In the magazine industry, crowd sourcing is an option in the future, and some magazines are doing it already. The term crowd sourcing has become popular with journalists as shorthand for the trend of leveraging mass collaboration enabled by Web 2.0 technologies to achieve business goals (Wikipedia, 2010a).

The role of companies in the book publishing industry will change in the digital media services business and new companies and delivery channels will come into the business, and it is not clear that only traditional book stores will sell the product in the future. Those who do not want to come along the digital media services business route, or develop their own paths, are unlikely to play a signif-icant future role. Companies were bothered by whether a book agency will re-main a wholesaler or whether it will sell for end users, or whether publishers will become the merchants. Small book stores and private shops were predicted to experience tough times in the future. The role of the consumer is changing and there can be more user generated content and consumers can interact through their feedback directly with the author for instance. Consumers who are profes-sionals will act as digital media services producers in the future too, and the role of social networks is likely to continue its growth.

4.2 The impact of cannibalization on print

In the newspaper industry, profiles of users differ between print and digital media services. Approximately 15—20% of users read both media, and it is estimated that half of the customers of the Internet side of the business also read the print version. In the book publishing industry a company's business goals for eBooks are about 20 per cent of total book sales.

4.3 Key issue in digital landscape

A great challenge in the newspaper industry is how to get consumers to pay for the journalistic content. Another great challenge is how that part of the business related to digital media services production could be made a more significant part of the whole business and more profitable. Generally, creating a new digital media services market should be a challenge taken up by all the companies and the whole newspaper industry. Creating a common distribution platform could be a common goal for the industry. It would also be interesting to see what is ac-complished when companies work separately.

A challenge for the magazine industry is to combine digital media services pro-duction and print production in the same process and to avoid completely differ-ent delivery. Another challenge is to make the activity economically profitable as advertising income will not necessarily cover the costs of producing and deliver-ing the content. Furthermore, a central challenge for the magazine industry is

the pricing of the digital media services offered. A challenge around managing customer relationships in the book industry is that the delivery of digital media services takes place through electronic commerce and the physical contact between buyer and seller is missing. This is especially relevant for retailers.

Table 8 – Similarities and differences of challenges and needs between newspaper, magazine and book industries in a customer interface pillar

Customer interface	Newspaper	Magazine	Book
Target segments of digital media services	Young adults with families, people under fifty	Supervisors	Also to grandmothers, to a wide customer group
Existing customer segments	People with high income; 20 % of internet side customers come from abroad; companies and professionals	Same as with print media	None so far

4.4 Target segments of digital media services

Young adults with families and people under fifty are seen as the first target group in the newspaper industry. Profiles of companies' customers for digital media services are different from their customers for print versions of their products. As many as 25% of readers of internet journals come from abroad and only half of the readers of internet sites read a paper journal. One survey respondent reports that between 15 and 20% of customers read from an internet service and not from a printed journal. Another says that 60 per cent of users of the internet service are not readers of the print journal. A third respondent from the newspaper segment says that "the better income a person has the more likely he or she is to follow our internet media".

According to a representative from the magazine industry, it is important to know who owns eReaders in order to target marketing messages to the right customers. A subscription-based electronic handbook is targeted at supervisors for instance. A representative from book industry emphasizes that it is not enough to excite gadget or technology fans, but for the development of the market it is essential that 'a grandmother from Pihtipudas' also knows how to use electronic content.

4.5 Existing customer segments

In the newspaper industry, people with a high income were seen as a major customer segment in one company. For another, 20% of its internet-side customers come from abroad. However, companies and professionals were still identified as major customer segments for the company. For the magazine industry, exist-

ing customer segments were the same as the customer segments for print media. In the book industry there are no existing customer segments so far.

Table 9 - Similarities and differences of challenges and needs between newspaper, magazine and book industries in an infrastructure management pillar

Infrastructure management	Newspaper	Magazine	Book
Current market	Online service providers bring sales	Insignificant market	Insignificant market
Market growth	Steady growth in internet side; another opinion digital publishing 5 per cent of total sales within 5 years	10 per cent in future	Moderate growth in short term, high growth expectations in long term, possible that proper market does not arise
Development phase	Started about 15 years ago	Started over 10 years ago	
Competition	International players, producers of free news, producers of news in general		International and domestic players from outside traditional industry
IPR issues		Rights relate to using pictures for instance, third-party content	IPR creates a ground for business

4.6 Current market

In the newspaper industry, online service providers bring sales. For instance, for one company the turnover of its online site was around 11.5 million euros last year compared to company turnover of 62.8 million euros. In the magazine industry, the digital media services market is currently insignificant when measured in euros. The digital media services market is still small in the book industry.

4.7 Market growth

The future growth in the business in the newspaper industry is forecast to come from the internet media side and the growth in the online side of the business is expected to be considerable. The internet side of the business will grow steadily and the customer expenditure on news will grow steadily.

Digital media services are viewed as an essential part of business in the future; its significance will be about 10 per cent in future for the magazine industry. Further percentage growth figures are expected to be high, the euro figures at this stage are small. However, earnings from the digital side of the magazine industry are based on advertising revenue and not significantly on selling content, and it is difficult to see advertising growing.

A representative from the book industry thought that it is also possible that a proper market would not emerge for literature in small markets like Finland. If the digital media services business proceeds in the manner predicted, then all the companies involved will have a challenging start.

4.8 Development phase

Companies in the newspaper industry are at very different starting points in digital media services production. Some companies started their first digitalization projects about 15 years ago.

The pioneering magazines have provided digital media services for over 10 years and digital PDF papers have been available since 2006, and also, almost all magazines have internet sites. Despite having over 10 years experience, digital media services make only a small economic contribution to the whole magazine industry, as its revenue comes only from advertisements.

The digital media services business is developing strongly and it is believed that the eBook will be an important part of the business and it has to be exploited. At the moment companies have few or no digital media services in delivery and in sales, and the business related to that is insignificant.

4.9 Competition

Competition in the newspaper industry is between newspapers, free papers, and more widely, free global news production. Also, international companies like Google are coming into the market from a position of power. Nevertheless, it is anticipated that the role of current retail dealers will reduce in importance and the market will see new entrants. Moreover, operators would like to act as content aggregators in the value chain.

The magazine industry sees that competition is widely understood as for the time resources of people.

Competition in the book industry was seen to take place on the level of price, availability and functionality of eBook stores selling digital media services. Furthermore, new companies and delivery channels and domestic and international players make the situation insecure for existing retailers. These companies come from outside of the traditional industry, but will still try to dictate terms and define price levels for the eBook market. At the moment the greatest share of the book market money is held by non-fiction books and school books. On the book side a great danger is that customers will go to Apple or Amazon. Basically, Google and Amazon are likely to decide the game in the end.

4.10 IPR issues

Not all of the content produced in the magazine industry has been delivered to the Internet, as magazines do not have the rights to do so. Rights relate to using pictures, purchased rights and "free editorial content" for instance.

Managing IPR will be a central concern in the book industry of the future. Taking advantage of IPR was seen as facilitating the digital media services business as it is the foundation of the business. IPR is defined in copyright law.

Table 10 – Similarities and differences of challenges and needs between newspaper, magazine and book industries in a financial aspects pillar

Financial aspects	Newspaper	Magazine	Book
Profitability of digital media services	Print subsidizes web	Costs greater than income	Expected to be profitable in three years
Pricing	Prices of digital editions are around 10 per cent lower than prices for print editions	For one company among the highest selling digital magazines is a magazine that has the same price as a similar print magazine	Pricing is in its early phases
Current earning logic in digital media services business	Income structure in print side approximately 50/50 (Ads and subscriptions)	AD fees	Selling single products

4.11 Profitability of digital media services

Only one company from the newspaper industry has built a profitable digital media business from inception. However, a number of companies are now considering how the digital media services production business could be made a

more significant and profitable part of their business. Currently, the situation can be summarized as one where print subsidizes web.

To date the costs of producing digital media services incurred by companies in the magazine industry have been greater than the income received.

The digital media services business in the book industry is expected to become profitable in three years.

4.12 Pricing

In Finland, the price for internet advertising is lower than in other Nordic countries. The price of digital editions of newspapers in Finnish publishing industry is around 10% lower than for print editions. An interviewee from the newspaper industry felt that the getting to people to pay was the relevant question and that the prevalence of free supply in the worldwide web had skewed the potential market. Newspapers do not believe in making internet sites totally chargeable, but some of their in-depth reporting could be made chargeable. Consumers are generally unused to paying for content, although there are some exceptions. A leading principle of the companies is that all content is not free, but still a large portion of it is given away for free. There is a change in value added tax from 8 per cent to 22 (23) per cent.

One of the best selling digital magazines produced by one company is priced at 7 euros. The same as for a similar printed magazine. On the book side of the business, prices are extremely high. Most paperbacks cost between 5 and 10 euros whereas a digital book can cost as much as 30 or 40 euros. Pricing is in its development phase, especially on the book side. Paper, press, warehousing and distribution costs at least partly disappear for digital books, intermediate authority no longer exists and authors can sell even their eBooks directly to the public. Despite the lower costs of production and storage, eBooks are priced at same level as hardbacks in Finland, whereas an eBook purchased abroad will cost significantly less, around the same as for a paperback.

4.13 Current earning logic in the digital media services business

Income on the print side of the newspaper industry is split approximately evenly, with around half the income derived from advertisements and half from subscriptions. In the digital magazine industry, income comes from advertisements. On the print side of the business 80% of income comes from subscriptions and 20% from advertisements. In book industry income for the companies is earned from selling single products. In book industry general literature and teaching material are different segments.

5 Business model cases in the digital landscape

Juho-Petteri Huhtala, Miikka Tölö, Riikka Siuruainen, Mervi Rajahonka & Seppo Leminen

5.1 Digital evolution of the music industry

It is hard to predict, how rapidly and strongly the digitalization of newspapers, magazines and books will affect the traditional publishing business. However, the evolution of digital music and its effects on the industry as a whole over the last 25 years provides us with an example of how digitalization might progress. During that time, the music industry witnessed unprecedented, rapid digitalization from c-cassettes to CDs and then into MP3-format. Below, Figure 18 summarizes the most significant events that took place in the music industry during those years.
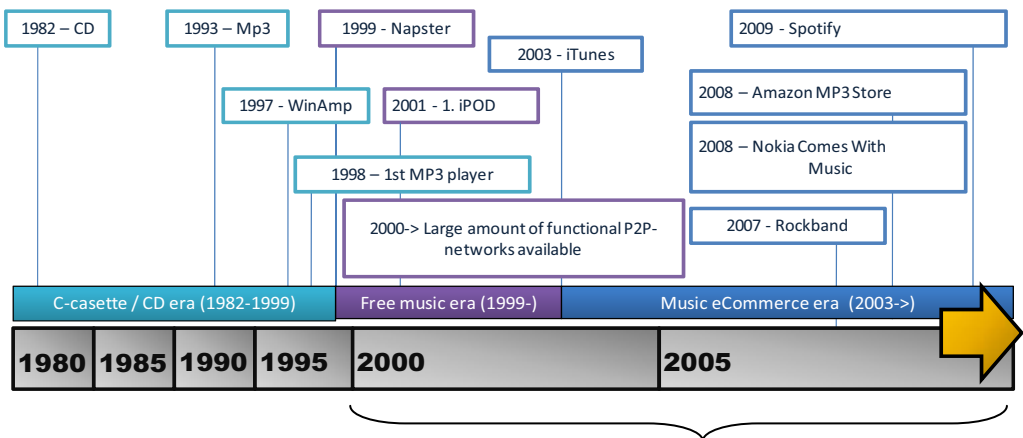
Figure 18 – Digital music industry milestones 1982-2009

C-cassette / CD era (1982-1999)

The digital storage of music is not such a new innovation as the Compact Disc (CD) that can store digital music has been commercially available since Philips first CD released it in 1982. Today, the CD has remained as the standard physical storage medium for audio**.**

Free music era (1999-)

In the late 1990s pirate music users on the Internet started using the MP3 format as format for digital audio. The use of MP3 formatted pirated music boomed in 1999, when Napster, the first of the peer-to-peer (or P2P) systems, was launched. Napster allowed users to connect to a sub-network, which allowed them to share files they each stored on their computers. Napster grew explosively through both word of mouth and publicity in the media. By late 2000, it was estimated that Napster's software was on 30% of all PCs and was continuing to grow. In early 2001, a US court ordered Napster to block the sharing of all copyrighted songs. As a result, the number of people using Napster went from a high of 15 million in February 2001 to 12 million in March and continued to decrease until the point when the service went off-line in December 2001. As Apple released the iPod in 2001, the sales of iPod and similar MP3 players was increasing drastically. However, many record companies still saw MP3 formatted music as a major threat for their business and started to use digital rights management (DRM) techniques to counter the spreading of MP3 formatted music.

Music eCommerce era (2003-)

The music eCommerce era began in 2003 when Apple launched their iTunes music store for mass audiences . The business idea of Apple was groundbreaking: all DRM was cut off soon after the launch and people could buy single songs from the collection of over 200 000 different songs. During the last few years companies such as Amazon and Nokia and have released their own music store services. As the latest innovative digital music marketplace, Spotify was launched in 2009, and has caused online music consumption in Europe to rocket. Figure 19 illustrates how rapidly physical music business is transforming into digital music business: From 2004 to 2009 online music revenues as a proportion of total music revenues has been rising dramatically. In 2009, roughly 43.2% of music sales in the U.S consisted of music that did not exist in physical form and was bought online. By way of comparison, eBook sales in 2009 contributed just 1.5% of total book sales of the same content.
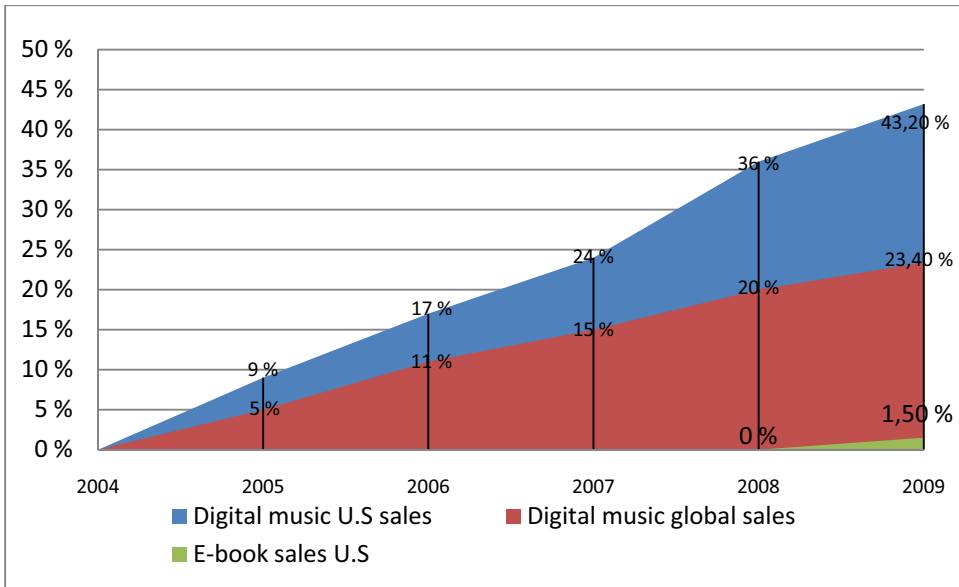
Figure 19 – Actual major label online digital music revenues as percentage of total revenues and e-book sales in U.S. in comparison
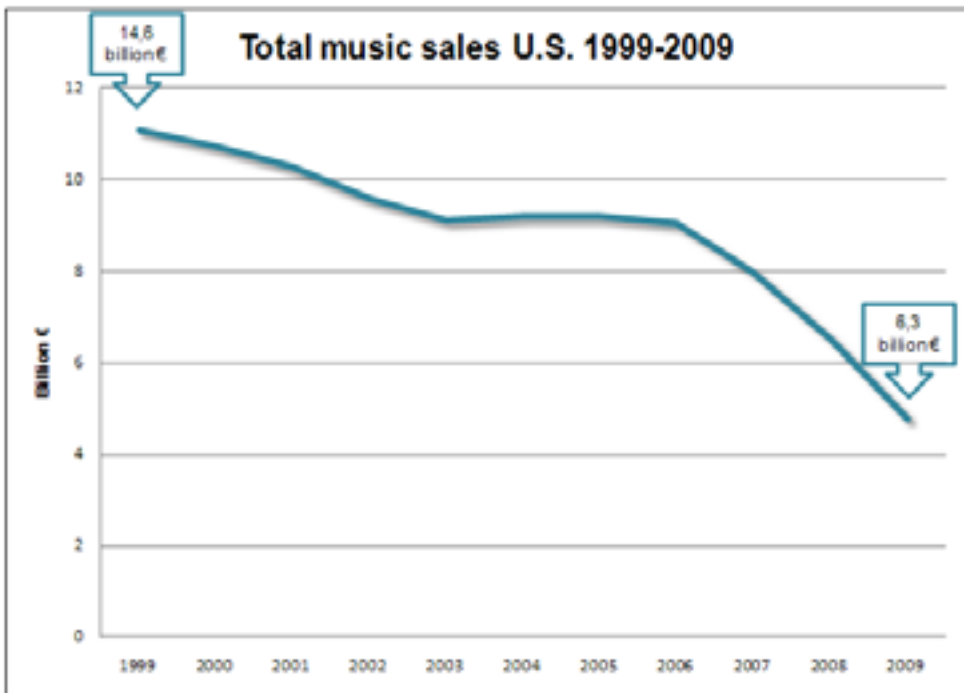
Figure 20 – Total music sales U.S. 1999-2009

Despite the commercialization of digital music, total revenue from music sales and licensing reduced by half during the last decade (See Figure 20). In order to succeed in this new music industry era, companies have been forced to develop new business models for their digital content business. As seen in Figure 21, challenges can be found in every pillar of the traditional business architecture. As an example, one of the main issues is the revenue logic — How can digital music be monetized? Consumer willingness to pay for digital content is one of the main problems. Even after iTunes got people buying music tracks for just 75 eurocents, it wasn't as attractive as getting them free. According to Forrester Research, now just 44% of U.S. Internet users and 64% of Americans who buy digital music think that that music is worth paying for. Since the digital music has been difficult to monetize, the music industry has tried to keep up by licensing music on popular Internet channels such as MySpace and YouTube. In 2009, revenues from this digital licensing reached 64 million euros and is expected to grow substantially.

III: Infrastructure management		I: Offer	II: Customer interface	
Key partners	Value configu-ration	Value proposition	Customer rela-tionship	Customer seg-ments
Who are the most cru-cial partners in digital landscape? How to bat-tle against piracy?		How the customers' Long-Tail of music is satisfied?	Who are in the cus-tomer segment for digi-tal online music?	

IV:Financial aspects

How to get rid of bloated costs struc-ture?

How to gain huge revenues with sin-gle, low priced songs?

Figure 22 – Challenges in four pillars of the traditional business architecture in the music industry

79

5.1.1 The future business models of the music industry

Spotify has developed a business model that seems to resolve some of the challenges of the old music industry business models from the consumer's perspective. Spotify has understood, that in order to succeed in the digital landscape and deal with the Long-Tail, it needs to have lot of content available on same platform. To build a platform wide enough, Spotify needed all major record labels to join them as partners in their business. While record labels provided the content, Spotify focused on their core competence, maintaining and developing an innovative music platform. The resulting business has two customer segments: advertisers and connected music fans. For advertisers their offering is mood-based advertising. For music fans the offering works on three levels; free streaming music, daily passes and premium subscriptions. Free streaming music means that one has to listen to advertisements. Each customer pays only for the value he/she gets. Costs are easy to predict (bandwidth, royalties of each song listened) and Spotify has 3 major revenue streams from ad fees, subscription fees and pay-per-use fees. Spotify has also started to sell single MP3's and provide its services through telecom companies offerings (e.g. Spotify premium is bundled and offered with Sonera Laajakaista internet services).

The key question is whether this kind of business model is really profitable and sustainable longer term. According to TechCrunch Europe (2010), Spotify is due to announce that they hit the 10 million users milestone in September 2010, so the user base for this distribution platform has rapidly grown in the past few years. In July 2010, Spotify founder and CEO Daniel Ek reported that Spotify has attracted 500 000 users paying for a premium account. These 500 000 users pay between 4.99 and 9.99 GBP for a subscription per month which gives Spotify a few hundred thousand pounds a month, depending on which subscription model is the more popular. Since it is not known what revenues the Spotify ads on the free subscription service bring in, it is hard to predict if the Spotify business model is profitable or not. However, again according to TechCrunch Europe, conversion rates seem too low at the moment and they suggest that Spotify would have to double its conversion rate in order to be sustainably profitable.

As for the record labels whose copyrighted material is listened to through Spotify, according to Telegraph UK (2010) currently the largest digital income record labels receive in the UK is from the sale of tracks and albums via iTunes. However, Spotify has already overtaken iTunes, in terms of revenue levels in its native Sweden. Major record labels, such as Sony BMG Music, Universal Music, Warner Music, EMI and Merlin, have invested money in Spotify and gather royalty fees from each song played. Since the Spotify business has not yet been profitable (2008: 4.4 million dollar loss), it is still unclear whether or not these companies have agreed to waive certain royalty fees until the company is in a position to pay out revenues from subscription and advertising.

The music industry has changed rapidly in 25 years and today features from business models like those of Spotify and Apple's iTunes are appearing in other

digital service industries (e.g. Voddler in movie industry). The newspaper, magazine and book publishing industries are in a similar situation as the music industry was back in 2004, when stores had just started to sell digital music and the digital formats for content were not fully standardized. What we can learn from the music industry is that providing the content under same service platform provides customers a Long-Tail of digital media services and ensures customer satisfaction in the digital landscape. Since the access to niche content is important, customers are willing to use the widest service platform available. Even though digitalization has drastically decreased overall revenues, it has also opened new sources of revenue for the music industry (such as ringtones, and music licensing on YouTube, MySpace etc.).

5.2 eReading bookstore business models

Today, various eReading content stores (channels) are available for both publishers and consumers. In this subsection, four eReading store business models are compared. These eReading stores are the Amazon Kindle Store, Barnes & Noble eBooks, Sony Reader Store and Apple iBookstore. Table 11 illustrates the main differences between these four distinct service platforms. All these stores have many similarities in their business model design. They have taken the platform provider role in digital content services, as they provide a viable channel for digital content publishers to reach a large number of customers. For customers they offer a wide selection of e-books for fairly low prices. However, providing a wide selection is not enough: to attract their customers, these four eReading stores are constantly tracking consumer tastes and use this information to create unique customer experiences. This cultivates relationships that lead to customers liking and trusting them and make these business models successful.

Table 11 – eReading store business models (Source: Toptenreviews.com)

	Amazon Kindle Store	Barnes & Noble eBooks	Sony Reader Store	Apple iBook-store
Ease of Use				
Re-download purchases		x	x	x
Search by Subject	x	x	x	x
Search by Price			x	
Search by Release Date	x			x
Search by ISBN, Title, or Author	x			x
Search by Series		x		
Pricing				
Special Pricing	Bestsellers & New Releases 7.55€	Most 7.55€ or less	Discount section and bundle pricing	Mostly 7.55€
Electronic Versus Paper	0.65	0.56	0.7	No paper versions
Royalties for eBook store	30% on certain conditions, 65% normally	35% between $2.98 and $10 - 60% of anything above and below	?	30%
Free Book Downloads	x	x	External links available	x
Supported eBook formats				
Nook Reader		x		
Sony Reader				
Kindle Reader	x			
Other Reader devices				
Smart Phones	x	x		
PDA				
iPad	Own app		Own app	x
EPUB XML format		x	x	x
PC (other)	x	x	x	x
Mac (other)	x	x	x	x
Additional Electronic Offerings				
Newspapers	x	x	x	*
Magazines	x	x		*

* = can be bought individually to Apple's iPad through applications from various companies

As seen in Table 11, pricing for Amazon.com Kindle books starts at 7.55€ ($ 9.99). Additionally, Amazon.com offers e-books at 65% of the price of paper books. Primarily, Amazon.com provides the content in its own Kindle Reader format; however there are options for smart phones and computers as well. The

Amazon.com software is handy: downloading requires only one click. Today, Amazon.com also provides its content through its own iPad application.

The Barnes & Noble eBooks store sells eBooks at approximately 55% of the hardback book price. This is competitive relative to comparable sites. Additionally many free classics are available as well as newer books for 3.80€ ($5.00) or less. The Barnes & Noble eBook store offers a range of features not available at many other stores that sell eBooks. Selected newspapers and magazine subscriptions can be purchased and viewed on a format-compatible device, as well as audio selections. What is unique at this eBook store, however, is the LendMe feature. With LendMe feature, purchases can be shared with other devices for a period of up to two weeks. After the lending period, the original purchaser can read the shared book again if they choose. As with Amazon.com, Barnes & Noble has also released its own application for iPad.

Prices on the Sony Reader Store website are, on average, a bit higher than comparable eBook sites like Amazon.com and Barnes & Noble. eBooks are priced at approximately 70% of their paperback versions. Unlike Amazon.com or Barnes & Noble, however, only digital versions are available for purchase. One disadvantage of the Reader Store had been its lack of digital formats. Previously the site only provided formats that worked with the Sony Reader. Today, however, the site also provides its books in an ePub format that provides access for various devices. Sony Reader Store has also many popular newspapers available by subscriptions through the Reader site. Average prices range from 3.80€ ($5.00) to 19€ ($25.00). Selections include local, national and global news outlets as well as professional and business selections.

Apple's eBook application for the iPad is called iBooks. Apple sells only digital versions of books. However, newspaper and magazine content are available for iPad owners through individual applications developed by other companies. As with Sony and Barnes & Noble, the iBookstore provides books in ePub format.

As seen in Figure 22, access to different titles in different stores varies between these four competitors. The biggest one, Amazon's Kindle store, offers nearly 700.000 digital titles (includes free public domain works). In comparison, Sony eBook store has more than 1.2 million titles. However, if content of Google Books is discounted, the actual collection size is around 60,000 titles. Similarly, Barnes & Noble's eBook store has nearly 26,000 titles available. Apple is not currently giving any numbers of their collection size of eBooks. However, it is predicted that iBookstore is the smallest of them all with a collection of around 22,400 titles.
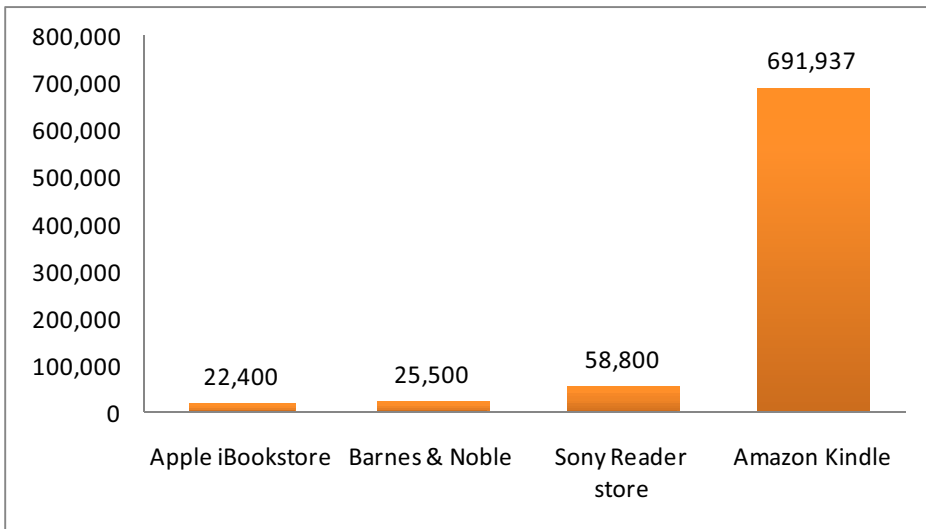
Figure 22 - Access to different titles in different stores *(Source: labnol.org)*

As the company that manages the customer information manages the digital content business, the most interesting part is, whether and how customer information can be accessed when providing digital content through these stores. For example, Apple iBookstore holds all the customer information and will not share it with affiliated businesses, which makes commercialization challenging. Amazon.com seems to act very similarly, as they state at their site that "Information about our customers is an important part of our business, and we are not in the business of selling it to others". In contrast, Barnes & Noble states that they send customer information "to third-party subcontractors and agents that work on our behalf to provide certain services" and "to third-party providers of goods and services that you may purchase from time to time on our site". Moreover, the Sony Reader store provides customer information for "the applicable owners of the content". For the publisher wishing to access customer information at least to some degree, these last two stores seems to be the most attractive.

5.3 Digital publishing around the globe

5.3.1 Single media company: Case Les Echos

5.3.1.1 Background

Les Echos is the first daily French financial newspaper. It was sold in 2007 to the French luxury goods conglomerate LVMH. It was created in 1908 and became a daily newspaper in 1928. Les Echos opened its internet site in 1996, and the last version of the internet site dates from 2006. It is possible to access the site with a mobile phone and view archived content from the newspaper dating back to 1991. There were 2 421 000 unique visitors on the internet site and 3 250 000 pages were viewed in December 2009.

Les Echos launched their eReader version on 12 September, 2007. It was the first eReader version in the world and it is compatible with the principal eReaders in the market. For instance, from 2007 Les Echos offered a newspaper subscription with the iRex iLiad Reader. Also, an eReader has been specifically developed for Les Echos. In 2008, journals including Les Echos, Le Monde, Le Figaro, Libération, L'Équipe, Le Parisien and Télérama joined forces with telecommunications company France Telecom to test the Read&Go eReader device. The survey group consisted of 120 people and took place over some months. In addition, there is a book store wholly dedicated to eReaders. The book store already contains almost one thousand writing pieces. At the time of launch, 200 people had subscribed to the eReader. The goal was to have between 1 500 and 2 000 subscribers by the end of 2007. The cost of technology and its selective usage limited the audience for the eReader version in 2007.

Les Echos and newspapers Le Figaro, Libération, Le Parisien-Aujourd´hui en France and the magazines L'Equipe, L'Express, Le Point and Le Nouvel Observateur partnered each other for the launch early in 2011 of a digital kiosk through a "groupement d'intérêt économique" or GIE. The kiosk will allow users to access either individual articles or to obtain a subscription for extra features, while surfing a variety of titles using a single account. The newly established partnership aims at weakening the impact of companies like Google, Apple and Facebook. The GIE will have a capital of 100 000 EUR shared amongst the publications in the ratios of 15.4% for each newspaper and 7.6% for each magazine.

5.3.1.2 eReading business model of Les Echos

Most critical strategic partnerships

At the end of 2009 an experiment was conducted for between two and three months where telecommunications provider, Orange supplied readers with a device and a mobile 3G connection. The service included the following journals:

Les Echos, LÉquipe, Le Monde, Le Parisien and Télérama. In addition, Les Echos has widened its selection by offering content of the sports journal, L'Equipe. Widening content supply in co-operation with other newspapers and professional publishers is seen as an important goal.

Added value for customers

The reader receives more dynamic and deeper content, videos, timely information and a knowledge store that also includes content from other sources. Content and its quality is the key to obtaining readers. The customers have:

- Their favourite newspaper anytime anywhere
- The reading convenience of paper
- The latest news (Les Echos from 3AM to 9PM)
- Access to thousands of (free) eBooks
- Reduced their carbon footprint

Who is the customer?

The offering is targeted at people in management. Les Echos can make money by offering existing content to new audiences.

Challenges

The figure below presents the most central challenges to the Les Echos business model.
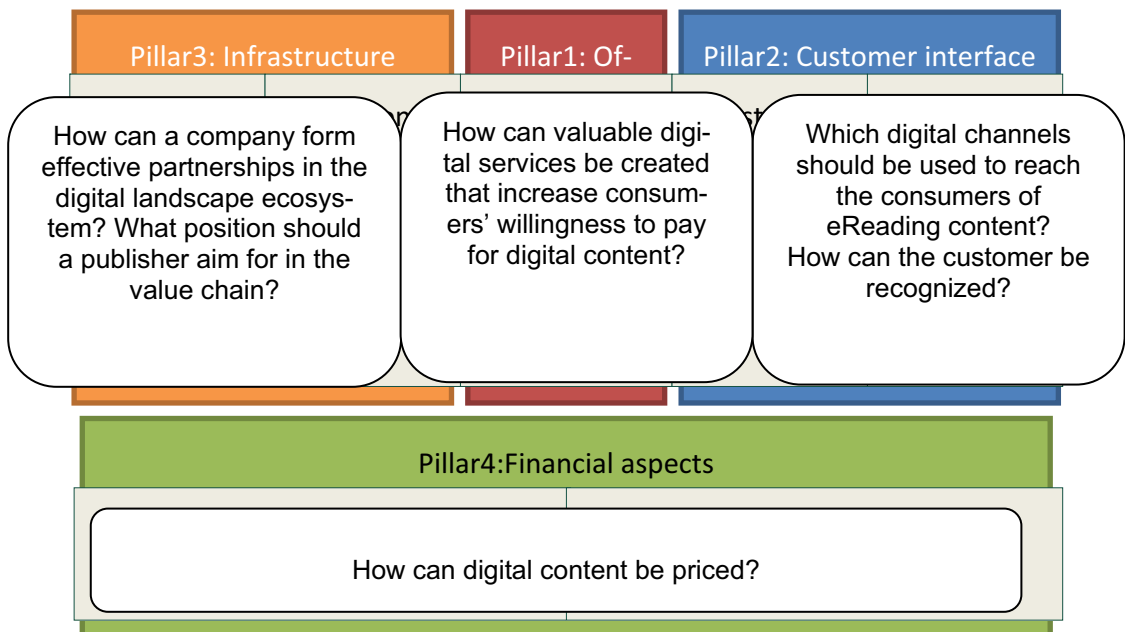
Figure 23 – Challenges to the Les Echos business model.

The various challenges illustrated by the figure above are discussed below:

- How can valuable digital services be created and the willingness of con-sumers to pay for digital content be increased?

To enhance customer value and to sell more to more people in the long term, Les Echos has created different offerings for customers. The figure below presents these offerings.

To sell more to more people in the long term

Figure 24 – Enhance customer value

The figure above illustrates that Les Echos first has a trial offer for customers. Then it has an on line and mobile standard offer and also a premium multi-device offer. Finally, Les Echos has a VIP offering that includes services. Customer value increases when moving upwards in the pyramid, so that with the VIP offer for instance customer value is higher than with the trial offer.

- How can effective partnerships be formed in the digital landscape eco-system? What position should a publisher aim for in the value chain?

As a service-provider, Les Echos covers the entire content value chain. However, in the launch phase there were sponsors that were involved in implementing the service.

- Which digital channels should be used to reach the target audience? How may the customer be recognized?

The most important thing is to provide service through many channels. The channels include

- E-bookshops

- E-platforms

- Mass market e-retailing

- Specialized e-retailers

- Cultural goods resellers

Recognizing the customer is a big challenge for Les Echos. It is initiating an e-crm program for all products within the group. It can do this because it has a direct relationship with the customer, whatever the product. They strongly believe customer information can be monetized in a cleverer and more efficient way.

- How can digital content be priced?

Les Echos makes its offering attractive to customers through subsidies. For example, it has bundled TV channels and iPad versions of traditional newspaper in the newspaper subscription. Prices are expensive, at the time of the study they were 44 euros per month for a one year minimum.

Two-sided networks

Les Echos can act both as a platform provider and as a content provider. The position of Les Echos offers many interesting avenues for strategic thinking in terms of pricing issues and network effects. Figure 19 below demonstrates the position of Les Echos in the two-sided network.
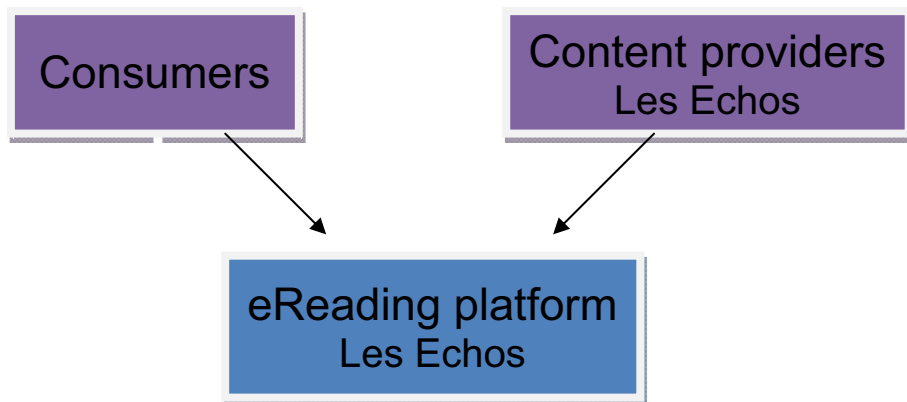
Figure 25 - Position of Les Echos in the two-sided network.

5.3.1.3 Summary of the case

Les Echos was created in 1908 and became a daily newspaper in 1928. The company presented its eReader version on 12 September, 2007. Its service includes dynamic and deeper content, videos, timely information and a knowledge store that includes content from other publications. The offering is targeted at people in management positions. The main partners of Les Echos have been France Telecom and Orange. They have a subscription model and the price of Les Echos iPad is 127 per cent of the price of Les Echos journal.

5.3.2 Single media company: Case New York Times

5.3.2.1 Background

The New York Times is an American daily newspaper founded and continuously published in New York City since 1851. It is both the largest local metropolitan newspaper in the United States and third largest newspaper in the world. The Times is owned by The New York Times Company, which also publishes 18 other regional newspapers.

The Times has had a strong presence on the Web since 1996, and has been ranked one of the top Web sites. Accessing some articles requires registration, though this can be bypassed in some cases through Times RSS feeds. The domain nytimes.com attracted at least 146 million visitors annually by 2008 according to a Complete.com study. As of May 2009, nytimes.com produced 22 of the 50 most popular newspaper blogs.

In September 2005 the New York Times introduced a subscription-based service for daily columns in a program, TimesSelect. The service encompassed many previously free columns. It was charged at 5.80 € per month and 36.70 € per year. However, it was free for print copy subscribers and university students and

faculty members. In September 2007, The Times announced that it would stop charging for access to parts of its Web site reflecting a growing view in the industry that subscription fees cannot outweigh the potential advertising revenue from increased traffic on a free site.

New York Times will start charging its readers on the Internet from 2011. The system allows a reader to read a certain number of articles for free. Additional content costs for the reader.

Table 12 below presents the New York Times average net paid circulation (Sources: March 2009 ABC Publisher's Statement).

Table 12 – New York Times average net paid circulation.

	Monday - Friday		Sunday	
	#	%	#	%
Total	**1,039,031**		**1,451,233**	
Home Delivery/Mail	647,695	65%	1,062,704	74%
Single Copy	212,704	21%	329,500	23%
Total Individually Paid	860,399	86%	1,392,204	97%
Other/Bulk	134,748	14%	43,485	3%
Total Print	995,147	100%	1,435,689	100%
Total ePaper	43,884		15,544	

Table 12 reveals an average net paid circulation for the ePaper between Monday and Friday was 43 884 when the total net paid circulation between Monday and Friday was 1 039 031. Thus the average net paid circulation for the ePaper was 4.2 per cent of total net paid circulation between Monday and Friday. The ePaper is a digital reproduction of the newspaper page by page, to be read on a computer screen.

5.3.2.2 eReading business model of New York Times

Most critical strategic partnerships

For example, The Times has a service that has analytics of advertisements with Google Analytics. The Times also collaborates with Microsoft and Adobe.

Added value to customers

In 2008, The Times created an application for the iPhone and iPod touch which allowed users to download articles to their mobile device enabling them to read the paper even when they were unable to receive a signal. Content stays in the device of a consumer for 7 days. In the electronic version, the New York Times has a pleasant layout very close to that of the print version. The layout scales on the computer screen according to the window of the browser. There is an option to have the layout fold.

TimesSelect opens almost the entire news database to all readers through their web site: On the site, The NY Times news archive from 1987 to the present are available free of charge as well as that from 1851 to 1922.

Who is the customer?

The offering is wide and targeted to mainstream audiences. However, the NY Times has less readers outside of New York City than do the two largest national newspapers, namely USA Today and The Wall Street Journal, and is more targeted to national markets in the U.S. The Times Web site ranks 59th in the world in terms of number of unique visitors, with over 20 million unique visitors in March 2009 making it the most visited newspaper site with more than twice the number of unique visitors as the next most popular.

Challenges

The figure below presents the most central challenges to the New York Times business model.

Pillar3: Infrastructure

How can effective partnerships in the digital landscape eco-system be formed? What position should a publisher aim for in the value chain?

Pillar1: Of-

How can valuable digi-tal services be created that increase consum-ers' willingness to pay for digital content?

Pillar2: Customer interfa-

Pillar4:Financial aspects

How can digital content be priced?
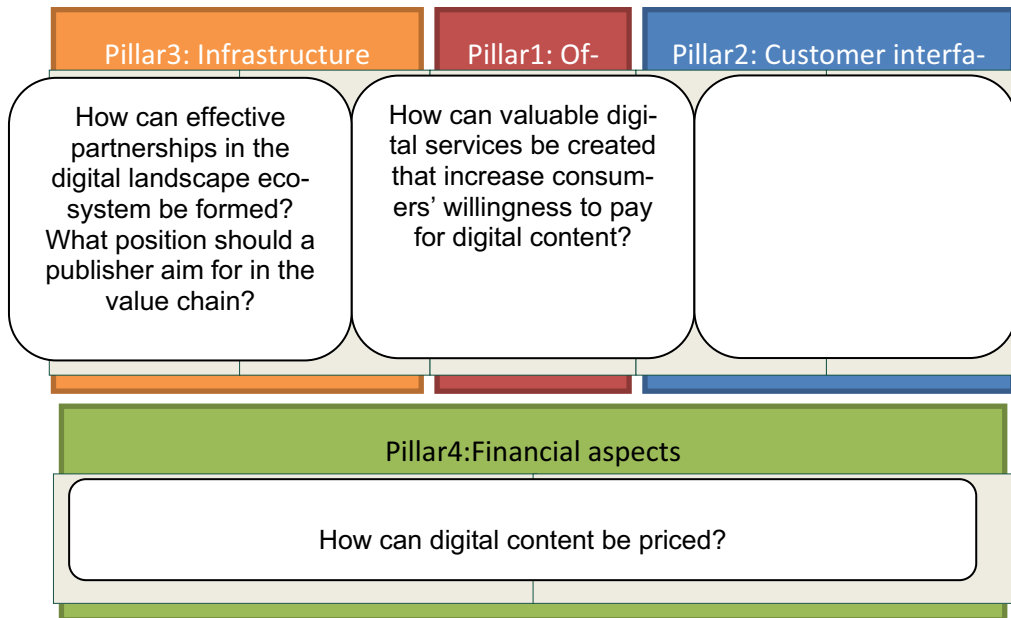
Figure 26 – Challenges for the New York Times business model.

Below the different challenges to the New York Times business model are dis-cussed.

- How can valuable digital services be created and consumers' willing-ness to pay for digital content be increased?

The New York Times is the first newspaper to offer a video game as part of its editorial content. Also, reCAPTCHA is currently helping to digitize old editions of The New York Times.

- How can effective partnerships in the digital landscape ecosystem be formed? What position should a publisher aim for in the value chain?

The Times Reader is a digital version of The Times. It was created via collabora-tion between the newspaper and Microsoft. The Times Reader takes the prin-ciples of print journalism and applies them to the technique of online reporting. It uses a series of technologies developed by Microsoft and their Windows Pres-entation Foundation team. It was announced in Seattle in April 2006.

- How can the digital content be priced?

Subscriptions to the New York Times are relatively cheap and they do not in-clude any subsidies. For instance, the price of The New York Times Kindle edi-tion in the United States is 90 per cent of the price of The New York Times print edition including The New York Times ePaper version.

5.3.2.3 Summary of the case

The New York Times is an American daily newspaper founded and continuously published in New York City since 1851. The Times has had a strong presence on the Web since 1996, and has been ranked one of the top websites. The New York Times will start charging its internet readers from 2011. In the electronic version, the New York Times has a pleasant layout very close to that of the print version. Also, The New York Times is the first newspaper to offer a video game as part of its editorial content. Partners of the New York Times include Microsoft, Adobe and Google.

5.3.3 Single media company: Case Bonnier

5.3.3.1 Background

Bonnier is a privately-held Swedish media group of 150 companies operating in 21 countries. The company was started in 1804 in Copenhagen when Bonnier published its first book. The Group's subsidiary in Finland is Tammi. Bonnier operates in the book and magazine industries.At the moment, there is an ongoing project across all Bonnier titles in the U.S. and Europe to rethink the way magazines can be read on a new generation of full-color, touchscreen tablet devices. 10 editions of Skiing Interactive are lined up, the first due to debut in late fall 2010.

Since 2010, all fiction and textbook titles have been published in digital format. They have also developed digital versions of several hundred titles in their existing catalogue.

Bonnier has planned to make its book selection available in eBook format in 2010.

5.3.3.2 eReading business model of Bonnier

Added value to B2B and B2C-side customers: Mag+ service platform and digital magazines

According to the design vision of Bonnier, reading from a tablet device should feel like touching the actual magazine, using natural body movement – not looking through the screen and layers of buttons. Bonnier published Popular Science+ that was the first digital magazine to emerge from Bonnier with their own Mag+ platform. It was available from April 3rd 2010 on the iPad. Inside Popular Science+ is every story that is in the print magazine, completely reengineered and redesigned for the iPad.

Below we present the features of Mag+ :

> o   Easy swiping motions make for effortless, intuitive navigation

- Unique "Browse" mode makes the text disappear so one can focus exclusively on the magazine's bold photography and illustrations

- Two ways to jump quickly between sections: using a pop-up contents panel or simply swiping forward with two fingers

- Bookmark pages so one can get back to them quickly

- Pages readjust when the device is turned, so one can hold it horizontally or vertically

- Uncompromised offline reading: Download once, and the whole issue is readable whether one is connected or not

- In-app store for buying future issues

Bonnier's Skiing has developed Skiing Interactive, a digital edition with unique content and advertising that was developed specifically to be accessed on a computer. Each issue will include features like a navigation scroll bar at the bottom, high definition cover videos, interactive maps and ads that allow users to click through for additional product information. Also, each issue of Skiing Interactive will feature a "Best of the Web" section to include user-generated videos, stories and photos.

Who is the customer?

Bonnier's offering is targeted at a mass global market. The Mag+ concept has also been offered to other parties.

Mag+ concept

Bonnier's business model in B2B-side is based on Mag+ and News+ concepts, and the publisher licenses the concepts. The figure below demonstrates the Mag+ concept.
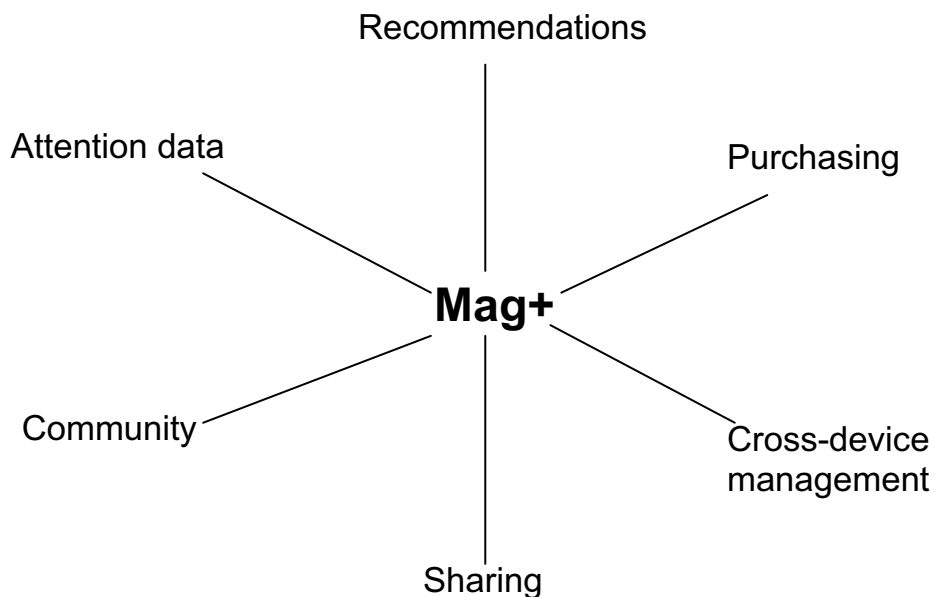
Figure 27 – Mag+ concept

Two-sided networks

Bonnier can act both as a platform and as a content provider . The position of Bonnier offers many interesting avenues for strategic thinking in terms of pricing issues and network effects. The figure below demonstrates the position of Bonnier in the two-sided network.
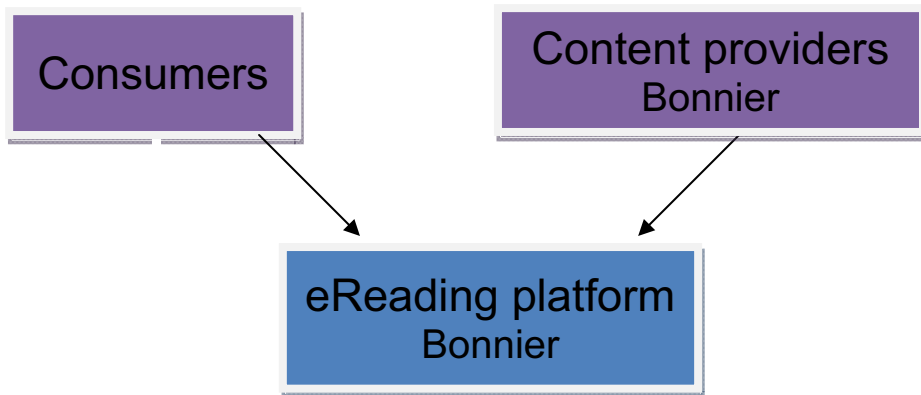
Figure 28 – Position of Bonnier in the two-sided network.

5.3.3.3 Summary of the case

The company was started in 1804 in Copenhagen when Bonnier published its first book. Starting from 2010, all fiction and textbook titles will be published in digital format. They have also developed digital versions of several hundred titles in their existing catalogue. According to the design vision of Bonnier, reading from a tablet device should feel like touching the actual magazine, using natural body movements. Mag+ has released Popular Science+ as the first digital magazine to emerge from Bonnier, and it was available April 3rd 2010 on the iPad. Bonnier targets a mass global market. The price of Popular Science+ is 511 per cent of the price of the equivalent print version in the United States. An average magazine issue for iPad in the United States is currently selling 10 000 copies at the moment. iPad version single copy sales outperform single copy print version sales in the United States. Also, people who have downloaded PopularScience+ in the United States are not readers of the print version. Bonnier's business model is based on its Mag+ and News+ concepts, that are in turn licensed.

5.3.4 Single media company: Case Financial Times

5.3.4.1 Background

The Financial Times newspaper was established in 1888 and today is part of the Pearson group. Today, the FT newspaper generates about 15 % of Pearson's overall revenues. Moreover, FT publishing, which is part of the FT group, provides up 7% of Pearson's overall revenues.

FT.com is known for its metering business model: FT.com allows its readers to have some free page views before it requires a subscription to gain further access. In today's news industry, many other companies have later on developed similar business models. For example The New York Times announced in

January 2010 that they will launch a metered, digital subscription approach beginning in early 2011.

5.3.4.2 eReading business model of Financial Times

As known, print advertising has long been the premier driver of revenues for newspaper companies. However, The Financial Times has earlier stated that 2010 would be the first year that revenues from content would surpass those from print advertising. Additionally, The Financial Times has projected that increasing content-derived revenues should overtake all advertising revenues by 2012. For FT.com, content revenues come from three different sources:

- Newspaper print subscriptions (Currently about 400,000 worldwide newspaper print subscriptions)

- Digital subscriptions (Currently roughly 120,000 paying digital subscribers)

- Company licenses

In digital landscape, FT.com are offering content through an iPhone app, which have been downloaded over 150.000 times. Even though the amount of digital subscriptions is increasing, most of the content revenues still come from print subscriptions.

Like many other news companies, the Financial Times has licensed its content through aggregators, who in turn, re-licensed Financial Times content to end-users (mainly companies and other institutions). In 2008 Financial Times started serving these companies by themselves: Today FT.com have over 750 customer companies, who receive directly content from Financial Times or through their delivery platforms. Advertising revenues in digital landscape are gathered from multiple sources, such as search-based advertising partnered with Google.

By providing the news platform, Financial Times is able to gather detailed information about its content use, which is crucial for business development. It helps the Financial Times to generate accurate user segments and target both content and ads for these segments.
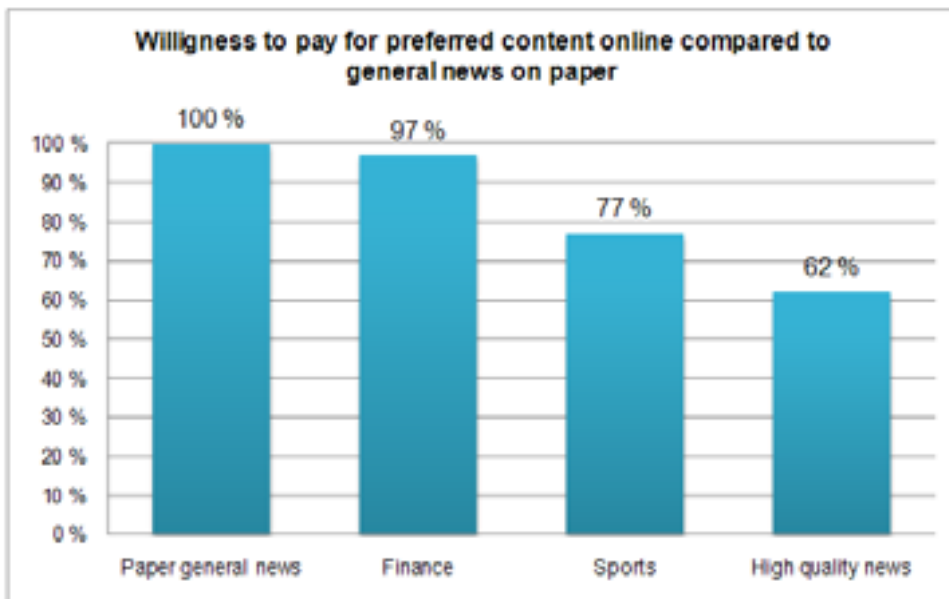
Figure 29 - Willingness to pay for preferred content online compared to general news on paper(Source: PwC 2010)

FT.com has gained large revenues from digitalized content and been very successful. Thus, the Financial Times should be viewed as a special case for two reasons. First, as seen in Figure 21, customers are more willing to pay for digitalized finance news content than any other subject. Secondly, in many cases companies buy the digital content from the Financial Times, not individuals.

However, the innovations of the Financial Times offer good insights for Finnish news publishers, and digital media services businesses in general. First, it seems that the analytics is the key to innovation in the digital landscape: Financial Times is strategically gathering data from the users of its digital services and uses it as a driver of business model development. Secondly, publishing industry must re-think their ad policies: Digital landscape offers plenty of choices to advertise and traditional way may not be the most effective one . Finally, the knowledge of users in digital landscape is very crucial: In order to act correctly, publishers needs to gain knowledge of both its end-users and advertisers.

5.3.4.3 Summary of the case

The Financial Times newspaper was established in 1888, and is today is part of the Pearson Group. FT publishing has been charging for online content since 2002 through website FT.com. FT.com is best known for its metering business model, which allows readers some free page views before requiring a subscription to gain further access. Partners of the Financial Times include Google among others. The Financial Times had earlier stated that 2010 would be the first year that revenues from content would surpass those from print advertising. Additionally, The Financial Times has projected that increasing content-derived revenues should overtake all advertising revenues by 2012. Today most of the content revenues are derived from print subscriptions, and if publishing world is turning digital-first rapidly, it will face the same though leap that all publishers face.

5.4 Digital collaborative platforms in media industry

5.4.1 Market-based collaborative platform: Case Next Issue Media

Data of this Next Issue Media -case has been gathered from Next Issue Media website, presentations slides of the NIM (Squares, 2010), Oliver Wyman study for NIM (2010) and various open sources on the internet*.*

5.4.1.1 Background

Next Issue Media (NIM) is an independent media coalition and joint venture of five Global Media /Publishing Companies; **Condé Nast**, **Hearst**, **Meredith**, **News Corporation** and **Time Inc.** Next Issue Media was formed to explore new opportunities for publishers, advertisers and consumers in the exciting, emerging environment of digital publishing and e-reading devices. NIM's five founders and equal partners represent around 80 percent of subscription volume in the U.S. According *Mediamark Research & Intelligence study:* The joint venture partners represent an unduplicated audience of 144.6 million.

The mission of NIM is to provide not only publishers, but also advertisers, consumers and technical partners alike, with an easy-use and economical entry into the e-reading channel. For publishers and advertisers, the venture will offer an attractive, cost-efficient, consumer-focused environment. Digital editorial applications will afford publishers a new and innovative way to showcase their distinctive editorial content. For the hardware, software and retail industries, he NIM will provide dynamic new business opportunities by organizing a library of quality content with a common format and technical specifications.
The main goal of NIM is to develop open standards for a new digital storefront and related technology to allow consumers to easily download their favorite me-

dia content on a variety of digital devices. This will include smart phones, e-readers, tablets, net books, desktops and laptops.

> ➢ "To create a universal digital platform for the distribution, sale and consumption of paid digital content."

> ➢ This main goal can be divided in four parts, to create:

> 1. A highly featured common reading application capable of rendering the distinctive look and feel of each publication
> 2. A robust publishing platform optimized for multiple devices, operating systems and screen sizes
> 3. A consumer storefront offering an extensive selection of reading options
> 4. A rich array of innovative advertising opportunities.

(Source: www.nextissuemedia.com)

Next Issue Media brings together multiple partners :
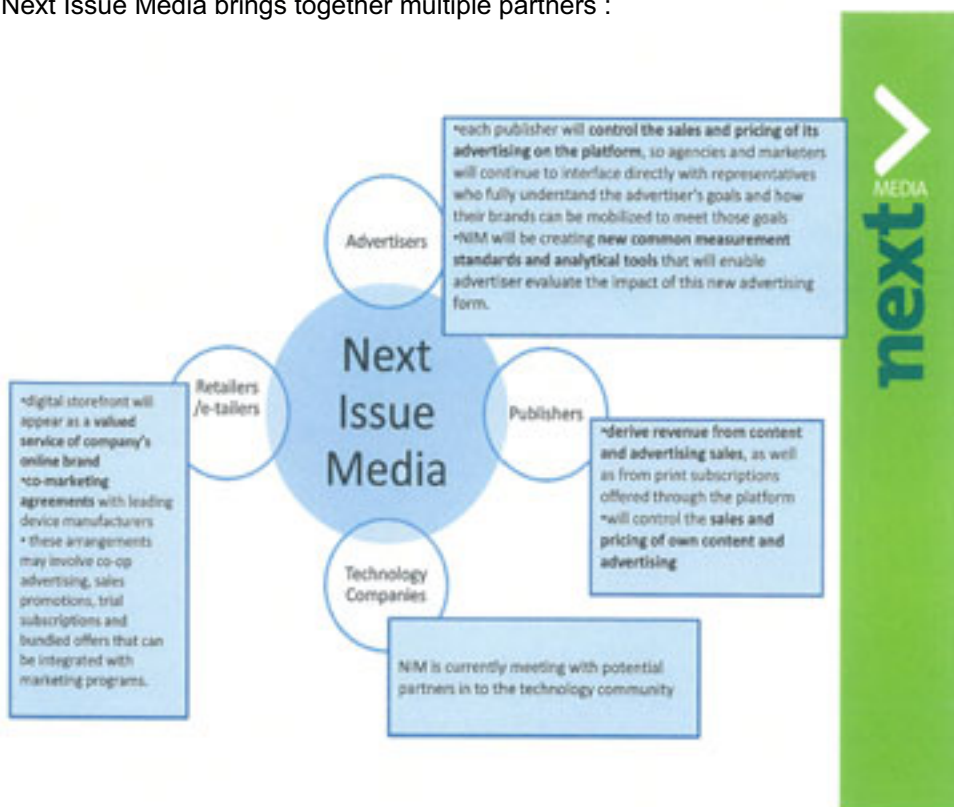
Figure 30 – NIM, Next Issue Media brings together multiple partners

Who will be the key strategic partners in the future:

Following data source (partners, advertisers, retailers, technology, pricing): website of the Next Issue Media and other various open sources on the internet about Next Issue Media.

Publishers

NIM's aim is to offer consumers paid content via an innovative digital reading experience – one that renders the distinctive look and feel of publications across multiple devices, operating systems and screen sizes.

NIM is currently meeting with publishers, advertisers, device manufacturers and software developers – as well as researching consumer preferences to develop the optimal e-reading experience and supporting sales/advertising infrastructure.

Publishers will derive revenue from content and advertising sales, as well as from print subscriptions offered through the platform. Publishers will control the sales and pricing of the content and advertising and in no way be restricted from participating in other digital publishing initiatives.

Advertisers

Targeted content and targeted advertising will become more and more important in the future. NIM will provide advertising with full-screen, high resolution color imagery, add animation and video and build-in the full power of the web to access additional content and connection with others. NIM is co-operating with leading advertising agencies and marketers. Technical solutions will be supported by the technical expertise and innovative resources of the technology community (Silicon Valley).

A very important factor is that each publisher will control the sales and pricing of its advertising on the platform, so agencies and marketers will continue to interface directly with representatives who fully understand the advertiser's goals and how their brands can be mobilized to meet those goals. Next Issue Media will also be creating new common measurement standards and analytical tools to evaluate the impact of this new advertising form.

A storefront would give publishers access to customer information, which they consider critical to their business and which they are denied by, for example, Apple's App store for the iPad

- Advertisers will be able to utilize innovative formats that benefit from the highly engaging, interactive nature of this new medium. Content selections may include books, comic books, blogs and other media. (for example Music)

- Advertising formats will enable an unprecedented array of digital marketing and promotional opportunities.
- Consumer-focused engaging advertising opportunity.

- Full-screen, high resolution color imagery with options to add animation and video and access to additional content and to connect with other users.
- Each publisher will control the sales and pricing of its advertising on the platform, so agencies and marketers will continue to interface directly with representatives who fully understand the advertiser's goals and how their brands can be mobilized to meet those goals.
- Publishers will derive revenue from content and advertising sales, as well as from print subscriptions.

NIM may also want to include a non-content partner as an investor in the future.

Technology and Technology companies

NIM is currently meeting with potential partners in the technology community to seek ideas and insights so that the group can develop a service that maximizes the capabilities of existing and anticipated smart phones, tablets and other digital devices.

Retailers /e-retailers

NIM is making its library of magazines and newspapers accessible to consumers via web sites from partnering retailers. In that way, the digital storefront will appear as a valued service of each participant's online brand

NIM is also planning to develop co-marketing agreements with leading device manufacturers whose products are sold through stores. These arrangements may involve co-operative advertising, sales promotions and bundled offers that can be integrated with the marketing programs of the participants.

5.4.1.2 Pricing and pricing strategies

The exact pricing strategies and price of the single digicopy / paper is unfortunately confidential information, put publishers will be able to set their own prices and sell digital subscriptions, single copies and print/digital bundles using Vindicia, a digital billing provider (see next section; billing solution). A customer lookup feature will let publishers target offers at consumers based on their purchase history.

Billing Solution – technology partner, Vindicia

According to a press release of 30.11.2010, (www.marketwire.com, 2010) Next Issue Media has selected Vindicia´s **CashBox billing solution** to power the sale of its interactive magazine and newspaper content to consumers worldwide. Options to be offered to consumers using the Vindicia CashBox solution will include digital subscriptions and single copy sales, as well as integrated print/digital bundles delivered across the consumer electronics and e-reading device landscape. Print subscribers will also have the option of combining their existing magazine and newspaper subscriptions with digital bundles

About Vindicia

Vindicia offers an on-demand strategic billing solution for marketing and sales that manages subscriptions and one time payments for digital merchants. Vindicia co-operate with some of the best known brands on the Internet, including Symantec, Activision Blizzard, Intuit, and Atari/Cryptic. As an externally audited PCI Service Provider and a SAS 70 Type II company, Vindicia securely handles online revenue of over a billion dollars annually. For more information, visit www.vindicia.com.

Digital Reading Experience, NIM research (Oliver Wyman Study) shows some positive response

***Figure 31 –* Next Issue Media (NIM –research, Oliver Wyman Study)**

5.4.1.3 Oliver Wyman's comprehensive Future Marketplace Simulation Study

Oliver Wyman's comprehensive Future Marketplace Simulation Study for Next Issue Media indicates, that the consumer marketplace for relevant device penetration, interactive periodical availability, and new subscription offers in late 2011. The results of the study indicate that the right portfolio of print, interactive, and bundled offers will both increase revenue from existing subscribers and drive revenue from new subscribers. The industry could generate over $3bn of revenue from interactive periodicals by 2014, with $1.3bn of that being truly incremental after accounting for potential cannibalization of some existing print revenues. (source: www.nextissuemedia.com/study)

Highlights of the NIM - study (US)

Source: Oliver Wyman's comprehensive Future Marketplace Simulation Study, 2010 And MPA digital conference 2010, "Magazines 24/7: The E-Reading Revolution," Presentation Slides J.Squires / NIM

- ❑ **Consumers will pay for true interactive periodicals**; - do not require discounts, they rather will pay similar prices for interactive subscriptions as for current print subscriptions
- ❑ **Print/interactive bundles are very attractive.** Combining the complementary value propositions of the two formats *justifies a higher price than either print or interactive editions alone*
- ❑ **For current subscribers, the power of print remains strong;** many subscribers stay with some form of print, either print only or in addition to interactive editions
- ❑ **For new subscribers, the value of quality interactive content is compelling;** new customers are willing to pay about the same prices as existing print subscribers for subscriptions to interactive editions and to some degree print/interactive bundles
- ❑ **Innovative offer designs and customer relationships** that will be enabled by this new interactive periodical category, such as automatic renewal billing flexible subscription models, can further drive industry revenues
- ❑ **Interest in interactive publications** spans magazine and newspaper categories /very important in the future
- ❑ **The demand for interactive publications spans gender and age groups.**

How to Realize the Opportunity for New Growth

Source: Oliver Wyman's comprehensive Future Marketplace Simulation Study, 2010

Interactive publications clearly present a substantial opportunity for publishers to generate additional circulation revenue and to strengthen their brands amongst *both existing and new customers*. However, in order *to realize this opportunity, publishers will need to execute on a number of levels:*

- **Develop truly new products.** Interactive publications must offer a compelling value proposition. More than just a digital replica of the print version, these new products can be feature-rich, contain enhanced content (including also video), use innovative yet intuitive navigation, and offer opportunities for personalization.

- **Offer a large library of interactive titles**. Making the widest possible assortment of titles available in an interactive format at a single destination ensures that current consumers will be able to access the publications they know and love and that new consumers are more likely to find a publication that interests them.

- **Create awareness with sampling opportunities**. After seeing demonstrations of interactive publications, consumers reported that they would be about twice as likely to purchase them as they had been before. Effective marketing is critical to generate interest and to drive early adoption. Very important in the future.

- **Develop innovative offers.** Consumers responded positively to flexible subscription models. This requires careful collaboration between industry players.

- **Collaborate to cross-sell**. The success of cross-sell opportunities assumes that consumers can be exposed to all relevant publications regardless of publisher. To ensure cross-selling success, publishers will need to collaborate and *potentially share some customer information.*

- **Partner with Technology Manufactures.** Interactive publications would benefit enormously from effective positioning on media tablets, smart phones, and net books, and future revenues are directly linked to the penetration of these devices. However, device manufacturers should themselves be interested in promoting interactive periodicals: The Future Marketplace Simulation indicated that the presence of an integrated and prominently featured digital newsstand on devices manufactured by mainstream brands (Apple, Amazon, Dell, HP, and Samsung), drives a sales increase of 6-8% across a broad range of likely price points com-

pared with identical devices without any integrated digital newsstand. *If device makers and publishers can find business models that are fair for both parties, with respect to financial terms as well as customer data, both will benefit.*

- **Define future advertising standards and metrics**. Interactive periodicals offer many opportunities for advertising, combining both the innovative nature of magazine and newspaper reading with the interactive, targeting, and measurement capabilities of the digital realm. Publishers will need to carefully manage the transition of audience measurement to these new formats rather than default to the pure pay-per-click web advertising model that has not proved sustainable for periodicals.

- **Create new advertising products**. A common digital platform would enable create new revenue opportunities not possible today, such as national ad placement across networks of local or regional publications, syndicated ad placement for smaller titles, and intelligent audience targeting based on behavioral data across many publications. *These new formats and products will require new thinking around industry standards, shared technical platforms, and collaboration across the industry.*

- **Transform organizations and workflows**. While one-off applications can be custom-made, publishing interactive periodicals in a scalable and replicable manner will require rethinking of workflows and organizations.

5.4.1.4 Lessons Learned from the Pilot Project: Next Issue Media

The figure below presents the most central lesson learned in project

Pillar3: Infrastructure	Pillar1: Of-	Pillar2: Customer inter-
How could other partners be convinced? How might the lack of a deal with Apple (or other players) be resolved?	What are people really looking for from Store? How can a company affect customers and users' willingness to pay? How can new advertising products be created? How can new ad. metrics and tools be created?	How can truly new products be developed? How can a firm offer a large library of interactive titles? How could it develop truly innovative offers?

Pillar4:Financial aspects

What will be the price?

Figure 32 – Project NIM lessons learned

Next Issue Media today
Source: Website of the NIM and Wyman 2010 and other various open sources
    on the internet about NIM

Next Issue Media will finally launch its **online store for magazines and newspapers on Google's Android Marketplace early in 2011.** (PaidContent, 2010)The storefront will initially only work for Android devices. The news-stand will start out selling print and digital titles from NIM's founding companies (Condé Nast, Hearst, Meredith, News Corp. and Time Inc.), with the goal of adding other publishers' titles over time. However, e-reader versions of major titles like Elle, Maxim and The Economist will not initially be available, although NIM's five founders represent 80 percent of subscription volume in the U.S.

NIM has also selected *Vindicia´s CashBox billing solution* to power the sale of its interactive magazine and newspaper content to consumers worldwide. Options to be offered to consumers using the Vindicia CashBox solution will include digital subscriptions and single copy sales, as well as integrated print/digital bundles

delivered across the consumer electronics and e-reading device landscape. Print subscribers will also have the option of combining their existing magazine and newspaper subscriptions with digital bundles

NIM's new offices are based in Silicon Valley. The new offices will serve as the center of its technology development work, while Next Issue's offices in New York will continue to be the home of marketing, finance, advertising and publisher-relations. Next Issue has added four additional staff to its executive team, three of whom were most recently at **Nokia**, working on the mobile device maker's **Ovi portal.** (PaidContent, 2010)

Digital prints will have a clear potential in the future. According to a few studies, for example by the end of 2010, *Forrester Research* estimates that 10 million e-readers will be sold in the U.S., And according to *m: Metrics (comScore, 2010),* there will be over 50 million smart phones in the U.S. by the end of 2010.

Challenges

Despite the evidently great opportunity for NIM, the group must still address several *challenges and open questions:*

- There will be **several different kinds of devices running on different operating systems**. – How could the group handle that? The consortium provides one point of contact for the consumer. Customers coming to the main store, can get the content any way they want it.
- Next Issue media has **to convince consumers** who already have billing relationships with Amazon, Apple and other vendors to sign up with another service.
- NIM has to **convince device makers to support a the strategy** that runs counter to many of their own plans. Both Amazon and Apple, for instance, have intentionally created closed systems that give them control of both devices and distribution.
- NIM has to **create content consumers want to buy**. The new product cannot simply be a digital version of the magazines it is already printing, and already available on the Web
- For a publisher who has an iPad magazine awaiting approval and wants to launch an Android version of the magazine, there could be two problems:

  1. The Android Marketplace is not available on most tablets with the exception of the Samsung Galaxy Tab.
  2. The 7" screens that Android Tablets seem focused on, is not always suitable to for a publication along the lines of "Wired" for example.

- One problem might also be the lack of a deal with Apple. NIM's aim is to have agreements with all device makers, but the storefront would initially

only work for Android devices. The goal is to have this fully stocked storefront across tablets and other high-resolution devices. Now NIM is focusing the launch around Android, and there's a large group of digital products, which are coming to market, with both seven-inch and 10-inch displays. NIM is also Apple-ready and Web-OS-ready, and each of those awaits just the right agreement.

(Mediaite, 2010, Kafka, 2010)

5.4.2 Cooperative / collaborative platform: Case Codex – Swiss joint venture for e-reading

5.4.2.1 Background

Project Codex is a Swiss e-reading joint venture. Participating in the project are four leading publishing houses Edipresse, NZZ, Ringier and Tamedia, with te-leoperator Swisscom and the biggest book retailer in Switzerland, Orell Füssli.

The objective of the project is to build an open platform of paid contents, and with it to solve the dependency on global equipment manufacturers. The possible future model of the print media will be tested with a pilot project. (IFRA, 2010)

The joint pilot project is intended to benefit the partners by enabling them to be active in the process of transition from print to digital reading, and benefit from synergies in payment processing and platform development.

The project is currently in a testing phase: the preparation phase was in 2009 (July-December), and the pilot project started in January 2010. The decision on continuation of the project and commercial implementation will be made at the beginning of 2011, and the possible commercial launch will be in 2011.

The figure below presents the development of project Codex on a time line.

July 2009	2010	2011
Preparation phase	Field test / Pilot project	Commercial launch 2011?
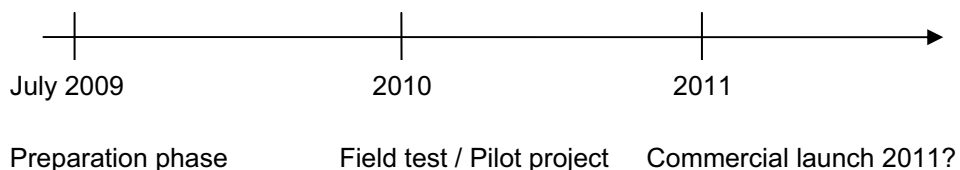
Figure 33 - Project Codex, time line

The common digital channel will be a pioneer in the Swiss market. The project partners are currently creating scenarios around a customer value proposition, technical solution and business plans on a eKiosk or eBookstore.

5.4.2.2 eReading business model of Codex

Offer

A web platform has been built for the pilot project with a content store and forum. The "Codex content store" has approximately 250 German and French eBooks and about 15 daily newspapers in ePub format. Currently the forum is used for testing users' customer support and interaction: for example test assignments are presented and questionnaires can be completed on the forum.

In future visions the eKiosk will offer a central store with a wide variety, that is, a broad portfolio of press titles and eBooks, possibly also including customized press clippings as a niche market. The target customers are people who value written content and take their time to read – are willing to pay and are not just "news snackers".

The value proposition is a full digital reading experience close to print. Customers can discover, bundle, personalize and archive the content. They can lean on a community (forum) for support and recommendations. The community support tool also ensures lower costs than use of a hotline alone. The role of advertising in eKiosk products is under discussion.

Customer interface

The pilot project has involved a field test of 150 users. The objective of the field test has been to test for technical feasibility, usability and market potential. Test users have used the iRex eReader which is a black and white 8.1" device with a touch screen and stylus. The device has 3G connectivity and supports multiple document formats. A new operating system and specific software has been developed by the project.

The products will be offered both for retail sale and subscription. Payment methods will be versatile, i.e. credit cards, operator bill, PayPal etc. The products will be available in different formats (possibly PDF, ePub, HTML5) for iPad, PC and Android devices. Adobe DRM is a de facto standard for eBooks, and it will be used. For newspapers a DRM solution will probably not be implemented.

Infrastructure, resources and partners

Important resources in the joint venture consortium have been technical skills, market research, and collaborative spirit between companies. Swisscom has been in charge of project management and technical implementation. The test environment is at Swisscom. Tamedia has been in charge of market research.

The costs of the pilot project are shared across the participating companies. The future management of the platform is currently under discussion.

The Swiss Media Association has no formal role in the project, but information flow is secured to the Association. The Swiss Media understands the commitment of its members to electronic media as an opportunity to actively shape media development. However, digitalization adds risks that the legal rights of publishers will be bypassed, and as a result, financing of the media system will be endangered. The Association's objectives in 2010 include tracking trends in online business models.

The platform has been built by a Swiss software company (Blankpage) in cooperation with the Innovation Lab at Swisscom. The backend pilot server performs customer management, recording of user behavior, and automated creation of ePub and other software files. Newspaper articles are automatically reproduced from Woodwing or other editorial systems to ePub files. The articles have new layouts and a selection of images. There are only few advertising formats, and they are test advertisements that have been adapted to a monochrome screen. Thus, the newspapers are not the complete print versions.

The solution built in the pilot for iRex can be transferred to other devices. In the pilot phase demos have been conducted for iPad and Joojoo tablet. These prototypes have not been tested by customers yet, but they have served to check the flexibility of the backend and frontend systems.

The position of the future eKiosk in the two-sided network is presented in the following figure. As mentioned before, in the eReading platform, consumers value a large number of content providers, and content providers value eReading platforms that have a lot of consumers to whom they can sell their content (the cross-side network effect). The content store in the Swiss case will exploit the cross-side network effect, as a larger library of digital content is attractive to the users, and a larger user base is attractive to content providers. On the contrary, the forum is based on a positive same-side network effect, that is users can benefit from the support and recommendations of other users.
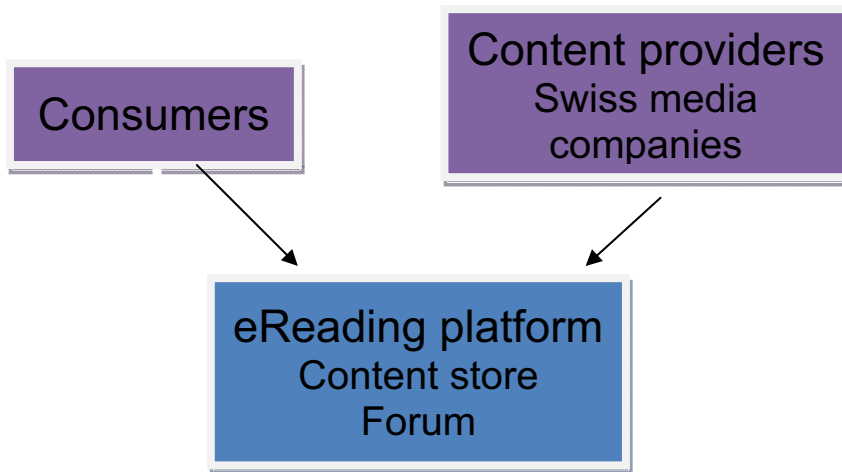
Figure 34 – Position of the Swiss eKiosk in the two-sided network.

Pricing

The pilot project has been free for test users in terms of both the device and content. The test users have had simulated billing, and a virtual budget. The virtual price points for products have been roughly 70% of print price. Customer expectation is that prices are lower than for print. For single copy purchases, consumers are willing to pay the equivalent of newsstand prices on mobile devices, but subscription acceptance varies from market to market. In Switzerland, it's up to 50 % of the print subscription price, according to a test by Codex. Crucial issues concerning the customer's willingness to pay are the quality of the device, the content, and seamless payment functionality. One future option is to bundle subscriptions with a device. (WAN, 2010)

The normal rate of Swiss value added tax (MWST = Mehrwertsteuer) is 7.6 % (8 % 2011-2017). The reduced tax rate of 2.4 % (2.5 % 2011-2017) is applicable to for example newspapers, magazines, books and other printed matter without advertising character. (http://en.wikipedia.org/wiki/Value_added_tax; The New Swiss VAT Law 2010, KPMG)

Challenges

Among the lessons learned about customer behavior in project Codex are that very good adoptation rates have been achieved during the pilot: skeptical digital readers have become interested potential customers. It seems that people are looking for complete newspapers (including crosswords etc.), because for breaking news they go online. However, it is still a challenge to create attractive offerings that the customers are willing to pay for.

Future challenges include that of scaling many costs (licenses, revenue shares, billing etc.) with the revenues. Fierce competition is expected from Apple, Amazon etc. with their content stores. There seems to be a market for paid content on dedicated eReaders, but the market potential for tablet PCs is much higher.

Different strategies of the Swiss publishing houses on sales channels (dedicated title apps vs. eKiosk) create uncertainties. Partners are currently offering products for the iPad, for example Edipresse's Bilan (www.bilan.ch) is offered for iPad in Apple Store with iTunes, and NZZ offers a subscription to the E-paper of «Neue Zürcher Zeitung» inclusive for iPad. Ringier offers for example Schweizer Illustrierte eMagazin, and prices in the Apple store are 4.40 fr, for the newest issues and 1.10 fr for older issues. Tamedia offers Tages-Anzeiger in the Apple Store with iTunes, and also Basler Zeitung, Berner Zeitung BZ and Der Bund. Orell Füssli provides advice on its website how ePub format books can be read with an iPad.

The Swiss project expects that if a paid content business model does not succeed in the digital world, book retailers and newspaper publishers will face disruptive development in the next 5 years.

(Wittman, 2010a; Wittman, 2010b)

5.4.2.3 Summary of the case

Project Codex is a Swiss joint venture for e-reading. Participants in the project are publishing houses with a teleoperator and a book retailer. The project is currently in a testing phase. The objective of the pilot project is to build an open platform of paid contents, and with it to solve the dependency on global equipment manufacturers. The possible commercial launch will be in 2011. Test users in the pilot project have used the iRex eReader which is a black and white 8.1" device with touch screen with stylus. The test users have had a virtual budget. The virtual price points for products have been roughly 70% of print prices. However, customers expect that lower manufacturing costs in digital content decreases the prices of digital subscriptions of newspapers and magazines. In Switzerland, customers expect that the digital subscription is set to 50 % of the print subscription price, according to a test by Codex. For the pilot project a web platform has been built with a content store and forum. In the future, the eKiosk

may offer a central store with a broad portfolio of press titles and eBooks. The target customers are people who value written content and are willing to pay for it, and the value proposition for them is a full digital reading experience close to print. The role of advertising in eKiosk products is under discussion. One of the major challenges in the Swiss joint venture is how to create attractive offerings that the customers are willing to pay for.

5.4.3 Co-operative collaborative platform: Case "Lesebrettprosjektet"

5.4.3.1 Background

Data of this "Lesebrettprosjektet"-case has been gathered from website of the Norwegian Media Businesses Association (www.mediebedriftene.no), presentations slides (Rhode, 2010) and various open sources on the internet.

The Norwegian Media Businesses' Association

The Norwegian Media Businesses' Association is the media trade and tariff organization in Norway. The organization numbers approximately 311 member businesses.

Priority areas of the Norwegian Media Businesses 'Association

There are four priority areas, each with a designated executive:

1. *Negotiations and representing employers*: Representing employers in collective bargaining, and in general.
2. *Media and business law*: Copyright, press ethics, freedom of expression and other legal issues to do with the media.
3. *Industrial policies*: Promoting legislation and industrial policies conducive to a prosperous business climate and ensuring framework conditions for the industry which are consistent with this goal.
4. *Documentation and Media Convergence*: Statistics, analysis, media convergence and digital media

Members of the MBL are divided into five sections;
➢ Newspapers
➢ TV/Radio
➢ Internet/Mobile
➢ Magazines
➢ Printing/Distribution

"Lesebrettprosjektet" – Norwegian Joint Venture

Norwegian Newspapers have joined forces to develop a common channel of distribution. The project is run in co-operation with the University of Stavanger. There are 10 media companies participating in the project; Aftenposten, A-pressen, Budstikka, Dagens Næringsliv, Edda Media, Hjemmet Mortensen, Nationen, Polaris, Vårt Land and VG. The project is managed by the Norwegian Media Businesses' Association (MBL, Mediebedriftenes Landsforening). There are 10 media companies/groups in the project, as mentioned before, but they represent around 30 magazines and around 100 newspapers. MBL has engaged a project leader, financed by the participating companies.

The test project is not open to every media company, only a limited number, but the results of the efforts will be made available for all the members of the MBL. For example, there have already been several workshops and open seminars on the subject and project.

The main goal is to build a platform that can be used by all newspapers that would like to use it. There is also another point; many newspapers will develop other solutions by themselves and the MBL's aim is to make sure that all these different solutions that are being developed could work together.

The greatest challenge for this project is to create a common platform, a solution, which will be suitable for all the members of the MBL.

Pilot Project

Norwegian Newspapers have joined forces to develop a common channel of distribution. The main objective of this project is to build the one common digital channel of distribution, an _open platform_ for the all Norwegian newspapers and magazines, in other words, to create a solution for both big and small media companies. The approach is also to establish a system for efficient delivery of products to existing or anticipated devices.

The possible future business model for print media will be tested by a pilot project. This project has been prepared and developed since last spring (2009) and it is in its testing phase at the moment. The Pilot project was initiated by MBL and Schibsted. After the launch, MBL's role has been to coordinate all the activities and to make sure the project has momentum. MBL has engaged a project leader, financed by the organizations (participants).

In the pilot project, each newspaper has to pay to participate. MBL paid for the setup of the test-papers, and the running of the project through 2010. After 2010 each newspaper has to pay for both setup and running costs. MBL is investing 250 000 euros in this project.

The field test involves two groups of users; 50 people who are using a Hanlin (6") and 230 people who already own an iPad. Seven newspapers will be deli-

vered for the users every day. In both groups the person's browsing habits are analyzed. At the moment the project management is working hard to get another 50 e-ink devices in to the test. The next phase for this will be the actual test, which will run for some months. Also 30 Samsung Galaxy tabs have been purchased and will be distributed to test users by the end of November 2010. It has been already noticed, that 3G capability is very important for the users. The e-reader devices being used in the project, have not been easy to work with and *e-reader devices with good 3G capability are hard to find.*

Selection of the devices depended on them not having *any relationships with an existing "digital store", like Kindle and Amazon*. What was also important was to attract as many 3G readers as possible. *It was key to be able to push content to the e-reading handset rather than having to connect it to a PC* to retrieve the digital version. The Joint Venture believes that, if there is concrete interest in high-end devices equipped with a bigger screen, there are also some people who will read books and newspapers on smaller and less expensive screens. It is the same as with the mobile phone industry: you will get different prices, functionalities, sophistication at different prices.

In Norway, the group wants to convert content from various publishing systems; store it in one place and control the delivery process. Then if Amazon or another company wants to distribute that content, the joint venture is in a better position to negotiate the commercial conditions to use that content.

One of the key things about e-reading is that one cannot afford to produce a unique content combination or a unique distribution channel. The group need to be ready to distribute on all sorts of devices and there will be also plenty of new readers coming out using different formats and, besides the Apple products, many e-readers will be using Android too.

In the test project everything (content and device) is free, but only for test users. In the future different models will be used and users will have to pay for the content. Some companies will give the App (on ePub, iPad or Android) for free, but only to their fee-paying subscribers. Some Norwegian newspapers will launch an app which will be free for a test period, after that it will be charged.

In the test project some of the participants have launched their paper in to the Apple App-store, where payment is being taken through Apple's mechanism.

5.4.3.2 eReading business model of "Lesebrettprosjektet"

Offer

During the test, users will have access to seven newspapers. Three different formats will be delivered: Apps for iPad/iphone, apps for Android and ePub for e-readers. Books are also part of the test for e-readers. Test users have a user-name and password for downloading from the kiosk.

At the moment, the content is the same as in the printed version. Some Norwegian newspapers have developed versions that differ from the paper, but those are not part of the project at the moment. These are currently only iPad optimized versions of the web/mobileweb**.**

The Joint Venture believes that through digital versions they can produce more customized newspapers though an application or on e-readers. This means to aggregate different contents though a platform and will let users build collections around "special interests", and to define what they want to read, when and how.

Advertisements

Targeted content and targeted advertising will become more and more important in the future. The advertising space is quite limited, but project management thinks that it is possible to attract advertisers who will pay good money to be pioneers on eReaders, and later there will be extremely good demographics and data for these advertisers.

There has been also some discussion about advertisements and how they will differ compared to print versions, but any details or decisions have not been made public at the moment.

Pricing

For test users, the content and device is free, but in the future it is important to develop new approaches to get revenues for the content. Some of the participants have launched their paper in to an App-store, where Apple's payment mechanism is used, as mentioned previously in this case.

In the future many methods of payment will be used in addition to the methods that are introduced by Apple or Android-shops and others like them.

How much people are willing to pay for the content is the key question. During the "Lesebrettprosjektet" precise surveys have not yet been made, but Aftonposten, VG and Nettavisen have done surveys of their own. This information is unfortunately confidential.

Infrastructure, resources and partners

Key partners in the future will be publishers, advertisers and technology developers.

The group is now searching for a partner who could provide a technical platform. They still need to find the best solution to ensure the conversion of a print format to an e-reading format. The aim is also to have a one common system that would take care of the storage of all the publications that participate in the

project. The idea is to create in a few months an open structure where everybody wishing to sell their products though this e-reading portal could do so.
There have been also some discussions of the role of MBL in the future, but no decisions have yet been made. MBL has also tried to open the discussion up to as many potential partners as possible: book publishers and Norwegian players in the e-reader market as well as telecom operators.

The position of the future eKiosk in the two-sided network is presented in the following figure. At the eReading platform level, consumers value a large number of content providers, and content providers value eReading platforms that have a lot of consumers to whom they can sell their content (the cross-side network effect). The content store in the Norwegian case will exploit the cross-side network effect, as a larger store of digital content is attractive to the users, and a larger user base is attractive to the content providers. On the contrary, the forum is based on a positive same-side network effect, so users can benefit from the support and recommendations from other users.
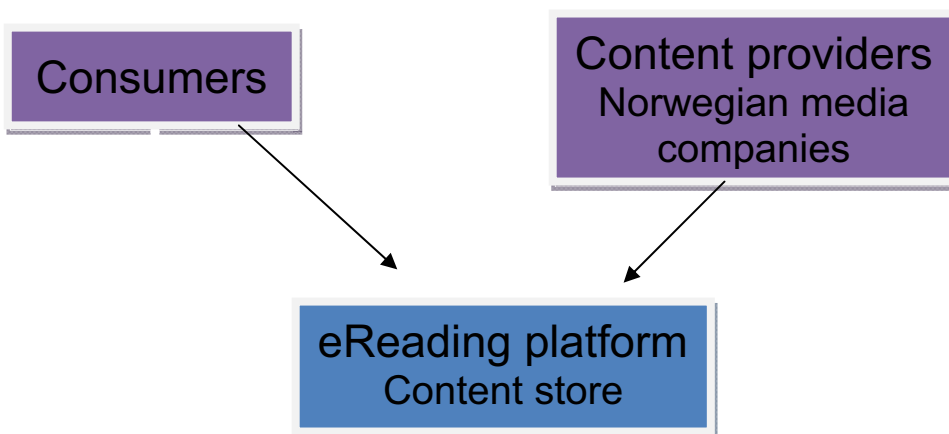
Figure 35 – Position of the Norwegian eKiosk in the two-sided network.

Value Chain

One possible model for the joint venture could be (figure below) (Rhode, 2010) :

- ➢ Content Production – Each Individual
- ➢ Content Conversion - Joint
- ➢ Storage , DRM Handling - Joint
- ➢ Sale - Joint, Support to all channels, Common Agreement
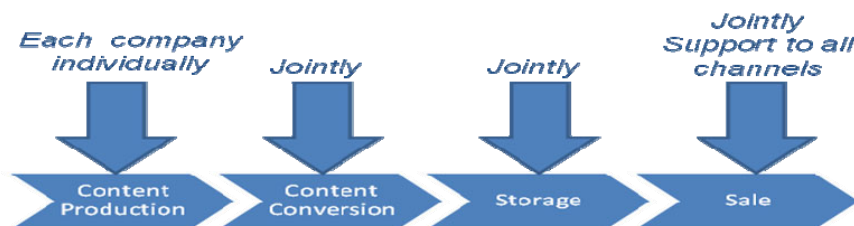
Figure 36 – Value chain (Rhode, 2010)

Outcomes of and feedback on the test project (expected by end of 2010 /beginning of 2011):

One important component of this project is a consumer test. During this time, with the help of a media professor working on the e-reading topic at the University of Stavanger, the joint venture is carrying out a consumer test. The test includes different e-readers , digital stores and products including books, newspapers and magazines). During this phase, the joint venture will explore marketing issues, customer willingness to pay, etc. At the beginning of the test, the group used available tools and for example the ePub format. There are some limitations of ePub in terms of navigation, design, etc., but the project management thought that it was important to get things started and learn with real end users, so actual and specific customer needs could be realized. For example, they hoped to learn what users would like to have in the kiosk, the limitations etc. A device such as the iPad brings additional functionality and it would also be possible to track how users behave with this new tool.

More feedback and outcomes are also expected on:

- Content demand
- Recommend changes
- Time for Consumption
- Price elasticity
- Shopping experience

Lessons Learned so far from the pilot project: "Lesebrettprosjektet"

The figure below presents the most central lessons learned in project.

Pillar3: Infrastructure

Can a common platform and a solution that will suit all the members of the MBL be created?.

How could the whole process be managed?

Can the JV members move fast enough to preempt the market being taken by other (global) players

Pillar1: Offer

What are people looking for from an eKiosk?
How can the group influence customers' willingness to pay?
What about advertisements?

Pillar2: Customer interface

What devices will be used in the future?
How quickly will eReading and Digital products be adopted by users?

Pillar4:Financial aspects

What will be the price?
How can costs be scaled with revenues?

Figure 37 – Project "Lesebrettprosjektet", lessons learned

Some other lessons learned… (Rhode, 2010)

- It is extremely important for the newspapers to have good metadata of the content
- eReader is a defined product with definite needs
- PDF –conversions do not giving enough flexibility, not a good product. Content Structure is Alfa and Omega
- WorkFlow on editorial Level
- Need a good XML to produce good navigation
- Need change of attitude from that of a newspaper company to one of a content provider company
- Have to have a control of the output of the products
- Have to deliver direct to readers, to protect right of use

In the future it will be very important for newspapers to move fast enough, to preempt the market being taken by other (especially global) players. It will be also very important that there are different and competing suppliers of tablets and e-ink devices. And the book industry has to take on the challenges too.

An eReader is a defined product with definite needs. For the users in the pilot project, eReaders have not been easy to work with. The PDF conversions do not give enough flexibility, and a good XML is essential to facilitate good navigation. If the whole content has been converted into one common XML format it should be capable of being read on e-reader devices and iPhones and be able to produce very fast iPad applications for the newspapers at a low cost from the inception of the scheme.

3G capability is very important for the users, but eReaders with good 3G capabilities are hard to find.

A change of attitude is needed when a company converts from a newspaper company to a content provider company. Content structure is the key issue: it is extremely important to have good content metadata. Also the workflows have to be changed at the editorial level. Media companies have to move fast enough to avoid the market being seized by competitors.

Challenges

> ➢ How to manage the process
> ➢ <u>Problem of the Industry</u>; all the new devices demand system adjustments and investments
> ➢ Distributing via eReader means hardly any printing and distribution expenses. This means that media companies can focus more on editorial quality, but also that new forms of advertising can create increased revenues.
> ➢ Challenge; To manage administrative and technical issues, that is, can a mutually suitable solution be found.

New forms of advertising can and have to be created. That also creates an opportunity for increased advertising revenue. All new devices demand system adjustments and investments.

Challenges include how to manage changes in mindsets, workflows and technical issues, and how to manage the whole process.

In the Future; a newspaper for me… and many opportunities (Rhode, 2010)

> ➢ A newspaper just for you - Targeted advertising and targeted content
> ➢ From producing to direct communication - Product will become your personal device with your personal content that will be used both offline and online. Mobile access anywhere and anytime will guarantee 24 / 7 shopping
> ➢ Product based on competence – it will be an editorial product
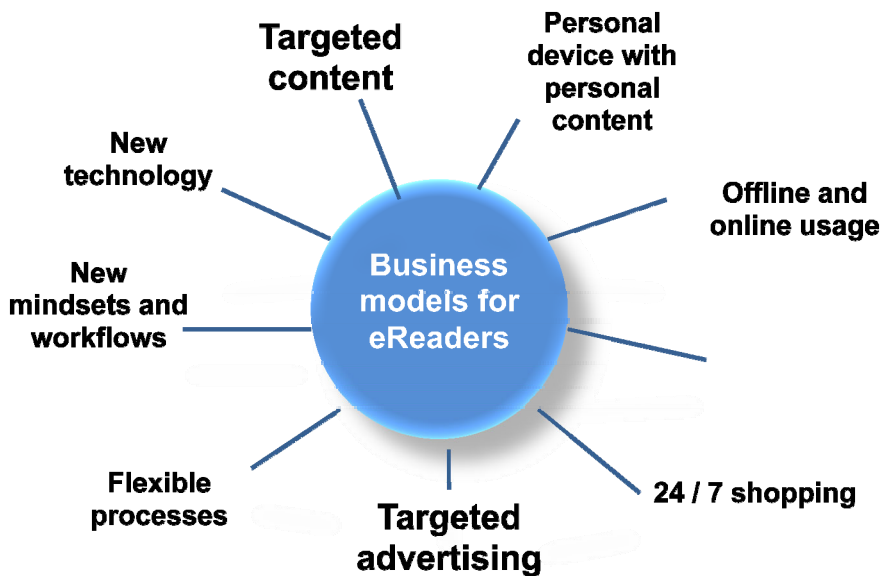
Figure 38 – Business models for eReaders

5.5 Summary and evaluation of different business models in media industry

Based on the interviews, two central dimensions of the business models were addressed multiple times. These were:

1) **Closed service platform architecture vs. open service platform architecture**, the degree to which the content is accessible in various formats and through various digital channels

2) **Static service design vs. modular service design**, the degree to which the content is offered for the customer in a static (as a one constant service) or modular (as personalized variations of service) manner
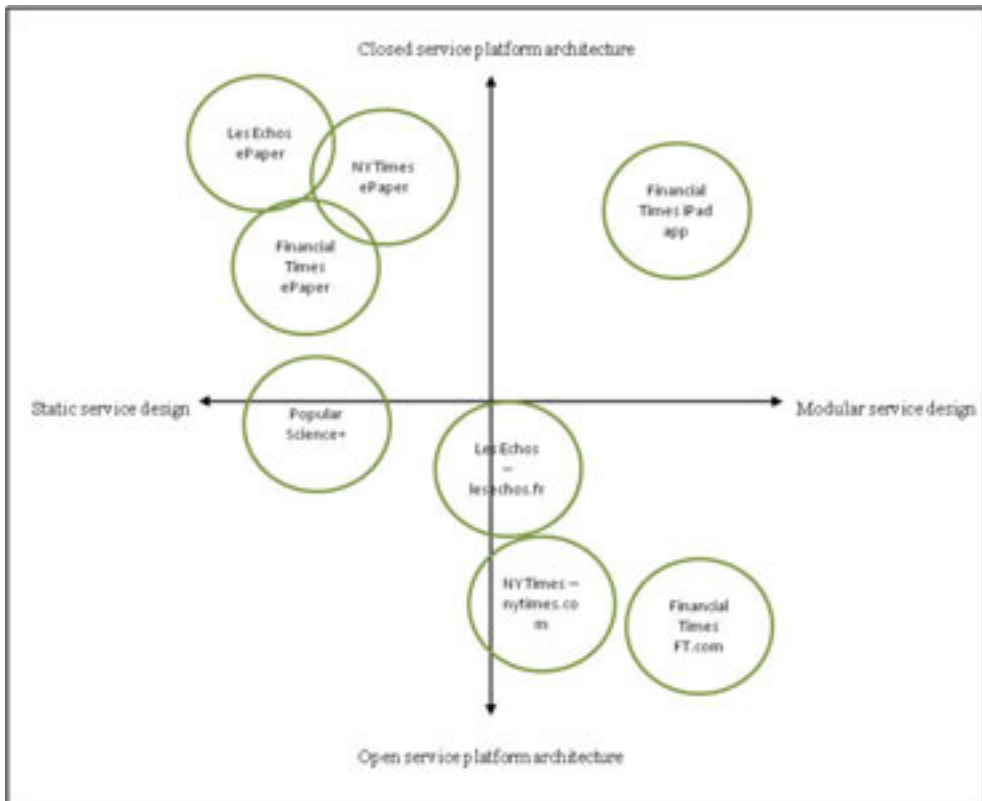
Figure 39 – Publishers classified based on whether they provide generic or modular service design (layout) and whether they form an open or close service platform system

When majority of the cases in this study are analyzed by using these two identified dimensions as the the x-axis and y-axis the result shows, that publishing industry offers various business model options from technological perspective (see Figure 40). Web based business models, such as nytimes.com and FT.com bring the possibility to release content in various ways, and the content can be shared through many platforms (other news sites). The content in these environments is also modular: For example, customers of FT.com may buy single articles from the site and combine content for their own purposes. In contrast, magazines under the Bonnier Mag+ concept (e.g. Popular Science+), are provided in static service design. Consumers that buy magazines through Mag+ portal(s) will recieve eReading content as bundled generic selection every time they consume and there are fewer options to personalize consumption. The replica versions of traditional newspapers (ePapers) of Les Echos and the Financial Times are examples of generic closed business models—the content is same for all customers and can be consumed in a specific format and through a specific platform. The business models in the application world are closed to certain plat-

forms with certain format(s) (e.g. Apple's apps and ePub as a format), but they offer plenty of options for designing the service for the customer.

Figure 40 Publishers, coalitions and marketplaces classified based on whether they are global, national, local or hyper-local

As seen in figure 41 these business models are designed for different sized markets. For example, business models of eBookstore platforms, such as Amazon, are aiming for global market share. In comparison, the Bonnier Mag+ concept is aimed to global market, but majority of Bonnier's magazines are targeted to national markets. Furthermore, Les Echos and Case Codex are business models that are targeted at local audiences. Our cases did not reveal any hyper-local business models. However, publishers may be willing to steer their business model into a hyper-local direction and models such as Fix my street (see http://www.fixmystreet.com/) should be uncovered. The term hyper-local connotes having the character of being oriented around a well defined, community scale area with primary focus being directed towards the concerns of its residents (Wikipedia, 2010b).

The business cases previously introduced and defined are quite different from each other and three of them are still in a pilot phase. Though these business cases seem to be excellent and ready to implement, there are still many *challenges and open questions:*

- **Several different kinds of devices running on different operating systems**. – How can that be handled? The consortium would usually have to provide one point of contact for the consumer. When customers come to the main store, they can get the content any way and any time they want it. This has to work 24/ 7.

- Any coalition would have **to convince consumers** who might already have billing relationships with Amazon, Apple and other vendors to sign up with another service.
- Any coalition would have to **also convince device makers to agree to a strategy** that runs counter to many of their own plans. Both Amazon and Apple, for instance, have intentionally created closed systems that give them control of both devices and distribution.
- Any coalition / publisher would have to **create content consumers want to buy**. The new product could not simply be a digital version of the magazines already in print, and probably already available on the Web.
- Any coalition / publisher would also have **to convince advertisers to create new advertising products**. These new formats and products will require new thinking on the standards, shared technical platforms, and collaboration across the industry.

5.5.1 Emerging business models in the eReading context from technological perspective

In our analysis we identified 4 types of business model options. These business models can be identified as e-paper business models (static-closed, e.g. service as a electronic replica of a traditional book), application world based business models (modular-closed, e.g. Apple's iPad platform based service content), unified concept based business models (static-open, e.g. Bonnier's Mag+ based service content) and web based business models (modular-open, e.g. FT.com e-reading services)
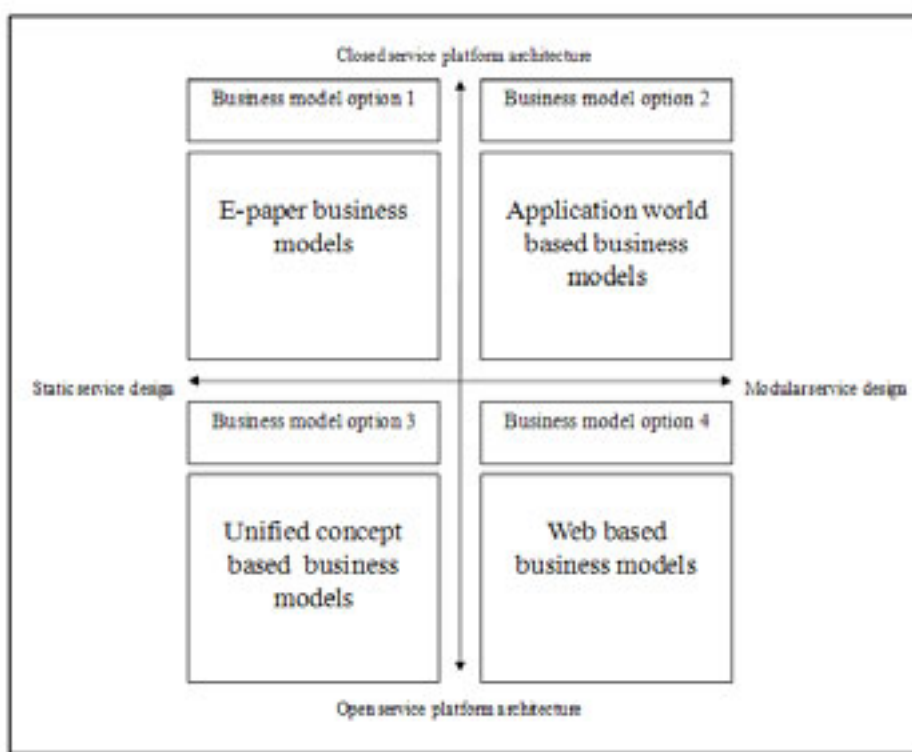
Figure 41 - Business model options in eReading context

E-paper business models focus on publishing replica versions of printed material in digital form. Since the aim is to replicate traditional print media, the content is in a static, general design and provided typically in one format and through a certain service platform (e.g the ePub format, or companies' own websites as a platform). *Unified concept based business models* gather various static versions of digital content under similar systems. There can be various service platforms and formats available, but various contents are provided for the customer under the same policies (E.g. technological regulations, pricing etc.). Content provided through Apple's iPad service platform is a good example of an *application based e-reading business model.* Through this service platform, companies can build their own applications and provide digital services for customers. Application based business model differs from unified concept based business models by two ways. In application based business model, the content provider is able to design freely how to represent the content for the customer as long as they support the same platform and format (For example iPad as technological device, iBookstore as service platform and ePub as a digital content format). In this model customer can buy small modular portions of the content. As these platform holders track the customer information, they are able to suggest new e-reading products for customers efficiently. The idea behind the unified concept

126

business model is that there are rules set on how the layout should be and e-reading content should be look like, but is not bundled into any specific device and content can be consumed via various service platforms (e.g. from magazine own website, independent digital stores). *Web based e-reading models* aim to attract revenue from various e-reader users by selling the current and future web content. These business models are not format/service platform specific and the content can be bundled and personalized in many ways.

5.5.2 Case Amazon: Closed system

Amazon.com is a global service platform for two distinct usergroups: consumers and content providers. The most important feature of Amazon is that the service of Amazon recognizes the customer and customized services based on shopping history are offered. Another important feature is the wide selection of products/services in the service. In Amazon.com prices for digital content are 65 per cent of traditional hardcover content prices. The main idea of the Amazon.com business model in the e-book market is to sell the device and the product cheaply and to gain the real profits from selling the content. From e-books, Amazon.com takes 30% royalties of the price on certain conditions (Large-scale publishing) and 65% normally.

5.5.3 Case Apple: Application world based closed system

As with Amazon.com, Apple's iBookstore is also a global service platform for consumers and content providers. Apple's business model highlights two issues from the publishers' point of view. First, Apple takes 30% of the revenues from any magazine, newspaper or book that is ordered through Apple applications. Since consumers are less willing to pay for digital content, the revenue logic through Apple's application world is unsustainable for publishers with smaller circulations. Secondly, the Apple iBookstore holds the customer information and does not share it with affiliated businesses, which makes commercialization challenging. For newspaper and magazine publishers, it is hard to convince the advertisers to invest in ePaper advertising when there is no information about the consumers of tablet ePaper.

5.5.4 Case Norway and Switzerland

The aim is to have a wide product selection. At the current pilot stage, the selection is small. In Norway, different business models are being tested for testing different tablets. Some models recognize the customer, whereas some models do not. There are many different devices. Different formats and models mean increasing content production costs for the publisher. Other important issues are recognizing the customer, usage experiences and re-purchasing. There should be money for "playing" in the pilot stage. Now that everything is free, that maybe unrealistic. According to the Swiss case, prices for digital content are 70 per cent of prices for print content. Important issues are how the print content business supports the digital content business and who the customers are and whether

new customers are recognized. With respect to sales, starting from scratch is expensive and the key issue is who recognizes the customer.

5.5.5 Case Les Echos

Les Echos's service includes dynamic and deeper content, videos, timely information and a knowledge store that also includes content from other providers. The offering is targeted at people in management positions. The main partners are France Telecom and Orange, and there is a subscription model resulting in the price of Les Echos iPad version being 127 per cent of the price of Les Echos journal. Les Echos launched their e-paper version in September, – the first e-paper version in the world. At the time of launch, 200 people had subscribed to the e-paper. The goal was to have between 1 500 and 2 000 subscribers by the end of 2007. for a key to the Les Echos business model is the bundling of digital and print content and the offer of generous incentives for subscriptions.

5.5.6 Case New York Times

The New York Times has had a strong presence on the web since 1996, and has been ranked one of the top Web sites. The New York Times starts charging its readers in the internet from 2011. The electronic version of the New York Times has a pleasant layout very close to that of the print version. Also, The New York Times is the first newspaper to offer a video game as part of its editorial content. Partners of the New York Times include Microsoft and Google, and the price of the New York Times Kindle edition in the United States is 90 per cent of the price of The New York Times print edition including The New York Times ePaper. According to March 2009 sources, the average net paid circulation for the ePaper between Monday and Friday was 43 884 when the total net paid circulation between Monday and Friday was 1 039 031. Thus the average net paid circulation for the ePaper was 4.2 per cent of total net paid circulation between Monday and Friday. The New York Times has bundled their ePaper with their print edition.

5.5.7 Case Bonnier

According to the design vision of Bonnier, reading from a tablet device should feel like touching the actual magazine, using natural body movements – not looking through the screen and layers of buttons. Mag+ has released Popular Science+ as its first digital magazine to emerge from Bonnier, and it was available in April 2010 on the iPad. Bonnier's Mag+ and News+ concepts are targeted at a mass global market, while majority of the magazines are targeted nationally. The price of Popular Science+ is 511 per cent of the price of the equivalent print version in the United States. An average magazine issue for iPad in the United States is selling 10 000 copies at the moment. iPad version single copy sales outperform single copy print version sales in the United States. Also, people who have downloaded PopularScience+ in the United States are not readers of the print version. Bonnier has been among the first in the magazine industry to offer

magazines for the iPad. Bonnier's business model is based on its Mag+ and News+ concepts and the company is licensing the concepts. In book sector, Bonnier started to publish all its fiction and textbook titles in digital format at this year. The company has also developed digital versions of several hundred titles in their existing catalogue.

5.5.8 Pricing

Wyman (2010a) recommends that publishers should set similar prices for inter-active subscriptions as for current print subscriptions. The study shows that the power of print will remain strong in the future and by combining two formats, digital and traditional, even higher prices are justified.

However, as seen in Figure 43, the price of the iPad version of newspapers is in many cases lower than the price of the traditional version whereas for magazines the price of the iPad version is many times higher than the price of the tra-ditional version. In some cases, the digital journal is distributed alongside the print journal. For example, the Financial Times has bundled its iPad version with its standard subscription fee. Similarly, Les Echos bundled options, but with an increased price (bundled 264€, iPad 228€, traditional 180€). When the size of the eReader market expands, subscriptions that do not include a print journal at all will become more common. Bonnier's iPad version is also more expensive: the price of Popular Science+ is 46€ when the price of the cheapest traditional version of Popular Science is only 9€ in the United States.

	The New York Times US	Les Echos FR	Financial Times UK	Sydsven skan SE (Bonnier)	Popular science US (Bonnier)
■ Digital iPad version (VAT incl., 12 months)	182	228	187	284	46
■ VAT	0	45	33	71	0
□ Cheapest traditional version (VAT incl., 12 months)	310	180	187	313	9
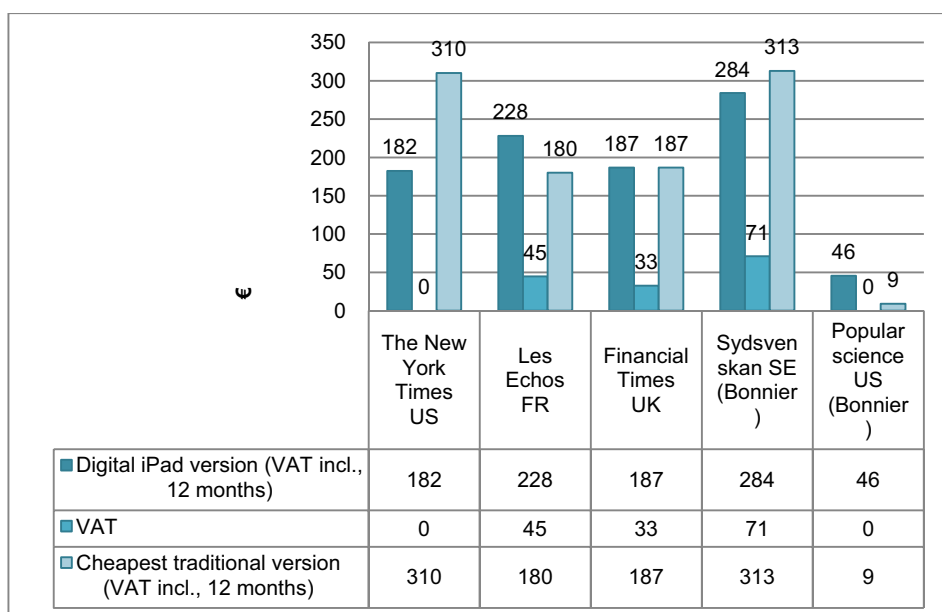
Figure 42 – Pricing: Magazines and newspapers

Value Added Tax (VAT) affects pricing models for digital services in the ben-chmarked countries. VAT rates were in 2010 as follows: Sweden (25%), France (19.6%), UK (17.5%, and 20% from January 1st 2011), U.S. (0%, currently under review). In Sweden the digital services VAT is a little higher than in Finland at 25%, it provides a good pricing benchmark for the newspaper industry in Fin-land. For a digital version (iPad) of Sydsvenskan the price is set to 90% of its traditional version and the digital version of the paper costs 5.46€ / week. With a similar profit share and Finnish VAT policy (23%, as of 01/07/2010), the price of the digital version would be set to 5.35€ / week.

Pricing in the United States could provide a pricing benchmark for the magazine industry in Finland. The digital version (iPad) of Popular Science has a price set to 511% of its traditional version and the digital version of the magazine costs 3.83€ / month. With a similar profit share and Finnish VAT policy, the price of the digital version would be set to 4.71€ / month.

In the Finnish book industry, the price of a hardcover book is around 24 euros. As seen in Figure 44, when a publisher retains 50% after all the production, edit-ing, marketing, and author's royalties are paid the publisher actually only sees about 3.74€ in return. In many e-bookstores, 7.55€ is the average price for a dig-ital version of a book. Since Amazon normally takes 65% of revenues, in reve-nue terms it is the worst possible option for medium and small-size publishers to release content.

	traditional hardcover book, list price 24€, publisher is paid 12€ (50%)	Amazon concumer price 7,55€ ($9,99), publisher is paid 35%	iBookstore concumer price 7,55€ ($9,99), publisher is paid 70%	Barnes & Noble concumer price 7,55€ ($9,99), publisher is paid 65%
Profit before overhead	3.74	1.33	2.65	2.46
Marketing	0.92	0.23	0.45	0.42
Design, typesetting, editing	0.74	0.14	0.29	0.27
Printing, storage shipping	3.00	0.00	0.00	0.00
Author's royalty	3.60	0.95	1.89	1.76

Figure 43 – Pricing and profit comparison: Traditional book, Amazon, iBookstore and Barnes & Noble

Figure 45, represents how 100 000 € profit for a publisher may be gained through these different revenue models. For every 100 000€ profit generated for the publisher, nearly 27 000 books need to be sold. Due to the smaller profit margins than found with traditional hardcover books, a publisher needs to sell much more books through the iBookstore (over 37 000 books) and Barnes & Noble (over 40 000 books). In contrast, over 75 000 books need to be sold through Amazon.com to generate the same amount of revenues.
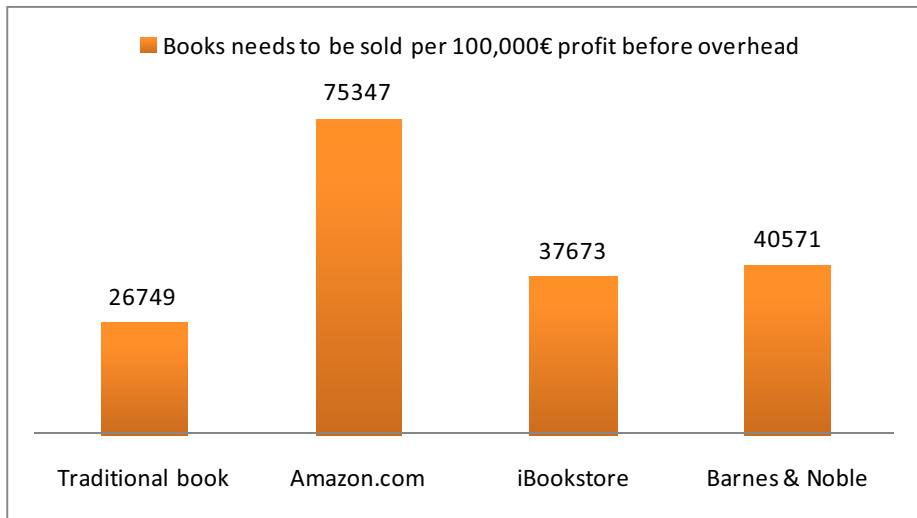
Figure 44 – Books to be sold per 100.000€ profit before overhead

However, profit before overhead does not actually represent how much profit a publisher makes from any book. Since most books are published and disappear from the bookstore shelves long before the publisher recoups the author's original advance and the original print run costs.

Current pricing models were not available for the benchmarked collaborative platform projects. However, by using many assumptions behind our calculations (what the publisher is paid; share of costs), the pricing and profit comparison of case Codex is speculated upon in Figure 46.

	traditional print 24€, publisher is paid 12€ (50%)	eKiosk: Consumer price 16.80 e (70 % of print), publisher is paid 11.75€ (70%)	eKiosk: Consumer price 12€ (50 % of print) , publisher is paid 8.40€ (70%)
■ VAT (7.6%, reduced for print 2.4%)	0,58	1,28	0,91
■ Profit before overhead	3,16	6,31	4,52
■ Marketing	0,92	1	0,71
■ Design, typesetting, editing	0,74	0,64	0,46
■ Printing, storage, shipping	3	0	0
■ Author's royalty	3,6	2,52	1,8
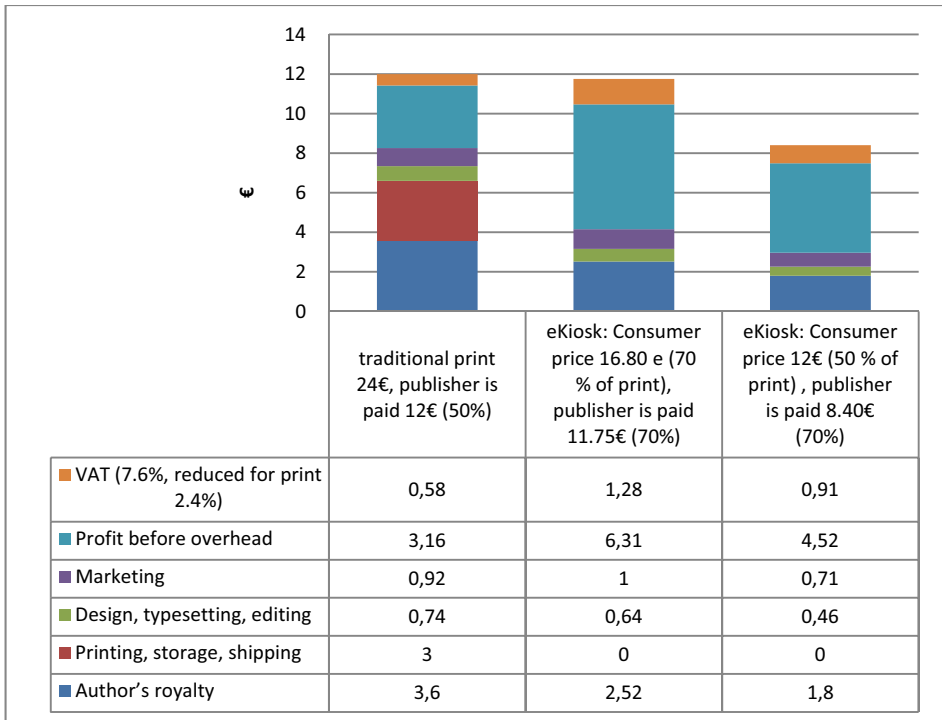
Figure 45 – Pricing and profit comparison: Case Codex

As Codex is willing to set the prices higher than global bookstores and give 70% and/or 50% of the revenues to the publisher, its pricing model generates more revenues for both the service platform holder and the content publishers. To apply this Codex revenue model into the Finnish context (VAT 23%) the prices for eBooks would be set to around 21.90€ ("Swiss 70% of traditional/ 50% to publisher") and/or 17.50€ ("Swiss 50% of traditional/ 50% to publisher").

5.5.9 Highlights of business model cases

Table below summarizes the different cases.

Table 13 – Summary table

	Financial Times	Les Echos	New York Times
Background	Est. 1888, today part of Pearson. FT publishing makes 7% of Pearson's overall revenues	Was created in 1908 and became a daily newspaper in 1928	The New York Times was founded in 1851 and has been in publication continuously ever since
Entered digital business	2002 through website FT.com	E-paper version in 2007	Strong presence on the Web since 1996
Benchmark type	Single media company	Single media company	Single media company
Value Proposition Market offering	Business articles, detailed coverage of markets, politics and economic policy, company activity reports	Dynamic and deeper content, videos, timely information and content from others	Layout that is pleasant and very close to layout of print version. Offers a video game as part of its editorial content
Customer / Segments	Mainly B2B. FT serves more than 750 companies directly	People in management positions	
Key Partners	Google, 30 distinct service platform supervisors delivering the news	France Telecom, Orange	Microsoft and Google
Revenue Model in digital context	Paywall system called 'metering model', which allows readers some free page views before requiring a subscription to gain further access. Also revenues from	Subscription model	Subscription model

	Case Codex, Switzerland	"Lesebrettprosjektet"; Norway	Next Issue Media
Background	A Swiss joint venture for e-reading	Norwegian Newspapers have joined forces to develop a common channel of distribution.	Next Issue Media (NIM) is an independent media coalition and joint venture of five Global Media /Publishing
Entered digital business	Field test / pilot in January 2010; Possible launch of eKiosk 2011	The possible future business model for print media will be tested by pilot project. This project has been prepared and developed since spring 2009. Pilot project started last spring 2010. Possible launch of eKiosk 2011	First press release of the coalition, Next Issue Media on December 2009
Benchmark type	National Co-operative Coalition	National Co-operative Coalition	Marked based coalition
Value Proposition: Market offering	In pilot- 250 eBooks and 15 daily newspapers. New layout and test images and ads adapted to b/w screen; In eKiosk a broad portfolio of press titles and eBooks; full digital reading experience close to print. Customers can discover, bundle, personalize and archive the content, and lean on community (forum) for support and recommendations.	Broad selection of newspapers and magazines, books, targeted content, targeted advertising	To provide not only for publishers, but also advertisers, consumers and technical partners alike, an easy-use and economical entry into the e-reading channel and new digital storefront and related technology to allow consumers to easily download their favorite media content (newspapers, books, music etc.) on a variety of digital devices.
Customer / Segments	In pilot- 150 test users; in eKiosk: people who value written content and make time to read	In Pilot: 50 people who are using Hanlin (6") and 230 people who already own an iPad.	Potential customers: NIM's five founders and equal partners represent around 80 percent of subscription volume in the U.S. And according to Mediamark Research & Intelligence study, the joint venture partners represent an unduplicated audience of 144.6 million.
Key Partners	In pilot - four leading publishing houses Edipresse, NZZ, Ringier and Tamedia, with teleoperator Swisscom and the biggest book retailer in Switzerland, Orell Füssli; In eKiosk TBA	In Pilot:10 media companies participating in this project; Aftenposten, A-pressen, Budstikka, Dagens Næringsliv, Edda Media, Hjemmet Mortensen, Nationen, Polaris, Vårt Land and VG. This project is managed by Norwegian Media Businesses' Association (MBL, Mediebedriftenes Landsforening).	Equal Partners: Condé Nast, Hearst, Meredith, News Corporation and Time Inc
Revenue Model in digital context	In pilot- no revenues; in eKiosk: paid content: The products will be offered both for retail sale and subscription; The role of advertising in eKiosk is under discussion	In Pilot: No revenues. eKiosk: Content and advertising	From content and advertising

6 Advertising effectiveness in the eReading context

Markus Kivikangas

6.1 How can firms advertise on an eReader?

The reason behind the study was to investigate if advertising in electronic media (e.g. an eReader) will be more or less effective than advertising in traditional paper-media. Therefore we exposed potential customers to advertisements presented either on paper or an iPad, and analyzed if these mediums had a different effect on the attitudes towards advertised brands. We assumed that the iPad would produce a more pronounced effect, being a new and cool medium, than anything in the paper-media.

Much to our surprise the assumption was not supported and was even somewhat contrary to our hypothesis. Based on the results of this study, it appears that media do not have any influence on implicit attitudes towards advertised brands. Therefore it appears that advertising on either medium could be equally effective (or ineffective). However, it is good to notice that advertisements were presented to participants as they usually appear in paper-media. This may have influenced results, because advertisements used in electronic media are usually created differently.

Although different media in general appeared to not elicit the assumed effect, it was interesting to note that the study implied that the effectiveness of advertising in a particular medium may depend on a brand's "character". According to that suggestion, it would not be possible to say both media were always equally effective, but instead some brands would benefit from advertising on paper. This question is based on the finding that only the non-technological brand Marimekko was unexpectedly associated with significantly more positive implicit attitudes when advertisements were read from paper (as compared to from an iPad). This effect was only found on Marimekko and was not statistically significant on technology-oriented brands (Sonera, Elisa and Nokia).

The conclusions drawn from the study are: a) advertising through iPad, by presenting advertisements as in traditional paper-media, is equally effective (or ineffective) as in paper-media, but b) advertising certain kinds of brands on an iPad may be less effective than compared to advertising on paper-media. Unfortunately, due to a lack of resources, the latter finding could not be comprehensive-

ly studied and requires more investigation. Appendix 1 presents the study con-
ducted in more detail.

7 Recommendations and managerial implications for the media industry

Seppo Leminen, Juho-Petteri, Mervi Rajahonka, Riikka Siuruainen & Miikka Tölö

7.1 Challenges facing business model development for eReading

The challenges of eReading business model development are slightly different for the different actors in the Finnish media industry. Recently, especially according to book publishers, there have been positive signals, because many publishers published their eBook selections at the Helsinki Book Fair 2010. Also, the first domestic eBook shops have opened, and prices of reading devices will presumably reduce over time.

As **Finnish magazine publishers** see it, money is a challenge: advertising on the Internet will grow but that is not enough as such. There is always demand for quality content, and there is no sense in distributing it free of charge. The key issue is also that consumers expect that e-magazines are cheaper than print. However, it can be assumed that a reader who pays for a printed magazine is probably also a good customer in the eReading world. In terms of internal processes and capabilities, the skills of editors are seen as a challenge, as it will probably not be feasible to hire separate editors for eReaders. In general, the same production processes and equipment should be used for different formats and platforms. In addition, the current diversity of end user device platforms and their burgeoning numbers is a challenge. At the moment, the iPad is superior, but the future is not clear. There is also a question mark over whether a reading device will become a common appliance. Other challenges the magazine publishers have identified include intellectual property rights, payment systems and electronic commerce as well as standards and their deficiencies. The interviews conducted in the magazine industry brought out the following central development needs. First, establish and grow the market for digital media services. Second, determine the business models and earning logics related to them. Third, improve the understanding of customers (= media users/advertisers). Fourth, combine digital media services production and print production in the same process. Last, take advantage of content made by others, such as consumers.

For **Finnish newspaper publishers** it will be a challenge to undertake news production round-the-clock, and to publish a new product every day. The chang-

ing habits of people pose a challenge too. In the future more attention will be paid to what is published through different channels, how the content is priced, and what will be offered for free for example on the Internet. So far, technology has not been a limitation. The interviews conducted with people in the newspaper industry raised the following central development needs. First, establish and grow the market for digital media services. Second, determine the business models and earning logics related to them. Third, improve the understanding of customers (= media users/advertisers). Lastly, the biggest stumbling block will be establishing a willingness to pay and that will involve deciding which areas of content it would be sensible to charge consumers for.

Book publishers see many challenges related to IPR issues. First, author contracts should also cover eBooks. Second, picture and translator contracts for books have to be taken into account. IPR issues in the eReading world are a new area, and there are no established procedures. However, in the past year there has been lots of positive development. Formats and reading devices are important questions for book publishers. Choosing a file format (ePub, Kindle azw, Apple) is a challenge. Kindle azw and Apple are not only file formats but also ready, closed business ecosystems that have their own formats and other terms. Also, a reading device has to support the format in question. To date, the availability of reading devices has been poor in Finland. What kind of reading devices will come on sale in the end is a relevant question. A challenge is also whether to use file protection. It must be remembered that consumers value ease of use. With regard to internal processes and capabilities, challenges relate to producing files which demands co-operation between graphic design and file producers, and controlling costs is a challenge too. The distribution and sale of eBooks will be a challenge, as the whole eBook distribution and sales network is still undeveloped, and the roles of the current actors are unclear. There are also new actors likely to get involved who come from outside the traditional fields including Apple, Amazon Kindle and Google. There are no established pricing models either. Book industry respondents reported the following central development needs. First, successfully opening new markets. Second, developing electronic business models. Third, building an operations model for digital media service business. Fourth, developing an operations model for customer insight. Fifth, developing processes. Last, managing intellectual property rights.

Payment methods will be affected by the Long Tail effect, that is the trend from big hits to large numbers of small volume sales. Also the unbundling of information goods (such as music and, journals), involving selling single items for instance, will give rise to new payment systems. Traditional payments solutions (money, debit card/credit card payments, checks, and bank transfers) will have to be accompanied by new innovative micro or nano-payment solutions such as those of PayPal and APE Payment. Meeting the payment challenges will require a critical mass, but that will not be easily achieved.

Challenges for the publishing industry can be found in every pillar of the traditional business architecture. As an example, one of the main challenges is how to create an offering that consumers will be willing to pay for. In many cases,

consumers are used to not paying for the digital media services offered by companies in the publishing industry.

Figure 46 contains four pillars of the traditional business architecture with the following content:

Pillar3: Infrastructure

- How can consumers be made to pay for digital media services?
How can new entrants compete against new global and local competitors?
How can print and digital media services be differentiated and bundled?

- How can print and digital media services be utilized in different channels?

Pillar1: Of- (Value)

- How can publishers provide value for customers with user generated content?
- How can effective partnerships be formed in the digital landscape ecosystem?
- How can IPR and micro-payment/e-payment be adjusted for digital content business?

Pillar2: Customer inter- (Cust...)

-What are the future target segments in the digital landscape?

-Which digital channels should be used to reach the target audience?

Cost Structure

How can publishers take full benefit from digital opportunities that lighten the traditional cost structure?

Revenue model

How should digital content be priced? Should earnings be based on ad fees, subscription fees, pay-per-view, pay-per-download or some hybrid solution?

Figure 46 – Challenges in four pillars of the traditional business architecture in the publishing industry

The key challenges for digital publishing are increasing customer understanding, creating an offering that consumers will be willing to pay for, being profitable and addressing the increasing dynamics in the new competitive environment. This study also points out that success from the early stages of digitization requires the capability to build value networks with partners from outside the traditional markets, and even with competitors.

7.2 Towards future BM in media industry

As stated in subsection 5.5, four distinct e-reading business models were uncovered. These are e-paper business models (static-closed, e.g. service as a electronic replica of a traditional book), application world based business models (modular-closed, e.g. Apple's iPad platform based service content), unified concept based business models (static-open, e.g. Bonnier's Mag+ based service content) and web based business models (modular-open, e.g. FT.com e-reading services).

Internal factors

- Technical infrastructure and knowledge
- Strategy in traditional publishing business
- Available resources
- Organizational culture

External factors

- Occuring market trends
- Influence of strategic partners
- Type of industry (newspaper, magazine book)
- Other environmental factors

Closed service platform architecture
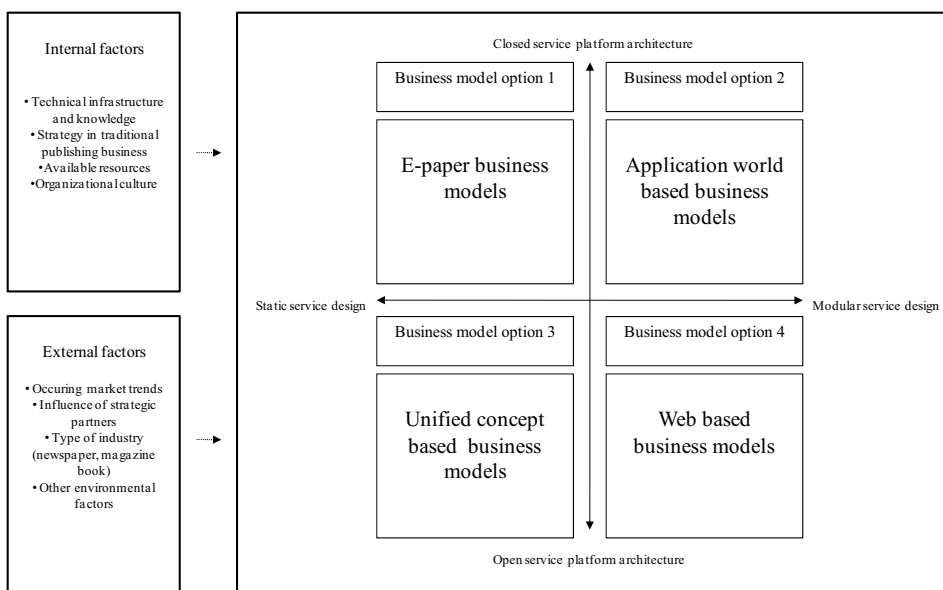
| Business model option 1 | Business model option 2 |
| E-paper business models | Application world based business models |

Static service design — Modular service design

| Business model option 3 | Business model option 4 |
| Unified concept based business models | Web based business models |

Open service platform architecture

Figure 47 – E-reading business model options for publishers and factors affecting on business model choice

From the benchmark studies and interviews conducted (in this chapter direct quotes from interviews are presented in *italics*), we found eight factors (4 internal and 4 external) that influence the choice of e-reading business model. Respondents suggested that technological infrastructure, knowledge and available resources are critical in determining a company's capability to develop and support the selected business model. Currently most publishing companies in Finland lack the required technological infrastructure, knowledge and resources, but that is a deliberate choice:

"Companies are not willing to take any risks by investing highly on e-reading content related development and resources, since there is possibility that a proper market will not appear in small, local publishing markets like in Finland"

Since an "e-paper business models" approach requires less investment than other opportunities, small publishers especially are intending to adopt this approach and develop digital replicas of their traditional products for e-reading devices in the near future. In the business model development process, strategic partners were regarded as important since such types of partnerships were formed to achieve common goals, and decisions on new business models should be taken jointly. In short, strategic partners drive the formation of a business model. For instance book publishers cannot make a decision on a certain business model on their own and take a certain role in the value chain without paying attention to authors and others.

Even though the majority of actors interviewed assumed that the Finnish digital content market would be relatively small for the next five years, companies constantly follow market trends, competitors and other environmental factors and are anxious to co-operate with new technological partners when the size of the Finnish e-reading market increases:

"If the digital content business in general becomes locally remarkable, technical partners for both the generation of a planned e-reading platform and supply of digital content are then strongly and rapidly needed"

When asked about the optimal way of providing digital content to customers, the majority of informants supported the idea of an individual platform, mainly because they would want to fully manage the customer information. Newspaper companies in particular are willing to enhance their current web based platform business model with content available for various e-reading devices:

"We screwed up in the www-context before by giving everything for free… these e-reading devices give us another chance to gain revenues from web content"

Some interviewees saw large application-based platform companies, such as Apple, as a future threat to these models. However, some industry experts from both the magazine and newspaper sectors supported the idea of a business model that would be jointly operated with other publishers at least at the technological level:

"To compete and succeed in digital business, publishers from the same industry have to cooperate widely, since all publishers in Finland are relatively small actors. There is a reason to build a unified platform and to make national level agreements on the technologies used"

Finally, organization culture, the type of industry and the off-line strategy were also seen as essential influencing factors. This stems from the notion that organizations tend to select business models that are similar to the ones they have utilized previously.

This business model framework of four different business models options, presented in Figure 48, provides a tool for analyzing current and planned e-reading business models and contrasting them with competitors in the e-reading industry. Our identification of the main internal and external factors having an effect on the choice of business model will help publishers to steer business model development into their chosen direction.

7.3 Towards development of business models for eReading

7.3.1 Trends affecting the relationship between content providers and users

There are some important trends that will affect the relationship between content providers and users in the future. These trends have been analyzed for example in the Next Issue Media project, and can be summarized as follows (Wyman, 2010a):

- Consumers will pay for truly interactive offerings – they will be ready to pay similar prices for interactive subscriptions as for current print subscriptions.
- Print/interactive bundles are very attractive. Combining the complementary value propositions of the two formats justifies a higher price than either print or interactive editions alone.
- For current subscribers, the power of print remains strong; many subscribers stay with some form of print, either print only or in addition to interactive editions.
- For new subscribers, the value of quality interactive content is compelling; new customers are willing to pay about the same prices as existing print subscribers for subscriptions to interactive editions and to some degree print/interactive bundles.
- Innovative offer designs and customer relationships that will be enabled by this new interactive publication category, such as automatically renewing billing and flexible subscription models, can further drive industry revenues.
- Interest in interactive publications spans magazine and newspaper categories, and will be very important in the future.
- The demand for interactive publications spans gender and age groups.

7.3.2 Further drivers and probable consequences

Amongst others the above mentioned trends will affect the relationship between content providers and users in the future. Opportunities for *deeper customer relationships* will increase, as on one hand customization or personalization of content will increase and on the other hand more information about users can be gathered and used to cultivate of the customer relationship. This in turn will make it possible to build *more holistic offerings* that satisfy customer's needs at all the levels of the Maslow's hierarchy of needs, or to build "zipper-like" customer relationship processes (Berg et al., 1999; Grönroos and Helle, 2010). For example for book publishers the new digital world makes it possible for the first time to get deeper customer information and to actually get to know the readers. On the other hand, for newspaper and magazine publishers the new situation al-

so brings uncertainties, as the competition for the ownership of customer information (i.e. the relationship) intensifies.

However, **content users' behavior** will also change. They are probably becoming more mobile in their preferences. It is possible that users will be moving from long-term relationships towards ad hoc decisions. If and when this fragmented information about "the whole customer" can be gathered and refined, for publishers, this will facilitate far deeper customer relationships and opportunities for customer lock-in. People are ready to pay for high-speed information on personalized "important" news and stories (e.g. "All news and rumors concerning Lady Gaga"). All in all, there will be less mass produced monolithic issues, and more mass-customized or personalized "designer", "good news" media content. As in the end, the content will be aggregated only in each content user's pocket, attractive personalizable platforms including discussion forums are becoming essential.

The content users' role will also become more active. "Lead users" provide content that is valuable for other users. **Users will become co-creators of the content** even more than today. The boundaries between "official" content and "unofficial" content will blur. The consumers look for building blocks for their life and personality, and because of that, also communities of like-minded people. "Book clubs" and portals will probably experience a comeback, but seasoned with personalization and social media. Content provider companies that want to build social platforms where their customers can become co-creators will have to familiarize themselves with orchestrating tasks that are beyond the classic content providers' competency.

The theoretical implications of the research on two-sided networks implies that if the network effects of eReading platforms are significant, the eReading market could be converging towards one **dominant platform** in the future. Consumers value a large number of content providers on the other side of the platform, and content providers value eReading platforms that have a lot of consumers. Similar scenarios can be sketched from the lessons learned from the music industry about long-tail effects: since the access to niche content is important, customers have been willing to use the widest platform available. Critical success factors are the **ownership of customer information and wide and attractive variety of products**, in other words, broad libraries that can satisfy the demand for blockbusters but also long-tails.

However, the more probable future is that the world will become in one way, flatter, but in another way spikier. The markets as well as potential competitors are **global, but also local and even hyper-local**. There are global markets for niche publications (see Bonnier's Popular Science+). On the contrary, new competition or possible partners will emerge from unexpected directions (see "Starbucks' latest blend: Social-digital network",
http://www.msnbc.msn.com/id/38695157/ns/business-us_business/).

Enriched *interactive content* will become more and more important, creating a need for new competences and new partners. As interactive content increases, *color devices* will rule. Battery durability is the only drawback. It is possible that b/w and color devices will be used by different people and/or in different situations. It is also likely that there are people who have both black and white and color devices.

The role and use of advertising will change, as new innovations in advertising are likely to emerge. *Targeted advertising* will also have more value for content users, and it will change from being thought irritating to being approved of. Like content, advertising will also become "mood-based" (JIT, JIP, JFY; different for different time, place etc.). The borderline between advertising and recommendations continues to get vaguer and vaguer. In the future it will also be possible to add updated advertising to books.

Mobile usage will be the biggest driver for eReading. This will probably make it possible to achieve newsstand prices for daily newspapers. Free daily newspapers including advertising seem likely to co-exist ('Metro' for the iPad?), and there may even be also different versions of the same content for free with advertising and chargeable without advertising (akin to the Spotify model). Mobile publishing offers new opportunities to create a targeted product for on-the-move audiences that will help advertisers find and connect innovatively with those audiences (see case Financial Times).

From a more general perspective, content distribution can generate revenues in different ways: as already mentioned, it can be advertising supported, purchase based, rental or subscription based. These opportunities may even create *new markets* – for example book rental businesses could emerge that are comparable to video rental counterparts, instead of borrowing books from a library. Some bookstores (for example Barnes & Noble) allow the borrowing of ebooks, and this could create a C2C rental market. There are also new attractive market opportunities among *new users and underserved customer groups*, for example B2B customers (see for example the Financial Times case: 750 direct customers get detailed information about how, when and where their employees are using the Financial Times content).

It is possible that magazines especially will be *priced flexibly* like airline tickets – there are also opportunities for new earnings, for example *longer selling periods* for blockbuster stories or certain types of publications (hobby, science magazines etc.). Further, books will never be sold out.

The range of *pricing strategies* will become greater. Examples include the four-tier payment model used by the Financial Times or the upselling model of Les Echos. It must be remembered that the nature of the cross-side network effects have an impact on the pricing strategy of the platform. Two-sided platforms usually have a "subsidy side", and a "money side", and in these cases the platform owner sets prices for the subsidy side below the level it would charge if it viewed it as an independent market. Technical challenges about micro and na-

no-payments must also be resolved, but that does not look to be an insurmountable obstacle.

7.3.3 Realizing the new opportunities

In order to realize new opportunities, publishers will need to (Wyman, 2010a):

- Develop truly new products, offer a large library of titles and create user awareness with sampling opportunities
- Develop innovative offers (flexible subscription models etc.)
- Collaborate to cross-sell: publishers will need to collaborate and potentially share some customer information
- Enter partnerships with technology manufacturers, because if device makers and publishers can find business models that are fair for both parties, both will benefit
- Create new advertising products and define future advertising standards and metrics: this will probably require shared technical platforms and collaboration across the industry etc.
- Transform organizations and workflows: publishing interactive offerings in a scalable and replicable manner will require rethinking of workflows and organizations

Major changes in the mental models and business processes of media companies will probably be necessary in order to realize new opportunities to their fullest. Choosing the right partners will be crucial.

Before making any exact plans for next steps it is always useful first to clarify the strategic approach to be used. In other words, first it must be decided whether to take a reactive or proactive stance. After that the challenges must be translated into reactive or proactive thinking according to the selected strategic view. Typically proactive thinking leaves more room for maneuver. This is an important step in altering the prevailing mental models to better fit the dynamic digital landscape. In the following table an example of this kind of translation work is presented.

Table 14 – Translating reactive challenges into proactive challenges

	Reactive view to the challenges of Finnish publishing industry	**Proactive view to the challenges of Finnish publishing industry**
Offer	How can consumers be made to pay for digital media services? How can we compete against new global and local competitors? How can print and digital media services be differentiated and bundled? How can we utilize print and digital media services in different channels?	How can we build attractive offerings that consumers (and other customers) are willing to pay for? How can we make our toughest competitors our friends, or if that is not possible, what would our own blue ocean strategy look like? When is it sensible to differentiate or to bundle print and digital media services? Why? How can we benefit from economies of scope by selling the same or slightly modified content more than once and to several customer groups? Do we have anything else we can sell?
Customer interface	What are the future target segments in the digital landscape? Which digital channels should be used to reach the target audience?	How can we reach our future customers? How can the customers find us? How could we improve customer relationships, increase customer loyalty and enhance customer lock-in? How can we ease the pain of shopping for our customers? What is the best way to collect customer information and to use it for the customer's benefit?
Infrastructure	How could we provide value for customers with user generated content? How could we form effective partnerships in the digital landscape ecosystem? How to adjust IPR and micropayment/e-payment in the digital content business?	How could we absorb the best of crowd sourcing, i.e. motivate and empower the customers to generate content that is valuable for other users (and us)? How could we form win-win partnerships in the digital landscape ecosystem? Where could we find the IPR solutions and payment methods that fit the digital world?
Financial aspects	How could we get full benefit from digital opportunities that lighten the traditional cost structure? How should we price digital content? Should earnings be based on ad fees, subscription fees, pay-per-view, pay-per-download or some hybrid solution?	How could we find new innovative sources of income in the digital world? How could we lighten the traditional cost structure by exploiting digital opportunities? How do we identify and adopt pricing systems that are attractive to customers and encourage them to buy more (and be happy to buy)?

7.3.4. Issues to be discussed related to future eReading business models

Related eReading business models issues that deserve further consideration can be categorized according to Osterwalder's (2004) building blocks model. However, the optimal business models will probably change over time (as do markets for early adapters vs. mass market).

Offer / Value proposition

Maybe the most important question is what is offered to the market. In two-sided networks this issue concerns both offerings to the content users (readers, consumers etc.) and advertisers. As a minimum, the following questions have to be addressed with regard to both users and advertisers:

- What are the innovative products and services of the future?
- How could organizations create valuable digital services and increase consumers' willingness to pay for digital content? What are people looking for? Is a digital replica of the print version enough or is there a need for new content?
- What kind of new content is needed? What is the role of interactive offerings and what kinds of interactive elements should there be?
- How can a broad variety of products for consumers be created? What amount is sufficiently attractive?
- What attractive new advertising products could be created? Who can create new advertising metrics and tools?
- What is the role of bundling and what are the modules the bundles are built of (combinations of digital products and services, other services, physical products, devices etc. for users / different media etc. for advertisers)?
- What is the logic behind bundling, that is, why bundle anything? Is it possible to create a holistic value proposition with Maslow's hierarchy of needs ?

Customer interface

In terms of the customer interface, the important issues are for example:

- Who are the customers – old and new? How can the customer relationship best be taken care of?
- How can the awareness and interest of content users be awakened? How quickly will eReading be adopted by users?
- What is the role of customization or personalization? How should user information be employed in building attractive customized and personalized offerings to create customer lock-in effects?
- Are black and white devices attractive enough? What devices will be used in the future?

- How can advertisers' awareness and interest be awakened? How should user information be employed in building attractive advertising products?
- How should ownership and access to user information be ensured? Is it necessary to collaborate and share some customer information in order to better exploit the cross-selling opportunities?
- How may social media be fully exploited?

Infrastructure

In terms of infrastructure, the important questions are for example:

- What partners are needed? What position should a publisher aim for in the value chain? How can win-win partnerships be forged in the digital landscape ecosystem?
- Is it possible or important to partner other publishers (or other content providers)? Why? How? Is there a balance between joint vs. separate strategies within the industry?
- Is it possible or important to partner device manufacturers? Why? How?
- What is the role of same-side effects and how could they be strengthened (need for discussion forums etc.)? What is the role of cross-side effects and how could they be strengthened?
- What are the IPR solutions and payment methods that are best fit the digital world?
- What kinds of changes in internal and external processes are needed? What kinds of changes in mindsets are needed?

Financial aspects

In terms of the financial infrastructure, the important questions are for example:
- What are the new innovative sources of income in the digital world?
- What is the role of user payments? Which model will be feasible (subscriptions etc.)?
- What are the pricing models that are attractive to customers and would encourage them to buy more (and be happy to buy)?
- What is the role of advertising?
- Are there other possible revenue sources in addition to selling content and advertising?
- What will be the new cost structure? Is it possible to scale costs with revenues? How? How could the traditional cost structure be lightened by exploiting digital opportunities?

The big picture of the business model

The most important question, however, is "the genie" of the business model, that is, the logic determining how the business model becomes a success. That is why at a minimum the following questions have to be addressed:

- What is the "big picture"? Where do we want to be in it in the future?
- How could firms ensure a virtuous cycle, i.e. a successful business model? What critical elements are there? What decisions are needed? What are the probable consequences of these decisions and how do they – combined with the right decisions – lead to a virtuous cycle?
- What will be our development path? What should we do? What are the next steps?

7.4 Summary and next steps

When gathered into Osterwalder's (2004) building blocks model, challenges in eReading business model development for the Finnish publishing industry can be found in every pillar of the business architecture. The key challenges for digital publishing are customer understanding, creating an offering that consumers will be willing to pay for, reaching profitability and increasing dynamics in the new competitive environment with, for example, scenario work combined with business model platform thinking.

It is useful to firmly decide upon the strategic view – either reactive or proactive – to be adopted. The appropriate view can be decided when comparing the present situation with the future scenarios: if the belief is that digital business will become a significant business area in the future, a proactive view is the most appropriate. If not, a reactive view can be more easily justified. After the view is selected, the scenarios presented in this report can be useful when clarifying what position(s) to aim for in the value chain or network, including the question of whether to build a tailor-made platform or not. The subsequent questions are related to what capabilities are needed, who to partner etc. Being successful from the early stages of digitization requires a capability to build value networks with partners that come from outside the traditional markets, and even with competitors. As network effects will most probably prompt a drive towards only a few dominant platforms, selecting or building and owning the correct platform, and cooperation with the right partners will be crucial. The essential questions are whether to give away ownership of the customer (i.e. customer information) in order to get onto the right platforms and, if so, to whom. The alternative to be considered is whether to join forces with peers in order to build attractive joint platforms and, in exchange, share some customer information with them to better exploit cross-selling opportunities. The next questions to be asked relate to offerings, pricing and the like.

The challenges vary slightly for each actor in the Finnish media industry, but also change over time and as the involvement in the digital business and the understanding of the future developments of the business environment increase. It must be remembered that finding a virtuous cycle, or a successful business model, probably demands – in addition to serious thinking – also a few iteration cycles in practice.

Overall, four distinct business models in the e-reading context were uncovered from the interviews and benchmark cases. These arose from two central dimensions, which are the openness of the chosen service platform architecture and the degree of service content modularity. These business models are: *e-paper business models*, *application based e-reading business models*, *unified convept business models* and *web based e-reading business models*. Currently in the Finnish context, the choice of business model seems to be largely determined by the offline (traditional publishing) business model, as firms try to replicate their offline business model in the digital markets.

From a theoretical point of view, the four model framework presents a typology of supplier side business models in the e-reading context. The value of this framework stems from the contemporary and emergent nature of the industry which has attracted only scant research interest, and from the necessity of exploring business models in the digital business context.

From a management point of view, this framework provides a toolkit for analyzing a company's own business model and contrasting it with that of other actors in the industry, especially in the e-reading context. Additionally, it enables identification of the key factors affecting one's own choice of business model and therefore steering the business model development in the chosen direction.

Our research is not without its limitations. The emergent nature of these business models and the snapshot nature of our study (despite covering one year in a rapidly developing market) do not enable us to state categorically whether such business models will materialize. However, due to the longitudinal aim and ongoing nature of our research, we hope to dispose of that limitation in the future.

Appendices

Appendix 1

Advertising effectiveness in eReading

HOW THE STUDY WAS CONDUCTED

Before the actual experiment, an internet-based e-form questionnaire was used to assess the explicit attitudes of Finnish people towards 13 brands. Of those 13 brands, the two most popular (Nokia and Marimekko) and the two least popular (Sonera and Elisa) brands were selected. The data from the questionnaire was analyzed, and based on the results, 32 subjects of 188 respondents were invited to take part in the actual experiment. The subjects were selected such that their explicit attitudes towards four chosen brands were statistically similar.

Subjects
32 subjects (19 – 29 years old) took part in the experiment. The subjects were rewarded with a department-store gift voucher worth 20 euros for their participation.

Experimental setup
Subjects were divided into two groups (group 1, n=16, group 2, n=16). Both groups completed a 30-minute long test in three phases:
Phase 1 (10 minutes): Looking at and reading advertisement cuts (see the stimuli-section) either using the iPad-device (group 1) or paper (group 2) in a soundproofed room. Subjects were placed on a chair next to a table, either holding the iPad-device or paper in their hands or having them on the table. The subjects were instructed to look at and/or read each of the advertisement-cuts in any way they saw fit, within the 10-minute time period.
Phase 2 (5 minutes): A distracter-task (2-back memory task) using a computer. Subjects monitored stimuli appearing in the middle of the computer screen (one stimulus per second) and responded by pressing the "E"-button whenever the currently presented stimulus was the same as the one presented two phases previously.
Phase 3 (15 minutes): The IAT-task using the computer. See "IAT" in the stimuli-section below.

Stimuli
Advertisement cuts: All the advertisement cuts used in the first phase of the study (see experimental setup) were custom-edited combinations of an advertisement and a piece of news text. The advertisement-cuts included editorial-text-cutoffs and advertisements of brands from Elisa, Marimekko, Nokia

and Sonera. All the brands had appeared in actual Finnish tabloids and Magazines. There were 3 different advertisement-cuts from each brand, a total of 12 advertisement-cuts. The contents of the editorial-text-cutoffs were always unrelated to the advertised brands. All text-brand combinations were randomly selected.

The IAT: The Implicit Association Test (IAT) is an experimental paradigm mainly used in social psychology, and measures the strength of implicit associations between mental concepts in memory. An implicit attitude is an attitude that is transferred to associated objects. For example, if the company your friend works for is sued, your positive attitude towards your friend may through association influence your judgment about the company, possibly making you believe it was wrongfully sued. The IAT has been used to, for example, assess the attitudes of ethnic white people towards ethnic black people, and vice versa (e.g., Nosek, Greenwald, & Banaji, 2005; Sriram & Greenwald, 2009). The IAT has also been used to assess marketing related questions, for example subjects' implicit attitudes towards the Pepsi and Coca Cola brands (Greenwald, McGhee, & Schwartz, 1998).

The IAT (see experimental setup phase 3) was completed using the Inquisit 3 program and a modified version of the "multifactor picture IAT" (Sriram, & Greewald, 2009) experiment-setup. The stimuli used in the IAT were the official logos, and other brand-related pictures from the brands Elisa, Marimekko, Nokia and Sonera (4 pictures for each brand), matched for size. The implicit association preferences were assessed using a D-score based on response latencies and reaction times. The D-score varies between the numbers -2 and 2. Negative numbers indicate a preference for the right hand category and positive for the left hand category.

Illustrative definitions for the preference-strengths of implicit associations (D-scores):

+/-0 = no preference
+/-0,30 = mild preference
+/-0,60 = somewhat strong preference
+/-1 = strong preference
+/- > 1 = extremely strong preference

Statistical methods
The IAT was used for 4 categories (brands) and therefore included 6 comparisons: Elisa vs. Sonera, Elisa vs. Marimekko, Elisa vs. Nokia, Sonera vs. Marimekko, Sonera vs. Nokia and Marimekko vs. Nokia. The mean D-score was calculated for each comparison, separately for groups 1 and 2. The statistical differences between mean D-scores between groups 1 and 2 per brand were assessed using a standard 2-tailed T-test. The statistical significance of the differences in D-scores between the 2 groups (iPad and paper; one between subjects factor) were analyzed using a repeated measures analysis of variance.

THE RESULTS
The ranking of the brands in both test groups were very similar. Thus the explicit attitudes towards the brands, as assessed by the e-form before the actual experiment, were somewhat comparable to the implicit attitudes, as measured

by the IAT.

The main effect for the between subjects factor (iPad vs. paper) was not statistically significant ($F(1,30) = 0.42$, $p < .05$). However, as can be seen in table 1, during the use of iPad (group 1), as compared to paper (group 2), the implicit attitudes related to comparisons made between a) Elisa and Marimekko, and b) Sonera and Marimekko, implicit attitudes where more positive towards Marimekko ($t(30) = -2.54$, $p < .017$ ja $t(30) = -2.09$, $p < .045$).

Table 1

COMPARISON		Mean D-score		
		Group 1 (iPad)	Group 2 (Paper)	T-test p-value (group 1 vs. group 2)
ELISA vs. SONERA		,1084	,3869	0,115
ELISA vs. MARIMEKKO		-,1053	-,4592	**0,045***
ELISA vs. NOKIA		-,0064	,0364	0,853
SONERA vs. MARIMEKKO		-,2798	-,6463	**0,017***
SONERA vs. NOKIA		-,1756	-,1849	0,956
MARIMEKKO vs. NOKIA		,2602	,4345	0,263

As can be seen in table 2, the ranking of the brands was relatively similar (Elisa and Nokia being exceptions) between groups 1 and 2. The implicit attitudes towards the brand Marimekko were notably more positive in group 2.

Table 2

RANKING OF BRANDS		
		The brand winning the comparison (the absolute value of the mean D-score, times 1000)
IPAD (group 1)	ELISA vs. SONERA	ELISA (1084)
	ELISA vs. MARIMEKKO	MARIMEKKO (1053)
	ELISA vs. NOKIA	NOKIA (64)
	SONERA vs. MARIMEKKO	MARIMEKKO (2798)
	SONERA vs. NOKIA	NOKIA (1756)
	MARIMEKKO vs. NOKIA	MARIMEKKO (2602)
	RANKING	MARIMEKKO (tot. 3933), NOKIA (tot. 1820), ELISA (tot. 1084), SONERA (tot. 0)
A4 (group 2)	ELISA vs. SONERA	ELISA (3869)
	ELISA vs. MARIMEKKO	MARIMEKKO (4592)
	ELISA vs. NOKIA	ELISA (364)
	SONERA vs. MARIMEKKO	MARIMEKKO (6463)
	SONERA vs. NOKIA	NOKIA (1849)
	MARIMEKKO vs. NOKIA	MARIMEKKO (4345)
	RANKING	MARIMEKKO (tot. 15400), ELISA (tot. 4233), NOKIA (tot. 1849), SONERA (tot. 0)

References

Abkowitz, A. 2009. The movie man. Fortune, 159 (2): 24.

Advertising Age. 2008. Advertising Age, 79 (41): 14.

Afuah, A. 2004. Business Models. A Strategic Management Approach. New York: McGraw-Hill, Irwin.

Afuah, A., & Tucci, C. L. 2001. Internet Business Models and Strategies. Boston: McGraw-Hill, Irwin.

Amit, R., & Zott, C. 2001. Value creation in e-business. Strategic Management Journal, 22: 493-520.

Asan, U., Polat, S., & Serdar, S. 2004. An integrated method for designing modular products. Journal of Manufacturing Technology Management. 15 (1): 29-49.

Aviles, J., Alberto, G. ja Carvajal, M. 2008. Integrated and cross-media newsroom convergence. Two models of multimedia news production – The cases of novotécnica and La Verdad Multimedia in Spain. Convergence: The International Journal of Research into New Media Technologies, 14(2), 221-239.

Baines, T. S., Lightfoot, H. W., Evans, S., Neely, A. D., Greenough, R. M., Peppard, J., Roy, R., Shehab, E., Braganza, A., Tiwari, A., Alcock, J. R., Angus, J., Basti, M., Cousens, A., Irving, P., Johnson, M., Kingston, J. C., Lockett, H. L., Martinez, V., Tranfield, D. R., Walton, I. M., & Wilson, H. 2007. State-of-the-art in product service systems. Journal of Engineering Manufacture, Part B: 1543-51.

Baldwin, C.Y., & Clark, K.B. 2000. Design Rules: The Power of Modularity. Vol. 1, MIT Press, Cambridge, MA.

Bask, A., Lipponen, M., Rajahonka, M., & Tinnilä, M. 2010. The concept of modularity: diffusion from manufacturing to service production. Journal of Manufacturing Technology Management, 21 (3): 355-375.

Bayer, H. ja Holzblatt, K. 1998. Contextual design: Defining customer centered systems. San Francisco: Morgan Kaufmann Publishers.

Berg, V., Karttunen, H., & Rajahonka, M. 1999. Internet-liiketoiminnan suunnittelu pk-yrityksessä. Edita.

Black Book. 2009. Comcast: The safest port in the storm for 2009? Black Book – The Best of Bernstein – U.S. Edition (First-Quarter 2009): 135-140.

Blacker, S. 2010. Magazine media brands are strong, unlike business models. Media Industry Newsletter, 63 (31): 7.

Blecker, T., & Abdelkafi, N. 2006. Complexity and variety in mass customization systems: analysis and recommendations. Management Decision, 44 (7): 908 – 929.

Bornemann, M. 2009. Performance implications of the business model and the moderating effects of the environment. Academy of Management Proceedings, August: 1-6.

Campagnolo, D., & Camuffo, A. 2010. The concept of modularity in management studies: a literature review. International Journal of Management Reviews, 12 (3): 259–283.

Casadenus-Masanell, R., & Ricart, J. E. 2010. From strategy to business models and onto tactics. Long Range Planning, 43 (2/3): 195-215.

Chan-Olmstedt, S., M. 251-273 2006. Issues in media management and technology. In B. Alan ed., Handbook of media management and economics. New York; London: Lawrence Erlbaum Associates.

Chen, T. F. 2009. Building a platform of business model 2.0 to creating real business value with Web 2.0 for web information services industry. International Journal of Electronic Business Management, 7 (3): 168-180.

Chesbrough, H. 2010. Business model innovation: Opportunities and barriers. Long Range Planning, 43 (2/3): 354-363.

Chesbrough, H. 2006. Open Business Models. How to Thrive in the New Innovation Landscape. Boston: Harvard Business School Press.

Chesbrough, H. 2003. Open Innovation. The New Imperative for Creating and Profiting from Technology. Boston: Harvard Business School Press.

Collis, D. J., Furey, M., & Olson, P. 2009. The newspaper industry in crisis. Harvard Business School Cases, Mar 01: 1-23.

Couldry, N., Livingstone, S. and Markham, T. 2010. Media consumption and public engagement. Beyond the presumption of attention. New York: Palgrave MacMillan.

Cummings, S. and Angwin, D. 2004. The future shape of strategy: Lemmings or Chimeiras. The Academy of Management Executive, 182, 21-36.

Curran, J. 2010. Technology Foretold. In N. Fenton ed., New media, old news. Journalism & democracy in the digital age 19-34. London: Sage.

Demil, B., & Lecocq, X. 2010. Business model evolution: In search of dynamic consistency. Long Range Planning, 43 (2/3): 227-246.

Deuze, M. 2005. What is journalism? Professional identity and ideology of journalists reconsidered. Journalism, 6(4), 442-464.

Digital Life Research project - Available online at: www.discoverdigitallife.com

Doganova, L., & Eyquem-Renault, M. 2009. What do business models do?: Innovation devices in technology entrepreneurship. Research Policy, 38 (10): 1559-1570.

Domingo, D. 2008. Interactivity in the daily routines of online newsrooms: Dealing with an uncomfortable myth. Journal of Computer-Mediated Communication13, 680-704.

Doz, Y. L., & Kosonen, M. 2010. Embedding strategic agility: A leadership agenda for accelerating business model renewal. Long Range Planning, 43 (2/3): 370-382.

Dubosson-Torbay, M., Osterwalder, A., & Pigneur, Y. 2002. E-business model design, classification, and measurements. Thunderbird International Business Review, 44 (1): 5-23.

Eisenmann, T., Parker, G., & Van Alstyne, M. 2006. Strategies for two-sided markets. Harvard Business Review.

Eisenmann, T. R., & Rust, J. K. 2000. Boston.com. Harvard Business School Cases, Feb: 1-38.

Engeström, Y. 1987. Learning by expanding: An activity-theoretical approach to developmental work research. Helsinki: Orienta-Konsultit.

Ernst, D. 2005. Limits to modularity: reflections on recent developments in chip design. Industry and Innovation, 12 (3): 303-345.

Fader, P. S., & Hardie, B. G. S. 2007. How to project customer retention. Journal of Interactive Marketing, 21 (1): 76-90.

Fenton, N. (toim.). 2010. New Media, Old News. Journalism & Democracy in the Digital Age (painos ed.). London: Sage.

Finnmedia. 2009. Making the media sector a winner. Strategies of the Finnish media sector. The Federation of the Finnish Media Industry, May 5th.

Firat, A. and Venkatesh, A. 1995. Liberatory postmodernism and the re-enchantment of consumption. Journal of Consumer Research, 22Dec., 239-267.

Firat, F. 2000. Rethinking consumption. Consumption markets and culture, 283-376.

Gambardella, A., & McGahan, A. M. 2010. Business-model innovation: General purpose technologies and their implications for industry structure. Long Range Planning, 43 (2/3): 262-271.

Garden, A. 2001. Will advertising work on the web? New Zealand Management, 48 (7): 76.

Gerpott, T. ja Wanke, H. 2004. Interactivity potential and usage of German press-title web site: An empirical investigation Journal of Media Economics, 17, 241-260

Goel, S., Miesing, P., & Chandra, U. 2010. The impact of illegal peer-to-peer file sharing on the media industry. California Management Review, 52 (3): 6-33.

Goldsborough, R. 2002. The controversial move from free to fee in online publishing. Consumers' Research Magazine, 85 (10): 33.

Greenwald, A. G., McGhee, D. E., & Schwartz, J. K. L. 1998. Measuring individual differences in implicit cognition: The Implicit Association Test. Journal of Personality and Social Psychology, 74: 1464-1480.

Grönroos, C. 2000. Service management and marketing. A customer relationship management approach. Chichester: John Wiley & Sons

Grönroos, C., & Helle, P. 2010. Adopting a service logic in manufacturing: Conceptual foundation and metrics for mutual value creation. Journal of Service Management, 21 (5): 564-590

Hall, M. 2006. Don't just search for information… Computerworld, 40 (32): 8.

Helle, M. and Töyry, M. 2009. Media concept as a tool for analyzing change in media. In
P. Oittinen ja H. Saarelma: Print media. Principles, processes and quality. Helsinki: Paper
Engineers' Association/Paperi ja Puu Oy, 497-530

Henderson, R. M. and Clark, K. B. 1990. Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. Administrative Science Quarterly, 351, 9-30.

Hermida, A. and Thurman, N. 2008. A clash of cultures. The integration of user-generated content within professional journalistic framworks at British newspapser websites. Journalism Practice, 23, 343-356.

Holbrook, M. 1999 Consumer value: a framwork for analysis and research, Routledge: London and New York

Hyötyläinen, M., & Möller, K. 2007. Service packaging: key to successful provisioning of ICT business solutions. Journal of Services Marketing, 21 (5): 304-312.

IFRA. 2010.
http://www.ifra.com/website/ifraevent.nsf/wuis/42465197427F6704C125770D00307994?OpenDocument&CS&E&

Im, Y. 1997. Towards a labor-process history of newsworkers. Javnost/The Public, 41, 31-46.

Innopay. 2010. Online Payments 2010 – Increasingly a Global Game. Edited by Douwe Lycklama, Chiel Liezenberg.

Jacobs, M., Vickery, S.K., & Droge, C. 2007. The effects of product modularity on competitive performance. Do integration strategies mediate the relationship? International Journal of Operations & Production Management, 27 (10): 1046-1068.

Janssen, M., & Joha, A. 2008. Emerging shared service organizations and the service-oriented enterprise: Critical management issues. Strategic Outsourcing: An International Journal, 1 (1): 35-49.

Jaring, P., Matinmikko, T., & Abrahamsson. Micropayment business in Finland – forming the basis for development of micropayment methods and business.

Jenkins, H. 2006. Fans, bloggers, and gamers. Exploring participatory culture. New York: New York University Press.

Jenkins, H. 2008. Convergence culture. Where the old and new media collide. New York: New York University Press.

Jensen, J. F. 1998. Interactivity. Tracking a New Concept in Media and Communication Studies. Nordicom Review, 1, 185–204.

Johnson, M. W., Christensen, C. M., & Kagermann, H. 2008. Reinventing your business model. Harvard Business Review, 86 (12): 50-59.

Jose, A., & Tollenaere, M. 2005. Modular and platform methods for product family design: literature analysis. Journal of Intelligent Manufacturing, 16 (3): 371-390.

Kamuriwo, D. S. 2009. Timing in business model and product market strategy tradeoffs: Performance implications. Academy of Management Proceedings: 1-6.

Kaye, J. and Quinn, S. 2010. Funding journalism in the digital age. Business models, strategies, issues and trends. New York: Peter Lang.

Kridel, T. 2006. The ad-supported model: Heresy or here to stay? Multichannel News, 27 (43): 40.

Korkman, O. 2004. Olisiko aika vaihtaa liiketoimintamallia? Puheenvuoro asiakaslähtöisten liiketoimintamallien puolesta. Konsepti – toimintakonseptin uudistajien verkkolehti, 11, 1-21.
http://www.muutoslaboratorio.fi/files/Olisiko_aika_vaihtaa_liiketoimintamallia.pdf

Korkman, O. 2006. Customer value formation. A practice-theoretical approach. Helsinki: Swedish School of Economics and Business Administration.

Kujala, S., Artto, K., Aaltonen, P., & Turkulainen, V. 2010. Business models in project-based firms – Towards a typology of solution-specific business models. International Journal of Project Management, 28 (2): 96-106.

Lampel, J., & Mintzberg, H. 1996. Customizing customization. Sloan Management Review, 38 (1): 21-30.

Leminen, S., Huhtala, J-P., & Tölö, M. 2010. eReading Business Model State-of-the-Art Analysis Report. October, 12th.

Linder, J. and Cantrell, S. 2000. Changing business models: Surveying the landscape: Accenture Institute for Strategic Change.

Linnett, R. 2000. Commercial-zappers send ad-friendly message. Advertising Age, 71 (18): 1-100.

Livingstone, S. 2004. The challenge of changing audiences. Or what is the audience researcher to do in the age of the Internet? . European Journal for Communication, 191, 75-86.

Magretta, J. 2002. Why business models matter. Harvard Business Review, 80 (5): 86-92.

Marketwire, 2010, http://www.marketwire.com/press-release/Next-Issue-Media-Taps-Vindicia-as-Billing-Provider-for-Digital-Newsstand-1361134.htm

Markides, C. C., & Oyon, D. 2010. What to do against disruptive business models (when and how to play two games at once). MIT Sloan Management Review, 51 (4): 27-32.

Martínez-Olvera, C. 2009. Benefits of using hybrid business models within a supply chain. International Journal of Production Economics, 120 (2): 501-511.

Massey, B. L. 1999. "Interactive" Online Journalism at English language Web Newspapers in Asia. Gazette, 616, 523–538.

McGrath, R. G. 2010. Business models: A discovery driven approach. Long Range Planning, 43 (2/3): 247-261.

Mediaite, 2010 **(**Kafka, P)**,** http://www.mediaite.com/print/next-issue-media/

Meyer, M. H., & de Tore, A. 2001. Perspective: Creating a platform-based approach for developing new services. The Journal of Product Innovation Management, 18 (3): 188-204.

Mikkola, J. H. 2006. Capturing the degree of modularity embedded in product architectures. The Journal of Product Innovation Management, 23: 128-146.

Mikkola, J.H., & Skjøtt-Larsen, T. 2004. Supply-chain integration: Implications for mass customization, modularization and postponement strategies. Production Planning & Control, 15 (4): 352–361.

Napoli, P. 2003. Audience economics. Media institutions and the audience marketplace. New York: Columbia University Press.

Napoli, P. 2010. Revisiting 'mass communication' and the 'work' of the audience in the new media environment Media, Culture & Society, 323, 505-516.

National Library of Finland. 2010. Presentations held by company representatives in eReading Results Seminar. October, 13th.

Negroponte, N. 1996. Being digital. New York: Vintage Books.

Nguyen, J. D. 2009. New media evolution: Business and IP issues for today's evolving media world. The Computer & Internet Lawyer, 26 (9): 18-24.

Nerone, J. ja Barnhurst, K. 2003. US newspaper types, the newsroom, and the division of labor, 1750-2000. Journalism Studies 43, 435-449.

Normann, R. 2001. Normannin liiketoimintateesit. Helsinki: WSOY.

Normann, R. and Ramirez, R. 1998. Designing interactive strategy. From value chain to value constellation. Chicester: John Wiley &Sons.

Normann, R. and Ramirez, M. 2001. Reframing the business. When the map changes the landscape. Chichester: John Wiley & Sons.

Nosek, B. A., Greenwald, A. G., & Banaji, M. R. 2005. Understanding and using the Implicit Association Test: II. Method variables and construct validity. Personality and Social Psychology Bulletin, 31 (2), 166-180.

Odlyzko, A. 2001. Content is not king. First Monday. Accessed 5.4.2010 at http://www.firstmonday.dk/issues/issue6_2/odlyzko/index.html

Osterwalder, A. 2004. The Business Model Ontology - a Proposition in a Design Science Approach. Doctoral Dissertation, In Institut d'Informatique et Organisa-

tion, University of Lausanne, Ecole des Hautes Etudes Commerciales HEC, Lausanne, Switzerland

Osterwalder, A., Pigneur, Y. and Tucci, C. 2005. Clarifying businessm: Origins, present and future of the concept. Communications of The Association for Information Systems, 15, 1-37.

Osterwalder, A., & Pigneur, Y. 2010. Business Model Generation. John Wiley et sons.

Paidcontent, 2010 http://paidcontent.org/article/419-next-issue-media-opens-silicon-valley-outpost-with-trio-of-nokia-execs/

Parker, G., & Van Alstyne, M. 2005. Two-sided networks: A theory of information product design. Management Science.

Pateli, A. G., & Giaglis, G. M. 2004. A research framework for analysing eBusiness models. European Journal of Information Systems, 13 (4): 302-314.

Pekkarinen, S., & Ulkuniemi, P. 2008. Modularity in developing business services by platform approach. The International Journal of Logistics Management, 19 (1): 84-103.

Perez, C. 2005. Respecialization and the deployment of the ICT pradigm. An essay on the present challenges of globalisation. In R. Compano ed., The Future of the information society in Europe: Contributions to the debate. Brussels: European Comission, Joint Reserch Center and Institute for Prospective Technological Studies.

Petersen, S. 2005. Open source's value. eWeek, 22 (7): 36.

Picard, Robert 2009 "Why Journalists Deserve Low Pay," Presentation to Reuters Institute for the Study of Journalism, Oxford University.
url: http://www.robertpicard.net/files/Why_journalists_deserve_low_pay.pdf

Porter, M. 1985. Competitive Advantage: Creating and Sustaining Superior Performance. New York: Free Press.

Pulkkinen, M., Rajahonka, M., Siuruainen, R., Tinnilä, M., & Wendelin, R. 2005. Liiketoimintamallit Arvonluojina - Ketjut, Pajat ja Verkot. Teknologiateollisuus ry. ("Business Models as Value Creators").

Rafee, A. 2005. Study shows US users will pay for content if it's right for them. New Media Age, April 14th: 12.

Rajala R. 2009. Determinants of Business Model Performance in Software Firms. Doctoral Dissertation.

Rappa, M. 2010. Business models on the web. Available online at: http://digitalenterprise.org/models/models.html (accessed 1st October).

Rhode, M "Creating a digital marketplace for e-reader news", Presented at Wan / IFRA Nordic Local media Conference, Stockholm on June 2nd , 2010

Rochet, C., & Tirole, J. 2003. Platform competition in two-sided markets. Journal of the European Economic Association.

Rupik, K. 2009. Business models of Polish clothing companies in their expansion into the CEE markets. Journal of Economics & Management, 6: 113-139.

Saba, J. 2007. Newspaper deals with job sites still valuable? Editor & Publisher, 140 (10): 13-14.

Sabatier, V., Mangematin, V., & Rousselle, T. 2010. From recipe to dinner: Business model portfolios in the European biopharmaceutical industry. Long Range Planning, 43 (2/3): 431-447.

Salvador, F. 2007. Towards a product modularity construct: Literature review and reconceptualization. IEEE Transactions on Engineering Management, 54 (2): 219–240.

Savage, M. 2005. Straits Times readers to pay for website use. Media: Asia's Media & Marketing Newspaper, 3/11: 6.

Schatzki, T. 2001 Practice mind-ed orders. In Schaztki, T, K. Knorr Cetina E. von. Savigny eds The practice turn in contemporary theory. Routledge: New York and London

Schilling, M.A., & Steensma, H. K. 2001. The use of modular organizational forms: An industry-level analysis. Academy of Management Journal, 44 (6): 1149-1168.

Schilling, M. A. 2000. Toward a general modular systems theory and its application to interfirm product modularity. Academy of Management Review, 25 (2): 312–334.

Shafer, S. M., Smith, H. J., & Linder, J. C. 2005. The power of business models. Business Horizons, 48: 199-207.

Sheppard, T. 2008. Get mobile. Broadcast Engineering (World Edition), 50 (7): 10-13.

Smith, W. K., Binns, A., & Tushman, M. L. 2010. Complex business models: Managing strategic paradoxes simultaneously. Long Range Planning, 43 (2/3): 448-461.

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. 2010. Business model innovation through trial-and-error learning: The Naturhouse case. Long Range Planning, 43 (2/3): 383-407.

Squires, J. 2010. Magazines 24/7: The E-Reading Revolution. Presented at MPA digital conference.

Squires. J, "Next Issue Media", Presented at MPA's digital conference "Magazines 24/7: The E-Reading Revolution," on March 18th 2010,

Sriram, N., & Greewald, A. G. 2009. The Brief Implicit Association Test. Experimental Psychology, 56: 283–294.

Starr, M. K. 1965. Modular production – a new concept. Harvard Business Review, 3 (1): 131-142.

Starr, M. K. 2010. Modular production – a 45-year-old concept. International Journal of Operations & Production Management, 30 (1): 7-19.

Svejenova, S., Planellas, M., & Vives, L. 2010. An individual business model in the making: A chef's quest for creative freedom. Long Range Planning, 43 (2/3): 408-430.

Tankhiwale, S. 2009. Exploring the interrelationship between telco business model innovation and the change in business process architecture. Journal of Telecommunications Management, 2 (2): 126-137.

Teece, D. J. 2010. Business models, business strategy and innovation. Long Range Planning, 43 (2/3): 172-194.

Thurman, N. 2011. Making "The daily Me". Technology, economics and habit in the mainstream assimilation of personalization of news. To be published in Journalism: Theory and Practice & Criticism Journalism: Theory and Practice & Criticism, 124.

Titterton, Janet 2010 Publishers can go much further to building sustainable relationships by adding value. Available at: http://www.journalism.co.uk/6/articles/539838.php

Tribute, A. 1996. Newspapers wrestle with the online bear. Seybold Report on Publishing Systems, 25 (14): 3-10.

Tu, Q., Vonderembse, M.A., Ragu-Nathan, T.S., & Ragu-Nathan, B. 2004. Measuring modularity-based manufacturing practices and their impact on mass customization capability: a customer-driven perspective. Decision Sciences, 35 (2): 147-168.

Tushman, M. 1997. Winning thorugh innovation. Strategy and Leadership, 254, 14-19.

Tushman, M. and O'Reilly, C. 1996. Ambidextrous organizations: Managing evolutionary and revolutionary change. California Management Review, 384, 8-30.

Ulrich, K.T., & Tung, K. 1991. Fundamentals of product modularity. Proceedings of the ASME Winter Annual Meeting Symposium on Issues in Design/Manufacturing Integration, Atlanta, GA: 1-14.

van Liere, D.W., Hagdorn, L., Hoogeweegen, M.R., & Vervest, P. H. M. 2004. Embedded coordination in a business network. Journal of Information Technology, 19 (4): 261-269.

Verganti, R. 2009. Design-driven innovation. Changing the rules of competition by radically innovating what things mean. Boston: Harvard University Press.

Voss, C.A., & Hsuan, J. 2009. Service architecture and modularity. Decision Sciences, 40 (3): 541-69.

Wall, B., Jagdev, H., & Browne, J. 2007. A review of eBusiness and digital business – applications, models and trends. Production Planning & Control, 18 (3): 239-260.

WAN. 2010. http://www.wan-press.org/article.php3?id_article=18696

Weill, P., & Vitale, M. R. 2001. Place to Space: Migrating to eBusiness Models. Harvard Business School Press Books.

Wikipedia. 2010a. Crowdsourcing. http://en.wikipedia.org/wiki/Crowdsourcing.

Wikipedia. 2010b. Hyperlocal. http://en.wikipedia.org/wiki/Hyperlocal.

Wirtz, B. W., Schilke, O., & Ullrich, S. 2010. Strategic development of business models: Implications of the Web 2.0 for creating value on the Internet. Long Range Planning, 43 (2/3): 272-290.

Wittman, R. 2010a. Codex – the Swiss e-Reading project. Presented at WAN-IFRA Conference, in London, 15th September.

Wittman, R. 2010b. 16th November.

Womack, J. P. 1993. Mass customization: The new frontier in business competition, book review. Sloan Management Review, 34 (3): 121-122.

Worden, N., & McBride, S. 2009. Redbox sues studio over access to films. Wall Street Journal – Eastern Edition, 254 (37): B8.

Wyman, O. 2010a. A new digital future for publishers? Oliver Wyman White Paper, (http://www.nextissuemedia.com/docs/NIM_research.pdf).

Wyman, O. 2010b. Future Marketplace Simulation Study.

Yunus, M., Moingeon, B., & Lehmann-Ortega, L. 2010. Building social business models: Lessons from the Grameen experience. Long Range Planning, 43 (2/3): 308-325.

Zott, C., & Amit, R. 2010. Business model design: An activity system perspective. Long Range Planning, 43 (2/3): 216-226.

Zott, C., & Amit, R. 2007. Business model design and the performance of entrepreneurial firms. Organization Science, 18 (2): 181-199.

Äijö, T. S., & Saarinen, K. 2001. Business models. Conceptual analysis. Telecom Business Research Center Working Papers 12, Lappeenranta.

eReading devices and content (books, magazines and newspaper) markets have mushroomed in recent years but they are still at an embryonic stage in Finland. The main objective of this study is to propose viable approaches to developing eReading business models for distributing chargeable newspaper, magazine and book content in the Finnish context. After conceptualizing the business model framework, defining existing challenges and benchmarking international business models through the lens of challenges faced by Finnish companies, suggestions for eReading business model development will be made.

LAUREA

www.laurea.fi