Master's Thesis

Title: Dutch cross-media now

Subtitle: An investigation of the current state of cross-media in the Netherlands

Vrije Universiteit Amsterdam

Faculty of Exact Sciences

Supervisor: Prof. dr. A. Eliens

Co-Supervisor: Prof. dr. G.C. van der Veer

Amsterdam

Date

First concept

Name: Raoul Franker

Student number: 1259696

Email address: rfranker@few.vu.nl

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*"**Blog**, what I think about, **Jaiku**, what I am doing, **Twitter**, what I say I am doing, **Plazes**, where I am and where I was, **Dopplr**, where I will be, **Flickr**, what I see, **delicious**, what I read, **Wakoopa**, what software I use, **Slideshare**, what I talk about, **Upcoming**, where I will attend, **Last.fm**, what I listen to, and then there is my **LinkedIn**, my **Facebook**, my **Xing**, my **Hyves**, my **NING**, and my collaborative tools **MindMeister**, **Thinkfold**, and **Googledocs**, **anywhere**, **anytime**!"*

Adapted from: http://www.zylstra.org/blog

"I had this guy leave me a voice mail at work, so I called him at home, and then he emailed me to my BlackBerry, and so I texted to his cell, and now you just have to go around checking all these different portals just to get rejected by seven different technologies. It's exhausting."

Quote from the film 'He's Just Not That Into You'

Preface

Contents

Abstract

Information is no longer bound to one particular medium. You can read the morning paper on your mobile, do some shopping from your television set and call your mom from your desktop PC. A couple of years ago, the joke was that computers could do everything except make you a cup of coffee. Then we discovered that computers really can do anything. If so wished, you can have your desktop PC custom build with an internal coffee maker. The opposite has also happened; gone are the simple days when all a telephone did was allow you to make telephone calls. We have turned innocent one-purpose machinery into sophisticated computers that are capable of anything. A television is no longer just for watching television, but for watching television, automatically recording programs you might want to see later and having a video conference with relatives living abroad. A telephone is no longer just for making telephone calls, but literally, for anything we can imagine. Formerly simple machines can now do anything and everything.

For organizations, cross-media not only offers new ways to reach and interact with customers, but also broader business models, which could lead to economic gain. In many industries, organizations are starting to focus on incorporating multiple media in their efforts to reach and interact with their customers. Cross-media, the application of two or more media, working together from their own strengths, to support the end goal of a media property, service, story or experience, is starting to play an increasingly larger role in many industries. Especially in the entertainment and marketing industry, many programs and campaigns have a strong cross-media component. In other industries, such as the healthcare and government industry, cross-media is also being applied to engage and interact with their public.

Another concept that is of importance in the media industry is (media) convergence. Media devices that used to have one specific function – a television was only for watching television, a (mobile) telephone was for making telephone (voice) calls – are being given the ability to handle other types of media then just the one they were originally intended for.

The first chapter of this thesis consists of an introduction to this research, in which we explain the problem, the research questions, methods, audience and scope of this master thesis. In chapter two, we will dive into the concept and definition of cross-media and the cross-media

industry in general. In chapter three we dive into the technical side of cross-media; we investigate the different media that come into play in cross-media, and the technologies those media encompass. The fourth chapter of this thesis introduces the most important cross-media initiatives in the Netherlands, divided according to different cross-media levels. Chapter five consists of a cross-media business case and the final part of this thesis consists of a list of figures and tables, references and appendices.

Chapter 1. Introduction

1.1 Introduction

Cross-media is a phenomenon that appears to be omnipresent, often even without the knowledge of the consumers aimed at. For the modern information consumer it is general practice to, for example, watch a television program or see an ad in a newspaper with a weblink or SMS code added to it and to subsequently follow up on the previous information on a computer or mobile device. Cross-media, in short, is defined as a combination of different forms of media, applied to get a message across and/or to get the consumer to interact. The modern information consumers want access to information anytime and anywhere and many organizations are utilizing the advances in modern technology, to apply cross-media solutions to reach, and interact more efficiently with, their target audience.

1.2 Problem definition & research questions

Many organizations in the Netherlands are deploying cross-media initiatives, which enable them to reach wider audiences and to interact with their customers, thus generating new and larger revenue streams and keeping their customers more engaged. Cross-media projects are inherently complex because a cross-media project often concerns many different technologies, platforms and disciplines, which have to work together seamlessly for the consumer. Due to the complexity of cross-media projects, many variables need to be taken into account to guide such projects to success. In this thesis, we will investigate what cross-media entails, what a medium sized cross-media project looks like based on an example project, and which key issues arise in the course of such cross-media projects.

We formulated our main research question as follows:

What is the current state of cross-media in the Netherlands?

To come to an answer for this question, we have devised a set of sub questions.
Cross-media is a term that can be used in many different contexts and in many different situations, depending on view and context of the user (bron???). For the purpose of this thesis, it is important to explore what cross-media is and to come to a definition of cross-media. This brings us to the first research sub question:

1. *What is cross-media?*

We will take inventory of the main technical platforms on which cross-media takes place:

2. *What are the main platforms on which cross-media takes place?*

We will explore the different levels of cross-media defined in the literature and divide the different cross-media projects accordingly:

3. *What are levels of cross-media projects can we distinguish in the Netherlands?*

We will explore the cross-media sector in the Netherlands, by investigating what kind of initiatives and projects are of interest:

4. *What are the main cross-media projects, initiatives and organizations of interest in the Netherlands?*

We describe the inner workings of a cross-media project with the help of a cross-media project business case:

5. *What does a cross-media project look like?*

We discuss the technical issues experiences during the cross-media project business case:

6. *What are the technical issues in a cross-media project?*

And finally, we take a look at the trends cross-media has and is likely to follow in the future:

1. *What does cross-media's life cycle look like so far, and what is likely to follow next?*

Chapter	*Research question*	*Research method*	*Result*
2	*1. What is cross-media?*	*Literature*	*Definition and general description of cross-media*
3	*2. What are the main players in the cross-media field in the Netherlands?*	*Literature; media & sector observation*	*Inventory and description of the main cross-media players in the Netherlands*
4	*3. What are the cross-media projects and initiatives of interest in the Netherlands?*	*Literature; media & sector observation*	*Inventory and description of the main cross-media projects in the Netherlands*
4	*4. What are types (cross-media levels) of cross-media projects can we distinguish in the Netherlands?*	*Literature; results previous questions*	*Classification of cross-media projects in the Netherlands*
5	*5. What technologies play a role in cross-media?*	*Literature; media & sector observation*	*Inventory and description of cross-media technology*
6	*6. What does a cross-media project look like?*	*Business case*	*Description of a cross-media project business case*
6	*7. What are the technical issues in a cross-media project?*	*Business case; results previous questions*	*Conclusions on the cross-media project business case*
	What is the current state of cross-media in the Netherlands?	*Accumulation of all research sub question*	*Completed masters thesis*

1.3 Thesis overview

The first chapter of this thesis consists of an introduction to this research, in which we explain the problem, the research questions, methods, audience and scope of this research.
In chapter two, we will dive into the concept and definition of cross-media and the cross-media industry in general. In chapter three, we dive into the technical side of cross-media and give an overview of the most important cross-media platforms and technical trends concerning these platforms. The fourth chapter of this thesis introduces the most important cross-media initiatives in the Netherlands, divided according to the different levels of cross-media and on the main organizations concerned with the cross-media industry in the Netherlands. Chapter five consists of a cross-media business case and in chapter six, we investigate the trends in cross-media, by taking inventory of cross-media's life cycle. The final part of this thesis consists of a list of figures and tables, references and appendices.

Chapter 2. Cross-media

2.1 Introduction

As long as modern media exists, there have been crossovers between media. Think of a television commercial, where an edited frame of that commercial is also used as a newspaper advertisement. According to film scientist Peter Bosma, the synergy or crossover between the different media, genres and products is not new. What is new is unprecedented scale on which this is occurring now (Reynaert I. (., 2007).

Cross-media has been around in one form or another for many years. Database Publishing, multimedia, multiple media and content re-purposing are all terms closely related to cross-media. By the mid nineties, the term cross-media stood for content re-purposing in the publishing and printing industry and it was linked to the slogan Create Once, Publish Everywhere (COPE). In many cases, nowadays COPE is still an issue in publishing, along with cross-media.

Towards the end of the nineties, the term cross-media was spreading to the broadcast industry. The broadcast industry embraced the internet from 1996 onwards, but most commonly only by providing extra information about television programs on the internet. 1999, the year of Endemol's first cross-media television show Big Brother, launched cross-media in the broadcasting industry. With Big Brother, a television show where a group of strangers is locked in a house while their daily lives are broadcasted over television and the internet, the public casts votes on who they want to allow to stay in the house by telephoning in at premium rates or through SMS. The internet was used to provide extra information on the house inhabitants and the public could, besides watching the 45 minute show on television, also subscribe to 24/7 live footage of the inhabitants of the house on the internet. Big Brother generated added audience interest and because of the increased number of platforms - analogue television, interactive cable, internet and mobile telephony and support by print magazines and newspapers – and an increase of revenues (Boumans J. , 2004). A larger target audience due to the application of more media was not the only cause of this increase, but also to the fact that the business models could be adjusted to the different media and because the public is more comfortable and more willing to pay for extra services through mobile

handhelds and the internet. In market communications, cross-media also has mayor benefits. In a MBIQ Media Mix Study by the Online Publishers Association in 2002, when exposed to a television commercial, 23% of the people remembered seeing it the next day. Of people exposed to the ad on the internet, 65% remembered having seen it the next day. When exposed to the ad on television and on the internet, 32% remembered seeing it on television and 78% remembered seeing it on the internet, proving that applying more than one channel, dramatically increases the impact of an ad campaign (Online Publishers Association & Millward Brown IntelliQuest, 2002).

Due to technological advances, the boundaries between television, internet, mobiles and PDA's are rapidly disappearing; information can be made available across a score of different media to provide richer experiences to users than the experience gained from pictures, voice and data on television, the internet or third-generation handsets (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004).

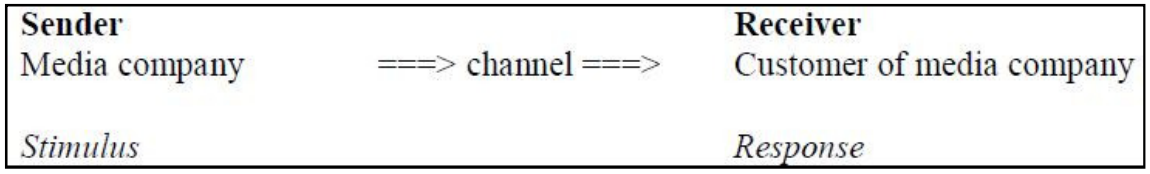


Figure 1: The two way communication system, which enables interactivity (Juhola, Lindqvist, & Siivonen, 2003)

The simple two-way value chain for information exchange between a media company and a media company customer (see Figure 1: The two way communication system, which enables interactivity) has been replaced by a far more extensive value chain, needed to explain the interactions between business, technology and users (see Figure 2: The generic media chain from content provider to consumer). This updated generic media value chain (Juhola, Lindqvist, & Siivonen, 2003), represents multiple use of content on a variety of information carriers (media), after the information has been stored in a generic and structured form. Especially in the broadcast and entertainment industry, an increasing number of new cross-media formats can be observed, where the collaboration of different media is essential for the success of the concept. The combination of television, web, mobile and other media has proven to be the key in many successful formats, and has opened up new revenue streams. Utilizing more media platforms means more ways for consumers to access information, more interaction with consumers, which means an increase of revenues (Boumans J. , 2004).

Information is no longer bound to one specific medium, but widely available across different media, often taking advantage of all the strengths of the different media.

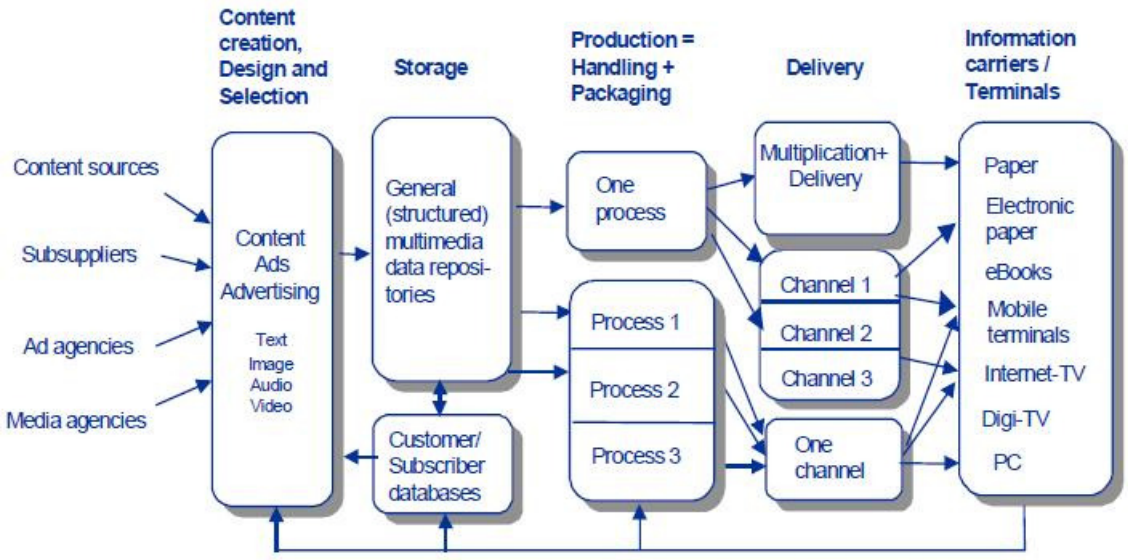


Figure 2: The generic media chain from content provider to consumer (Juhola, Lindqvist, & Siivonen, 2003)

Cross-media is now also penetrating many other industries, from healthcare and government to the retail industry. On different governmental websites, it is for example possible to subscribe to receiving SMS text messages, in the event of certain policy changes or changes to the website. On the website of the Albert Hein supermarket chain, it is possible to search for recipes, and to receive a grocery list of the ingredients of recipe's on a mobile handheld device through SMS.

2.2 Defining cross-media

Cross-media, also called transmedia – allowing or even forcing the user to transfer between media – in the US, is a term often used with different intentions, depending on the discipline of the person using the term. The concept of cross-media is generally not difficult to understand. In the most general sense, cross-media can be explained as information that is available across different media.

From the content viewpoint, cross-media can be defined as any content (news, music, text, and images) published in multiple media, be it most often mobile, print, web and TV. Posting

content or information once and making it available on other media, rather than having redundant material (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004).

From the viewpoint of communication, cross-media can be defined as communication where the storyline will invite the user to crossover from one medium to the next. Good cross-media communication will enhance the value of communication in two ways. Firstly, the level and depth of (message) involvement will be more personal and therefore more relevant and powerful, which means a more valuable experience. Secondly, it is possible to gain financial profits through equal or decreasing costs for the same communication effects with single medium communication. Costs for communicating can be relayed from the sender to the receiver if the story is attractive enough for the receiver to want to interact with it (de Haas, 2005).

Cross-media involves two or more media (both new and existing) that are used in an integrated or coordinated fashion (Barkhuus, L & Cauchi, G & McLean, K & Pruzan, R, 2001)

Cross-media most often refers to (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004):

- Create once, publish everywhere
- The ability to leverage content over a variety of media
- The creation and implementation of single graphics for a variety of media

Boumans (2004) also defines four criteria for describing cross-media:

- more than one medium, ranging from analogue and digital media or digital media only, which all support each other with their specific strengths;
- aimed at an integrated production;
- delivered / accessible on a range of devices such as PCs, mobiles, TV set or set-top boxes;
- use of more than one medium needs to support one theme / story / one purpose / one goal / one message, depending on the type of project;

Based on the different definitions discussed earlier in this chapter, for the purpose of this thesis, we define cross-media as follows:

The application of two or more media working together from their own strengths, to support the end goal of a media property, communication, service, story or experience.

2.3 Reasoning behind Cross-media

Cross-media initiatives are, more often than not, complicated endeavors. In a cross-media project, many different specialties and technologies are concerned. Every type of medium demands specific specialist knowledge during the course of the cross-media project such as, amongst others: concept, design, interaction, technical implementation and rollout. And to make things even harder, the project members need to work together on one coherent theme, that should get the user engaged enough to cross-over to the different media to get the complete experience.

Businesswise, almost every cross-media initiative is unique in the sense that it uses different aspects of different combinations of media. This, with the complexity of using a combination of many different media, each with their own traditional business models, has as a consequence that there is no univocal or generally accepted business model for cross-media, if this is even possible. This imposes challenges for the feasibility of cross-media initiatives; for every initiative, a business model needs to be developed and negotiated. The last couple of years have shown for many different initiatives in the Netherlands that this, cross-media's failures to generate revenues, is the cause for many cross-media disappointments. We shall discuss some projects in more detail in "Chapter 4 Cross-media projects and initiatives in the Netherlands".

Cross-media does have a number of advantages that could lead to greater financial gain than the use of a single medium or multiple uncombined media. The ultimate goal of cross-media initiatives is to reach potential customers and to get and keep users engaged, whether it is with a television program, a brand or a physical product. In the production phase of a cross-media initiative, assets are shared, which lowers the production costs (Björk, 2004). When making

use of different media, the range of the initiative is widened, all the media specific audiences that would otherwise be beyond the scope of the initiative (niche audiences) can be approached and engaged via the medium they are comfortable with and they can also be invited or tempted to continue their experience on the other media. This also has as advantage that consumers can be directed towards other media, and even towards the media with the more lucrative business models. If we take Idols type cross-media initiatives for example, Idols is a weekly television show, where viewers are invited and encouraged to go see more (backstage and extra) footage on the internet, which is available 24/7. Voting for your favorite Idol is done by SMS-ing or telephoning in your vote at premium rates. With the internet video channel, the advertising opportunities were greatly increased and the voting system makes use of consumer's level of comfort with spending money by (mobile) phone. For the American version of Idols, an official application was developed and downloadable on iPhone and iPod touch devices for two US dollars from Apple's App Store. With this application, users got access to exclusive in depth bios, daily news updates and weekly updated pictures and behind the scenes videos. From the application, the iTunes store is one click away, where music from recent performances can be purchased. (Liaw, 2009)

Cross-media initiatives should make use of the individual strengths of the different media, such as mobile handheld's ubiquity, mobility and the consumers habituation to its use costing money, computer's and the internet's capabilities when it comes to dealing with all types of data and television's omnipresence. We will discuss the different media strengths in more detail in Chapter 3 Cross-media .

2.4 Cross-media and media convergence

A concept that is closely related to cross-media is (media) convergence. Media devices that used to have one specific function – a television was only for watching television, a (mobile) telephone was for making telephone (voice) calls – are being given the ability to handle other types of media then just the one they were originally intended for. Convergence is taking place in a number of different media such as PC's, televisions, game consoles and mobile handheld devices, which are all able to show the same digital content and has its implications especially on the telecommunication, television and publishing industries. (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004)

However, due to their ubiquitous nature, the fact that mobile devices are usually available to their owners 24/7, and the rate at which consumers tend to replace them, it seems mobile handheld devices are winning the race to become the most important media device. Mobile handhelds are more and more becoming all-in-one-devices, with the technological advances being driven by the fact that the modern consumer not only wants, but also needs access to information anytime and anywhere and mobile handheld devices are supporting this need. The modern mobile telephone, which first came into existence to enable (business) people to make phone calls while on the road, is now a technologically sophisticated computer, capable of just about anything and of handling most other, previously media specific, types of data. The modern mobile handheld device is a music player, game console, video player, day-planner, internet browser, text communication device (SMS and web-chat), internet modem, and not to forget a device to make telephone calls with, all in one. See Figure 3: Top 10 mobile services in the Netherlands, 2008 for percentages of the top ten mobile services used in the Netherlands. We will discuss the technological aspects of convergence in more detail in paragraph 3.7 Convergence .

	%
SMS	79
MMS	24
E-mail	21
Surfen	19
Zoekdiensten	15
Nieuws en weer	15
Downloaden van ringtones	15
Games	12
Downloaden van icons	12
Opzoeken van vertrektijden van trein of vluchten, downloaden van muziek en streamen van muziek	11

Figure 3: Top 10 mobile services in the Netherlands, 2008 (Het Centraal Bureau voor de Statistiek, 2008)

Chapter 3. Cross-media platforms

Even though cross-media is not based on a specific technology, technology is the mayor enabler for cross-media. The introduction of internet and the TCP/IP protocol has allowed technologies to converge and networks to become ambient, with a great increase of the amount of different types of devices. To aid in the delivery of content, content management systems (CMS) are being developed and technical platforms are developed with scalability in mind, in order to allow transmission of data from main computers through various linked networks to a growing number of different terminal devices, so users can seamlessly move from network to network. A for users ubiquitous environment is established with domestic fixed line, satellite and mobile networks and broadband is becoming a triple play network for television, internet and telephony. This integration and convergence is stimulated by technological advances in terminal devices, which are becoming more powerful and cheaper in production and retail price, PC's are becoming smaller in the form of laptops and PDA's, mobile telephones are becoming smart phones capable of handling all sorts of data and networks, and the migration from analogue television towards interactive digital television. (Boumans J. , 2004), (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004).

3.1 Print and publishing

Print and publishing have been using a form of cross-media for an extended period, for example in the form of a CD-ROM added to books in order to make books searchable. Efficiency used to be the main driver, but marketing and market penetration are now important considerations in the newspaper and magazine industry. Cross-media in the print and publishing industry mostly takes place between the actual printed version and the internet. Magazines and local newspapers can be read online (sometimes limited to with an online subscription) and often, book chapters can be read online, in order to promote books and to support book sales. Though e-book adoption at still in the early stages and e-book sales are lagging far behind printed book sales, e-book sales are growing fast and the expectation is that this form of cross-media will be successful and reading books on PC's, mobile smart phones or dedicated hardware devices or e-book readers will be generally accepted and used in the near future (Chennupati, Schubert, & Heng, 2006).

3.2 Television

After the success of Endemol's Big Brother (see paragraphs 1.1 Introduction and 4.3.3 Reality TV shows), many comparable television concepts have been launched, where mobile and internet are added as extra channels, to reach larger audiences – broadcasts can be viewed online, along with extra content – and to enlarge the business models, adding extra income streams. Television has evolved from a passive channel to an interactive one, with the addition of SMS and with the launch of interactive television. Digital television with an upstream channel offers interactivity through the television remote controller, such as the ability to vote and get extra information. IPTV – television over the Internet Protocol – allows for yet more interactive services, such as video on demand, and is stimulated especially by triple play companies, offering bundled subscriptions to television, telephone and internet.

3.3 Web

In the Netherlands, bandwidth is no longer an issue; in 2008, 74% of all Dutch households had a broadband internet connection on their computer (Centraal Bureau voor de Statistiek, 2008). The internet and the TCP/IP protocol are mayor technological drivers for and enablers of cross-media, and still play an important role in cross-media; most cross-media initiatives either have the internet as main platform or have a strong internet component, due to internet's reach, marketing analytics possibilities and clear business models. The internet is still lacking an efficient micro payment system allowing consumers to pay small sums of money at reasonable costs, which can be taken care of by adding mobile – with its organized micropayment invoice systems – to the business model (Antikainen, H. & Kangas, S. & Vainikainen, S., 2004). With wireless technology and widespread access points, internet has become mobile and is becoming even more so, with laptops and mobile phones able to connect to the internet regardless of their location at low costs.

With the arrival of web 2.0, the public's attitude towards internet has changed. The public is now the producer of content and needs to have real-time access to information at all times in order to collaborate with others, share information in wiki's and blogs and to connect to their social network.

3.4 Gaming

Seventh generation game consoles have come a long way from the simple machines with game cartridges that could be played at home when connected to a television set. Game consoles are now complex computers, can be in handheld mobile form and can be used to watch video and to connect to the internet, which also enables players to play with and against each other over the internet. An example of cross-media gaming is a multiplayer game, where players compete against each other by sending commands through SMS to a server,with the results displayed on television. With interactive television (see paragraph 3.2 Television), these types of games will be playable with the television remote control (Pelkonen, 2005). Mobile gaming and mobile devices are adding even more functionality to gaming, for example, the availability of GPS in mobile handheld (telephone and game console) devices, has added context awareness to games and opened the field to pervasive, real world, location based, gaming. Cross-media gaming can also be a form of pervasive gaming, games are played across different devices and media channels, often making use of a combination of state-of-the-art mobile and stationary computing devices and more traditional communication and information channels, such as print and television broadcast (Lindt, Ohlenburg, Oppermann, Ghellal, & Adams, 2005).

Figure 5: Devices used in cross-media gaming (Lindt, Ohlenburg, Oppermann, Ghellal, & Adams, 2005)

Figure 4: Trends in games (Exmachina)

3.5 Mobile handheld devices

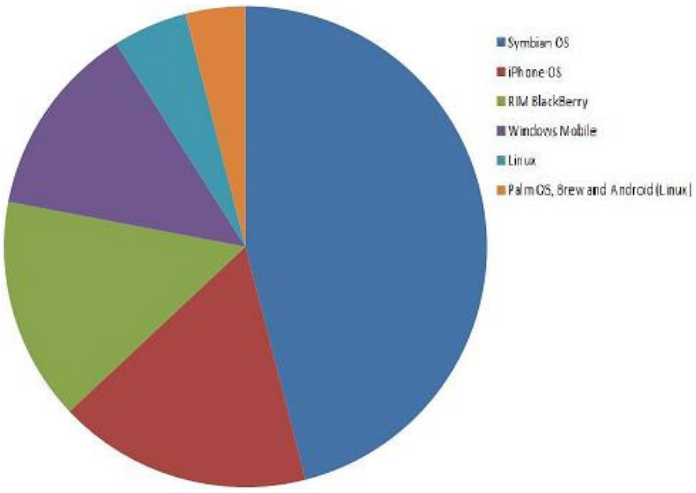
Mobile handheld devices have become more and more sophisticated. As discussed in the previous chapter mobile technology has undergone mayor advances. Most modern mobile handheld devices are capable of presenting internet websites, video, music and other formats not necessarily designed for mobile, in a correct manner. The discussion has moved from “How do we get our product displayed correctly and what boundaries do we have to keep in mind” to “Do we want our product to be displayed differently on a mobile device then on for example on the internet”. Mobile handheld devices do still have their limitations, such as battery life, screen size and limited input devices, but solutions are being developed to overcome these limitations, such as (pico)projectors that can be hooked up to project the screen of the mobile device and mobile devices with (touch screen) QWERTY keyboards.

Product	Nokia E71	Palm Treo Pro	Apple iPhone 3G 16GB
Kleur(en)	grey steel; white steel	zwart	zwart; wit
Introductie model	2008	2008	2008
Op Kieskeurig sinds	juni 2008	augustus 2008	juni 2008
Afmetingen (H x B x D)	11,4 x 5,7 x 1 cm	11,4 x 6 x 1,4 cm	11,6 x 6,2 x 1,2 cm
Model	standaard	standaard	standaard
Type telefoon	smartphone	smartphone	smartphone
Besturingssysteem smartphone	Symbian OS v9.2	Windows Mobile 6.1 Professional	OS X
GSM-netwerken	quad-band	quad-band	quad-band
Netwerkfrequenties	850, 900, 1800, 1900	850, 900, 1800, 1900	850, 900, 1800, 1900
Dual SIM	✗	✗	✗
HSDPA	✓	✓	✓
UMTS	✓	✓	✓
EDGE	✓	✓	✓
GPRS	class 32	class 10	✓
WAP	2.0	2.0	✗
Fax / data (modem)	✓	✓	✗
Infraroodpoort	✓	✗	✗
Bluetooth	2.0 met A2DP	2.0 met A2DP	2.0
Wi-Fi (WLAN)	✓	✓	✓
USB-verbinding	USB 2.0	USB 2.0	USB 2.0
Kleurendisplay	✓	✓	✓
Aantal kleuren	16777216	65536	16000000
Grootte	2,4 inch	2,45 inch	3,5 inch
Resolutie	320 x 240 pixels	320 x 320 pixels	320 x 480 pixels
Touchscreen	✗	✓	✓
Tweede (front)display	✗	✗	✗
Camera	✓	✓	✓
Megapixels	3,2 megapixels	2 megapixels	2 megapixels
Maximale fotoresolutie	2048 x 1536 pixels	1600 x 1200 pixels	1600 x 1200 pixels
Zoom	digitaal	digitaal	✗
Camerafuncties	autofocus, flitser, multishot, zelfontspanner	multishot, zelfontspanner	?
Pictbridge	✓	✗	✗
Video opnemen	✓	✓	✗
Maximale videoresolutie	640 x 480 pixels	320 x 240 pixels	? pixels
Maximale framerate	22 fps	? fps	? fps
Tweede (front) camera	✓	✗	✗
Videobellen	✓	✗	✗
Intern geheugen	110 MB	100 MB	16384 MB
RAM-geheugen	? MB	128 MB	? MB
ROM-geheugen	? MB	256 MB	? MB
Uitbreidbaar geheugen	✓	✓	✗
Maximaal uitbreidbaar	8192 MB	32768 MB	? MB
Opslagmedium	micro SD (transflash)	micro SD (transflash)	✗
SDIO	✗	✗	✗
Processor	?	Qualcomm MSM7201	Samsung S3C6400
Processorsnelheid	? MHz	400 MHz	620 MHz
Batterij	Li-Ion	Li-Ion	Li-Ion
Capaciteit	1500 mAh	1500 mAh	1150 mAh
Stand-by tijd	408 uur	250 uur	300 uur
Gesprekstijd	390 min.	300 min.	600 min.
Gesprekkenlijst	✓	✓	✓
Trilfunctie	✓	✓	✓
Beltonen	monofoon, MP3, polyfoon, realtone/truetone	monofoon, MP3, polyfoon, realtone/truetone	monofoon, MP3, polyfoon, realtone/truetone
Voice dialing	✓	✓	✗
Handsfree speaker	✓	✓	✓
Fototelefoonboek	✓	✓	✓
Tekstvoorspelling	T9	✗	✗
SMS	✓	✓	✓
MMS	✓	✓	✗
Mobile chat	✓	✓	✗
Beltonen toevoegen	✓	✓	✓
Wallpapers toevoegen	✓	✓	✓
FM-radio	✓	✗	✗
RDS	✗	✗	✗
E-mail	✓	✓	✓
Ondersteuning voor Exchange	✓	✓	✓
Internet browsen	✓	✓	✓
Vliegtuigmodus	✓	✓	✓
Audiospeler	ja, AAC, AAC+, eAAC+, MP3, Real Audio, WMA	ja, AAC, AAC+, eAAC+, MP3, WMA	ja, AAC, AAC+, MP3
Stereo speakers	✗	✗	✗
Videospeler	ja, 3GP/H.263, MPEG4/H.264, Real Video	ja, 3GP/H.263, MPEG4/H.264, WMV	ja, MPEG4/H.264
Digitale televisie (DVB-H)	✗	✗	✗
Video-uitgang	✗	✗	✓
Organizer functies	ja, agenda, contactpersonen, taken	ja, agenda, contactpersonen, taken	ja, agenda, contactpersonen, taken
SyncML	✓	✓	✓
Overige functies	alarmklok, calculator, JAVA ondersteuning, ondersteuning voor Office, RSS-lezer, spelletjes, vCard, voice memo	alarmklok, calculator, JAVA ondersteuning, ondersteuning voor Office, spelletjes, vCard, voice memo	alarmklok, calculator, ondersteuning voor Office, spelletjes, voice memo
Geïntegreerde antenne	✓	✓	✓
Geïntegreerde GPS ontvanger	✓	✓	✓
Volledig toetsenbord	✓	✓	✗
Navigatie geïnstalleerd	Nokia Maps	?	Google Maps
Stralingswaarde	1,33 W/kg	? W/kg	0,88 W/kg
Gewicht	127 gram	133 gram	133 gram

Figure 6: Mobile handheld devices compared technically (kieskeurig.nl)

Mobile telephones have gone through many technological advances in the last couple of years, going from telephoning devices you could take

outdoors with you to sophisticated "smart" phones, hybrids between mobile telephoning devices and PDA (Personal Digital Assistant)'s; mobile telephones with many PC-like functions and capabilities added to them. Smart phones can run on a number of different operation systems such as Symbian OS, RIM's BlackBerry, Windows Mobile, Linux, Palm WebOS, iPhone OS and Android, the main operating systems in the last quarter of 2008. In november of 2008, Symbian OS had the largest market share worldwide, followed by the iPhone operating system, RIM Blackberry and Windows Mobile (see **Error! Reference source not found.**). As can be seen in Figure 6: Mobile handheld devices compared technically (kieskeurig.nl), mobile handheld devices from different manufacturers, with different operating systems, do not differ much when it comes to technical specifications and functionality. When looking at the market shares of mobile operating systems, the iPhone with its iPhone OS, has managed to acquire a very large market share as a relatively new player (first version release: June 29th, 2007) as opposed to the much older Symbian OS (first version released in 1980), RIM Blackberry (first version released in 2002) and Windows Mobile (first version release: April 19th, 2000), which have been on the market for far longer. In paragraph 3.6 The iPhone and cross-media, we will investigate the Apple iPhone and the reasons behind its success. (Wikipedia Smartphone, 2009)



3.6 The iPhone and cross-media

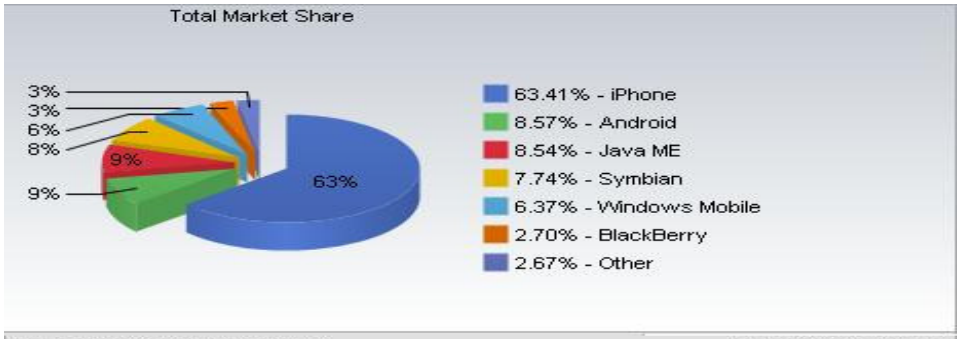
Apple inc., formerly Apple Computers Inc., is known for their friendly and intuitive user interfaces. First in their Macintosh computer systems, with a strong community of almost cult-like followers, then in their successful portable music players, the iPods, and now, with their iPhones, which seem to be a combination of all Apple's previous products.

In 2001, Apple successfully launched its iPod, a music player, with some PDA type functions added, such as a calendar, contacts and simple games. The music player market was booming and the iPod was not the device with the best specifications, but the iPod was still very successful due to its nice interface and its good synchronizing technology. In 2007, Apple launched the iPhone, a web enabled, multimedia, multi-touch screen smart phone with an operating system derived from the desktop MAC OS X.

In 2008, Apple released new firmware and the newest model iPhone, the iPhone 3G, which enabled third party developers, including consumers, to make applications according to Apple's strategy, that can be sold through the Apple iTunes Apps store after approval, not only adding functionality to the iPhone, but also adding a revenue stream for Apple. Apple reports that over 800 million downloads have taken place of the over 25.000 available applications, with prices ranging from $0,00 to $899,99, and that applications have been installed on 98% of the iPhone's on the market.

Apple has sold more than 17 million iPhones since June 2007, and is planning to release firmware 3.0 in the summer of 2009. This firmware version can be installed on more than 30 million devices, including the iPod Touch, and promises even greater possibilities for third party developers, allowing them to also develop hardware-based applications, which will enable any USB or Bluetooth enabled hardware device to be connected to the iPhone. (Dilger, 2009), (Smith, 2009), (Janssen, 2009).

It is arguable that the iPhone has pushed cross-media to a new level. The iPhone was literally designed for viewing of or listening to multimedia and for internet browsing, and with its easy synchronizing capability and high resolution screen, for example digital print suppliers have started offering content for the iPhone (Nawotka, 2008). Also, 98% of the iPhones is sold in combination with a flat fee internet subscription, accounting for 63,41% of total mobile internet traffic (Mobile Browsing by Platform Market Share) (see Figure 7: Mobile browsing by platform market share). The iPhone's popularity and Apple's and mobile operator's combined marketing strategy has introduced mobile internet to the general consumer and brought it from the early adopters stage to mainstream.



Mobile Browsing by Platform	Total Market Share
iPhone	63.41%
Android	8.57%
Java ME	8.54%
Symbian	7.74%
Windows Mobile	6.37%
BlackBerry	2.70%
Palm	2.13%
BREW	0.54%

Report generated Thursday, April 02, 2009 11:51:21 AM

Figure 7: Mobile browsing by platform market share (Mobile Browsing by Platform Market Share)

Google's Android, released October 22nd 2008, an "internet phone", developed especially for connecting to the internet and Google services, is build with an open source Linux based operating system, which gives developers access to every aspect of the phone's operation. The Android is seen as a possible hefty competitor for Apple's iPhone. Only time will tell what the competition effects will be between the Android and the iPhone, what is certain, is that the Android will be a consumer driver for mobile internet and cross-media.

3.7 Convergence

A trend that can be observed in the media and technology industry is the (digital) convergence of information, media and services across multiple channels, giving consumers the freedom to choose the channel they prefer at that moment to view the content they want. Technical digital convergence entails the unification of technology functions and features; devices become capable of handling information and formats that used to be tied to another device, for example mobile television or voice over IP (VOIP), and is a driver for industry convergence, which plays a major role in cross-media (Jeon, Park, & Digman, 2008). Because cross-media initiatives generally lead users across different media, different industries and specialties are involved and have to work together in order to create seamless integration of the different aspects of the cross-media initiative. In the cross-media industry, cooperation different types of organizations (for example a technology and a marketing organization) and within project teams are vital for the success of cross-media initiatives. In Chapter 5 A cross-media case-

study: Stappenmaken portal, we will further investigate cooperation between different organizations and disciplines.

Chapter 4. Cross-media projects and initiatives in the Netherlands

In the Netherlands, cross-media is becoming common; the extra effort it takes to bring an initiative from only television or internet based to a cross-media initiative often well out ways the extra costs.
In his article What Audiences Want, Gary Hayes divides cross-media into four levels or categories (Hayes, 2006)

1.0 Pushed
2.0 Extras
3.0 Bridges
4.0 Experiences

In exploring cross-media in the Netherlands, one category of cross-media does not fit within the levels as defined by Hayes. Because of this, we have decided to add one more category:
0.1 Promoted

In the following paragraphs, we will explain what the cross-media levels entail and divide the different Dutch cross-media initiatives according to the cross-media levels.

4.1 Cross-media 0.1: Promoted

In exploring cross-media in the Netherlands, we have noticed one group of initiatives that cannot be classified in the cross-media levels as described by Hayes.
This level would contain cross-media advertisement initiatives, where products or (digital) content are promoted cross-medially. The goal of this type of initiative is merely to inform potential customers that the products exist and how they can be obtained. It is arguable that this group should be disregarded as not being cross-media at all.

4.1.1 Low-level contests

Often during certain television shows or series, during the commercial break, an ad appears saying that you can win the DVD box set, a home cinema set, or some other prize, if you SMS the correct answer to a – ridiculously – simple question to a premium SMS shortcode. The consumer then receives one or more SMS messages back – the only way to charge money to the consumer is by sending them SMS messages – with either more questions or a request for the consumers' data.

The campaign is cross-media, a combination of television and (mobile) telephone is necessary in order for such campaigns to be successful; television with its high range levels and mobile telephones with the consumers' habituation to action costing money and its relatively simple business models.

4.1.2 Late night television sex ads

Late night television in the Netherlands consists almost solely of sex ads where the consumer is able to get in contact with sex telephone operators by calling or SMS-ing to a premium service number or by logging in on a displayed internet address. Television is used as a promotion medium for the services offered by telephone or over the internet. These websites often also offer the possibility to download wallpapers, ringtones and other digital content. See the next paragraph for more on digital content.

4.1.3 Digital content shopping

Digital content is heavily promoted in different types of media, such as during television commercial breaks, in newspapers and magazines, and on internet sites as banners and pop-ups. Digital content promotion is mostly focused on younger target audiences, as they are traditionally more willing to spend money on the acquiring of mobile ringtones, wallpapers, games and applications. Commercial companies now still most often offer content, but, for example Apple, has managed to build a strong community where applications for the Apple iPhone are developed for and by consumers, who are allowed to sell their products through the regular Apple Apps store. Consumers can make money by designing and making popular applications and Apple receives 30% of the sales price. This self-regulating community approach has largely contributed to the iPhone's success; the applications add value to the iPhone and make Apple money, without Apple having to make the applications themselves.

4.2 Cross-media 1.0: Pushed

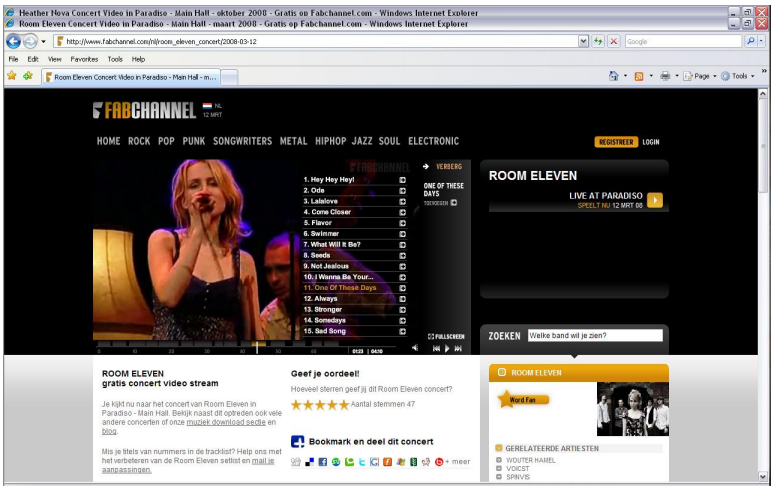
In cross-media 1.0: Pushed, the same content, or content that has been adapted to the minimum, is made available over different media. The user can choose to view the same content cross-media, across different media.

This level of cross-media is comparable to Create Once, Publish Everywhere (COPE), the creation and implementation of single graphics for a variety of media (Boumans J. , 2004).

Most cross-media initiatives developed fall under this category. Cross-media 1.0 initiatives are conceptually the easiest to produce. One concept that can be experienced in its entirety via one medium. The conceptual and design issues in this category are to make sure the concept is not dependant on the characteristics of one specific medium, but independent of all media, in order for it to present and work correctly on all different media.

The technical implementation of the cross-media concept should also be media independent, or adapted to be available on different types of media. This can sometimes pose some technical difficulties, for example in the way different mobile devices present the concept.

4.2.1 Fabchannel



Fabchannel is a live music platform, on which live music concerts can be watched for free over the internet during the concert and afterwards, with as goal to offer bands and performers the opportunity to showcase their music to a larger audience. Fabchannel's business model was to generate revenues with ads on the Fabchannel website, and keep the content free for the public. The Fabchannel initiative failed to live up to the expectations financially and was killed off in 2009, when governmental subsidization ended and Fabchannel failed to sustain itself. Another reason Fabchannel gave for the failure of the initiative, was the lack of cooperation from the label companies, who's permission

Fabchannel needed to broadcast their artist's shows over the internet. According to Fabchannel, the record labels recognize radio and television as a partner in generating income, but failed to recognize internet as such, which resulted in their lack of cooperation (Blok, 2009).

4.2.2 Uitzending gemist / missed broadcasts

Many television programs offer an "uitzending gemist" (missed broadcasts) function on their websites, where previous broadcasts can be streamed over the internet. Sometimes, a website of a television show does offer some more functionality then just the same show as it was shown on television, such as limited extra information (TV-guide type information), but this does not add to the initiative experience or it's cross-media level.

4.3 Cross-media 2.0: Extras

In cross-media 2.0: Extras, extra content containing extra information to support the main content is separate and independent from, but available alongside the main content on different media.

In the conceptualization phase of cross-media 2.0 projects, attention must be paid to the entire concept. The different parts of the concept should form a coherent whole, but the user should still be able to experience just part of the concept, without being hindered by missing parts.

The concept parts can be designed for specific media, which removes the problem of having to design with media-independence in mind.

Technical development of the different parts of the concept can be done media specific, since a specific part can only run on a specific medium.

From his involvement in the second season of the French version of Big Brother, Loft Story, Damien Marchi formulated six commandments for these types of cross-media projects (Marchi, 2002).

1. Give users access to exclusive content not seen on television

In de course of the show, extra material is shot and not used for the general broadcast television show. Users like the live, raw, unedited and exclusive material, especially when their curiosity is triggered during the regular television broadcasts.

2. Interact with the show - Give the power to the audience

Marchi attributes the international success of Big Brother to the fact that for the first time, the audience got to participate and decide the outcome of the show by voting for the contestants, interacting with the "contestants" and even influencing the compilation shows by voting for their favorite moments.

3. Increase users' stickiness - Extend the life length of the show

Fans of the show should be able to keep "in touch" and up to date with the show outside of the daily broadcasts, using other – especially ubiquitous mobile – media.

4. Increase users' loyalty

Fan loyalty should be stimulated by extra fucntions such as a fan club, chat and viral games where loyal (paying) fans can win prizes not accessible to the general television watching public, which can also be used to create extra branding opportunities for sponsors.

5. Follow the TV show

The television show should be the driver for the other media, for example by refering to the website during events in the television show.

6. Enhance the watching experience

People tend to use other media while actively watching the television show; make them use the other media, also for the show, by having them ask questions live by calling to a premium telephone number, or through SMS and the internet.

4.3.1 Instructional television shows

There are a couple of television shows that offer extra information, often in the form of instructions or extra information, that did not get focused on during the television show, on different media. Examples of these types of shows are "Eigen Huis en Tuin" (Own house and

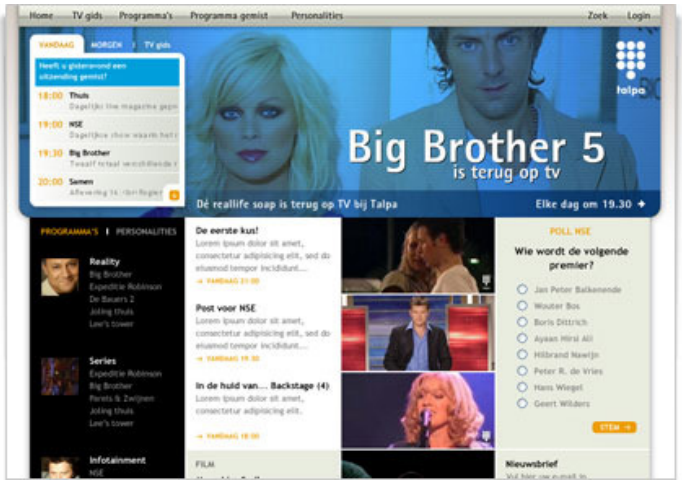
garden – a show where houses and gardens get makeovers) and “Wie is de Chef?” (Who is the chef? – a show where a group of strangers cooks each other meals, and the participants have to guess which of them is a professional chef) type shows. In these shows, where in the first case extra explanation, tips and information on DIY and gardening can be found on the internet page, and in the second case the recipe’s for the dishes cooked can be found and it is possible to have the ingredients for tomorrows recipes sent to your mobile phone through SMS, the extra information does add value for the consumer, but the shows are completely independent from the information on other media.

4.3.2 Idols type shows

Many television shows nowadays, have strong cross-media components, without which, their success and revenues would be far less. Idols, Starmaker, Dancing with the Stars, Stars on Ice, X-factor, Holland’s Got Talent, and so on, are all examples of shows that are live television shows, but have components that are firmly based on other media. These shows all have internet websites, where fans can watch the live shows again, where backstage and extra footage can be seen, information on the contestants can be read, fans can communicate with each other and where wallpapers, ringtones and music can be downloaded. These shows have a very high involvement rate amongst the public, also stimulated by the fact that as a member of the public, you have the power to vote for your favorite on the show, in order to help them achieve their dreams. Voting can only be done by sending a text message through SMS or by calling in your vote at premium rates.

4.3.3 Reality TV shows

In reality TV shows such as Big Brother, Big Diet and De Gouden Kooi (the golden cage), a group of people can win a – large cash – prize, if they enter a house or controlled complex, where their every move is followed by camera’s and last the longest. The cross-media components in these



types of shows are that the public can vote for their favorites by sending text messages via SMS or by phoning, to a premium number and that all the footage shot in the house can be viewed 24/7 live, often on a monthly subscription base. The actual 45 minute show that is aired on television is a compilation of the most interesting happenings during the previous day.

4.4 Cross-media 3.0: Bridges

Cross-media 3.0: Bridges is the truest form of cross-media. The story or service structure is specifically designed to drive users across different media devices to get the complete story. In this form of cross-media, a narrative bridge triggers the user to cross over to the next media device to get to the next piece of the story.

Though the design and technical issues are closely related to those of cross-media 2.0, it is in the conceptualization where extra care must be taken to create a coherent story that triggers the user to continue to the next medium.

In cross-media 3.0, opportunities lie for enhancing the revenue streams generated. Different mediums appeal to different target audiences. In a cross-media 3.0 concept, all the different types of audiences can be targeted to crossover to through the different media, thus accessing a larger audience.

4.4.1 News service DAG

"DAG", an initiative of PCM Uitgevers – a Dutch publication company – and the KPN – a Dutch telecommunication company – promised to be a truly cross-media medium-independent news service, available 24 hours a day through the internet and mobile, narrowcast on

screens and available five days a week in the form of a free newspaper. The newspaper consist of many pictures and less text, and if the reader wants more information on a subject in the paper such as a sound- or video-fragment, he or she can SMS the article or picture code to DAG's premium SMS number and receive access to the extra information. After 14 months the free newspaper was dropped, having failed to become profitable, but the DAG platform continued on the internet, mobile and narrowcasting (Tuil, 2008) (Dag).

4.4.2 Pathé

Pathé Cinema's, the largest cinema chain in the Netherlands, started to deployed mobile in april 2007, making their successful website available on mobile with Pathé Mobiel, and thus offering users information on what is playing, at what time and at what location, as well as movie trailers, anytime and anywhere, from their mobile device. The iPhone application, launched later, was a hit in the iTune Apps Store, acquiring a top rating, and being downloaded 250.000 times within the first two weeks. Pathé Cinema's has also launched a pilot in two of their cinema's, where movie-goers, on entering the cinema, receive a Bluetooth message on their mobile phone with an installer, which enables them to see streamed movie trailers on their mobile. (Janssen, 2009) (Pathe Mobiel).

4.5 Cross-media 4.0: Experiences

Cross-media 4.0: Experiences is an aggregation of the first three levels of cross-media. Content is non-linearly distributed across many different media and the user is able to build the bridges he or she chooses, thus determining the line of the story. The audience is in control of what happens in the cross-media 4.0 concept. By interacting with each other and with the concept across many different devices, the concept evolves into the direction the audience is taking it.

In this level of cross-media, the user should het an unlimited amount of tools to be able to interact with the concept from different devices. The high-level concept should be

unconstrained to allow the audience to make their own determination of which bridges they want to make, and which direction they want to go inside the concept. At the same time, the concept must be thought out into the smallest details, in order to satisfy all the needs that a user might have.

4.6 Organizations

4.6.1 Talpa Media Holding

Talpa Media Holding is a company that is active in a number of different consists of a number of different media sectors, namely radio, the internet, music, content, previously television, with a clear cross-media angle. Talpa has a specialized cross-media division, which broadens single media concepts to cross-media formats. An example of a Talpa cross-media format, is the first reality show, Big Brother, a show that utilized television, internet, mobile telephones, and a digital magazine and that went on to become a world-wide success (Wikipedia Talpa Media, 2009).

In 2005, John de Mol, who had previously come up with for example the first ever reality soap and internationally successful Big Brother concept at Endemol, launched a television broadcasting station to add to his cross-media emporium Talpa Media Holding. With its television station, Talpa focused on Dutch programming, mostly their own (cross-media) concepts and productions. This enabled Talpa, who owned all the rights to their programs, to make their content available on other media. Shows could be watched over the internet, at first for free, later on, for a fee. Talpa also launched mobile websites for some of their shows, for example for the very popular show “De Gouden Kooi”, where short films clips could be watched first for free, then for a fee, and then again for free. After two years, Talpa announced that they were pulling the plug on their television station, and were going back to designing television formats. (Bokkerink & van der Pas, 2006).

4.6.2 iMMovator Crossmedia Network

The iMMovator Cross Media Network is a network organization focused on innovation and economic profit in the cross-media industry, which iMMovator has defined as the increasing

integration of radio, television, internet, mobile, print and events. To facilitate cross-media innovation, iMMovator develops different activities, from their Cross Media Monitor, an inventory of cross-media activities in the Netherlands, and the organization of Cross Media Café's, seminars where members of the network can network and discuss relevant cross-media developments, to supporting policy makers, supporting cross-media projects, a Cross Media Innovation Center and the support of students by offering innovative learning vicinities. (Immovator Cross Media Network)

4.6.3 Ex Machina

Ex Machina's motto is: Play anytime, anywhere on any connected device. Ex Machina is a Dutch technology and service provider for mobile, web and broadcast games, focused on technology on their own game engine, for cross-platform, multiplayer and community gaming, compatible with all major operators and handset manufacturers, which offers companies the possibility to deploy innovative mobile gaming business models. Ex Machina has also introduced the first parallel multiplayer gaming software developers kit, to assist other game developers and publishers to master the potential of multiplayer games. (Exmachina)

4.7 Conclusions

In the Netherlands, there are many cross-media initiatives. Especially the combination of television, internet and mobile is applied more often than not, because the extra effort is outweighed by the extra traffic generated, the extra advertisement opportunities on different media. For cross-media levels 0.1 Promoted, 1.0 Pushed and 2.0 Extras, there are many examples of successes to be found. Cross-media level 3.0 Bridges seems to be a lot trickier, and on a bigger scale, the examples we found were very promising, but ultimately failed. As cross-media reaches a higher level, the business models and ways to actually generate income become more complicated. Cross-media level 3.0 Extra's still has a relatively straight forward business model, which is why most initiatives seem to be of this level. Cross-media level 4.0 Bridges often requires a custom business model to be implemented, depending on the types of media involved.

Chapter 5. A cross-media case-study: Stappenmaken portal

5.1 Introduction

5.1.1 Electrabel

As a relatively new energy provider in the Netherlands, Electrabel wants to create brand awareness and a positive brand image in the Netherlands by sponsoring the KNBLO Wandelsportorganisatie Nederland, the Dutch recreational and fitness walking association. Electrabel has launched an online community Stappenmaken, from where recreational walkers can communicate and interact with each other online, through cross-media and eventually meet in real life. In the following paragraphs, we will discuss the Stappenmaken portal in more depth.

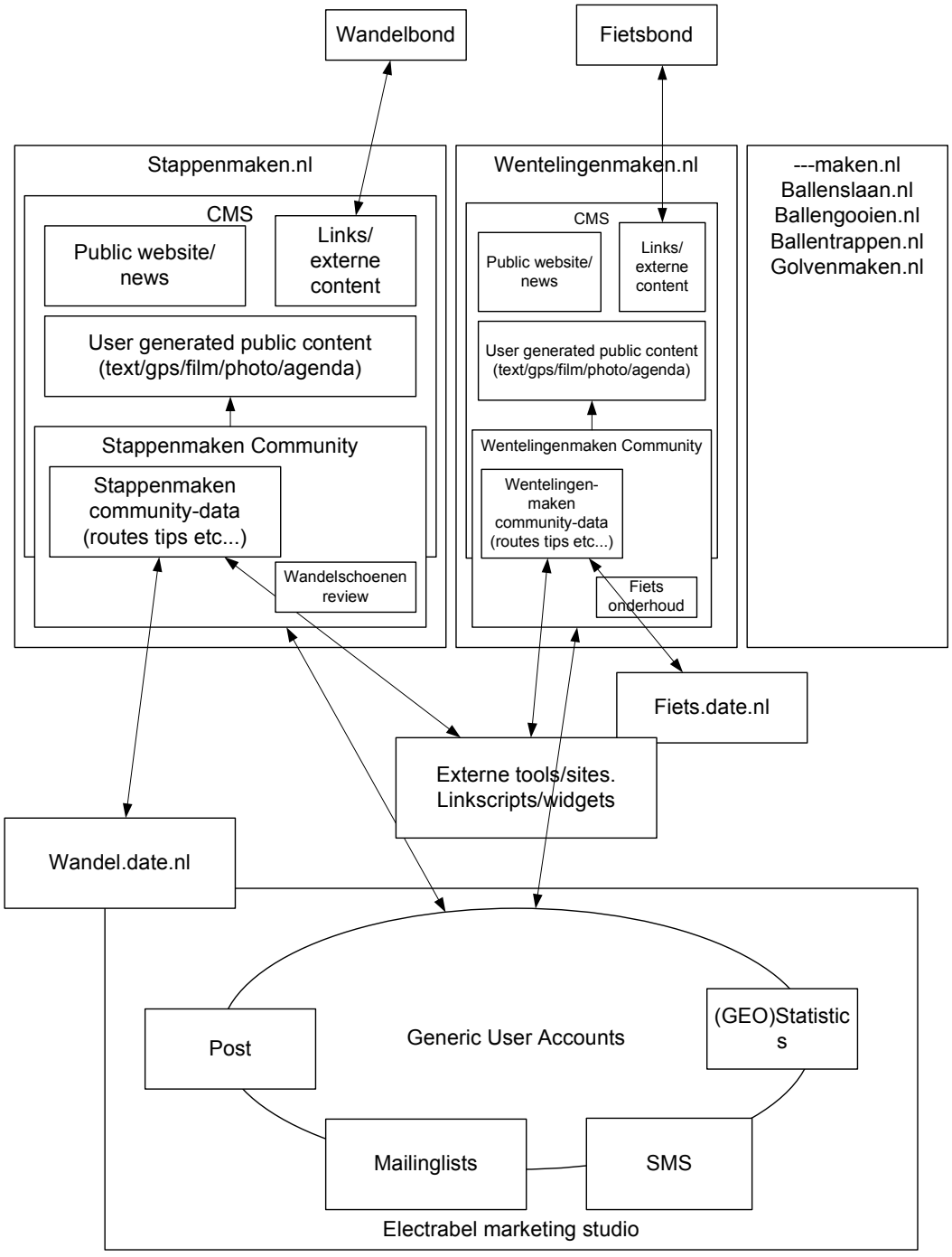
5.1.2 Electrabel cross-media portal Stappenmaken

With the Stappenmaken portal, Electrabel wants to create an online community of recreational walkers, where the members of the community should be able to interact with each other cross-medially, mainly through the web and mobile, and in real life. Electrabel has two main strategic goals. Electrabel Retail has as strategic goal: the unique portal branding and collection of potential client data. Build a community of recreational and fitness walkers.

Ontwikkeling van wandelcommunity met koppeling naar evenementen als Nijmeegse vierdaagse, ANWB wandelroutes, connectie van wandelroutes naar mobiel, live
mobile broadcasting, Track & Trace, Augustus 2008 incl. personal coaching en geocaching

5.2 Stappenmaken cross-media strategy

5.2.1 Functional infrastructure



5.3 Stappenmaken technology

5.4 Conclusions

Chapter 6. Trends in cross-media

6.1 Introduction

Gartner Research has developed a hype cycle theory, which offers a snapshot of the relative maturity of technologies, IT methodologies and management disciplines. Gartner proposes that every emerging technology goes through a typical progression, a hype cycle. In the first stages, when less real knowledge is available and there are more uncertainties regarding the technology, hype is the main driver of the cycle. In later stages, when more information and knowledge are available about the maturity, performance and adoption of the technology, the hype factor plays a far lesser role in the perceived value of the technology (Fenn, 2007).
Cross-media takes place across a spectrum of different technologies and platforms, all with their own life cycle, hype level and maturity, which makes it difficult to determine what its hype and maturity could be. In this paragraph, we will discuss what the stages cross-media has already passed through and what that meant, at what position cross-media is now, and what we can expect for the stages still coming.

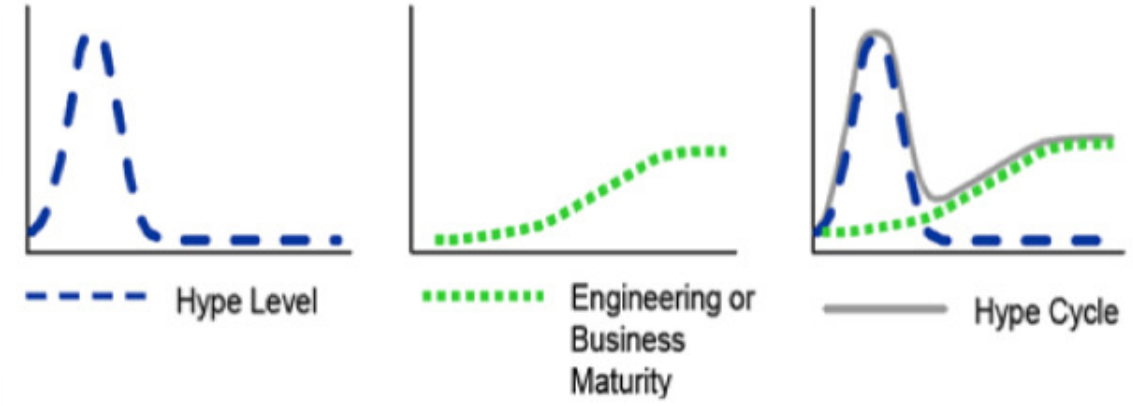


Figure 8: The Hype Cycle: Hype & Maturity (Fenn, 2007)

6.2 The hype cycle phases

Technologies are positioned on the hype cycle based on the level of hype of a technology and the engineering or business maturity of the technology. These two components of the hype cycle complement each other (Fenn, 2007).

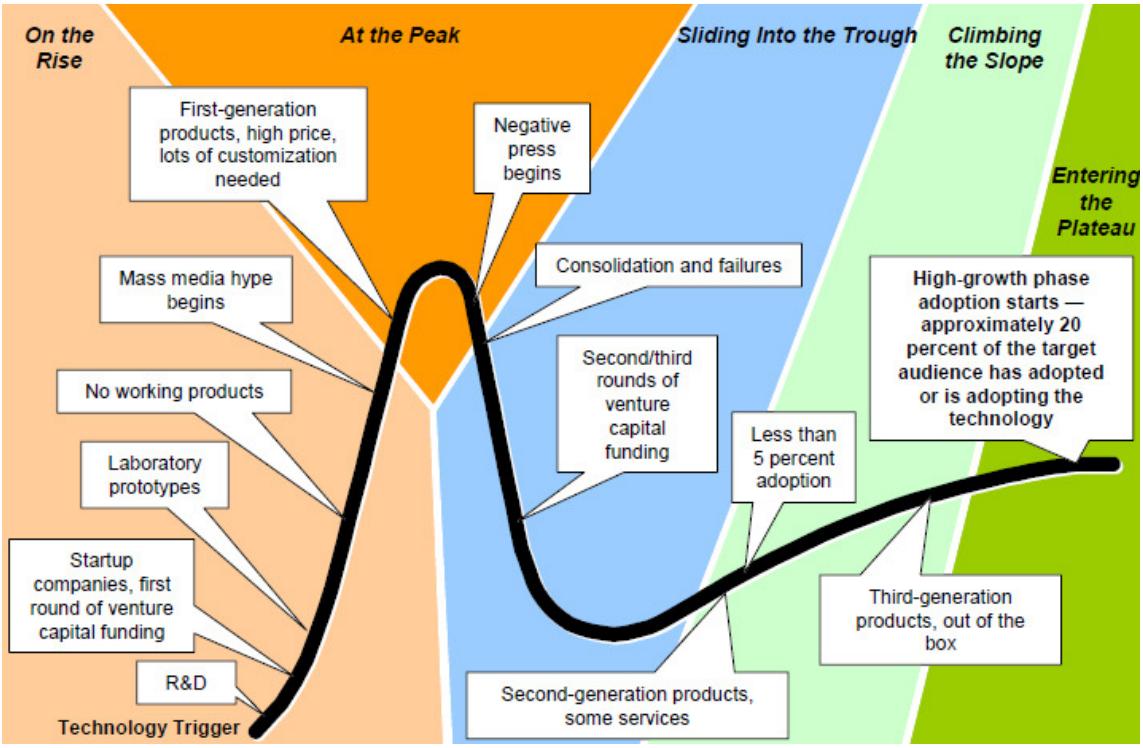


Figure 9: The Hype Cycle phases (Fenn, 2007)

6.2.1 On the Rise

In this stage, there was significant interest in cross-media, especially after events such as product launches or public demonstrations, even though there was no usable cross-media "product" yet. Cross-media was often picked up in the media as being of importance or sometimes even as the next big thing, but there was not much real knowledge about or experience in cross-media. During the climb towards the Peak of Inflated Expectations, the first-generation products were developed. These products were usually highly specialized – custom made – or extremely difficult to use. In this phase, cross-media was relatively expensive, as vendors had to sell at high margins to earn the invested R&D costs back.

6.2.2 At the Peak

Before cross-media reached the highest Peak of Inflated Expectations, cross-media was a buzzword and primarily startup companies utilized this high amount of hype cross-media was experiencing. many companies shifted their attention towards cross-media because of all the seeming promise (hype) it has and the amount of companies applying and involved in cross-media grew, and was is easy to find willing investors.

6.2.3 Sliding into the Trough

We believe that cross-media is currently at the end of this phase. Because of not being able to live up to the overinflated expectations, (media) interest resided and cross-media had become somewhat unfashionable. Cross-media is going through a negative hype and it is becoming increasingly difficult to attract investors, with many of the organizations that focused on cross-media during the Peak of Inflated Expectations stage, are finding it hard to stay afloat financially. Organizations joining the hype, who have not managed to create added value with cross-media, go bankrupt, because there are no or very little financial benefits to be made. In addition, the often ad-hoc business models in place for cross-media, are not succeeding in generating sustainable revenue streams, resulting in many cross-media initiatives disappearing and many companies, such as Talpa, Dag, Fabchannel, going bankrupt, or finding themselves having to shift focus away from cross-media (see paragraph Chapter 4 Cross-media projects and initiatives in the Netherlands). Key in this phase is for vendors, is to start increasing product adoption from early adopters towards more mainstream adoption.

6.2.4 Climbing the Slope

Cross-media may be leaving the Trought of Disillusionment, and enter the Slope of Enlightenment phase next. Experience gained by an increasingly diverse range of organizations, due to past focused experimentation, such as earlier cross-media initiatives and pilot projects, is leading to a true understanding of cross-media's applicability, risks and benefits. The organizations that made it through the Trough of Disillusionment, those who manage to gain a competitive edge and stay afloat in times where the cross-media was going through a negative hype, will have managed to develop commercial off-the-shelf second- and third generation products, methodologies and tools, which simplify the development process.

The iPhone can be regarded as an external extra cross-media driver, pushing cross-media towards the slope of enlightenment, introducing mobile internet and all its applications and features to the general public, and taking mobile internet from adoption by early adopters to mainstream adoption (also see paragraph 3.6 The iPhone and cross-media). Market penetration for cross-media will grow to around the 20% as the technology enters the Plateau of Productivity.

6.2.5 Entering the Plateau

In this stage, the risks concerning cross-media will have diminished because the real-world benefits of the technology are demonstrated and accepted and mainstream adoption will begin, ending the negative hype and encouraging experiences in cross-media and aiding its rapid growth and adoption. Cross-media will become embedded in "out of the box" solutions, with decreasing service elements as cross-media matures. A new aspect of cross-media industry will come into existence, in which providers of products and services will be supported. Related products and services that extend or that are based on cross-media technology will appear which in turn could trigger a new hype cycle.

Conclusion ???

Crossmedia seems like it is here to stay. Unknown business models are a problem! Need business models, otherwise might get internet bubble type thing.

Mobility:

Implications

People want to access anything, anytime, anywhere. Increasing importance of battery life and lightweight materials.

Opportunities

Mobile versions of products and services, 24/7 help lines, faster products.

Threats

Competitors that offer faster, more portable or more convenient options.

Links

Portability, place shifting, time shifting, speeding–up, urbanisation, Gen Y.???

http://www.frankwatching.com/archive/2008/01/28/is-crossmediale-marketing-wel-effectief-deel-2-2/

- De hele mediawereld zal vroeg of laat crossmediaal worden ingericht.
- Er zullen 'uitzenderijen' gaan ontstaan zoals eerder ook al aangekondigd.
- Synergie vindt alleen al plaats door het aanbod, maar het is afwachten wat de consument hiermee gaat doen.
- Hoe meer we weten over het individu en haar beweegreden des te beter kan een crossmediaal concept hierop worden aangesloten.
- Het succes van elke crossmediale activiteit wordt ingevuld en bepaald door de kracht van het creatieve concept.
- Maar niet alleen het creatieve concept is deels de succesfactor, ook de inzet van de mediakanalen en mediaplatformen op basis van de medium specifieke eigenschappen.
- Convergentie zal sneller plaatsvinden dan iedereen doet denken.
- Disciplines schuiven steeds meer in elkaar.
- De verdienmodellen van de toekomst zijn nog niet concreet en helder maar dit zal snel inzichtelijk worden.

Economic crisis was beyond the scope of this research, but is not helping. ???

Will iPhone push cross-media into the slope? ???

Tijdens het uitreikingsdiner was er dus genoeg tijd voor gesprekken. Bijvoorbeeld over de crisis, en hoe die de interactieve sector raakt. De conclusie was niet helemaal duidelijk, ook niet bij de vertegenwoordiger van de hele gemeenschap Derksen: ‘Interactief blijft wel groeien, maar we merken zeker iets van de crisis’. Een andere internetondernemer was optimistischer: ‘Wij hebben het geluk, dat de internetsector rond 2000 al een crisis heeft gehad. Bedrijver hebben daar van geleerd, zijn kleiner geworden en hebben niet-winstgevende zaken afgeschoven’. http://www.depers.nl/entertainment/297280/Feest-begon-al-op-Twitter.html

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Appendix