



CAPTURING RETAIL CUSTOMERS' ATTENTION WITH DIGITAL SIGNAGE

**Guides for designing Digital Signage
advertising content and locating digital
displays in retail environment**

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Työn nimi DIGITAL SIGNAGE-JÄRJESTELMÄ KEINONA TAVOITTAÄ VÄHITTÄISKAUPAN ASIAKKAAT Oppaat Digital Signage-järjestelmän mainonnan sisällön ja digitaalisten näyttöruutujen sijoittelun suunnittelulle vähittäiskauppaympäristössä		
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Tiivistelmä <p>Opinnäytetyön toimeksiantaja on slovenialainen yritys Nevron d.o.o., joka on erikoistunut interaktiivisiin TV-ratkaisuihin sekä verkko-oppimiseen. Yritys on kehittänyt Digital Signage -teknologiaan perustuvaan Nevron Digital Signage Solution -ratkaisun, joka on erinomainen väline tehokkaaseen digitaaliseen myymälämainontaan. Tämän opinnäytetyön tavoitteena on selvittää, millainen digitaalisen myymälämainonnan sisältö voisi kiinnostaa ja viehättää asiakkaita. Tavoitteena on myös selvittää, kuinka digitaaliset näyttöruudut tulisi sijoittaa myymäläympäristöön, jolloin ne voisivat vaikuttaa asiakkaiden ostopäätöksiin.</p> <p>Tämän opinnäytetyön tarkoituksena on tehdä kaksi opasta Nevronin jälleenmyyjien sekä asiakkaiden käyttöön. Ensimmäinen opas keskittyy mainonnan sisältöön ja oppaan tarkoituksena on auttaa kauppiaita suunnittelemaan myymälämainonnan sisältöä asiakkaan huomiota herättäväksi. Toinen opas antaa ohjeita siihen, kuinka digitaaliset näyttöruudut tulisi sijoittaa myymäläympäristöön parhaalla mahdollisella tavalla. Opinnäytetyön teoreettisessa viitekehityksessä käsitellään muun muassa mainontaa Digital Signage -teknologialla, mainonnan sisältöä sekä asiakkaan ostopäätöstä.</p> <p>Tutkimus toteutettiin kvalitatiivisella tutkimuksella teemahaastattelua käyttäen. Haastatteluun osallistui kolme suomalaista mainostoimistoa sekä Digital Signage-teknologian asiantuntija. Tutkimus osoitti, että selkeys, yksinkertaisuus, laadukkuus sekä ajankohtaisuus ovat tärkeitä ominaisuuksia toimivalle digitaalisen myymälämainonnan sisällölle. Digitaalisten näyttöruutujen sijoittelu myymäläympäristöön riippuu kyseisestä myymälästä. Sijoittelussa on tärkeää ottaa huomioon, missä asiakkaat viettävät aikaa ja tekevät ostopäätöksensä.</p>		
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Abstract <p>This thesis is assigned by a Slovenian company Nevron d.o.o. specialized in developing advanced interactive solutions with an emphasis on IPTV solutions and e-learning. The company has developed Nevron Digital Signage Solution based on Digital Signage technology that is an excellent medium for efficient in-store advertising. The aim of this research was to find out what kind of Digital Signage advertising content could attract retail customers, and how Digital Signage displays should be located in stores so that Digital Signage advertisement would be noticed by customers and affect on their decision-making.</p> <p>The purpose of this thesis is to make two guidelines for Nevron's distributors and customers. The first guideline focuses on Digital Signage advertising content and helps retailers to make their advertising content attention-grabbing. The second guideline advices how to place digital displays in a retail environment. The theoretical background of this thesis deals with subjects such as advertising with Digital Signage technology, advertising content and customer decision-making.</p> <p>The used research method was a quality research, and the data was gathered through thematic interviews. Three Finnish advertising companies and an expert in Digital Signage were interviewed. The research showed that simplicity, clarity, quality and topicality are keywords for an active advertising content. Locating digital displays in a retail environment depends on the store in question. When planning the placement, it is important to consider where customers spend time and where they make their purchase decisions.</p>		
Keywords Digital Signage, advertising, in-store advertising, advertising content, customer's decision-making, customer's decision-making process		
Miscellaneous		

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1 INTRODUCTION

1.1 Motivation for the study

“The message’s impact depends not only on what is said, but often more important, on how it is said” (Kotler 2003, 594).

Today people face more advertisements every day through different advertising channels than ever before. The real challenge for advertisers is to be able to stand out from the crowd and to capture people’s attention with an attractive and attention grabbing message. The content of advertising is a very central success factor for reaching customers and influencing on their purchase decisions. This thesis presents Digital Signage, an innovative way of advertising, and how it answers to the challenges that retailers face today with in-store advertising.

The thesis was assigned by Nevron d.o.o., a Slovenian company located in Ljubljana specialised in developing advanced interactive solutions with an emphasis on IPTV solutions and e-learning. The company was established in 1998 and has 12 employees. The idea of creating a thesis about Digital Signage advertising came up during my internship in Nevron in Slovenia during the summer 2007. It seemed an interesting option to compose a thesis for the company after getting familiar with Nevron Digital Signage Solution. Nevron experienced an increased demand from its distributors and customers for Nevron Digital Signage Solution and therefore made the decision to support the thesis project on the subject.

The term used in this thesis is Digital Signage. Digital Signage means a network of digital displays that are centrally managed and addressable for targeted information, entertainment, merchandising and advertising. Digital Signage is quite a new industry, and even though it is a growing industry and prevailing at the moment, there is a lack of research in this particular area. This is what makes the subject an excellent choice for a thesis. In order to be more successful in Digital Signage advertising, it is necessary to know what

kind of content presented by Digital Signage affects buyers' decision-making most efficiently. There is a clear demand for this type of research.

Nevron Digital Signage Solution

Nevron has developed Nevron Digital Signage Solution which is an advertising medium, and represents ITV services of marketing and administrating a completely new advertising space for an innovative and target-oriented way of advertising. Nevron Digital Signage Solution enables content management and content distribution from a single location to different digital displays. The solution has been developed continually and it has various functions available (Nevron d.o.o. 2008.):

- **Location management**
 - location methodology as a central point of the whole system
 - overview, control and management off any digital display in the network
- **Scheduler and content management**
 - daily, weekly and many other timescale content scheduling
 - creation of unlimited number of different content channels
 - rapid schedule updates over extended network of digital displays
 - easy content duplication over many channels
 - fast and on-time channel mixture capabilities
- **Network capabilities**
 - long-distance distribution of any digital content
 - support for extend networks, even with a few 1.000 digital displays
 - control over all network and its devices
 - support for set-top-boxes and PC players
 - simple streaming servers integration
 - wired and optional wireless connection
- **Infos**
 - set of predefined templates for different purposes and industries
 - mixture of different media content type management and publication
 - external content sources publication for dynamic information signage
 - embedded html sources
 - fast any easy custom based information creation and publish
 - full multimedia content distribution over server based streaming mode

- **Content storage**
 - multimedia content upload and storage
 - repository management
 - video importer and indexer
 - heavy support for any live video source
- **Hardware and system administration**
 - centralized management of any device in the network
 - STB or player management and settings
 - master and deployment management and settings
 - long distance access for system/firmware updates and support.

Nevron Digital Signage Solution contains the user management and permissions control and the client management control. The solution has also complex functions in reporting, for example set of predefined reports, set of predefined reports and report export to different file formats. The functions of the system can be upgraded for current needs and interests. The system can be used in different locations: stores, shopping malls, pharmacies, banks, schools, museums, theatres and gas stations, for example. (Nevron d.o.o. 2008.)

Nevron has developed also another solution, Nevron Hospitality Solution which is designed for hospitality industry. However, this thesis concentrates on Nevron Digital Signage Solution. The company would like to help their distributors that sell Nevron Digital Signage Solutions to advise their customers about Digital Signage advertising content. Another issue that customers need help with is how to locate screens in the store to benefit most from the system. In order to help the distributors and customer base, Nevron granted a permission to complete a thesis on their solution.

1.2 Research problem and research questions

The aim of the research is to find out what kind of Digital Signage advertising content attracts retail customers, and how Digital Signage displays should be located in stores so that customers would notice retailer's Digital Signage advertisement. The purpose of this thesis is to make two guides:

1. A guide about Digital Signage advertising content in retail to help retailers to plan their advertisement content;
2. A guide that concerns the placement of the screens.

The guides will be used by Nevron's distributors selling Nevron Digital Signage Solution to help them to advise their customers to become successful in using the system and to get the best results of it as an advertising medium. The research concentrates on the retail sector and shopping malls.

The research questions are:

1. What kind of Digital Signage advertising content attracts customers and can have an effect on their decision-making?
2. How should Digital Signage displays be located in stores to grab consumers' attention?

An excellent way to get information about the subject is to carry out a qualitative research, and thus thematic interviews were chosen to be used as the research method. The plan was to interview advertising companies that are familiar with Digital Signage advertising and retail advertising. Three advertising companies and one company specialised in Digital Signage participated in the research.

After introduction, the second part of the thesis presents what Digital Signage advertising really is, and how it is used especially in the retail sector. Chapter three goes deeper into consumers' decision-making which is important for understanding before planning how to grab consumers' attention by Digital Signage. The last chapter of the theoretical part concentrates on Digital Signage advertising content and placement of Digital Signage displays. The last chapter presents the conclusions of the research.

2 OVERVIEW OF DIGITAL SIGNAGE INDUSTRY

2.1 What is Digital Signage?

The term Digital Signage is becoming more and more popular in the advertising industry, and its popularity is growing continually especially in the area of out-of-home advertising (Digital Signage Resources 2008). This thesis refers to the term Digital Signage throughout the text, and thus it is necessary to explain what the term really means. In this part of the thesis Digital Signage industry will be presented and the advantages of using Digital Signage will be discussed.

Digital Signage refers to a network of digital displays that are centrally managed, and addressable for targeted information, entertainment, merchandising and advertising. Other terms that can be used for Digital Signage are e.g. Dynamic Signage, Digital Signs, Electronic Signage, Digital Media Advertising, Digital Signage Network, In-store TV Network and Captive Audience Network. (Sign Industry 2008.) Digital Signage covers a range of various applications and technologies (Digital Signage Resources 2008).

Digital Signage can be used in various locations. Common places are stores, shopping malls, schools, libraries, banks, restaurants, hospitals, cinemas, offices, airports, railway stations, bus stations and other public places. The role of Digital Signage can vary depending on where it is used and for what purpose. In stores and shopping malls Digital Signage works well as an advertising tool. On the one hand, Digital Signage is an ideal

tool for informing and entertaining audiences in places like railway stations and cinemas. On the other hand, in schools it can work well as an informative and educational medium.

Digital Signage is becoming more and more popular in the advertising industry. It is an excellent medium for informing, persuading, and reminding customers at the point of purchase. It reaches customers effectively by grabbing their attention which makes it an excellent and effective form of advertising. With Digital Signage it is possible to send the right message to the right audience at the right time.

Currently Digital Signage is used in more locations than ever before. Doran claims that more retailers are using Digital Signage technologies to increase sales and inform their customers. He believes this trend will continue growing in case hardware and network costs remain relatively low compared to what the costs were just a few years ago. (Doran 2008, 2.)

Doran says that Digital Signage is a very flexible tool, and can be adapted for different needs. There are many possible ways of using Digital Signage. He points out that there are many other practical uses for it in addition to advertising and promotions. Digital Signage can also be used to inform and educate customers on the various features of a product or service. It is possible to communicate directly with customers and complement brochures and product specific signage when there is no staff around to assist them. Doran describes it as turning Digital Signage networks into silent “salesmen”. (Doran 2008, 2.)

Using Digital Signage is an excellent way to reach customers by advertising, informing or entertaining them with the system. With Digital Signage it is possible to grab customers’ attention effectively and influence their decision-making in the right place at the right time: at the point of purchase. Possibilities to use Digital Signage are enormous; only the imagination is the limit. Digital Signage is more than just an advertising medium. It can inform viewers about the weather or current affairs for example but it can also advise viewers about a possible danger or emergency.

There are many advantages in using Digital Signage. According to Li and Gilbert (2005), one advantage of Digital Signage over printed materials and static signs is the ability to change messages in “real time” and enable just-in-time marketing implementation. Another great advantage of Digital Signage is the unlimited content that can be posted at every display location. Display sites can also be networked together so that target sites can be selected demographically and messages can be tailored to a specific audience. Li and Gilbert believe that when using Digital Signage product and brand promotions can be done in a more efficient way and with lower costs. (Li & Gilbert 2005.)

Doran writes that it is obvious that well designed printed materials are an essential part of any advertising campaign. However, in his opinion a properly designed video or animated clip on a large format screen has a greater impact on viewers, and captures their attention more efficiently than printed material. (Doran 2008, 3.)

One advantage of using Digital Signage is that it can be cost effective. The user saves on printing cost when using Digital Signage. Changing Digital Signage content is also cost effective, and it can be done in seconds from only one location. The user is able to send content to the system's displays at one time. (Digital Signage Resources 2008.) However on the one hand, to invest to Digital Signage network can be a relatively high cost. On the other hand, after investing to the network the user can save money for example in printing and distribution costs.

2.2 Digital Signage in retail sector

Digital Signage is an ideal and powerful advertising medium for retail environment.

When talking about using Digital Signage in retail environment, the commonly used term is Retail Digital Signage. Using Digital Signage in retail environment is a good way for a retailer to communicate with consumers, inform and remind them of current affairs. Consumers and their decision-making can be influenced by Digital Signage during the time of purchasing, which can increase the retailer's sales.

There are several benefits of using Digital Signage in retail environment. One advantage is that retail Digital Signage messaging is dynamic, and it has the ability to display complex graphics and videos. Messages can be delivered rapidly system-wide, store-wide or in a single store aisle and can leverage specific regional and store conditions, such as customer demographics, weather conditions, promotions and educational content. (Scala 2008.)

The major advantage of Retail Digital Signage over other forms of in-store communications is that it can be centrally monitored. It ensures that system-wide and brand-compliant messages are deployed. When using Digital Signage it is possible to measure accurately the impact of the message upon a consumer. The technology is also capable to correlate the message to its sales impact directly. (Scala 2008.)

The great factor about Retail Digital Signage is that customers as well can benefit from the system which enhances customer service and customer satisfaction. Digital Signage displays in retail environment can help customers in locating the merchandise they are looking for in the store or it can provide in-depth information and product demonstrations to aid customers to make the purchase decision. Digital Signage disables the time-lag between consumer exposure to a message and the place of purchase. (Scala 2008.)

Digital Signage experts have listed some ideas why they think the retailer world need Digital Signage. Jeff Collard points out that retailing has changed from a product-centric business to a customer-centric business, and shopping has become a user experience where services and products need to be built around individual customers. Digital Signage allows retailers to customise offers around each individual customer, and to offer the appropriate product based on each customer's needs. According to Collard, it also gives a chance for retailers to optimise their message around their capabilities at that moment based on variables, such as local inventory levels and external conditions. (Bickers 2007a, 8.)

Ken Goldberg states that Digital Signage offers a way to make sure that important messages are delivered. Scott Koller emphasizes that the main role of Digital Signage in the retail environment is to keep the in-store marketing message relevant and as dynamic as other forms of marketing media, primarily TV and the Internet. Digital Signage allows for instantaneous updates to marketing messages in a dynamic manner that has proven to provide better recall rates and generate unplanned purchases. (Bickers 2007a, 8.)

According to Wayne Ruttle, the primary benefit of Digital Signage for the retailer is to enable better consumer messaging at the point of purchase, with much more targeted and timely information, specific to their shopper demographics. Other benefits for the retailers are brand enhancement, a modern shopping environment and sales lift. Ruttle reminds that also the customer benefits from Digital Signage and these benefits include an enhanced shopping experience, more information and a more educated purchase. (Bickers 2007a, 8.)

Retail Digital Signage can also improve store personnel productivity and decrease store labour costs. It can reduce in-store operating costs associated with graphics deployments and increase labour productivity relative to other types of signage. While using Digital Signage there are no costs associated with printing, distributing and installing static signage. (Scala 2008.)

The Arbitron Retail Media Study

Arbitron Inc. is an international media and marketing research firm that serves radio broadcasters, cable companies, advertisers, advertising agencies and outdoor advertising companies in the United States, Mexico and Europe. The Arbitron Retail Media Study – Volume II: Consumer Interest and Acceptance of Video Displays in Retail Environments, focuses on consumer attitudes towards video displays in retail stores. There were 1002 people interviewed for the study to find out America's awareness of retail video broadcasting and the advertising it carries. (Arbitron Inc. 2005.)

The study produced some significant findings. According to the study, one third of Americans have watched in-store videos and 33 percent of consumers recall seeing video screens in a store. The study shows that one out of ten shoppers makes a habit out of

watching retail videos. Consumers who have seen video screens in a store 10 percent of consumers said that they either always or frequently stop to watch them, and 32 percent told that sometimes they stop to view video screens they pass in a store. (Arbitron Inc. 2005.)

Using displays at stores was clearly supported by retail video viewers. The study shows that more than half of retail video viewers felt that more stores should install displays. According to the study, 52 percent of the consumers who have watched in-store videos thought that more stores should run video programming. Screens can also be helpful for consumers and according to the study, more than three quarters of retail video viewers thought that screens were helpful. Results state that 16 percent of consumers who have seen a video in a store felt the displays featuring product or sale information were very helpful, and 62 percent found displays somewhat helpful. (Arbitron Inc. 2005.) This showed that consumers felt they can also benefit from digital displays at stores.

An interesting part of the study consisted conclusions regarding unplanned purchases. According to the study conducted by Arbitron Inc., almost 30 percent of retail video viewers have made an unplanned purchase since 29 percent of the consumers who have seen video in a store told that after seeing the product featured on the in-store video display they bought a product they were not planning to buy. (Arbitron Inc. 2005.) These findings show clearly that advertising with in-store displays can have an influence on consumers' decision-making and produce unplanned purchases.

The study proves that consumers are interested in digital display and its content in the store. According to the study, 42 percent of retail video viewers said that they would prefer to shop in a store that has video displays. Over 40 percent of consumers who have seen a video in a store thought that in the future they would rather shop in a store with video screens than in one without them.

According to the results of the study, consumers are interested in videos that focus on store sales, product information and special events. Even 81 percent of all consumers, whether they have already experience of in-store videos or not, are most interested in seeing video programming in the store they are in. (Arbitron Inc. 2005.)

2.3 Differences compared to other forms of advertising

In this section of this thesis Digital Signage and other forms of advertising will be discussed especially from the in-store advertising point of view. Digital Signage is still a relatively new form of advertising and its popularity is growing constantly. It has many advantages compared to other forms of advertising. The huge advantage that Digital Signage poses is that it can influence on customer behaviour at the point of purchase. This makes Digital Signage a very efficient and powerful advertising medium.

As mentioned earlier, one of the advantages of Digital Signage is that it helps to get rid of the cost of creating and distributing printed advertisements. Ping Wang (2006) says that traditional media tools including billboards and print posters have all been created to deliver messages at locations with high traffic but they take a long and costly cycle to produce, distribute and update. In today's global economy the static nature of those traditional displays harmfully affect a business that needs to reach the audiences spreading around a large geographical region or even across continents with timely, updated and localized contents.

Digital Signage is becoming a new generation digital media network in delivering dynamic and relevant content to target audiences in a way beyond the reach of those traditional media tools. Compared to traditional print posters and static billboards, Digital Signage delivers dynamic and rich-media content using new generation media and network technology. Wang states that research shows that people are 5 to 10 times more likely to pay attention to dynamic rich-media content in contrast to the traditional static signs. For instance, unlike PowerPoint-based display panels, Digital Signage can deliver updated content and real-time messages remotely through the Internet. With Digital Signage, content update consistency and efficiency are greatly improved while the content distribution cost and time are significantly reduced. (Wang 2006.)

All arguments that Wang mentioned earlier shows that Digital Signage advertising is very effective advertising medium and it is a cost-effective way of advertising. People will most likely put attention to rich-media content that can be shown by Digital Signage advertising system. I believe that retail customers give attention to Digital Signage advertising since it is a quite new way of advertising and different comparing to traditional ways of in-store advertising. Instead of printed and static advertising material, customers can be influenced, informed and entertained by Digital Signage with rich media content, pictures, videos and music, for example.

2.4 Calculating the price of Digital Signage advertising

2.4.1 Cost per mille (CPM)

Cost per mille (CPM) which is also called cost per thousand (CPT) is a commonly used measurement in advertising (The Display Diary 2007). It is the main standard in the advertising industry for comparing costs or determining what are the costs per customer (Intertise 2008). CPM is used for calculating the relative cost of an advertising campaign or an ad message in a given medium and it estimates the cost per 1000 views of the ad (The Display Diary 2007).

It is critical to understand CPM while entering into Digital Signage industry. Many Digital Signage providers offer their rates based on CPM. (The Display Diary 2007.) For calculating CPM it is necessary to know exactly how much advertising costs, minus the cost of creating, setting up or editing ads. In addition, it is also essential to know how many viewers, readers or listeners will actually see, read or hear the ad. (Intertise 2008.)

$$\frac{\text{Total cost to run the ad}}{\text{Total Audience}/1000} = \text{CPM}$$

FIGURE 1. The formula for calculating CPM. (Source: The Display Diary 2007.)

For example, if the total cost for the ad is 15 000 euros and the audience that the ad has been shown is 1 000 000 people, the calculation of CPM is:

$$\frac{15\ 000}{2\ 000\ 000/1000} = \text{CPM is 5 euros}$$

FIGURE 2. An example of CPM calculation.

2.4.2 Return on investment (ROI)

Return on investment, ROI, is a performance measure that accurately reflects the amount of money earned on investment capital. ROI is usually expressed as a percentage. (Kircher 2007, 6.). Return on investment (ROI) is a hot topic in the Digital Signage industry. Using Digital Signage needs to produce some benefit for the business or otherwise it will be useless to spend money on it. Companies have to know what their Digital Signage ROI would be before buying the system. (Digital Signage Resources.com 2008.)

$$\frac{\text{Gain from investment} - \text{Cost of investment}}{\text{Cost of investment}} = \text{ROI}$$

FIGURE 3. The formula of calculating return on investment (ROI). (Source: Kircher 2007, 6.)

3 HOW TO GRAB CONSUMERS' ATTENTION AND AFFECT THEIR DECISION-MAKING

3.1 Getting consumers' attention

This chapter goes deeper into how to capture consumers' attention and how to influence their decision-making. As mentioned earlier, using Digital Signage is a good way to grab consumers' attention, persuade and inform them in the place where most of purchases are made: at stores. It is essential to understand what the consumer goes through in the decision-making process in order to be able to understand how to influence on his or her decision-making.

The AIDA model

AIDA is a simple model of consumer response to marketing communication and stands for Attention, Interest, Desire and Action. The model implies that by gaining a consumer's attention interest will automatically lead to a desire for the product and action in purchasing. (Blythe 2000, 12.)

Communication objectives	Customer state of mind	Communication barriers
getting ATTENTION	UNWARENESS of need, or product, or both	alternative communications, pre-occupations
creating INTEREST	AWARENESS of the product	misunderstanding low priority area
arousing DESIRE	UNDERSTANDING the benefits	hostility, inappropriateness of benefits
obtaining ACTION	WANTING the benefits	lack of immediate mo- tivation or resources to purchase
	READY TO ACT and purchase the product	

FIGURE 4. The AIDA model of communication stages (Source: Stokes 2004, 252.)

3.2 Consumer decision-making process

In order to affect consumers' decision-making it is essential to understand the decision-making process that consumers go through while purchasing. According to Stokes (2004, 107), consumers are influenced by many factors while purchasing. These factors can be examined under two classifications: the influence on the consumer as a part of a social group, and the influence on more individual and psychological characteristics. Social influences include factors such as culture, sub-culture, social class, reference group and family whereas individual influences include motivation, personality, self-image, perception, learning, belief and attitudes. (Stokes 2004, 107.)

Some purchasing decisions become routine and are automatic, such as buying bread, milk or a postage stamp, whereas other decisions are irregular and more impulsive, triggered by a sudden desire. Other purchasing decisions need more selection but they are regularly carried out, for example, buying clothes. (Stokes 2004, 116.)

Types of purchasing decisions differ in the amount of the consumer's involvement in the process. The consumer does not necessarily become more involved as the value of the purchase item increases. While buying a present for a friend, for example, can take a long time to select, it may not cost a lot, though. Involvement changes through (Stokes 2004, 116.):

- **familiarity:** when purchase decisions are repeated they become quicker and simpler
- **significance:** important decisions which have a greater significance in the purchaser's life go through a more elaborate process. Still, it does not mean that they are better decisions.

The consumer decision-making model is a process that consumers go through while purchasing. The purchasing decision process involves five different stages: need recognition, information search, evaluation of alternatives, purchase decision and post-purchase decision. The model implies that the consumer passes through all these five stages with every purchase. However, in routine purchases the consumer often skips or reverses some of these stages. (Kotler, Wong, Saunders & Armstrong 2005, 279.)

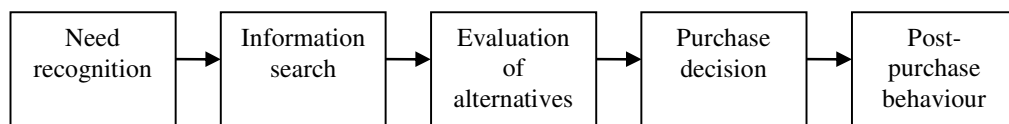


FIGURE 5. The stages of a buying process. (Source: Kotler et al. 2005, 279.)

The first three stages represent a decision process before buying. The fourth stage is the actual act of purchase and the fifth stage is a period of usage and evaluation of the product or service. The consumer is involved in the marketplace not just during the actual time of purchase but also before and after buying the product. (Stokes 2004, 117.)

Need recognition

The first stage of the buyer decision process is need recognition. In this state the consumer recognises a problem or a need. (Kotler et al. 2005, 279.) The need can be triggered by internal stimuli or external stimuli. Internal stimuli such as thirst or external stimuli such as TV adverts and shop displays can trigger a need. (Stokes 2004, 118.)

There are some aspects that marketers should understand considering the stage of need recognition (Stokes 2004, 118.):

- The factors that may stimulate the recognition of a need for their products;
- How to use these factors to full advantage;
- How to deal with the response to the recognition of need.

Information search

After the need is recognised, the consumer may need to search for more information. Information search is the second stage of the buyer decision process in which the consumer is aroused to search for more information. (Kotler et al. 2005, 279.) Information search can be active, passive or sometimes not carried out at all, and the level of information search reflects the degree of consumer involvement (Stokes 2004, 118). The consumer's awareness and knowledge of the available brands and features increase when more information is obtained (Kotler et al. 2005, 282).

Evaluation of alternatives

After information search the consumer uses gained information to evaluate alternatives. According to Stokes (2004, 119), the consumer tries to assess which product will best deliver the benefits he or she seeks. Consumers go about evaluating purchase alternatives depending on the individual consumer and the specific buying situation. Sometimes the consumer uses careful calculations and logical thinking. At other times the same consumer may do little or no evaluation but buy on impulse and rely on intuition. Some buy-

ing decisions consumers make on their own and sometimes they turn to friends, consumer guides or sales staff for advice. (Kotler et al. 2005, 284.)

Purchase decision

The consumer's evaluation of alternatives leads to an intention to buy a certain brand of product or take up a particular type of service (Stokes 2004, 119). In other words, purchase decision is the stage of the buyer decision process in which the consumer actually purchases the product (Kotler, et al. 2005, 284).

Post-purchase decision

Post-purchase behaviour is the stage of the buyer decision process in which consumers take further action after purchasing based on their satisfaction or dissatisfaction. Whether the consumer is satisfied or dissatisfied with a purchase depends on the relationship between the consumer's expectations and the product's perceived performance. (Kotler et al. 2005, 285.)

Consumers' expectations are based on messages they receive from sellers, friends and other information sources. The larger the gap is between expectations and performance, the greater is the consumer's dissatisfaction. (Kotler et al. 2005, 285.) Stokes (2004, 120) points out that the relationship between expectations and performance places a responsibility on marketing management to avoid making exaggerated claims for their products and services.

By understanding the customer's decision making process and the stages that the buyer goes through in the process, the retailer can gain important information for planning the advertising. It is necessary to know how customers make their purchase decisions and what kind of things affect their decision making.

3.3 Consumer's in-store decision-making

It is very common that people decide what to buy in the store. Point-of-Purchase Advertising International (POPAI) has conducted a study about the consumer's in-store decision-making and discovered that most of purchase decisions are made at the point of sale. The study confirmed that in-store media can significantly affect consumers' purchase decisions. (Shimp 2003, 208.)

In this POPAI's Consumer Buying Habits Study the purchase and other data were collected from 4200 consumers who were shopping in the stores of 22 leading supermarket chains and 4 mass merchandisers located in 14 major markets throughout the United States. Shoppers aged 16 or older were screened by researchers to determine that they were on a "major shopping trip". Then qualified shoppers were interviewed both before they began their shopping (entry interviews) and after they ended their shopping trip (exit interviews). (Shimp 2003, 208.)

Conclusions of the study show that purchase behaviours can be classified into four different groups: specifically planned, generally planned, substitute purchases and unplanned purchases (Shimp 2003, 208-209.):

1. Specifically planned

This classification applies to purchases of a brand that the consumer had indicated an intention to buy. For example, if the shopper mentioned during the entry interview that he or she had an intention to buy a certain brand like Diet Pepsi and in fact bought it, the purchase would be considered as specifically planned. The study showed that 30 percent of supermarket purchases and 26 percent of mass merchandise purchases belonged to this category. (Shimp 2003, 209.)

2. Generally planned

Purchases for which the shopper indicated intent to buy a particular product but had no specific brand in mind, are generally planned purchases. According to the study, 6 percent of supermarkets purchases and 18 percent in mass merchandise stores were generally planned purchases. (Shimp 2003, 209.)

3. Substitute purchases

This category represents purchases where the shopper does not buy the product or brand he or she indicated in the entry interview constitute substitute purchases. For example, if a consumer intended to buy Diet Pepsi but bought Diet Coke instead, this behaviour would be classified as substitute purchases. Only 4 percent of supermarket purchases and 3 percent of mass merchandise purchases were substitute purchases. (Shimp 2003, 209.)

4. Unplanned purchases

Unplanned purchases are purchases for which the consumer had no prior purchase intent. According to the study, 60 percent of the purchases in supermarkets and 53 percent of those in mass merchandise stores were classified as unplanned. (Shimp 2003, 209.)

The categories of generally unplanned, substitute and unplanned purchases represent purchases that are not specifically planned. These three categories represent decisions influenced by in-store factors. The in-store rates are 70 percent for supermarkets and 74 percent for mass merchandise stores which points out that approximately 7 out of 10 purchase decisions are influenced by in-store factors. (Shimp 2003, 209.) The study shows that most of the purchase decisions are unplanned and that usually consumers decide what they buy in a store at the point of sale. This clearly proves that retailers can affect consumers' buying behaviour with in-store advertising, and encourages retailers to put more emphasis on in-store advertising.

4 CRITERIA FOR SUCCESSFUL DIGITAL SIGNAGE ADVERTISING

4.1 Hardware

Digital Signage content is shown on hardware displays. Displays can include plasma and LCD displays, projection onto a screen or holographic device, interactive kiosks or CRT devices, and any number of emerging display technologies can be used as display devices. (Bickers 2007b, 36.) A typical Digital Signage network is comprised of a centrally located management server and many networked display panels that are installed to various locations (Wang 2006.).

A media player is normally installed at or near the display panels and it receives contents from the central management server and plays the contents locally for one or several display panels (Wang 2006). For Digital Signage media players are the mechanisms that drive and support the content (Yackey 2007a). Media player stores and delivers content to the display devices on the defined timetable. Even though the concept for media player seems simple, they can differ considerably. For instance, some of them run on Linux, while others can run on XP or Microsoft Embedded operating systems. There is a difference between solid-state players and those with rotating disk drives also. Media players with rotating disk drives require the use of internal fans and need to be used in ventilated areas. (Yackey 2007b, 34.)

However, the media player that the user chooses for the Digital Signage network should be as custom fit as possible to user's unique digital signage application. That can also be seen as a reason why media players come in different varieties and offer different options. According to Dan Kozyra, media players should be ready for the future and be able to handle upgrades. (Yackey 2007b, 7.)

4.2 Software

Digital Signage distribution network provides a delivery and feedback infrastructure to pass information to and from the display locations. The network can have multiple forms such as satellite, Internet, LAN, WAN or wireless network. (Bickers 2007b, 36.)

Consideration of Digital Signage software is very fundamental. Digital Signage software can differ a lot even though most of the software has at least a basic functionality for delivering third-party advertising. (Bickers 2008, 17.) According to Li & Gilbert (2005), in order for Digital Signage to become a mainstream product, the software needs to be tailored for non-technical people, and it should not have to rely on outside specialists to create and maintain the content. Some key issues associated with using software are content creation, content management and distribution. (Li & Gilbert 2005.)

Content is the most important part of the Digital Signage system. There is a wide variety of content types, and one major component of Digital Signage content is video. When purchasing the software it is necessary to know which file types the software can handle. It is important to make sure that it can handle the file types that will be used. Philip Luzbetak says that when choosing the software, a part of the consideration has to be related to the content that is needed at that time and that the content that will be needed in the future to keep the audience entertained. Another matter to consider is whether it is powerful enough to facilitate and maintain the type of network the system will require. (Kircher 2007, 19.)

The content management software is specialised software that is used to schedule the delivery and playback of content at multiple devices. It also monitors performance, tracks and reports on the execution of the scheduled events. More advanced content management software packages also contain authoring features and most of them include screen formatting and production capability for screen crawlers and other information feeds. (Bickers 2007b, 36.)

4.3 Digital Signage advertising content

When speaking about Digital Signage content, it can include things like the full-motion video, audio, promotions, messaging and information to deliver. It can also contain pre-recorded information, news feeds, or pricing and merchandising information. (Bickers 2007b, 36.)

Usually content creation requires someone who has knowledge in graphics design (Li & Gilbert, 2005). Some companies design their own Digital Signage content and others out-source it to media companies that specialise in this particular advertising. Whether or not the content creation is outsourced, it is necessary to set aside a substantial amount in the budget for the purpose of content creation. (Kircher 2007, 25.)

4.3.1 The importance of the content

The content of Digital Signage advertising is an important factor for retailers to become successful in using Digital Signage advertising. The importance of the content has been discovered in Digital Signage industry. All experts in Digital Signage industry are speaking on the behalf of the significance of the content, and they are convinced that it is the key to the success. Why is the content so important?

Jeff Porter says that the content is the king. It needs to be lively, relevant and appealing. There has to be a hook, a reason to look at the screen. (Porter 2001.) Ruttle says that consumers need to be engaged which means providing relevant, interesting and fresh content. With the proper software in place, messages can be customized on an ongoing basis, so they'll have more impact and better results. (Bickers 2008, 16.)

According to Bill Collins, the content is everything. A store sells content, merchandise and services, but it also sells customer experience. The content is fundamental to make the store experience friendly and helpful. Even the best hardware and software in the world will fail if they are used to deliver weak, boring or poorly designed content. Poor content can create poor customer experiences, which might cause irreparable harm to a company or its brand. (Bickers 2007b, 4-5.)

The content is the key to the success in Digital Signage and if that fact ignored, there will probably be no benefit from the retailer's investment. A retailer can invest a lot to Digital Signage advertising system but if the used content is not attention-grabbing, relevant or interesting for the customer, the retailer has probably wasted the investment. In the following chapters there will be a deeper discussion about the content of Digital Signage since it is one of the main focuses of this thesis. It is extremely important to put attention on the content. It can have a great impact to the result how retailer experiences using Digital Signage.

4.3.2 Designing the content

Previous chapter represented arguments why Digital Signage content is so important. It is good to keep its significance in mind when planning the content. This chapter concentrates on the topics that need to be considered while designing Digital Signage content. There are three aspects that are often described as being the primary considerations when developing an effective retail channel messaging and content strategy: **time, location and content**. Delivering the right content at the right time and in the right place for the audience is the key to be able to influence customer behaviour. (Boakes 2008.)

There are some typical problems that the content design can usually face. Common problems that digital television can face are (ITV Interactive television, n.d.):

- difficult interfaces in terms of use and navigation
- too much time for loading interfaces
- a badly structured interface layout
- too many contents and functionalities and contents in each screen
- too many extra-elements – graphic elements without a clear purpose
- background is not contrasting with the text
- an inadequate colour combination – too bright colours which leads to tiredness and inattention regarding the contents
- a too small font in the text.

The list of common problems shows that too many extra-elements or contents should be avoided and that paying attention to colours and fonts is important. These typical problems and mistakes should be noticed early in the content planning process.

There are many things to consider while designing the content. Collard has listed five must-do steps that should be considered while planning Digital Signage content. These five steps are (Bickers 2007b, 10.):

1. Define your message;
2. Define your audience;
3. Define the location;
4. Define your performance criteria;
5. Research the platform; settle on the software before planning the network, hardware or staffing.

Collins points to four design principles that work for any place graphic design. Principles for a strong on-screen content design include four items: proximity of on-screen elements, alignment, repetition and contrast. (Bickers 2007b, 15.):

1. Proximity

Collins says that items related to each other should be grouped close together.

When several items are in close proximity to each other, they become one visual unit rather than several separate units. This helps to organise information and reduces clutter. (Bickers 2007b, 15.)

2. Alignment

Nothing should be placed on the display arbitrarily. Every element needs to have some visual connection with another element on the display to create a clean, sophisticated and fresh look. (Bickers 2007b, 15.)

3. Repetition

Visual elements of the design are good to be repeated in the content. It is possible to repeat colour, shape, texture, spatial relationships, line thickness or sizes, for example. This helps to develop the organisation and strengthens the unity. (Bickers 2007b, 15.)

4. Contrast

With contrast it is possible to avoid similar elements on the display. The contrast can be used to make the elements very different if they are not the same. Contrast seems to be often the most important visual attraction on a display. (Bickers 2007b, 15.)

The content needs to capture people's attention, and this aspect is important to keep in mind when designing the content. The following list summarises the aspects of attentional capture most relevant for Digital Signage (Bickers 2007a, 35.):

- Motion onset
- Luminance or brightness changes
- Colour changes but only if it is dramatic
- Faces, particularly emotional, famous or relevant ones
- Unique things like for example a red thing on a field of green things
- “Task-relevant” items (for instance, if looking for a teapot, silver items will capture attention)
- “Resonant” items (emotionally, task-wise, etc.)

It is also important to plan how the content is updated. According to Brad Gleeson, there needs to be someone who is responsible for updating content or otherwise the content can get out of date. The content has to be relevant to the customers, and this is why it is important that the content is updated regularly. (Kircher 2007, 26.)

Interactive Digital Signage

Digital Signage can be interactive and lets the viewer to be involved with the system. With interactive Digital Signage the viewer becomes in control of the experience. If consumers feel they are in control they will be more receptive to the messages they receive. (Bickers 2007b, 11-12.)

Interactive Digital Signage can grab consumer’s attention by playing compelling content and asking them to get involved. The external trigger can be a touch on a touch screen, a code entered into a cell phone or simply some sort of environmental condition like stepping on a pressure-sensitive mat, for example. (Bickers 2007b, 11.) Ruttle says that interactivity is becoming the next generation in Digital Signage initiatives. He thinks that Digital Signage delivers the biggest return on investment in having the ability to inform and educate consumers with a self-help touch screen, and taking them through an experience that dramatically increases the odds of influencing a purchase at the point of purchase. (Bickers 2007a, 31.)

Advertisement text

An important matter in successful Digital Signage content is fonts in advertisement. Mike Doyle advises that the text needs to be clear, easy to read and it should not be too small. It has to be big enough for being easy to read. He recommends using one typeface on all signage. (LeClaire 2006.)

ITV Interactive Television DVD that was established by Leonardo da Vinci-project offers some recommendations for typography in interactive televisions. According to ITV Interactive Television DVD material, it is important to establish differences among the text blocks such as menus, navigation button and titles, for example. That makes the hierarchy structure easier to handle with. The DVD material presents some general principles considering the text format (ITV Interactive Television n.d.):

- Avoid small and serif font type;
- Anticipate alterations of fonts by the user;
- Write precise texts;
- Avoid text with an intense brightness.

Colours

Colours have different meanings and images. They can express emotions and have different kind of meanings to people. Figure 6 summarises the psychological effects and images different colours have.

Blue	trust, loyalty, water, relaxing, power, dignity, calmness, serenity
Yellow	energy, joy, light, hope, cheerfulness
Pink	calming, feminine
Green	life, growth, money, jealousy, nature, fertility, freshness, youth
Purple	richness, power, love, sophistication
Brown	credibility, stability
White	Purity, cleanliness, innocence
Red	heat, passion, danger, power

FIGURE 6. A summary how colours can create images. (Source: Bickers 2007a, 32.)

There are some generalities and recommendations regarding colours (Bickers 2007a, 33.):

- Blue is the most widely preferred colour among all European age groups;
- Men prefer deep shades of colour while women tend to prefer lighter tints;
- Women respond more positively to bright colours, and more negatively to dark ones;
- Children prefer bright shades and tints (particularly reds and yellows);
- Older people have difficulty with distinguishing colours that differ primarily in terms of their blue content;
- Older people tend to see all colours more dimly.

Bright colours give positive emotional associations. In turn, dark colours give negative emotional associations. Red is the most attention grabbing colour. (Bickers 2007a, 32 - 33.) Light rays have varying wave lengths or frequencies. Some pigments absorb light and others reflect it. Reflected frequencies can be perceived as colours. (Clear Channel 2008.)

Readability is important in advertising content. Customers are not interested in content that they cannot see well. There are some advices on how to create content that can be seen easily. Pure blues on black background create poor readability. In addition to this, pure colours on top of other colours which have the same brightness should be avoided. Instead, bright backgrounds with dark letters make a sign optimally readable. (Bickers 2007a, 33.)

Complementary colours are not legible together, since they have similar values that cause wave lengths to vibrate. A good example of complementary colours is red and green. Any combination of similar colour value provides a low visibility even without vibration. The strongest contrast has the combination of yellow and black, since they are dissimilar in both hue and value. White complements colours with light values. (Clear Channel 2008.) In figure 7, there is an example of colour combinations, and it shows how similar colours create low visibility. Yellow and black have the strongest contrast and this makes the combination very legible.



FIGURE 7. Examples of colour combinations. (Source: Clear Channel 2008.)

When planning what colours to use, the background colour should be chosen first. It is better to use a light coloured text on a dark background because it is easier to read than a dark text on a light background. White backgrounds should be avoided, since they cause distortion of the image and sight fatigue due to their intensity. The set of pure white and red especially on large areas can cause the screen distortion so it is thus necessary to use them carefully. (ITV Interactive Television n.d.)

The selection of colours is one of the steps that demands accuracy from the designer. Colours shown on the computer screen will deeply alter when viewed on a television screen. Colours on television are generally more intense than on a computer screen. Pure colours should be avoided on television because they cause the unpleasant effect of blot- ted colours, changing to different colours. (ITV Interactive Television n.d.)

Images

Gerba (2008) advises to use imagery and symbols that are relevant to the viewer. He also recommends being careful when including images that are very attention-grabbing, since this can easily divert attention from the core message. These attention-grabbing images can be people's faces, for example. (Gerba 2008.) Imagery has to be bold, clear and easy to understand (Clear Channel 2008).



FIGURE 8. An example how strong images against simple backgrounds create high-impact visuals. (Source: Clear Channel 2008.)

Also shapes can create psychological impacts. Circles express things like community, connections, movement, safety and wholeness. Rectangles describe words like solid, secure and whole. Triangles reflect things such as exciting, powerful and aggressive. (Bickers 2007a, 34.)

Audio

Deciding the audio for an advertisement is also important. Ads can include sounds like music or speech, for example. Ruttle says that audio can have a great impact on the shopping experience. Still, audio needs to be handled well to have a positive impact. He thinks that directional sound puts some control over where and when audio is delivered. If directional sound has been done properly, it works well. (Bickers 2007a, 31.)

Ruttle believes that retailers can get the best return on investment with Digital Signage network that delivers visual messaging and also integrates the audio messaging to include music. (Bickers 2007a, 31.) One thing that retailers need to consider is how loud the audio should be played at. It is good to remember that audio should not annoy customers or staff.

The loop

Loop length means the amount of time that takes for the loop to repeat. When planning a loop length it is necessary to have knowledge of customer traffic patterns and dwell times. The length of the loop should be proportionate to viewer dwell time to optimize that the customer has a possibility to see each ad. (Bickers 2008, 13.)

4.4. Placement of the displays

There are many things retailers must consider when they plan the placement of Digital Signage displays. A careful planning of locating the screens is necessary for succeeding in Digital Signage advertising so the importance of the location is extremely significant. Doran states that the planning process of Digital Signage network is very important for the result. He highlights that it is necessary for store planners and marketing staff to par-

ticipate into the planning process, or otherwise a fully functional Digital Signage network can become ineffective because of wrong locations of signs. (Doran 2008, 3.)

Porter points out that proper placement of the screens with the appropriate content is absolutely critical (Porter 2001). According to Dale Smith, digital screens should be placed where they can be seen easily and immediately by customers. The displays should be placed in high-traffic areas where the content is easily viewable by all who enter the store. Smith also mentions that they must be accessible for service, replacement and updates. Digital Signage in entranceways can provide the best opportunity to educate customers on products immediately upon entering the store. Inside the store, Smith says that Digital Signage is effective wherever customers stay put for a moment, for example near check-out lines or dressing rooms. (Bickers 2007a, 47.) Even if the store has all the most excellent displays and the high-powered content, they are wasted if the screens are placed wrong.

The planning process and locating screens of the system is extremely significant for succeeding in Digital Signage advertising. All the money that the retailer has invested to the system can be wasted if screens are located wrong and the retailer does not get any benefit of the investment. When planning the locations of the displays, it is important to think where customers actually make their purchase decisions. Jennifer Davis says that the best point-of-purchase signage is placed in where decisions about product purchase are made (Bickers 2006, 19).

Recent debate has been the effectiveness of Digital Signage at the cash register. Customers that are waiting in a line are a captive audience but at that point customers usually have their purchasing decisions behind them already. (Bickers 2006, 19 - 20.)

Lief Larson says that digital displays come in all shapes and sizes, and it is necessary to choose them wisely depending where they will be placed. He states that it is important to remember that the point is to modify the store's design instead of replacing it. (Bickers 2006, 19 - 20.) Every display should be considered carefully.

Also the size of digital displays needs to be considered. When planning the size of displays it is good to use common sense and to keep in mind that displays have to fit to the environment. George Whalin recommends that displays should be within the eyesight of the customer. He thinks that it is not a good idea to locate screens too high above a customer's head or too low below the customer's waist. According to Don Longo, hanging signs work well in a facility with very high ceilings. In his opinion signs that are right above the shelf are a safe bet. (LeClaire, 2006.)

Digital screens need to be placed where they can be seen easily and immediately. However, this can pose a challenge sometimes. Due to variations in ceiling heights and room arrangements, flat screens may not always fit in the ideal spot with conventional mounting hardware, for example. After considering a screen's placement, the next step is to evaluate the space and determine whether standard products will work or if customised solutions are needed. Smith says that custom solutions are most common in retail stores, since individual stores and network environments tend to dictate what kinds of mounts can be installed. (Bickers 2007a, 47.)

5 RESEARCH PROCESS

5.1 The research approach

The research approach was chosen to be a qualitative since it seemed to be the most suitable and useful way to gather data for this kind of a research. In order to receive profound understanding about the topic, I think that qualitative research was a good choice. The method was a thematic interview.

The thematic interview can be either qualitative or quantitative, and it is a suitable research method for exploring quite unknown or sensitive things (Metsämuuronen 2005, 226). It focuses on certain topics, and a typical feature is that the interviewees have experience of the same kinds of situations. In general, a thematic interview is useful for re-

searching and evaluating experiences. The interview helps to understand a certain thing deeper. (Hirsjärvi & Hurme 2000, 35, 47- 48.) The interview takes the interviewed person well account. (Hirsjärvi, Remes & Sajavaara 2008, 200 - 201).

The interviewer must get along with different people, be trustworthy, tactful, inattention-grabbing and neutral with different people, and in the different situations where feelings can be under discussion even if he or she has the power to choose the questions which are used. The neutrality is important, since the interviewer needs to know how the interviewee feel and think. The questions may not lead the conversation too much to the direction that the interviewer wants. (Hirsjärvi & Hurme 2000, 68-69)

The research was conducted by interviewing Finnish companies that were familiar with retail advertising or Digital Signage advertising. It was important to get information from both advertising companies that design the advertising content and companies that are specialised in Digital Signage.

First in the interviewing process it was necessary to get familiar with Finnish companies that were specialised in Digital Signage advertising or retail advertising in general. After this relevant companies were contacted by phone, and the date and time of the interview was agreed with companies that were willing to participate voluntarily. All interviews were carried out in March 2008.

Some companies did not want to participate in the interview because they did not want to give their information forward to anyone else, especially to competitors. Some companies felt that they are not suitable for giving information for the interview because of lack of experience and knowledge on in-store advertising.

Interviews were conducted to get information mainly about the Digital Signage advertising content and the placement of the displays. As mentioned earlier in the introduction, the first research question is what kind of Digital Signage advertising content attracts customers and has an effect on their decision-making. The second question that this thesis tries to answer is how Digital Signage displays should be located in stores so that they would grab consumers' attention.

5.2 The analysis of the research

It was difficult to find companies for an interview with this subject. There are not many companies that are focused on Digital Signage, especially when talking about advertising companies. There are companies in Finland that are developing Digital Signage system solutions but advertising companies focusing on in-store advertising were hard to find. However, quite a new and uncommon thesis subject and its resources, four interviews with different kinds of companies, were excellent to get enough information for the thesis.

The interviews brought useful information and brought forward important aspects for the research. All interviewees were very helpful for the research since they discussed openly about in-store advertising and shared their experience freely. All of the interviews were conducted in interviewees' offices. I reserved approximately one hour for each interview and it was a good estimation length for the interview. All interviews were recorded since interviewees gave permission for recording. There were many things discussed during the interviews so recording the interviews was necessary. After the interviews, records were transcribed because it helped data analysis. This also shows that the information gathered is reliable. Since all interviews were conducted in Finnish, they were transcribed in Finnish and after the most important things were translated into English.

It is essential to consider ethical issues while conducting a research. The participation in this study was voluntary. The data was treated confidentially. The information gathered from the interviews was not used for any other purposes than this research. Interviewees had a possibility to stay anonymous in this research. One interviewee expressed his willingness to stay anonymous so his name will not be mentioned in this study.

Reliability of the research refers to which data collection method yield consistent findings, similar observations would be made or conclusions reached by other researchers. Validity is concerned with whether the findings are really about what they appear. (Saunders, Lewis & Thornhill 2003, 488-492.)

While conducting a research, there can be threats to reliability such as subject or participant error, subject or participant bias, observe error or observe bias. (Saunders et al. 2003, 101.) Interviewees were experienced with in-store advertising or Digital Signage. They have years of experience in these fields and I think that increases the reliability of the research. Since the interviews were recorded, it helped the data analysis and increased reliability as well.

I strongly think that making interviews was the best way to get data for this research. The advantage of interviews is that it is possible to clarify and specify the questions if required. The point in thematic interviews is that there are certain themes that are discussed during the interviews. That is why the interviews followed these chosen themes but there was not a prepared question set. This also made all the interviews different from each other which is a real richness for the research. I think that using a thematic interview was a good choice since they all created a lot of useful information from different aspects.

Information that was gained from the results of the interviews is used for the guides together with information gathered from the theoretical part of the thesis. All this information together gave a really good and reliable base for the guides.

6 RESULTS

6.1 The results of the interviews

Interviewees

Three representatives of advertising companies were interviewed: Antti Osara, creative director of Procut, Pekka Isohanni, AD of Isohanni & Elevaara and the representative of one advertising company located in Central Finland, who wanted to stay anonymous in this research. The representative of the company is called person N in this research. Also Jari Öystilä, CEO of Market Media who is an expert in Digital Signage industry, agreed to participate in the interview.

All of them were interviewed personally at their offices at the agreed time. Advertising companies that were interviewed are located in Central Finland, Jyväskylä and Media Market is located in Helsinki, the capital of Finland.

Antti Osara works as a creative director in Procut and agreed to participate to the interview. Procut Marketing Communications was established in 1994 and has from 8 to 12 employees. The company focuses on marketing communication strategies, design and implementation. (Procut 2008.) Pekka Isohanni is an art director of the advertising agency Isohanni & Elevaara. The company provides marketing communication services. (Isohanni & Elevaara 2008.)

Jari Öystilä works in Market Media as the company's CEO. Market Media Oy is a leading digital retail media operator in Finland. The company focuses on digital retail marketing and offers comprehensive digital retail media solutions for its customers. (Market Media 2008.)

Interviews had four different themes. The first theme was background information where participants told about themselves and about the company they represent. The second theme was retail advertisement and the purpose of the theme was to discuss about the subject in general. The discussion about retail advertising naturally led to the theme three which was the content of Digital Signage advertising in retail sector. The last theme was the placement of Digital Signage displays in stores.

The last two themes were significant for the research because they were the keys for answering the research questions. The results of the interviews are presented in themes to make it easier to see the whole picture of each theme.

Theme 1. Background information

Antti Osara, the creative director of Procut, has been working for three years for Procut. He has a long working history in the advertising industry, and has been in the industry for approximately twenty years. He has gathered his experience in various sized companies which also involved an experience in international campaigns. Osara does not consider Procut to be an ordinary advertising agency. The company provides a lot of consultation to its customers. Procut has customers from very different industries, such as commerce and IT, for example. (Osara 2008.)

Pekka Isohanni, AD of Isohanni & Elevaara, has been working in the advertising industry since 1973. He has been involved with in-store advertising throughout his career. Isohanni & Elevaara was established 11 years ago, and the company provides a comprehensive advertising design to companies of various sizes in Jyväskylä and other parts of Finland. Some of Isohanni & Elevaara's biggest customers are Sinerbykoff's House of Beer and Moilas Oy. (Isohanni 2008.)

Person N works as a creative director at the advertising company he represents. He has been working for the company for many years now. The company has customers mainly in Central Finland and also nationally and internationally. (Person N 2008.)

Jari Öystilä is the CEO of Market Media that is located in Helsinki, Finland. Market Media is a media operator that focuses on in-store advertising. The company is four years old, and the first few years the company was making the concept of the business idea until it was developed to the point it is now. Market Media provides its customers a turn-key solution that includes all hardware and software for the system, maintenance and also operation of the system. The idea is to make it as easy as possible for the customer to buy and use this kind of in-store advertising system. The customer gets the whole system and the service in the same package. (Öystilä 2008.)

Theme 2. Advertising in retail sector

Isohanni says that usually in-store advertising has been a part of a larger complex, and in-store advertising is an important and significant part of it. The store is the place where the product and the consumer confront. (Isohanni 2008.) According to person N, in-store ad-

vertising can have a great impact on consumers' decision-making, and he believes that in-store advertising and advertising in general will change in the future. Advertising has faced changes in the past and that will continue in the future as well. Person N strongly believes that digital advertising will have a future ahead. (Person N 2008.)

Also Öystilä (2008) believes that in-store advertising will grow in future. He assumes that within 5 years almost all bigger distribution channels will have a digital in-store advertising system. Also the amount of Digital Signs in shopping malls will increase in the future. (Öystilä 2008.) Osara says that it is hard to say if in-store advertising has increased lately. However, in his opinion advertising has changed in the sense that today it is taken closer to where the purchase decision is made and this has a significant meaning. (Osara 2008.)

“It can be said that advertising has changed in the sense that today it is taken closer to where the purchase decision is made and this has a significant meaning” (Osara 2008).

There are many benefits for retailers to use an in-store advertising system. According to Öystilä, the primary benefit for retailers to use Digital Signage is to increase sales and this kind of system is a straight tool to effect impulsive purchases in stores considering that 75 percent of purchase decisions are made at the store. (Öystilä 2008.) Person N (2008) believes that the retailers want to have a clear benefit of the system. It has to be profitable and not too expensive for them. Isohanni (2008) says that the greatest benefit of digital performance is that it is possible to make moving picture compared to static and printed material.

The system has other uses in addition to advertising. The system can serve customers so the store may not need as much staff as before. Öystilä (2008) says that it works well for educational purposes as well. With the help of the system, the retailer can train the staff by showing them a training material through the system, for example. Then retailer can save in training expenses, and there is no need to travel anywhere for training. (Öystilä 2008.)

Öystilä thinks that smart displays will become general in the future. Smart displays can work as consultants at the store. According Öystilä everything depends on money. At the moment smart displays are fairly expensive. (Öystilä 2008.)

Theme 3. The content of Digital Signage advertising in retail sector

Öystilä highlights that it is important to keep the content simple. The message that works best is simple and clear. There is no need to complicate things. There has to be a signal connected to the message and purchasing to achieve some action at the store. It works as a customer activator. Öystilä says that it is very important to remember that when having this kind of in-store advertising system it should not be a TV shop. When talking about shopping malls, Öystilä thinks that a shopping mall is a challenging environment for Digital Signage. The message needs to be simpler and clearer in shopping malls compared to environments where the consumers sit and look at the screen. (Öystilä 2008.)

“Keep it simple works” (Öystilä 2008).

Also Isohanni states that simplification works (Isohanni 2008). Osara highlights that the advertising content has to be clear and attractive for customers. Ads should also stand out positively from the crowd to get customers attention. (Osara 2008.) Isohanni recommends taking advantage of campaigns when using the system. He thinks that advertisers should be active to provide and offer advertisement to retailers so the advertisement would fit campaigns. Advertising should be relevant to the customers. Topics like sales, seasons, holidays and events like Christmas can be used in advertising.

Person N believes that the content and producing it has a big role in succeeding with in-store advertising. The content has to be of good quality. If the content was not produced with good quality, it would not interest anyone. With quality of the content person N also means using multimedia content instead of poor home-made power point presentations, for example. Easiness of using the system and putting content into is also very important. (Person N 2008.)

“Producing content plays a big role and it has to be of good quality” (Person N 2008).

Person N (2008) says from experience that first it is important to define what kind of customers go to the store. The content has to be relevant for customers, and it has to contain things that are related to the store and to what customers can buy from there. According to person N, the content has to be of good quality, easy to update and renewable. It does not have to be just an advertisement; it can be partly more informative. Some ads can be created into more informative form, for example. (Person N 2008.) Also Isohanni thinks that the content should be of good quality. Even a good idea can be ruined with lack of expertise or money. (Isohanni 2008.)

“The content has to be of good quality, easy to update and renewable” (Person N 2008).

Person N thinks that this kind of digital advertising can face problems in case it is difficult to use or it is not maintained and updated well. He highlights that it should be easy for the user to put content into the system. The system has to look attractive and it has to be brought forward well. Person N says that the system should not be annoying, that is why it is important that the content is renewable. If there is the same content from day to day, it becomes annoying. He highlights that it has to be easy for the user to update the system or otherwise the user will lose his interest to update the system and develop it. Updating should not be expensive either. (Person N 2008.)

Öystilä reminds that it is good to keep in mind that this kind of advertising system is one medium among mediums and that it supports other medium solutions at the same time. For example, when the campaign is shown in TV and outdoor advertising, this system would show the same campaign content in the store environment. (Öystilä 2008.) Also Isohanni thinks that in-store advertising should match with other advertising, like campaigns. In-store advertising is a part of the campaign and it should follow the same line as rest of the advertising mediums. (Isohanni 2008.)

Isohanni says that it is good to remember that the system should not annoy customers in the store. Instead, in the best case the system would attract customers to enter the store. Isohanni recommends collecting feedback from the customers which can produce suggestions for improvement. Isohanni reminds that the feedback from the customers needs to be noticed. (Isohanni 2008.)

Colours

Öystilä says there have been studies about effective colours in outdoor advertising which has showed that yellow and black are successful colours to use. In Öystilä's opinion, colours should fit to the store. According to Isohanni, colours are important but it is hard to tell which colours to use with the system. It depends on each case. Isohanni points out that careful design is very important for the result. (Isohanni 2008.)

The length of the ad and loop

Osara thinks that the length of the ad should not be long, only a few seconds in retail environment. The maximum would be absolutely from 15 to 20 seconds. (Osara 2008.) Person N says that it has been explored that people are able to watch a three minutes long loop. In retail environment three minutes or less is the maximum length for a loop in case the content is purely advertisement. The length of a loop depends on the place and content. It also depends on the way of implementation, how the content is made. According to Person N, approximately 10 to 15 seconds is a suitable length for an ad. An ad of 20 seconds is quite long already. (Person N 2008.)

According to Öystilä, the length of an ad or a loop depends on the environment of the system. Relevant matter is if the consumer has time to face the message or not. Öystilä states that in case the environment is very busy, it is better to use a digital poster. (Öystilä 2008.) Isohanni says that the length of an ad depends on where the advertising is presented. He thinks that 10 to 15 seconds is enough in retail environment. In places where people spend time and wait the length of the ad could be longer. He says it depends on the content. If the content provides useful information for customers, they might stop and look at it. He believes that it depends on the content. (Isohanni 2008.)

Audio

Person N believes that it might be better to leave audio from the system. It can be annoying to hear the same song or speech many times. It can annoy the customers and it certainly would annoy the staff. Person N believes that there can be a longer product life cycle if it is possible to create good and interesting content without audio. It brings more challenges for creating the ad but it is possible. (Person N 2008.)

Öystilä says that in Market Media they have taken audio away of the systems. He also thinks that using audio can disturb and annoy not just customers but also the sale staff.

One alternative is a directional sound; this is what Market Media uses. (Öystilä 2008.)

Isohanni believes that some kind of audio world would support the system if it was used deliberately. He points out that audio should not be just some kind of background noise. If it is just background noise and does not have a proper purpose, it is better to leave the audio out. In his opinion well used and planned audio can have a good and positive impact. (Isohanni 2008.)

Additional features

Osara thinks that it is a good idea for the system to offer something for the customer. Besides advertising, it can be more informative so customers would feel that they can benefit from the system. (Osara 2008.) When talking about additional features of the system, Isohanni believes that customers can experience them as a service. With help of the system customers can find information about the products and check the availability of the product, for example.

Theme 4. The placement of Digital Signage displays in stores

Öystilä highlights that designing the placement of screens is very essential. Misdirected design can damage the whole activity of the system. (Öystilä 2008.) Isohanni believes it is a good idea if the retailer gets help for planning how to locate screens in the store (Isohanni 2008).

According to Osara (2008), the optimal place for displays would be where everybody can see them well. Osara says that good locations are places where people are spending time. For example, places where people are waiting or getting jammed are good locations. A

good place for a display is close to the products in question, since this is where the customer makes the purchase decision. In Osara's opinion the displays should be placed at regular intervals along the shop. (Osara 2008.)

Person N thinks that main aisles of the store are good locations for screens. Especially places where people get jammed in rush hours are excellent locations, such as meat counters and fruit departments. Person N also mentioned as an example that advertisement could be divided in different departments. Person N believes that locations close to checkouts can also be good because in rush hours people might have to stand in a queue sometimes even from 15 to 20 minutes. Then the content can consist of advertisements of products that can be found at checkouts. (Person N 2008.)

According to person N, clumsy places to locate screens are areas where people do not spend any time. He thinks that the entrance is not the best location either. (Person N 2008.) Öystilä thinks that good places for displays are close to the products. There customers can get useful information about products. In Öystilä's opinion, there can be something at the entrance and it is also a good idea to have a screen at the service counter, for example. Öystilä highlights that every screen must be planned and well considered. The amount of displays depends on a particular place. In a small store it can be just one or two screens. (Öystilä 2008.)

Screens should not be placed too high, but rather in the eyesight level. According to Öystilä, a bad choice for locating screens is to put them too high at the store. Also a bad idea is to locate them to checkouts when customers are already leaving the store. He believes that people do not go away anymore from cash queue to pick up something from the store. In case they do, it has to be something urgent or the message has to be very convincing. It is hard to make customers to have impulse purchases in a cash queue. Öystilä believes that these kinds of locations are of wrong investment and design. (Öystilä 2008.)

“Whatever you would like to communicate to the customer, the customer should run into the message naturally” (Isohanni 2008).

According to Isohanni (2008), locations in where customers would have a lot of alternatives to buy and choose from are excellent locations. It is essential that customers do not have to search for the screens in the store and that they would naturally run into screens and to get message the retailer wants to communicate. Displays should be placed along natural routes in the shop. Isohanni says that designing the placement of the screens depends of the store. Places where people are spending time and waiting are ideal locations. Isohanni thinks it would be good to have a screen already in entrance of the store. (Isohanni 2008.)

“Places where you can assume that people are spending more time and choosing what to buy are definitely good locations because there you can still try to affect to their decision making at the last minute” (Isohanni 2008).

Isohanni is not opposed to the idea to have some screens near checkouts. He thinks that people would not necessary go back to store to pick up something when seeing something interesting in advertisement. However, customers can get ideas about what to buy the next time. The content does not have to be just an advertisement but more informative in screens that are located close to checkouts. (Isohanni 2008.)

Besides the placement of the screens in the store, the placement in shopping malls was discussed as well. Osara says that in shopping malls displays could be located near escalators. Entrances can be nice locations as well. (Osara 2008.) Also person N thinks that in shopping malls a good place to locate the system is near escalators where people are standing and waiting (Person N 2008).

According to person N, the size of the screens should be quite big so it can be seen from far away. Too small screens do not work. (Person N 2008.) Also Öystilä points out that the size of screens does matter. When choosing the size of the screen, it is important to consider the space where it will be placed. The screen size can be from 10 to 12 inches when it is located on shelves. If it is located higher, 42 inches can be one option. When talking about kiosk environment, 19 inches is probably enough. (Öystilä 2008.)

6.2 Main findings

The interviews produced interesting, important and useful information. Many findings of the interviews supported the theoretical part of the thesis. Main findings are presented in two main themes of the research: advertising content and placement of screens.

Advertising content

According to the results of the interviews, the importance of the advertising content is really significant, and its importance should not be underestimated. One of the significant findings of the interviews is that it is really important to keep the advertising content and the message simple and clear enough. When designing the advertising content for Digital Signage network, the best way to succeed is to create content that is simple and interesting enough to capture consumers' attention. Interviewees advised not to complicate things but to keep it simple. Retailers should express the message they really want to communicate to their customers clearly. The rule "Keep it simple" really works.

The quality of the content is very important. The content with good quality is much more interesting for customers than poor quality content, and in addition, it grabs their attention easier. It also gives a good impression of the store and expresses that the retailer invests on quality and wants to offer only the best for their customers. The quality of the content is a fact that retailers should keep in their minds while planning the content for their Digital Signage network. Quality is worth investing in.

The importance of renewable and updated content was a significant finding from the results of the interviews. The system should be user-friendly: it has to be easy to update and change. Otherwise the risk can be that the content will not be updated continually which can lead to the problem that the system will not be used efficiently - in the worst case it will not be used at all and the investment will end up being worthless.

The system should fit the environment. The displays should be easy to notice but they still need to fit the environment naturally. The advertising content of Digital Signage network should follow the same line than in other advertising mediums. Advertising content that is shown in the store should follow the same line as other parts of the campaign that are shown in other mediums. The content should support other mediums that are used in the same campaign.

Retailers should think about the system from the customer's point of view. Collecting feedback from the customers is a good way to find out how customers experience Digital Signage network in the store. It also gives the possibility to develop the system more towards customers' wishes and retailer can obtain valuable information on what customers really want from the system. Customers' feedback should definitely be noticed and considered.

According to the results that were gathered from the interviews, the length of the ad or the loop depends on where the advertisement is used. If signs are located in a place that many people pass by and the environment is busy, the ad should be short and clear. Using digital poster is one option in busy environments. When signs are located in places, such as waiting rooms or lobbies, where people gather and spend time, the ad and the loop can be longer. The content can also be more informative and entertaining in places where people spend time.

Interviewees advise retailers to exploit different topics, such as sales, campaigns, seasons, holidays and celebrations. For example, when schools start in autumn, retailer can advertise what the store has to offer for students, and inform them about sales or new products they might benefit from. At Christmas time the content should contain advertisement related to the topic. The content must be relevant for the customer or otherwise it will not be interesting enough for them.

According to the results of the interviews, the decision what colours to use in advertisement depends on each case. As mentioned earlier in the theoretical part, red is the most attention-grabbing colour. Bright colours give positive emotional associations whereas dark colours cause negative emotional associations. Using contrast works well. Yellow and black is a combination of a strong contrast, for example.

Opinions varied about using audio with the system. Some of the interviewees thought that audio can annoy customers and the staff as well. However, if audio is used it has to be well considered. One option is to use directional sound.

Placement of screens

Interviewees' opinions varied considering the placement of digital displays. However, all of interviewees thought that places where people spend time in are excellent and ideal locations for the system. Especially places where people get jammed are great locations. Interviewees also thought that main aisles of the store are good locations for screens. In shopping malls displays can be located to where people spend time. Especially to locate displays close to escalators is a good idea, since it is a place people have to stand and wait.

The displays should be located in a way that customers would see them easily and immediately. Customers should not have to look for the screens but instead run into them naturally. Displays should not be placed too high or too low but within the eyesight level. Opinions varied about locating displays close checkouts. However, the ones that supported the idea agreed that the content should be more entertaining and informative, since customers have purchasing decisions behind them already.

The size of displays has to be considered as well. An important thing to remember is that displays should not be too small. Customers should be able to see the advertising text well and easily. Too small screens do not work. The size should be considered in each case, since it depends on the place it will be located to.

7 CONCLUSIONS

This thesis aimed to find out what kind of Digital Signage advertising content attracts retail customers and can have an effect on their decision-making and how should Digital Signage displays be located in stores to grab consumers' attention. I think that the study was successful since it gave answers to the problem that was supposed to solve and many conclusions can be drawn from it.

First of all, the content of Digital Signage advertising content has to be simple and clear. Secondly, it has to be topical so it is interesting and prevailing for customers and it must be renewable. Thirdly, the content has to be good quality. Retailers will have a good base using the Digital Signage when they keep those important things in mind.

As this research has showed, planning to locate digital displays in a retail environment is extremely important. All stores need their own solutions depending on their needs and environment. Thus the solutions would fit their environment the most comfortable and suitable way possible. The ideal situation for the retailer is to get help to locate the system to the store from experts. The solution provider that want customers to be satisfied with their solution, should make sure that retailer will not end up to be alone with the solution. In my opinion, consultation about the advertising content and the placement of digital displays is essential for the result. Then retailer is more confident about the solution and the solution provider will likely have a happy customer.

This research is useful for providing essential information for Nevron's distributors and their customers. The subject of this thesis was really interesting but at the same time also challenging. Since there were no other theses about Digital Signage, it made the choice of creating this thesis worthwhile. I strongly believe that Nevron will benefit from this thesis and that it will help their distributors and customers to succeed with Nevron Digital Signage Solution in the future.

I would like to highlight that this thesis and guides that it produced present advices that help planning the Digital Signage advertising content and the placement of the screens. Still, it is good to remember that every store is different and need careful planning and solution that suits the best that particular store. Furthermore, most of Digital Signage solutions are customized so it is hard to generalise what kind of content Digital Signage advertising should contain or how to place exactly screens in retail environment. However, some recommendations are presented in this thesis since the results of the research and theoretical background strongly support them and they tend to work.

Since this research contained only four interviews, I would suggest a deeper and larger research about same or similar topics for the future research. For further research, I would also recommend exploring in-store Digital Signage advertising from customers' point of view which would be useful and very interesting for retailers, advertisers and Digital Signage software providers. I also think that it would be fascinating to read a complete study about companies that have invested into an in-store advertising system that describes how the retailers actually gains benefit from it and how the retailers' customers experience the system.

The whole journey from planning the research and putting it into action was a positive learning experience. It was great to see and learn the research process and become more experienced in the subject every step of the way. I found the planning process very important so I used a lot of time to create a plan that guided me in how to compose this thesis. In the end, the plan was very useful and it greatly helped the writing process. Creating a strong basis took time but it was worthwhile. In my study I used literature of advertising and customer's decision-making. Sources about Digital Signage were mainly articles and guides published by Digital Signage Today since there is no literature available regarding this topic unfortunately. I hope that in the future there would be more literature available about this topic.

It has been a pleasure to work with Nevron and I would like to thank Nevron for giving me the opportunity to compose this thesis for their use. I would also like to thank all interviewees for being so helpful and kind to participate into this research. I hope that Nevron, its distributors and customers will benefit from this thesis and will follow the advices it has produced in the future.

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APPENDIX

Appendix 1. The guide for Digital Signage advertising content.

THE GUIDE FOR DIGITAL SIGNAGE ADVERTISING CONTENT

The content that you show in your Digital Signage network is very significant for its success. The content is the most important part of your Digital Signage network. Delivering the right content, at the right time and in the right place for your customers is the key to be able to influencing their decision-making.

Keep the advertising content simple and clear. Present the message you want to tell to your customers clearly. Use content with good quality. Your customers are not interested in poor quality. Show your customers that you really invest on quality.

The content needs to be relevant and topical for your customer and it must be renewable. It is important to plan how the content is updated. Make sure that there is someone responsible for updating the content. The content has to be updated constantly.

The advertising content of Digital Signage network should follow the same line than in other advertising mediums. It should support other mediums that show the content of the same campaign.

Make the content interesting for your customers. Use different topics as sales, campaigns, seasons, holidays and celebrations in your content and make it relevant for your customers.

Readability is very important in advertising content. Make sure that customers can see the content easily.

Use contrast in colors. Contrast is often the most important visual attraction on a display. Red is the most attention grabbing color. Keep the advertising text clear and easy to read.

Do not use too small fonts but instead use font that is big enough and easily readable. It is also recommended to use one font type.

Use imagery and symbols that are relevant to your customers. Imagery should be bold, clear and easy to understand. Be careful when using images that are very attention-grabbing because that can easily divert attention from the core message.

If you want to use audio, use it wisely. Audio should not annoy customers and your staff. Well used audio can have a great impact on shopping experience. One good option is to use directional sound.

The length of the ad or the loop depends where the advertisement is used. If your screens are located in a place that customers are passing by and the environment is busy, the ad should be short and clear. Using digital poster can be good to use in a busy environment. When signs are located in places such as waiting rooms or lobbies where your customers gather and spend time, the ad and the loop can be longer. The content can be more informative and entertaining in places where people spend time.

One thing to consider is interactive Digital Signage. With interactivity the customer becomes in control of the experience and consumers that feel they are in control are also more receptive to the messages they receive.

Listen to your customers. You can collect feedback from your customers and that can help you to improve the content your Digital Signage network presents. Then you will also improve customers' shopping experience more into the direction they wish.

Appendix 2. The guide for locating Digital Signage screens in retail environment.

THE FOR LOCATING DIGITAL SIGNAGE SCREENS IN RETAIL ENVIRONMENT

First of all, plan well how you will place the screens at the store. A careful planning of locating screens is necessary for succeeding in Digital Signage. Locating the screens has a remarkable importance for how you and your customers will benefit from the system. It also has a great meaning for a customer experience.

While planning the locations of screens, use the knowledge that you have about your customers. Think how your customers move in your store, where do they spend time and where do they make their purchase decisions.

Screens have to fit to the environment. Every screen and its location must be planned and considered well. The amount of displays depends on a particular place. Place your screens only to places where you think they will be noticed and useful.

The size of screens needs to be considered. When choosing the size of the screen, think about the space where it will be placed. Use screens that are big enough because too small screens will not be noticed and they do not work.

Place screens within the eye sight of the customer. Do not place screens too high or too low. Place screens where customers can see them easily and immediately.

Excellent and ideal locations for screens are places where people are spending time. Places where people get jammed especially in rush hours are very good locations because there customers stop and wait and then they also have time to receive your message. Think which places in your store are locations that people spend time.

A good place for a display is close to the products in question since this is where the customer makes the purchase decision. Use locations where you think that your customers have lot of alternatives where to pick and choose to buy.

Also main aisles of the store are good locations for screens because they are the natural routes where your customers will walk and spend time. If your store has escalators, they are good places to locate your screens as well.

Locating screens near checkouts is critical since customers already have purchasing decisions behind them in that point. However, if you want to locate your screens near checkouts, instead of pure advertisement use content that is more entertaining and informative.

Appendix 3. The frame of the theme interview.

TEEMAHAASTATTELU

DIGITAALINEN MYYMÄLÄMAINONTA INTERAKTIIVISELLA TV-JÄRJESTELMÄLLÄ

Teema 1.

Haastateltavan taustatiedot

Teema 2.

Myymäälämainonta

Teema 3.

Digitaalisen myymälämainonnan sisältö

Teema 4.

Digitaalisten näyttöruutujen sijoittaminen myymäläympäristöön