A business model for the e-newspaper from a customer perspective

Ton AM Spil
University of Twente
a.a.m.spil@utwente.nl

Martijn Suijkerbuijk
University of Twente
m.suijkerbuijk42@gmail.com

Abstract

The e-newspaper will in time replace the traditional newspaper, but today a successful business model is lacking, which leads to declining income from advertisement and difficulty to remain profitable. A debate in literature is mostly absent. Just a few articles have been published in bigger journals in recent years. This paper tries to fill this gap, by presenting a general business model for e-newspapers created from a customer perspective. Therefore it is needed to define the e-newspaper and the value it adds to the customer. The research consists of a structured literature review and qualitative research based on 29 interviews. The research question in this paper is:

"What should be the business model of the e-newspaper, looking from a customer perspective?"

An e-newspaper is a newspaper in digital formats, which can be searched comprehensively, quickly and reliably. The interviews show that newspapers are also read to socialize and to be educated. E-newspapers offer ways to share and communicate about news, and interact directly with the customer. The choice between the traditional newspaper and e-newspaper is mostly determined by the perceived ease of use. This leads to older readers preferring the traditional newspapers and younger readers preferring e-newspapers. This paper builds a new business model for (e)newspapers. Looking at comparable entertainment industries, it seems likely that the future will show a central newspaper seller, collecting news from newspapers and bringing it to the customer (bundled or singular). Where nowadays most newspaper producers ask a fee for their news, news will most likely be delivered for free in the future, since customers do not associate paying for news with higher quality. Advertisement and personal information sales will be the revenue in this business model.

Introduction

Lately the upcoming of the Internet has affected the distribution of goods and services. This has consequences for the newspaper industry, creating a revolution in journalism (Guo & Sun, 2004). New information systems accelerate the process of news reaching the reader, the distribution costs and the chance to connect with readers in a more direct way, where readers might even play a role in the journalistic offer (Flavián & Gurrea, 2009). These developments have paved the way for a new kind of newspaper: the electronic newspaper or e-newspaper. The e-newspaper is often substantially different from their paper version, whereas digital news sites use journalistic formats that differ from those of the print medium, with greater emphasis on visual aspects of news, and news sites are updated constantly with no absolute deadline (Nossek et al, 2015).

The situation in the newspaper industry is comparable to other entertainment industries, like the music or video industry. The music industry has shifted from paying for single songs and CD's, to downloading illegally in MP3 format. Since the necessity of a new business model became bigger, new concepts like ITunes and Spotify turn out to be very successful in creating revenue from legal downloading. In Norway this lead to a reduction of illegal downloading from 1.2 billion songs in 2008, to 210 million songs in 2012, without a repressive policy of the government (Aftenposten, 2013). In the video industry, similar concepts are now starting to become popular. A big example is Netflix, which streams content per pay and suggests videos based on previous watching behavior (NRC, 2013).

New digital central sellers are now also appearing in the newspaper industry, where there is a lack of a successful business model. In the Netherlands the service Blendle is founded to solve the problem at hand. The idea is offering single articles of different newspapers and journals to the customer, who pays per read, like a digital newsstand. Just like ITunes, Blendle wants to earn 30% of each sold item. Competing initiatives are eLinea, which allows access to contents for a fixed amount like Spotify does with music, and Yournalist, which selects relevant articles for readers from thousands of newspapers and journals (Volkskrant, 2013; NRC, 2013). On the other hand there is NU.nl, a free news website since 2000 that covers a broad spectrum of subjects and delivers direct and up-to-date news coverage. NU.nl receives a billion page views per month, highlighting their current success.

These upcoming interesting and innovative ideas have not been addressed or studied properly in literature when it comes to the newspaper industry. The scientific debate is mostly lacking, or failing to assess the current developments, which is needed in order to come up with a working business model for the newspaper industry. This paper tries to add to scientific literature and creating a business model framework that fits the current trends and technologies.

Research method

The main research question that has to be answered is: "What should be the business model of the e-newspaper, looking from a customer perspective?"

In order to answer the research question interviews are done with newspaper readers in the Netherlands. The answers from the interviews give insights in the potential and requirements of e-newspapers from a customer perspective. The interviews have been done based on the PRIMA/USE IT model by Landeweerd, Spil and Klein(2013). Among more theories, this theory is based on the TAM model by Davis (1989) and UTAUT model by Venkatesh (2003), the Information System Success Model of Delone and McLean (2003) and the innovation diffusion model of Rogers (1983). Five areas of analysis make up the PRIMA model: Process, Relevance, Information needs, Means and people, and Attitude. This model for interviewing is very suitable for the study of adoption of e-commerce services according to Landeweerd (et al., 2013).

29 Interviews have been held in total, consisting of open questions as well as multiple-choice questions. The average age of the interviewees is 40 years old of which 67,9% is male and 32,1% is female. The youngest case is a 16 year old woman and the oldest case is a 78 year old man.

When searching in Scopus using keywords: "*e-newspaper*" OR "*digital newspaper*" OR "*electronic newspaper*" returns 248 results, with 161 results from the previous 10 years. Only 6 of the articles published in the last 10 years have over 15 citations. When searching in Scopus using keywords: "*business models*" returns 11.211 results, with 9.814 results from the previous 10 years. 11 Articles published in the last 10 years have over 400 citations.

In order to perform an in-depth and structured literature review, the five-stage grounded theory method for doing literature reviews the grounded theory method of Wolfswinkel (et al.,2013)

is used. The used criteria for this study are the number of citations and the year of publication. The number of citations indicates quality, utility and impact (Seglen, 1997). From articles found, forward and backwards citation is used to get a complete and detailed picture of the subject. Appendix 1 below lists the topics found in literature and the main articles or books that encompasses these topics.

Background

Ihlström et al. (2004) state that the concept of e-newspaper is a wide and not defined term. Ihlström and Kalling (2007) limit an e-newspaper to a newspaper service published on an e-paper device (like an e-reader), with the possibility to offer an experience to read news in a high quality at any time of the day. The properties of this e-newspaper are close to print on paper. This is something else than an e-newspaper offered online or PDF, because according to them, this is a digital replica of the printed edition (Ihlström & Kalling, 2007).

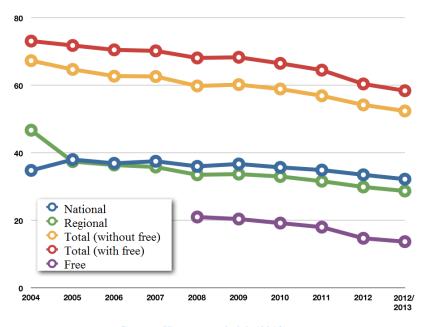
David Deacon (2007) uses a different definition. He states that an e-newspaper is a newspaper in digital formats, so it can be searched comprehensively, quickly and reliably. In many cases this can even happen remotely by subscribers (Deacon, 2007). Shapira and colleagues (2009) state that an e-newspaper can have many forms and can be accessed with computers and mobile devices like a phone or e-reader.

Unfortunately the definitions mentioned above are already quite old and somewhat outdated but can be used to build a new definition:

"An e-newspaper is a newspaper in digital formats, so it can be searched comprehensively, quickly and reliably. An e-newspaper has the form of a webpage or mobile application and can be accessed with personal computers and mobile devices like a tablet, (smart)phone or e-reader".

In the Netherlands the amount of newspaper subscriptions have dropped since 2004 until 2013 as can be seen in figure 1. The total percentage of Dutch people reading newspapers in 2004 (either free, regional or national) has dropped over 10%, with especially the precious five years showing a downward slope. Even newspapers published for free are read less. Print consumtion in Norway follows the same pattern except for some strong national dailies (Slaatta, 2015).

Figure 1 – Newspaper readers in the Netherlands from 2004 to 2013 in % of population



Source: Krantenstatistiek (2013)

Although newspaper producers are still struggling to come up with a suitable business model, in the Netherlands the subscriptions for e-newspapers have increased since 2005 (see figure 2). Krantenstatistiek (2013) shows that for nine major newspaper producers in the Netherlands, the number of subscriptions have increased. Notable is the recent rise in subscriptions for NRC, which is promising. The general growth has continued until at least the final quarter of 2013. Volkskrant has the largest number of subscribers to their e-newspaper with over 45.000 subscribers.

Looking at another news providing medium in the Netherlands news, Nu.nl receives a billion page views per month. 68% of this number of page views comes from either a tablet or a mobile phone (Nu.nl, 2013). In 2012 it was stated that over 5 million unique visitors visit Nu.nl per month (Marketingfacts.nl, 2013). Looking at the billion page views this means that each unique visitor would view the site about 200 times a month.

50000 Telegraaf 45000 > AD Volkskrant 40000 NRC nrc.next 35000 Trouw FD 30000 Ref. Dagblad Ned. Dagblad 25000 20000 15000 10000 5000 0 2007 Q2 2007 Q3 2008 Q4 2009 Q2 2010 Q2 2011 Q3 2011 Q4 2005 Q2 2005 Q3 2005 Q4 2006 Q4 2007 Q4 2008 Q1 2010 Q1 2010 Q4 2011 Q1 2012 Q1 2012 Q2 2012 Q3 2005 Q1 Q **8** q 8 ğ ဗ δ 02 0 2008 Q2 2010 Q3 2009 2009 2009 2007

Figure 2 - Subscriptions to e-newspapers per newspaper producer in the Netherlands

Source: Krantenstatistiek (2013)

The newspaper industry has always been very profitable compared to other industries over time, until recently (Åkesson, 2009; Picard, 2006). According to Alexander and colleagues (2004), the newspaper industry always relied on two revenue streams: circulation and advertising. In 2000, 81% of the income came through advertising. The most important costs for traditional newspapers are printing, mechanical, administration, distribution, and editorial (see table 1). Newspapers can gain from going digital, according to Thurman and Myllylahti (2009), who performed a case study in Finland. On the other hand they found that online traffic did not rise due to dropping the printed newspaper. The income from advertisement online is much lower than for printed newspapers (Kaye & Quinn, 2010). Above all the losses on advertising and subscription revenue can be even higher making a switch to online newspapers useless (Thurman & Myllylahti, 2009; Peters, 2011). It can be said on the other hand, that this has more to do with the lacking of a successful business model, and inexperience in this particular field, than anything else. In 2009 it has been noted that for the New York Times, printing the newspaper on a yearly basis would cost twice as much as it would cost to present every subscriber an e-reader (Businessinsider, 2009). One of the newspapers in the Netherlands (NRC) increases e-subscription by delivering IPad for free.

Table 1 - Average percentage of operating budgets for the traditional newspaper industry

Average percentag	ge of operating budgets		
Revenues	Advertising	65-80%	
	Circulation	20-35%	
Expenses	Newsprint	15-30%	
	Mechanical	13-15%	
	Administration	8-12%	
	Distribution	9-10%	
	Editorial	7-10%	
	Advertising	5-6%	
	Building and land	1-3%	
	Promotion	1-2%	

Source: Alexander et al (2004)

The subscription model for online contents has been tested unsuccessfully in the 1990's, and since then most content is available for free online (Chyi, 2005; Mings & White, 2000). This seems to be one of the biggest struggles to get by, in order to create a successful business model, since the income from advertisements have always been one of the most important forms of income for newspaper producers. It is stated by economists that a switch from offering free news to a model which requires paying will not work due to substitution, except if all newspaper producers increase their price (Chyi, 2005). According to a number of authors customers value the paid and free newspaper similarly, which makes the customer prefer the free content (Ariely & Shampan'er, 2004; Chyi, 2005; Pauwels & Weiss, 2008).

It has been suggested by Kaye and Quinn (2010) that a central newspaper bundler combines a certain topic from different newspapers, so that it shows all articles regarding a subject (for instance sports or politics), since this bundling should increase the willingness to pay (Shapiro & Varian, 1999). Others state that unbundling would be more logical, considering the lack of a cost saving with bundling in the case of online content (Daripa & Kapur, 2001). It is found that offering a similar way of bundling news online and offline leads to cannibalization, which is averted when the news is offered in different ways (Stahl et al, 2004). They also found that the income of bundled articles is higher than the income of single articles.

Today it can be seen that with Blendle, eLinear and comparable initiatives in the music and video industry, companies still tend to believe that the customer is willing to pay. With ITunes, or Blendle, single items are sold to the customer. To maintain the selling platform, newspaper producers, or music producers, need to work together. The success of ITunes shows that it is not per se necessary to bundle items in order to sell them. It has to be noted though, that Apple had the convenience of locking customers using their IPod, by charging them relatively little for the music sold on ITunes (Johnson et al, 2008). Newspaper producers do not have this possibility.

Netflix was founded as an online video rental shop and now is very successful in streaming movies and shows for a certain price. In contrary to the newspaper industry, they generate few income from advertisement, because the video is delivered without commercials. This automatically raises the question whether a business model with commercials, but free video could compete with the Netflix business model. Other sellers, like eLinear and Spotify, too offer the possibility of accessing multiple items for a fixed price. This is more like bundling, which is said to be more effective. Spotify for example focused on the younger audience to penetrate the market. For Spotify, the most important activity is to maintain their platform. All in all, a trend can be seen where the idea as mentioned by Kaye and Quinn (2010) is leading, with a central seller offering items of many different producers to a customer, instead of producers selling their own items. All in all it seems that most initiatives still avoid delivering content for free.

A change in journalism is the usage of hypertexts and multimedia, instead of linear texts which still seems to be preferred. Hypertexts and multimedia allow for a more detailed coverage of news items, and offer the reader the possibility to access more background information with the click of a mouse button. These options are not well used by newspaper producers (Steensen, 2011). The access of readers also allows for reader participation or citizen journalism, which could make the role of a formal journalist less valuable. This type of journalism can happen either by allowing readers to publish news stories, or to allow readers to publish opinions in the form of blogs, or comment bars. The costs of these additions are relatively high, given the need for editing and moderating the news to fit the newspaper, prevent duplications, avoid misspellings or bad language, and selecting newsworthy articles (Thurman, 2008). Interactivity and reader participation is used more in the case of breaking news events (Steensen, 2011).

Newspapers are read for four reasons: (1) to search for specific information, (2) to get updated news, (3) for leisure reasons, and (4) as a habit (Flavian & Gurrea, 2009). Flavian and Gurrea (2009) also state that both channels can survive alongside one another, avoiding cannibalistic effects, and that the newspaper industry should recognize the difference of the digital channel by paying more attention to its peculiarities. More authors have mentioned other (similar) reasons for reading news: to search for specific information, to know what is going on in the environment, entertainment, socialization, and to pass time (Chung & Yoo, 2006; Lin et al., 2003). The question is, if with the current developments, where people get access to Internet and mobile applications everywhere, these motivations have become any different.

Customers of media have become selective and active participants in the production and generation of media content. Young customers are more and more moving to online media, thereby creating an environment where substantial audience segments have everyday experiences with reading and using online news services (De Waal & Schoenbach, 2010). Skogerbø and Winsvold (2011) stated that "print and online audiences read different types of content and were divided according to age, social background, gender and political activity, too". Bennet (2012) wrote about a difference between the younger and older generation: "The digital generation gap refers to the proposed gap between children and adults [...] due to young people's natural ability to adapt to new technologies more successfully than older generations."

Results

This section starts with an overview of the results of the interviews about (e-)newspapers based on the PRIMA USE-IT module. 68% of the interviewees is male and 32% of the interviewees if female. The average age of the sample is 39,36 years. The distribution of ages can be seen in figure 3. It can be seen that all ages between 16 and 78 are incorporated.

Why newspapers are read

It becomes clear from the interviews that besides the gathering of information and being informed about news, reading a newspaper is also a habit for most people to fill their leisure time. This is illustrated by an interviewee stating "I am just very used to the whole routine of getting the paper from the post-box after walking our dog". Another interviewee also noted the habit-aspect of reading a newspaper, and said: "I think I would miss the physical use of the paper news, stuff wet shoes etc. Another thing I would miss is at the weekend, together with my wife, reading the weekend edition from cover to cover and relax while reading". These

motivations align with the theories found in literature. Other mentioned motivations are the finding of interesting topics to discuss with colleagues, friends or family and to be entertained. Of course these can be incorporated under leisure reasons, but the social aspect of sharing news is very notable in the interviews. Almost all respondents state that others share news items with them, and they share news items with others.

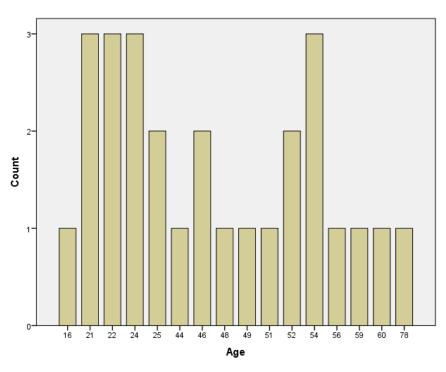


Figure 3 - Distribution of ages of interviewees

Besides these habits, interviewees also state how they like holding a printed newspaper, turning the pages and cutting out interesting news articles in the case of traditional newspapers. The interviewees also stated to have different wishes regarding the content of newspapers, where some just like to read sport sections, others only regional news, and a third one might prefer all the news except for politics.

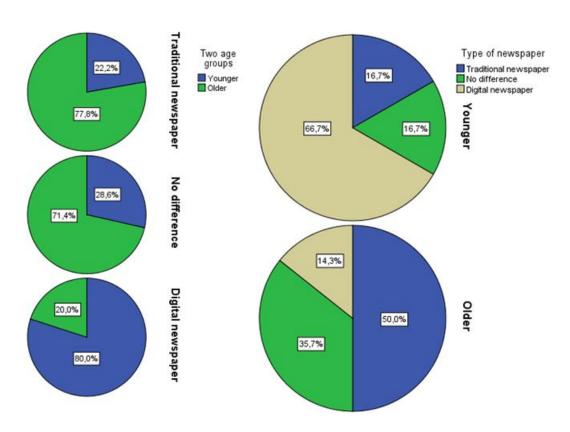
Differences between age groups

The likelihood of an interviewee choosing a type of newspaper is evenly distributed among the three possible outcomes *Traditional newspaper*, *No difference*, *Digital newspaper*. This means that among the sample, no clear preference for either type is found. The interviews show that the older interviewees tend to lean more towards the traditional newspaper, whereas the younger interviewees tend to lean more towards the e-newspaper (see figure 4 and 5). The traditional newspaper is most likely read by 77,8% of the older interviewees and 22,2% of the younger interviewees. The e-newspaper is most likely read by 20% of the older interviewees and 80%

of the younger interviewees. When you look at the differences within an age group, it becomes clear that for the younger interviewees, 16,7% is more likely to read a traditional newspaper, 16,7% has no preference, and 66,7% is more likely to read a e-newspaper. For the older interviewees, 50% is more likely to read a traditional newspaper, 35,7% has no preference, and 14,3% of the older interviewees is more likely to read a e-newspaper. When performing a Chisquared test and Fisher-exact test to find out if the means for younger and older interviewees differ significantly, a p value of 0,023 is found, which is less than $\alpha = 0,05$.

Figure 4 – Age group - Newspaper

Figure 5 - Newspaper - Age group



Gains and pains of the traditional newspaper

For a number interviewees, the preference for a printed newspaper has to do with the layout and headers, that are more appealing in the case of the traditional newspaper. One interviewee said that with "traditional newspaper, usually there is a lot of news and significant headlines in one big page. I can just have a glance of the headlines and then read the news I'm interested in" Another interviewee stated similarly that with "the traditional newspaper I like the fact that I sometimes read news, which I would not have pick out to read myself in the first place. Just because the title or something looks interesting, I read it. I would also like to get that in an enewspaper". This statement also shows that the decision or preference is not fixed, but might change. On the other hand, some older interviewees recognize the advantages of the e-

newspaper over the traditional newspaper, but still prefer the traditional newspaper: "No doubt, that the e-papers get you more specific and interactive information on the topic you are interested in. So it may get me faster information than the traditional newspaper. But [...] if it is that important, that I have to know about it right away, I will turn on the TV".

On the other hand interviewees dislike the lag in time experienced with the traditional newspaper, which is always the day after it happened. Also the traditional newspaper lacks the multi-media possibilities that e-newspapers have, although this is not a feeling shared by most of the older interviewees.

Gains and pains of the e-newspaper

When it comes to the characteristics of the e-newspaper clear differences are found. Interviewees really appreciate the speed of news, accessibility and customization that the enewspaper offers, but on the other hand interviewees dislike slow internet connections, small or unreadable screens, difficult layouts, and the fact that they cannot lay the newspaper in front of them on the table. For example, one interviewee said he found it "quite exhausting looking" at a screen for a long time". This is addressed by many others, where one interviewee said to find "scrolling down a webpage annoying. Reading news from a screen is also not as nice as reading from paper. My smartphone's screen is too small too". Another interviewee stated he really disliked the "loading times, especially on my phone. These are very annoying, especially when compared to a traditional newspaper". Many interviewees too state that it could become easier in time, as does this interviewee when talking about reading the e-newspaper: "I think it would take more effort, especially in the beginning. I not used to reading things on a screen, so that would be a change for me. But after a while, there might not be a big difference in reading a traditional or an e-newspaper". Another interviewee acknowledged the difficulty of learning new devices, and stated that this influenced the preference for the type of newspaper, saying: "so far I still prefer traditional newspaper more but I think I will prefer e-newspaper more in the coming future when I get used to the ICT devices". These problems are experienced mostly by older interviewees, whereas younger interviewees are much more positive. Big and significant differences are found between the two age groups through a Mann Whitney-U test $(p = 0.004; \alpha = 0.05).$

One interviewee stated that e-newspapers would help him to reach his goals better, but that he dislikes the screen, because of the difficulties of reading, which becomes even impossible in sunlight. The first statement really is about the performance of the e-newspaper, whereas the

second statement is about the perceived ease of use which is less in the case of the e-newspaper, than in the case of the traditional newspaper. The effort required to master the technology seems to bother more interviewees more than the increased performance brings, where one said that "if it is a really big change in relation to the traditional newspaper and it brings many advantages, I willing to spend time on it. But if it is not that big of a change in relation to the traditional [newspaper], I will just keep reading the traditional paper and will not spend any time or energy on the e-newspaper".

On the other hand, another interviewee stated that "with a traditional newspaper, you read the news of the day before. With the e-newspapers, this might change because they can update it, when something happened. I think the correctness stays the same". A second interviewee acknowledged the advantage of e-newspapers, saying that "you can get sudden information immediately and you do not have to wait until the next day to read about it in the paper. Also you can research further". On the other hand an interviewee said that she valued the quality of the news itself more and that "it is OK if this means the news will be slightly less timely, because without depth, the news is not really useful". This shows that the extent to which the newspaper is up to date does not necessarily make the difference between a customer choosing either newspaper.

One interviewee stated that e-newspapers could provide more background information about certain news items through the use of a broader variety of media, although not always applicable: "I am not even interested in videos and vocal information, because that would probably disturb my family, while we are eating. But it is useful, if I am doing more research on topics, which interest me, to have [...] options like videos". It has also been stated that the e-newspaper allows for sharing easily on social media channels like Facebook.

Paying for newspaper quality

The interviewees are really divided when it comes to paying for digital news in order to increase the quality. Some interviewees seem convinced that this relationship exists, some interviewees are less confident and some interviewees think that is does not exist. When looking at the beliefs of the interviewees whether or not paying for a e-newspaper would lead to a higher quality (allowing the interviewee to reach its goals better), 50% of the interviewees beliefs it does and 50% of the interviews beliefs it does not. When looking at the distribution among age groups, it becomes clear that these differ per age group (see figure 6). Note that when the interviewee states he or she does not believe that paying leads to higher quality that this does not necessarily

mean that he or she believes the opposite. Of the younger interviewees, 66,7% does not believe that paying for the digital news would lead to higher quality, whereas 33,3% thinks it does. Of the older interviewees, 33,3% does not believe that paying for digital news would lead to higher quality, where 67,7% belies it does. However, this relationship is not significant.

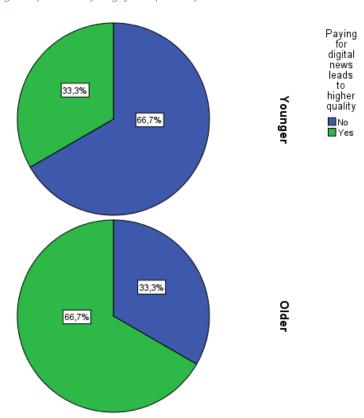


Figure 6 – Age groups – Paying for quality

Analysis

The interviews showed that the four motivations of Flavian and Gurrea (2009) to read a newspaper are all present for today's newspaper readers. Although not all readers said to be motivated to read a newspaper to search specific information, get updated news, for leisure reasons, and as a habit, all motivations have been mentioned more than once. Specific reasons for reading the news found in the interviews are studying, staying up to date in a certain topic, sharing news, and being able to talk with friends, family or colleagues about a topic. These have a more educational, or social vibe to it, which are not directly clear from broad terms like "get updated news", and "leisure reasons". The respondents said to value correctness and some prefer better information over faster information. No difference is found in this sample between an overall preference for either newspaper type. Both types of newspaper are preferred as much as the other.

Looking at the UTAUT model and newspaper preference, which formed the basis for the hypotheses used in this research, it becomes clear that perceived ease of use is the most important variable. Age too, seems to be correlated with the preference for either type of newspaper, but this seems to be due to the perceived ease of use of the e-newspaper according to older interviewees. Regarding the performance, differences are not so clear, both have some gains and pains, but these seem less influencing than the effort one needs to invest in getting familiar with the e-newspaper.

Important gains of the traditional newspaper have to do with familiarity with this medium, combined with a nostalgic feeling like reading with the family, turning the papers and cutting out news articles of interest. Other gains found are the reading of news one would not choose to read him- or herself and an easy layout. Notably these gains are mostly felt by older interviewees, and are expected pains for the e-newspaper, as stated before. To appreciate the e-newspaper in a similar fashion, interviewees need to get to know this medium as much as they do traditional newspapers. It has been stated multiple times that some readers rather not put in the effort of getting there, as long as the traditional newspaper is an alternative. It seems likely that as long as the older generations start to get much more familiar with the Internet and all its aspects these pros will diminish more and more.

The e-newspaper has many more pains to overcome, but most have to do with the quality of and familiarity with the facilities, instead of the actual e-newspaper. Screen sizes, Internet speeds, and difficulties with ICT systems are mentioned often, but do not address the actual content or form of the e-newspaper. This too is mentioned multiple times to be worse than the printed newspaper, as some stated to dislike the layout, video or audio content, since it is either not practical, or not needed. On the other hand, when it comes to the contents of the e-newspaper, much more gains are mentioned. The e-news would allow for more in-depth studying, customizable news delivery, the possibility to share the news on social media channels and live updates. Given the trends worldwide and in the Netherlands, it seems likely that the e-newspaper will overcome its remaining (ICT-related) struggles and outperform the traditional newspaper within a decade or two.

Business model of the e-newspaper

Based on the analysis of the results, a business model canvas (Osterwalder & Pigneur, 2010) of the e-newspaper is created. This business model canvas is displayed below in table 2. Aspects and options of the e-newspaper are given which are general and depend on the specific requirements of the e-newspaper. This way it is possible to get a clear idea of what the business model of an e-newspaper means.

A big global newspaper targets a heterogeneous customer, delivers general news about all kinds of topics, uses much more employees, journalist, bloggers as well as employees to search other sources, and requires much more server space, than a local newspaper. The latter would target a more homogeneous customer, delivers (local) news for a limited amount of topics, needs fewer employees, and requires little server space. In a similar vein differences occur between the business model of a newspaper targeting the customer that wants to be entertained and a newspaper targeting the customer that wants to be educated.

Table 2 - Main differences between business models of e-newspaper and traditional newspaper

	E-newspaper	Traditional newspaper							
Value proposition	- Live delivery	- (One day) late delivery							
	- Customization	- Standardized							
	- Debundling	- Bundled							
	- Social platform and online sharing	- Cutting out news articles for sharing							
Customer relationship	- Younger audiences	- Older audiences							
	- Website or application	- Paper							
	- Automated services								
Infrastructure management	- Maintaining social platform	- Printing newspaper							
	- Maintaining website, servers and application	- Distributing newspaper							
	- Maintain online security								
	- Direct contact with readers								
Financial aspects	- No printing costs	- High printing costs							
	- Little distribution costs	- High distribution costs							
	- Costs for running website and application	- Higher income from advertising							
	- Lower income from advertising	- Income from newsstand							
	- Income from central newspaper seller								

Conclusions

The interviewees showed that the perceived ease of use is the most important predictor in newspaper usage and preference. The perceived ease of use is also influenced for a great deal by the age of the user. The perceived ease of use of the e-newspaper for older customers is lower, than for younger customers.

An important part of the value proposition of the e-newspaper is the timeliness of the news. It is capable of delivering up-to-date news. E-news articles can be shared with the click of button, and e-newspapers allow for social platforms where readers can discuss and ask questions. The e-newspaper can also make use of multimedia, hyperlinks and hypertexts. As well e-newspapers can be customized and personalized. The interviews showed that it is important to look at the aspects of newspapers that go beyond the quality of news, but to look more carefully at the motivations and habits of readers. Readers may have nostalgic reasons for reading a newspaper, which should not be ignored.

People read news to find different sorts of information and can be segmented accordingly. In literature differences have been found on customers who prefer either more local, national or global news. Linked to these segments are customers who value either that the newspaper producer produces their own news, or serves as a newsagent. Differences between age generations have been found in the interviews, where younger readers are more likely to prefer an e-newspaper than older readers, who are more likely to prefer the traditional newspaper. Other differences can be between customers that prefer general and specific news, or customers that want to be entertained or educated.

The way of delivering the news to the customer to is important, where the size of the screen of the device influences the perceiving of easiness by the customer and might make a big difference. This also influences the perceived ease of use, which seems to be lower for smaller screens. An e-newspaper on a personal computer or tablet can thus be preferred over an e-newspaper on a mobile phone. Customers can be contacted directly, and they can also contact the e-newspaper easily using digital and social media channels.

The e-newspaper producer can either sell or deliver its news by itself, or can partner with for instance a central news seller like ITunes which sells music. Different than for the traditional newspaper is that the e-newspaper producer needs to pay attention to maintaining the website, its online security, and mobile application. The ways of editing news can also differ, especially when offering readers the possibility to create content.

The costs of printing and distributing news will decrease when moving from a traditional newspaper to an e-newspaper. Unfortunately the revenues from advertising are much lower in the case of the e-newspaper, but given the trends of the last ten years, this will become better in time. This brings e-newspaper the opportunity to offer news content for free, like NU.nl does, instead of subscriptions. Using a central newspaper seller can also be a way of generating income.

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Appendix 1

A = Åkesson (2009)K = Johnson and colleagues (2008) B = Åkesson and Ihlström (2008) L = Morris and colleagues (2005) C = Al-Debei and Avison (2010) M = Mullainhathan and Shleifer (2005)D = Brousseau and Penard (2007) N = Osterwalder and colleagues (2005) E = Chesbrough (2010)O = Osterwalder and Pigneur (2002) F = Chesbrough and Rosenbloom (2002) P = Osterwalder and Pigneur (2004) G = Deacon (2007)Q = Osterwalder and Pigneur (2010) H = Flavian and Gurrea (2009) R = Shapira and colleagues (2009) I = Ihlström and colleagues (2008) S = Zott and colleagues (2011) J = Ihlström and Kalling (2007)

Table 3 – Topics found in literature review by author(s)

		A	В	C	D	E	F	G	H	Ι	J	K	L	M	N	О	P	Q	R	S
1	E-newspaper definition							X			X								X	
2	Newspaper history	X																		
3	Reader motivations								X					X						
4	Newspaper characteristics	X	X																	
5	Business model definition			X		X							X		X					X
6	Functions of a business model						X									X	X			
7	Value proposition					X						X	X				X	X		
8	Customer relationship					X							X				X	X		
9	Infrastructure management											X	X				X	X		
10	Financial aspects					X						X	X				X	X		
11	E-business model			X	X															X
12	E-newspaper business model									X	X									