

Optimizing FOXplay for Finland

Adding value to viewers and advertisers

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Abstract:

The purpose of this thesis is to gain knowledge in how advertisement and content should be placed on FOXplay in Finland in order to attract both viewers and advertisers. FOXplay, an online catch-up service for the linear channel FOX, is financed completely by advertisement. Recently, competition in traditional TV and online media has grown. More devices for watching television content has led to an increase in free and subscription-based viewing. Digital advertising spend continues growing while TV has remained stable. Earlier research about web usability shows the need of an appealing web page and an adequate user interface. Models of achieving online profitability are developing and the advertiser wants to be seen. The empirical part consists of an eyetracking study with 24 images combined with a short questionnaire. Self-selection sampling was used to find 60 participants. Participants, mostly between 20 and 50 years, were shown modified still images from different parts of the web page and asked to provide background information about themselves, the usage of television content and what was seen in the Eye Tracker-test. Three groups are used for presenting the results; all, new and familiar visitors. The quantitative data collected is analysed with gaze plots, heat maps and statistical data. Results indicate that the functionality of advertising areas and program content depends on the suitability as well as personal interest. Attractive images should be preferred whereas the defined needs decide the placement and what could be a suitable pricing model.

Keywords:	Eyetracking, FOXplay, optimization, value, advertisement, content, Fox International Channels Oy
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Sammandrag:

Syftet med detta examensarbete är att få reda på hur reklam och programinnehåll borde placeras på FOXplay för att locka både tittare och annonsörer. FOXplay är en reklamfinansierad catch up tjänst för den linjära TV-kanalen FOX. Konkurrensen i traditionell tv och online har ökat. En ökning i apparater som möjliggör TV-tittande har gjort att tittartiden för både avgiftsfria och avgiftsbelagda tjänster blivit högre. Digitala reklammarknaden fortsätter att växa medan TV är stabil. Tidigare studier om användbarhet visar behovet av en lockande webbsida och användargränssnitt. Olika lönsamhetsmodeller på nätet utvecklas eftersom annonsören vill bli sedd. Undersökningen består av en eyetracking-studie med 24 bilder samt ett kort frågeformulär. Self-selection sampling användes för att hitta 60 deltagare. Deltagarna, huvudsakligen mellan 20 och 50 år, visades modifierade stillbilder från webbsidan och de gav sedan bakgrundsinformation om dem själva, användningen av TV-innehåll samt över det som de hade sett i Eye Tracker-testet. Resultaten presenteras i tre grupper; alla, nya och bekanta besökare samt analyseras med gaze plots, heat maps och statistik. Resultaten visar att funktionaliteten för reklam- och programområden beror på lämpligheten samt personliga intressen. Attraktiva bilder borde föredras medan definierade mål bestämmer placeringen samt vad som kunde vara en lämplig finansieringsmodell.

Nyckelord:	Eyetracking, FOXplay, optimering, värde, reklam, programinnehåll, Fox International Channels Oy
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1 INTRODUCTION

Nowadays, different online services allow viewers to buy or watch for free traditional television programs. Since the media industry seem to develop and change towards online viewing, traditional broadcasters need to take it into consideration. Therefore, traditional television broadcasters have either already launched or they are planning to start offering programs online.

Fox International Channels Finland, FIC Finland, has launched FOXplay in order to receive a share of the online viewing. In order to attract the viewers as well as receive revenue from advertising, the service has to be attractive. An eyetracking study is done to receive information about how FOXplay should be optimized and to know which areas are the most interesting according to the visitors.

1.1 Research problem and aim

The aim of the study is to define how advertising and content should be placed on FOXplay in order to please both the viewers as well as the advertisers. Usually, the companies paying for advertisement want to reach potential customers by placing advertisement around or in the content while the viewers are looking for the actual content.

The author focuses on the ideal placement from the perspective of FIC Finland. This means finding out the areas that are best noticed by the viewers and could be used for advertisement. On the other hand, it is necessary to know how the programs should be promoted in order for them to be discovered by the viewers.

This study will above all benefit FIC Finland. The reason is that the company receives information concerning what their viewers are looking at when they visit the online page for FOXplay, www.foxplay.fi. Based on the points of interest, the most valuable positions can be optimized to use in such a way that the most important content or advertisement will reach the desired audience. Knowing what focuses the attention of

the viewer, FOX might also be able to substantially improve its position from a marketing as well as commercial perspective.

Since FOXplay exists already in Finland and is going to be launched in other countries, the results from this study could be applied to some extent in these new countries. In addition, companies having similar web pages might be inspired to learn more about the possibilities with eyetracking and how this particular study has been conducted.

1.2 Limitations

This study covers advertisement and program recommendations that are visible on the web page as still images. In other words, it does not include video or any other moving images.

Still images are used throughout the Eye Tracker-test. The reason is to assure that every participant sees the same, since content on the web page can change rapidly. By showing predefined still images, the outcome of individual navigation cannot be studied. However, finding out the functionality of the navigation between the different areas on the web page is not a part of the research aim.

Personal interests might affect the interest towards an advertiser or a program. This means that the time a single participant focuses on certain content could vary depending on the chosen elements. In case most of the participants would have preferred certain content on one of the pages due to the appeal of the advertisement or program, it should still not have affected the presented results. The reason is that since similar elements are placed on several pages, the author is able to use average numbers which gives an overall understanding and a more credible result.

As a reminder, the author strives to find out the areas that are perceived by the participants as most attractive. This means gaining knowledge about where an advertisement or promoted program could receive most attention. Consequently, it does not include if those pieces of advertisement that are used as examples actually would reach its desired target audiences.

2 BACKGROUND

In order to understand the need for FOXplay, the author presents in this chapter information about Fox International Channels and gives an insight into the Finnish TV market. The insight includes knowledge of available services and viewing as well as the advertisement situation.

2.1 Fox International Channels

Fox International Channels, FIC, is an international multi-media business owned by 21st Century Fox. This includes in total more than 300 free-to-air or pay-tv channels available in most parts of the world, for example FOX and National Geographic Channel, as well as non-linear brands, for example FOXplay. FIC started its operations on 14th August 1993 and has now a cumulative reach of over 1,725 billion households. (Fox International Channels a)

2.1.1 FOX Finland

Fox International Channels Oy is a Finnish company that is a part of FIC Nordic. In Finland, the local operations started when buying SuomiTV, a free-to-air commercial television channel, in January 2012 (STT a). Consequently, the channel relaunched by changing its name to FOX on 16th April 2012 and has stayed as subscription free for the viewers (Kauppalehti). In September 2013, National Geographic Channel was launched as a local pay-tv channel (STT b). FIC has less than 30 employees in Finland.

The main target audience for the linear television channel, FOX, is people aged 25-44 who are living in Finland. However, FOX wants to reach a broad audience by not targeting a certain group of people. Since the launch, the broadcasting time has increased to 24 hours per day. The schedule in autumn 2014 included for example; kids programming, movies, series, content from National Geographic Channel, 24Kitchen and Sky News. (FOX b, Karjalainen)

2.1.2 FOXplay

FOXplay is a Video-on-Demand service that FOX launched as a beta-version on Monday 8 December 2014 (FOX a). The catch-up service, with a wide range of content from the linear channel, is offered for free to its viewers. Viewers can access FOXplay by writing the web address www.foxplay.fi in their browser. In 2015, applications for Apple-devices were made available while the application for smart phones using Android will be published in the near future. (Fox International Channels d, FOXplay)

In order to cover the costs, FOXplay contains different forms of advertisement. The web page has certain areas designed especially for advertisement and the videos are also interrupted every now and then. FOXplay launched with possibilities for three different clickable advertising types; video, push down and square. A pre-roll is a video from the advertiser appearing before the program while a mid-roll interrupts the viewed program. The push down allows an advertiser to place an image on the top of the page. If the advertiser desires and the content is of adequate size, the push down has the ability to expand when the mouse is on the same area. However, a normal page-wide panoramabanner can also be placed on this advertising area. The square has always the same size and it can be sold to certain parts on FOXplay. In addition, plans exist to use other solutions as well in order to increase the attractiveness for advertisers and enhance the user experience on FOXplay. (Fox International Channels c)

Available programs receive additional visibility for example on the front page and in the promos that appear in the breaks of every program. The editors of FOXplay continuously choose which programs should receive special attention and create pictures to arouse viewers' interest. The promos may also contain commercial elements.

The company has not officially decided on the naming for FOXplay. Currently, the recommendation is to write FOXplay but the variant FOX Play has also been used. Therefore, the names are not always consistent in this study. (Fox International Channels b)

2.2 TV market in Finland

Finnish viewers are interested in services that are available for free. During the last few years, an increase in digital devices has allowed online services to expand. TV viewing as well as the amount of TV advertisement seem to continue as stable. However, more advertisers are choosing digital media. A brief Nordic and global perspective is also given together with future expectations.

2.2.1 An insight into the Finnish TV market

The digital terrestrial television network in Finland consists at the moment of 15 free-to-air channels. Apart from Fox International Channels who has one free-to-air channel in the terrestrial network, FOX, the amount includes four public service channels and ten commercial. Pay TV channels, temporary channels, radio channels with an image and other channels sending mostly paid programming are not included. (Digita)

The public broadcaster Yle is a state-owned company that has no advertisement. Yle launched its online platform Yle Areena already in 2007 (Taloussanomat). Starting from April 2013, all the linear channels; Yle TV1, Yle TV2, Yle Teema and Yle Fem, can also be watched live on Yle Areena (Yle a b).

MTV Katsomo is the online platform for the commercial broadcaster MTV. It offers live streaming and Video-on-Demand for their three free-to-air channels; MTV3, Sub and AVA as well as pay television services. (MTV b)

Nelonen Media has four channels; Nelonen, Jim, Liv and Hero. Hero started on 10 November 2014 with programming only in prime time. TV series are broadcasted either several episodes on the same day or on consecutive days. This strategy, which takes into account the changing habits of watching television content, is a new concept in Finland. It is also a sign that the parent company for Nelonen Media, Sanoma, believes in growth opportunities for the traditional television industry. The online platform for Nelonen Media, Ruutu, is mainly a free Video-on-Demand service while the paid version Ruutu+includes premium content. (Nelonen Media a, b)

SBS Discovery Media has three channels, TV5, Kutonen and Frii. Frii is the newest free-to-air channel in Finland since it was launched on 1 April 2015. The company announced in May 2014 that its online platform, D Play, will launch in the end of 2014 or in the beginning of 2015. According to the published information, D Play is a Video-on-Demand service with content also from the other Nordic channels belonging to the same company. However, since the news about the launch, there has been no new information from SBS Discovery Media about when D Play will be available. (Frii, TV5)

In 2014, all persons over 10-years living in Finland watched television during an average day for 3 hours and 4 minutes while those aged between 25 and 44 watched TV for approximately two and a half hours (Finnpanel b p. 2-3). Figure 1 shows the share of TV viewing in Finland for year 2014 for persons over 10-years. Even though the values for the commercial broadcasters also include pay TV channels, it gives an understanding that the public broadcaster YLE and the commercial broadcaster MTV are those receiving most of the TV viewing in Finland.

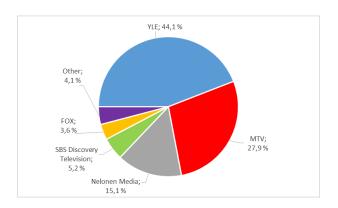


Figure 1. Different broadcasters share of TV viewing in Finland in year 2014. All persons over 10-years (Finnpanel $b \, p.37$)

As can be seen in Figure 2, in 2014 MTV3 had the highest share of commercial viewing among persons over 10-years as well as among those aged between 25 and 44. FOX was the fifth most watched channel in its main target group and the fourth in persons over 10-years. The category "PayTV" contains only those pay TV channels selling advertisement in Finland.

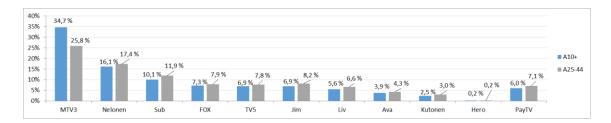


Figure 2. Commercial share of TV viewing in Finland for year 2014 for all persons over 10-years and those aged between 25 and 44 (Finnpanel a, b p. 42)

In addition to the mentioned linear channels and their online platforms, companies such as Netflix and Plejmo are interested in taking a share of the total viewing of TV content. Netflix offers their customers unlimited access to series and movies online without advertising. These can be watched basically on any device after having paid the monthly subscription fee. (Netflix)

Plejmo is a Swedish company who wants to challenge its competitors on the online television market by renting movies based on dynamic pricing. Depending on the popularity, prices range from 0,33 to 5 euros. Customers are also offered free movies that change every week as well as a possibility to watch the content offline during the 48-hour long rental period. Plejmo was founded in the beginning of 2015 and it was launched in Finland on 23 April 2015. (Plejmo)

2.2.2 Statistics and studies about TV viewing

According to a study made by Finnpanel in autumn 2014, nearly all Finns are still watching television with a television receiver. During the last few years, the percentage of households using a computer for this purpose has increased from 32 % to 44% while the use of a smartphone or tablet was 12 % in 2011 but in 2014 it was 33%. In other words, those who choose to watch television content online, for example on Yle Areena or Netflix, prefer their computer but smartphones and tablets are becoming popular as well. (Viestintävirasto a b)

In January 2015, TNS Gallup made a study which included questions about viewing TV online. Figure 3 shows that 75 % of the Finnish population, aged between 15 and 69, is

watching TV content and online videos. Out of those who are watching and own at least one of the three devices; 89 % are using a computer, 23 % use a tablet and 22 % use a smartphone. During an average week, the Finnish population watches online videos and online TV content for 2 hours and 17 minutes. However, those between 15 and 24 watch 4 hours and 25 minutes while persons over 65 watch only for 58 minutes. (TNS Gallup e p. 4)



Figure 3. Devices used and average hours for watching online tv and video (TNS Gallup e p. 4).

Figure 4 shows that the three most popular services, used for watching online TV content in Finland, are available for free to the users. According to the study by TNS Gallup, visitors tend to watch TV content at least once a week while daily use is still not as popular. (TNS Gallup e p. 5-6)

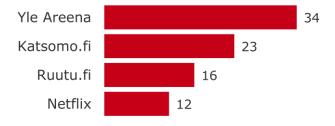


Figure 4. Percentage of the Finnish population using different online services at least once a week (TNS Gallup e p. 5).

In April 2014, 5000 persons in the Nordic countries, aged between 18 and 65, were interviewed by the market-research company Ipsos Mori on behalf of Samsung about using streaming media. Overall, the results showed that streaming media is more popular than downloading content. In total, 72% of the Finns watch streamed television content while for example in Sweden the value is only 61%. Approximately half of the

Finns aged between 18 and 24 watch daily more than one hour streamed television content. On the other hand, of those who are over 55, 30% are watching it only on a weekly basis. (Samsung)

Arkena, a media services company, wanted to gain insights and learn about the streaming habits and services used in all Nordic countries. The study was conducted in mid-December by the research agency Epinion. As can be seen in Figure 5, having converted the local currencies to euros, Finland and Denmark are the countries where people use in average the lowest amount of euros for streaming services. When comparing the share of paying users, Finland is below average. (Arkena p.22)

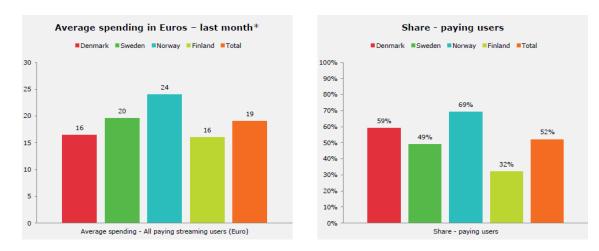


Figure 5. Spending on streaming services in the Nordic countries (Arkena p. 22).

Globally, Ericsson has conducted a study in 23 countries during year 2014. The results, from more than 20000 people who use weekly both the internet and television, show that streamed video has become nearly as popular as scheduled broadcast TV, 75% compared to 77%. The amount of those who more than once a week watch recorded broadcast TV has declined to 30% while the value for DVDs has stayed as 30%. According to the study, people appreciate being able to access content whenever they want and on any device. (Ericsson p. 2, 5)

Based on results from the study by Ericsson, Figure 6 shows the average hours per week that is used to watch video. Compared to 2012, the amount for the TV screen has stayed more or less the same since in 2014, the TV screen was the most popular device with 15

hours per week. Online viewing represented both in 2014 and 2012 approximately 21 hours per week. The decrease in desktop computers has led to an increase in smartphones and tablets. Consequently, the total time used for watching television content and short video clips has remained same. (Ericsson p. 6)

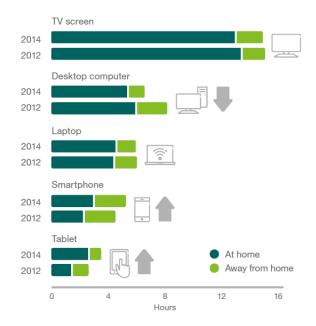


Figure 6. Average hours spent per week watching video on each device (Ericsson p. 6).

2.2.3 Advertising spend in Finland

Figure 7 shows the total advertising spend in Finland for year 2013 and 2014. The author has modified the figures in order to make them comparable with each other. As can be seen, the total spending in euros has decreased by 2,6 % from year 2013 to 2014. The amount of money used for TV has slightly decreased while digital media has increased. Results from the first quarter of 2015 show that digital continues to increase and has reached second place whereas TV is now in third place (IAB Finland a). (TNS Gallup a b c d)

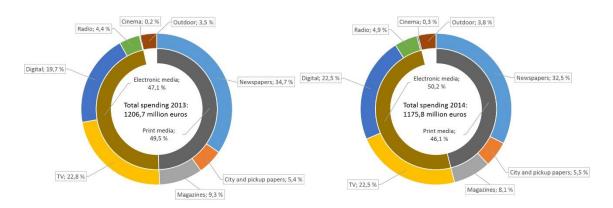


Figure 7. Total advertising spend in Finland 2013 and 2014 (Modified based on data from TNS Gallup a b c d)

In 2014, according to IAB Finland, display advertising was the most popular form of digital advertising. The majority, of those using display advertising, spent money on banners. A comparison between the shares of different digital media, Figure 8, shows that the category "TV and Radio websites" has remained constant at 8 %. (IAB Finland b d, TNS Gallup a b c d)

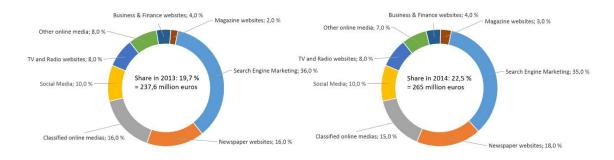


Figure 8. Share of different digital media in Finland 2014 (IAB Finland b d, TNS Gallup a b c d).

2.2.4 Expectations or predictions about the future

Despite some changes in consuming television content, Finnish broadcasters have not stopped believing in either the terrestrial television or online platforms. During the last year, licenses for creating new free-to-air channels have been granted (Liikenne- ja viestintäministeriö) and the online platforms seem to continue to expand.

Dentsu Aegis Network, a global network brand, has done a forecast for the year 2015 about the total advertising spend in Finland. In addition to the forecast, which can be seen in Figure 9, accurate values by TNS Gallup from 2007 to 2014 have been included. Figure 9 shows that print media has decreased significantly during the last years while digital spending has increased. Dentsu Aegis Network forecasts that these will continue with a similar pattern in Finland. Advertisers are also expected to keep investing in TV since it appears to be a relatively stable media with a small increase more or less every year. (Dentsu Aegis Network b)

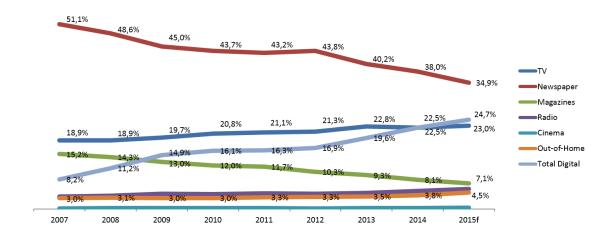


Figure 9. Total ad spending in Finland 2007-2014 and a forecast for 2015 (Dentsu Aegis Network b)

When comparing the overall spending in Finland to the global market, one becomes aware of that advertisers are decreasing the total budgets in Finland while globally the development is the opposite. A global forecast from Dentsu Aegis Network indicates that the only media increasing its share in 2015 and 2016 is digital. (Carat p. 10-11, Dentsu Aegis Network a)

In Sweden, according to Mediavision, the total TV market had the highest turnover to date in 2014. The revenue for online TV increased while it decreased for traditional commercial TV channels. Swedish viewers seemed to prefer foreign online TV services and decrease the time that was spent watching traditional television. In order to avoid losing revenue to foreign companies, Swedish TV companies had stated that they will invest more on the online market in 2015. Mediavision has been operating in Sweden since 1996 and it offers consulting for companies in the media industry. However, as

presented previously, since the share of paying users is higher in Sweden than in Finland, these expectations might not be completely applicable for Finland but they could give an indication about the future. (Mediavision)

3 THEORY

The theoretical framework consists of earlier eyetracking research about online TV services, some information about what is a good web page as well as different models of achieving profitability online. The focus is on giving an understanding about how eyetracking has been used and what could be needed in order to optimize FOXplay for both advertisers and viewers.

3.1 Earlier research

Previously MTV sold advertisement on their web page based on the location, size and expected click-through rate. Since advertisement can be seen without a reaction, MTV wanted to find out how visitors behave in order to improve the web page for their advertising customers. This was done by giving students at Arcada a project with the Eye Tracker. When the study was made, in autumn 2011 and spring 2012, the company was still known as MTV3. The author was not involved in the study. The results showed what and for how long the content was seen as well as what remained unnoticed. Consequently, the sales team of MTV has used the results when pricing the different forms of advertisement. (Arcada b)

Netflix used eyetracking when developing its new user interface that launched in the end of 2013. As seen in Figure 10, previously the viewers had difficulties in finding descriptions for the selected titles. Since the text was on the right-hand side of the page and the image on the opposite side, they either did not pay attention to it at all or were forced to look back and forth. Figure 10 shows also that having changed the layout, the focus mostly stayed on the selected title and it became easier to read the descriptions. (Roettgers)





Figure 10. Heat maps for the old and new user interface of Netflix (Roettgers).

3.2 What is a good web page

A web page should in most cases be able to convey a message to its visitors. This message could for example be distributing interesting information or attracting potential customers with a clear call to action. Therefore, no matter the message, it is of high importance that the content and layout is appealing and can be quite easily found.

Kathryn Whitenton, a User Experience Specialist at Nielsen Norman Group, writes about how those who have a web page need to consider what they want to achieve. Large images covering most of the page might result in a situation where crucial information appears below the fold, meaning that the content is not visible for the user before scrolling down on the page. Depending on what kind of page it is and its objective, one has to take into consideration what is the adequate approach. (Whitenton)

According to results from eyetracking studies conducted by Jakob Nielsen and Kara Pernice, nearly all human beings are interested in advertisement that is perceived as similar to the content available on the web page. Nielsen and Pernice argue that every element strives to achieve attention. Therefore, the publisher needs to decide on the most important elements and how the available areas should be used in order to please both visitors and advertisers. However, an overused area might result in banner blindness, meaning viewers learn to avoid it since they know that it contains elements that are not of their interest. (Nielsen & Pernice a 2010 p. 332-339, 348-349)

3.3 Models of achieving profitability

Web pages with content can be profitable in many different ways. Depending on the business model, the funding could be subscription-based, supported by advertisement or be dependent on both. However, in this study, the author describes only some models that are relevant for a web page that is supported by advertisement in order to give a brief understanding about the existing possibilities and needs. The intended goal for the campaign affects which model the advertiser chooses when buying advertising space. Examples of different models are CPM and CPC. Alternatives, such as RTB and other special solutions, are also used.

3.3.1 CPM - Cost Per Mille

CPM stands for Cost Per Mille. This means that advertisement is sold per thousand impressions at a fixed rate. An impression occurs when the user has loaded the page and there has been an opportunity to see the banner once. In other words, it is not necessary for the user to click on it. (IAB Finland c p. 23)

Brand advertisement can be effective even though there would not be any immediate action since the goal could be to only achieve a lot of visibility, hopefully leading to top-of-mind awareness. However, a high number of impressions does not necessarily mean that users have seen the advertisement. Therefore, a development from CPM is viewable impressions. The idea with viewable impressions is to measure those impressions that have actually been visible on the screen. This is done based on the number of pixels and the time advertisement has been on a visible area in the browser. The first publisher in Finland, MTV, implemented viewable impressions already in 2012 (MTV a). (IAB Europe b p. 2-7)

3.3.2 CPC - Cost Per Click and CPA - Cost Per Action

CPC stands for Cost Per Click. When the user clicks on a banner on the web page, the advertiser pays a certain amount to the publisher. The cost per click can be either fixed or floating. However, the total amount paid by the advertiser depends on how many clicks the campaign has received during the period it was online. The advertiser and the

publisher could also agree to price based on CPA, Cost Per Action, meaning the publisher receives money when the agreed action is successfully completed. (IAB Finland c p. 23)

3.3.3 Programmatic buying

Programmatic buying occurs when the buying and selling process of advertisement is automated. Real-Time Bidding, RTB, is one version of programmatic buying. RTB means that the placement of and the price for advertisement is decided a few milliseconds before the user has loaded the web page. Both the advertiser and the publisher suggest a price to the broker. Consequently, when a deal has been made based on the best price at that particular moment, the user sees the advertisement. Assuming the publisher decides to use programmatic buying, the publisher still has the possibility to set limitations concerning to whom it wants to sell as well as decide whether the total inventory or only certain parts are offered. (IAB Europe a p. 4-5, IAB Finland c p. 3-5)

3.3.4 Other special solutions and models

Some publishers offer the possibility to different kinds of special solutions. To exemplify; the advertiser can have a tailor-made area, an area bought for a specific time or a partnership. Publishers can also offer to show the advertisement only in a certain target group, geographical area or for example among visitors who have seen objects defined by the advertiser. The pricing for these solutions can vary significantly between different online media. (IAB Finland c p. 23-25, MTV a, Sanoma)

4 METHODS

Research methods are divided into two main categories, qualitative and quantitative. In a qualitative research method, data can for example be collected by having unstructured face to face interviews. The quantitative research method is more structured and based on statistical data. However, it is possible to combine both research methods in the same study since one does not exclude the other. (Bryman & Bell 2005 p. 40, 80, Saunders et al. 2007 p. 124-127)

The empirical part of this study consists of two parts, a test with the Eye Tracker and a short questionnaire. Every participant is asked to take part in both since they together form a whole. The methods for collecting data and finding participants are presented separately. A description about what is the Eye Tracker and how the empirical part was designed are included. Different requirements and preparations needed for conducting an eyetracking-study as well as challenges are also described. This study is based mostly on a quantitative method since the majority of the data from the Eye Tracker and questionnaire will provide the author with numbers that can be analysed.

4.1 Eye Tracker

Eyetracking is a technology allowing researchers to receive information about what persons are looking at by following the eye movements. Tobii, a Swedish company specialised in eyetracking (Tobii a), has developed different kinds of Eye Tracker products, for example glasses and screen-based devices (Tobii c). The author has chosen to describe shortly the screen-based model T120 and the software Tobii Studio since these will be used in the study.

4.1.1 Description

The Eye Tracker used in this study is the screen based model, T120, a 17" TFT monitor connected to a Windows computer (Tobii c). Tests are prepared, recorded and analysed with Tobii Studio, a software coming with the device and installed on the same computer. The author has Enterprise Edition of Tobii Studio, version 3.2.1.190. This

means that during the study the author uses a separate screen, keyboard and mouse while the participant focuses only on the Eye Tracker and his or her own mouse.

The vision for human beings could be divided into two categories, foveal vision and peripheral vision. Fixations belong to the vision with high resolution known as foveal vision. A fixation occurs when the eye stays and focuses on an object. Peripheral vision is what a person sees unclearly. To exemplify, he or she can see clearly a certain kind of object that is focused on. However, objects outside the focused area are blurred which means that even though these cannot be completely recognized, persons can tell more or less what kind of areas surround it and whether any of these are something they want to see in detail. (Nielsen & Pernice a 2010 p. 6-9)

What allows the eye movements to be tracked, is the infrared light sent from the device to the eye. When the eye reacts, a reflection of what has been seen on the screen is recorded by the Eye Tracker. In order to recognize the eyes correctly, the Eye Tracker products are always calibrated individually for every participant before starting the actual test. (Tobii b p. 6-7)

Calibration means that the participant is required to focus on a moving point until the device has registered the eyes correctly. In a regular calibration process, the red point is on a grey background. The point goes through every corner as well as the middle of the screen. During this process, it is important that the participant follows the moving points only with his or her eyes. After a successful calibration, the Eye Tracker has recognised the eyes and can create a 3D model of them. The 3D model is used together with image processing algorithms to determine with high accuracy what the participant has been focusing on. (Tobii b p. 6-7, Tobii e p. 28-33)

If the first calibration is unsuccessful, the researcher is required to restart the calibration until it is accurate and acceptable. Unfortunately not all persons can participate in an eyetracking study. For example, those using glasses or a lot of mascara could prevent the device from seeing clearly the eyes. Having received a successful calibration, the actual test can be started and all the questions will be shown as prepared by the researcher. However, the participant should try to be still and keep looking at the screen

during the whole test. If the head moves shortly out of range, the device would continue to receive information when the eyes return. (Tobii b p. 9, Tobii d, Tobii e p. 32-33, Nielsen & Pernice b p. 87-88)

4.1.2 Analysing data

When tests are completed, the analysis of the collected data can be started. The recordings for every participant are saved as a separate file but also as a combined file according to the shown images. This gives a possibility for the researcher to watch and understand the results either individually or as a whole.

Tobii Studio allows the researcher to analyse and present the results in many different ways. This can be done for example with a gaze plot, heat map or by defining areas of interest. Having created areas of interest, exporting the data to an external software, for example to create figures or in-depth statistical analyses, is also an option. Consequently, it is possible to know exactly how the participants have looked at the material on the screen. (Tobii e p. 57, 76, 85, 118)

Gaze plot

A Gaze plot describes how the eye has moved from the first fixation to the last in a chronological order. Every participant has its own colour. Participants who keep watching a specific area for a long time, increase the size of the circle that represents the time of what has been looked at. The number in the circles is the order the objects were seen. (Tobii e p. 61-62)

Heat Map

In a heat map, colours reflect the amount of time participants have observed the elements shown to them. Usually a red colour represents the longest time, then comes yellow and green, while nothing at all means that it has remained unnoticed or not been looked at enough. Depending on the chosen settings; number of fixations, absolute duration or relative duration, the colours for the image change accordingly. (Tobii e p. 63-64)

The author has chosen to use relative duration in all of the presented heat maps since this option serves the purpose of the study very well. The reason is that the viewing time per image in the eyetracking study is not fixed and with relative duration, these changes are taken into account. The relative duration is calculated by analysing the result per participant and giving the same weight for elements receiving equally long visit duration in percentage. This means that even though the total visit duration on the image could differ significantly between participants, the heat map would not be affected. The Kernel size in the heat maps is 50 pixels since it is the recommended value by Tobii and the author has not seen any reason to change it. (Tobii e p. 64-67)

Areas of interest and statistics

If the case material contains objects differing from each other but still of interest for the study, it would be convenient to use areas of interest. With the help of areas of interest, desired areas can be defined and statistical data can be counted for those in particular, making comparison between the different elements easier. The areas of interest should be carefully marked in Tobii Studio since an area containing unnecessary elements leads to a misleading result. Depending on the amount of participants noticing and what settings are chosen, the statistics look different and behave accordingly. (Tobii e p. 76, 85, 94)

The author has chosen to use the following descriptive statistics; N, Mean and Standard Deviation. N is the amount of participants who noticed each element on the image while the mean is the average value for the metric. When the value for the standard deviation is small, it means that most of the observations are close to the mean while a large value means the opposite (Djurfeldt et al. 2003 p. 65). Having selected the correct settings and descriptive statistics, the researcher chooses a metric before exporting the statistical data. The time when the participants have noticed an area of interest for the first time is called time to first fixation. Total visit duration, also known as the metric for observation length, is the sum of all visits for the element in the selected image. (Tobii e p. 89-90, 95-96, 105-106)

4.2 Designing the empirical part

The empirical part was designed partly in co-operation with FOX. By assuring the availability of relevant material and including adequate questions in the study, the results give valuable information to the company. The idea was that participants could complete the test with the Eye Tracker and fill in the questionnaire in approximately 5 to 10 minutes.

According to Nielsen and Pernice, an eyetracking usability test for a web page needs to ask a representative group of users to perform realistic tasks on different kinds of web pages. Results differ also when showing only one page compared to a situation where a whole process with several subpages is shown in the test. In other words, it is not possible to analyse one page and expect that the result is applicable for all the other pages as well. (Nielsen & Pernice a 2010 p. 13-14, 35-40)

When the pages shown form a whole, participants are usually not able to guess what the researcher wants them to observe. Consequently, when the focus is on a question, persons tend to do what is asked. Depending on if the participant is asked to do a specific task or visit the web page during spare time, the results would not be the same. Accordingly, when visiting the site on own free will, the behaviour is most likely more normal. This normal behaviour is more difficult to achieve in a test situation since the participant is still usually somehow aware of being monitored. (Nielsen & Pernice a 2010 p. 13-14, 35-40)

4.2.1 The Eye Tracker-test

Appendix 1 shows the material used in the test with the Eye Tracker. The test consisted of images, scrollable web pages and some instructions.

Simulated version of FOXplay

Since content on FOXplay is changing constantly, the participants were looking at a simulated environment. A change in the online material could have resulted in a situation where the page is perceived differently and consequently affected the results.

By using downloaded versions of the page, the author eliminated the risk of having changes in advertisement or available programs. The visit is simulated with the help of modified screenshots from different parts of the web page. This gives an overall and comprehensive understanding regarding how the content should be placed in order to be perceived as attractive by the visitors.

As described previously, when preparing the material for the eyetracking study, FOXplay did not have all the elements ready and the service was not publicly available. In order to have different kinds of images and html-pages, the author had created new elements that are still not available on FOXplay but could be of future interest to the company.

All pieces of advertisement appearing on the images and web pages have been copied from different sources that were publicly available on the internet. These have been modified, if needed, in order to be suitable for FOXplay. The reason for using external advertisement was that the system was not ready and therefore FOX could not provide advertisement in time.

Size and format of images

In addition to the nearly constant change of content on the online version of FOXplay, the technical limitations of the Eye Tracker were also one of the reasons why every element that has resulted in an image or html-page has been modified or re-created by the author. In order for the material to be viewed correctly, the images and html-pages had to be adapted to the display area of the Eye Tracker. Consequently, all of the images are always 1280 pixels wide and 1024 pixels high. These images are saved as jpeg-file. By using images converted to html-pages, the height can be increased depending on the amount of content. This means that more content can be placed on the same image and participants are able to scroll up and down in a web browser.

Content and structure

The use of predefined images meant that some features, such as the functionality of interactive content, could not be tested completely. Even though the participants were not always allowed to choose freely, it was important for the author that the study still

reflected an ordinary visit. By avoiding to give unnecessary instructions, the tasks should have been completed more closely to the reality and without influencing the choices made by the participant.

Different kinds of pages are shown throughout the eyetracking test. On most of the pages, the participant was asked to choose the area he or she would normally click on or the favourite program among the available selection. This was designed to give information on how persons are looking at a number of titles before choosing an option to watch. However, in some of the images, the participant was asked to do a specific task since the author wanted to know if a certain element is easily found.

The actual test began with a brief instruction explaining to the participant that he or she always made a choice by clicking once on the left mouse key. The author was present during all of the tests since the Eye Tracker had to be monitored. In case the participant had any questions or encountered a problem during the test, the author could immediately give assistance. When the participant had read the first instructions, he or she clicked on the left mouse key, and the first image was shown. The main purpose of the first welcoming image was to familiarize the user with the test environment as well as FOXplay.

Having continued the test, it was assumed that the participant had written in the browser the address for FOXplay. Therefore, he or she saw an image taken from the front page and was requested to click on the same element as she would click in a normal situation, if arriving to that particular page. The front page is used for promoting the main programs but also for advertising and it was shown several times to the participants.

Concerning the advertisement, similar alternatives have been used and placed either on top, in between or below the programs. By changing the content, meaning the places for the program recommendations and advertisement, it was possible to examine what was the reaction and if there was a difference in how participants perceived the pages.

After having seen different versions of the front page, the participant saw two similar versions of the series page. Consequently, it was assumed that the participant had chosen the series "Eläinkunnan hurjimmat" and arrived to its program page.

Having selected an episode on the program page, the participant was shown four versions of the episode page. The author chose to use the areas above and beside the video area for different advertising combinations in order to explore the possibilities of effective usage. On the first episode page, Fazer communicates the main promotional message with the top banner while the two remaining areas are used for reminding the potential customer about chocolate.

On the second program page, the author had deliberately placed the takeover for the video area by Nelly together with the episode having a woman in a dress holding a baking tin. The reason was that participants could believe that the woman modelling a party dress for Nelly, in the top banner, is the same person who is appearing in the episode. The dress in the episode image might also tempt viewers to buy new clothes. The left banner has several smaller elements while the right banner has a message about a sale.

Since the episode image for the third episode page had a map with Barcelona, the author chose a combined takeover from two travelling companies, Norwegian and Hotels.com. By having exactly the same banner from Hotels.com on both sides of the video area, the author could receive information about their efficiency. On the fourth episode page, an advertisement by Nescafé had been placed on the same areas as Hotels.com.

The placement on the series titles page has also been tested by having two different pieces of advertisement by I need Spain. On the first series titles page, the advertisement was in the lower right-hand corner while on the second page it was in the centre of the second row.

The author wanted to test the significance of the order content is seen and the time visitors are willing to scroll by having the first latest episodes page as a very long scrollable html-page. In addition to the episodes, it also has different forms of

advertisement. Some pieces of advertisement are placed among the latest episodes while others are outside the latest episodes. There is also a top banner by Fazer promoting cookies.

The last two images of the test represented the information pages. These images had been chosen by the author to examine how a page with a lot of text differs from one with less text. If the participant still was not familiar with FOX and FOXplay, these pages gave some information about the service.

It is also assumed on the information pages that the participant has used the mouse to move the cursor to the top navigation menu on the text for programs, "Ohjelmat". Therefore, the drop-down menu with links to certain program titles and latest content is visible on both of the pages. This allowed the author to compare what is a suitable amount of program titles in the menu.

Even though it was desirable that every participant took the test seriously, it is however possible that a participant completely overlooked the instructions given by the author. To exemplify, this could mean that a participant deliberately clicked very rapidly or slowly through the test or made a lot of head movements which resulted in low accuracy. If such scenario seemed to occur repeatedly for the same participant, the misleading results were taken into consideration before excluding them from the presented results.

4.2.2 The questionnaire

After having completed the test with the Eye Tracker, the participant was asked to fill in a short supporting questionnaire. This questionnaire can be seen in Swedish in appendix 2 while appendix 3 contains the same information in English.

Since the Eye Tracker only provides the researcher with data, background information about the participants is needed in order to better understand the results. With background information, the author means knowledge about gender and age, but also questions about viewing patterns for television content.

Apart from being requested to give background information, there were also some open questions about the material shown in the eyetracking-test. Participants were asked to remember the name of the web page as well as the names for the advertisers visible on the web page he or she just visited. In case a participant could not remember the names, he or she was asked to describe the advertisement as good as possible. The reason why open questions, when asked about the names, were chosen instead of multiple-choice questions was that the author did not want to remind or suggest to the participant what he or she had seen or could have seen.

Concerning the questions about visible advertisement, Raluca Budiu, a Senior Researcher at Nielsen Norman Group who has written about how the human memory works, would most probably agree on the choice made by the author. According to Budiu, the amount of and the time when a person previously has seen the object as well as what he or she is focusing on at that particular moment affects the memory. It is also easier to recognize an object that is shown than asking him or her to recall it from the memory. (Budiu)

The author used this information from the questionnaire to examine the placement for the remembered areas as well as for those areas that had remained unmentioned. In case the participant had any suggestions of improvement or thoughts about the web page, the author included a separate field for collecting feedback.

Since the Eye Tracker automatically assigned every participant an identification number, the same number was written in the questionnaire. This gave the author an ability to combine the data with the correct participant. By combining the two sources of data, the author was able to analyse and group the participants according to different variables.

The questionnaire also contained a part explaining the purpose of the study and how the collected information was used. Having read and completed the test, participants were required to accept it by signing the document.

4.3 Ethics

According to the document "Good scientific practice in studies at Arcada", certain ethical guidelines have to be followed when conducting an empirical study. Since persons are not the object for the study and the material shown does not contain any pornographic, violent or sensitive material, it is not necessary to ask for permission from the Ethics Board. (Arcada a p. 1-2)

Before participants started the first part of the empirical study, the eyetracking test, they were informed that participation is voluntary. Participants were also told that they will see different kinds of web pages with no correct or wrong answers. The author could not immediately explain the aim in detail since it would have affected the results.

The questionnaire contained information about the author as well as a more thorough description about the aim of the study, finding out how content and advertising is perceived on FOXplay. In the end of the questionnaire, participants were asked for written consent to use and combine data collected with the Eye Tracker and the questionnaire. The author is keeping the signed documents as confidential material. As stated in the questionnaire, identification of single participants from the published results is not possible.

4.4 Finding participants

The population is all the persons or objects from which a selection can be made. In sampling, persons or objects are known as cases or elements. If it is not possible to study all cases or elements, the researcher can use different methods to select a sample from the population. (Bryman & Bell 2005 p. 111, Djurfeldt et al. 2003 p. 107, Saunders et al. 2007 p. 210-212)

Nielsen and Pernice argue that the amount of participants needed for an eyetracking study depends on how the results are presented. When the aim is to draw conclusions based on generated heat maps, one should have at least 30 users. Since all persons are

not eligible for an eyetracking study, Nielsen and Pernice suggest to recruit 39 users. (Nielsen & Pernice b p. 19)

According to Nielsen and Pernice, having 30 eligible users, the percentage of variance, r^2 , is 0,85. This means that results from the studied heat map are 85 % predictable, if conducting a new study and generating a heat map for the page with a similar group of participants. When increasing the amount of eligible users to 40, the r^2 -value is approximately 0,95. These presented r^2 -values are based on how well nine selected heat maps, with the chosen amount of persons from the same study, were statistically comparable to the originally generated heat map with 60 persons. (Nielsen & Pernice b p. 19, 48-51)

In this study, a non-probability sampling method is used to find participants. As the name already refers to, some persons have usually a better chance to be part of the sample than others. The author presents the technique for selecting the non-probability sample which is known as self-selection sampling. (Bryman & Bell 2005 p. 124, Saunders et al. 2007 p. 233-235, 241)

In self-selection sampling, individuals decide by themselves whether they are interested to participate in the study. In other words, the researcher has for example in person informed them of the need, sent an e-mail or asked them in social media. Consequently, data is collected from those who have chosen to participate. (Saunders et al. 2007 p. 241)

The author considered that self-selection sampling is the most suitable method for this study. It is not realistic to move the Eye Tracker for every single participant since it requires assembling and technical adjustments before a test on a new location can be started. Therefore, potential participants had to be geographically close and able to come to a certain location.

The author informed about the place where the study was conducted as well as the dates and times when present. In addition, individuals were asked directly about their interest in participating. If it was not possible for a person to come directly, the author arranged a more convenient time for the potential participant.

Nielsen and Pernice have stated that a study conducted only among a certain age and professional group cannot represent the whole population of other similar individuals (Nielsen & Pernice a 2010 p. 35). Even though a self-selection sampling method was applicable, it was important for the author that the study remained representative for the population. The author has striven for a variety in and balance between the age of the participants as well as their background.

Since the main target audience, for the linear channel FOX, is people aged 25-44, this study about FOXplay was limited to cover a similar target audience. However, it was only a preferred age group and participants who were some years younger or older were allowed to participate.

As already mentioned, in order to have a representative sample, some persons came by own initiative while others were contacted by the author. In the beginning of December, when the study was conducted, FOXplay was not publicly available. This also meant that in case the researcher was familiar with some of the participants, it could not have had an impact on the result. The reason is that participants did not know about its existence or what the actual aim of the study is before completing the test and the questionnaire.

In addition to new visitors, FOXplay will most probably also have returning visitors. Therefore, the content should be appealing to both visitor groups. Since FOXplay was not publicly available, employees at FIC Finland were also asked to participate in the study. This was done in order to obtain an estimate about the overall functionality and perception that visitors have about FOXplay.

Before the employees participated in the empirical part, a limited online test version of FOXplay without advertising and only some program recommendations had been made available at the office. Even though only two persons had been involved in discussions about the questions of the study, the researcher wants to inform that it is possible that

others might have overheard or figured out when completing the test what the actual aim is. However, having combined these results with the participants who had not visited the web page previously, an indication and general view of how persons react on the content and advertisement could be established. Therefore, in order to not receive a misleading result, the author decided to increase the amount of eligible participants needed for the study.

4.5 Preparations and pilot testing

When viewing same information on different devices, significant differences can occur due to screen resolution and available software. Before conducting the study, the author prepared all the material that was needed. All material shown in this study has been designed in order to function properly on the Eye Tracker. By trial and error, several adjustments were made in order to assure that the material was viewed as desired by the author.

Having finalized the material, pilot testing was used. This was done in order to assure that individuals were able to understand and complete the test, before all participants had been recruited. Since participants completed the test without having any problems or misunderstandings, the author conducted the actual study as planned.

The author had always available several questionnaires in both languages, Swedish and English. The questionnaire was printed out on both sides of the paper in order to have all information for one participant on the same paper. Apart from being convenient for the participant as well as the author, it was also an ecological and economical decision. In case anything extraordinary would have occurred during the study, the author had also printed out a script with all material shown on the Eye Tracker.

4.6 Reliability and validity

Reliability means how trustworthy and reliable the received results are. A study has high reliability when different researchers can present the same result. Validity refers to

how well the researcher has been able to express oneself in order to receive an answer to the right questions. (Djurfeldt et al. 2003 p. 108-109)

As stated previously, in order to have a reliable eyetracking-study with heat maps, 40 persons are required to participate. Results from this eyetracking-study are reliable for all participants, 60 persons, as well as new visitors, 44 persons. Since the amount of familiar visitors is only 16 persons, these results can only serve as a guideline.

Even though the results are revealed in chapter 5, it can be said that the results are valid. Participants are representative since both visitor groups as well as all participants together have different kinds of habits. In addition, these results are comparable with the results presented in chapter 2.2, TV market in Finland.

4.7 Challenges

Finding participants willing to take part in the eyetracking-study was challenging. In some cases, the author had to wait for several hours before somebody had time to participate. There were also situations where a person had agreed to participate but he or she never came.

Having received a sufficient number of participants to complete the study, the author encountered problems with the data export. The amount of data meant that the files became very large. This caused the computer to be slow and every now and then to stop responding. Therefore, it would have been necessary to have an even more powerful computer in order to be able to work effectively.

In addition, due to an unknown reason, Tobii Studio had saved results from the scrollable images in two separate files. One of the files had a white background while the other had the original background. Even though the majority of the participants were saved in the file with a white background, there was not a consistency in how participants were grouped.

This meant that the results for all participants could not easily be analysed and presented. Heat maps and gaze plots have been manually re-created with a photo editing software, based on the heat map-file with a white background, meaning that a few participants have not been included. Regarding the statistical data for the scrollable images, the problem was solved by first creating areas of interest to the result page with a background. These areas of interest were then copied and pasted in place to the page without background. Consequently, the author could manually combine the exported data and continue the data analysis.

5 RESULTS FROM THE EYETRACKING-STUDY

This chapter includes results from the eyetracking-test and the questionnaire. Results from the eyetracking-study are primarily arranged according to their content and secondly based on the order shown to the participants. This means that similar web pages are grouped together under the same section heading. In addition to the presented results, every section heading contains a short analysis and a possible comparison.

Gaze plots are presented for all participants. There are usually three gaze plots for one image; the one on the left-hand side shows how the viewing was after 1 second, the one in the middle shows after 2 seconds while the one on the right-hand side shows the viewing after 3 seconds. Images having a different amount of gaze plots are described separately.

All heat maps show results based on relative visit duration for all participants. The mouse-symbol, appearing on the gaze plots and heat maps, represents the area a participant clicked on. When the left mouse key has a red colour, it means that it was selected. The amount of mouse clicks is higher on the scrollable pages since the author had to click once on the monitored computer before Tobii Studio allowed participants to scroll.

In some cases, the visit duration for the scrollable pages can be a few milliseconds longer since the author had to press F10 after the participant had clicked on an element. Since results for the scrollable pages were saved in two separate files, a few participants are not included in the gaze plots and heat maps.

A descriptive name has been given to every area of interest. These names facilitate the author to recognize the different areas of interest, when analysing and preparing the results, but they do not have an impact on the actual result.

Outliers, meaning results differing significantly from other participants, have in some cases been manually removed from the statistical data in order to not have a misleading result. To exemplify, if a participant moved away from the screen or looked at one of

the areas for a surprisingly long time, his or her viewing for that particular area would not be included in the results. However, the author has evaluated carefully every differing result and compared it to the overall result as well as the results from that particular participant before taking a decision of elimination. The total population per page varies also due to technical problems for some of the participants.

5.1 Presentation of the participants

In total, 60 individuals participated in the eyetracking-study. The majority of all the participants, 39 persons, chose to answer the short questionnaire in Swedish while 21 participants answered in English.

Out of the 60 participants, 40 were female and 20 male. Table 1 presents the age for all participants with descriptive statistics while Figure 11 has the age distribution in a bar chart. As can be seen in Table 1 and Figure 11, the average age for all participants was 29,60 while the median was 25 years. Since the skewness for all participants is 0,97, it means that more participants are younger than the mean. The negative value for kurtosis means that the distribution is more flat.

Table 1. Eyetracking-study Q2 Age, all participants, descriptive statistics.

Age, all participants				
Mean	29,6			
Standard Error	1,224099			
Median	25			
Mode	22			
Standard Deviation	9,481829			
Sample Variance	89,90508			
Kurtosis	-0,34868			
Skewness	0,97376			
Range	33			
Minimum	19			
Maximum	52			
Sum	1776			
Count	60			

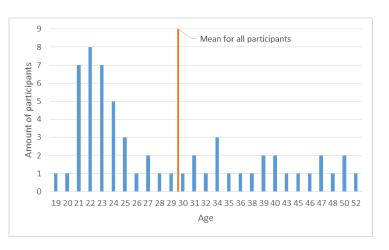


Figure 11. Eyetracking-study Q2 Age, all participants, bar chart

In average, all participants watch television content for 9 hours during an average week. However, as can be seen in Figure 12, there are those who watch only a few hours as well as participants who watch for more than 20 hours.

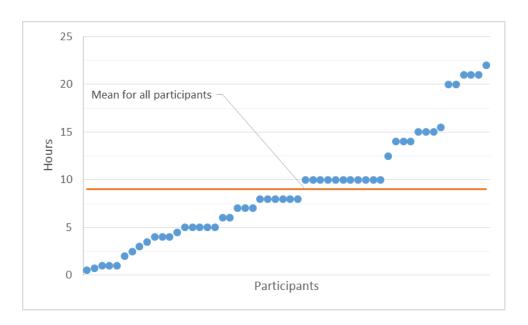


Figure 12. Eyetracking-study Q4 Average time participants watch television content during one week

Figure 13 shows how often online television content is consumed by all the participants. Results show that the majority watch at least several times per week while nearly all participants watch at least several times per month.

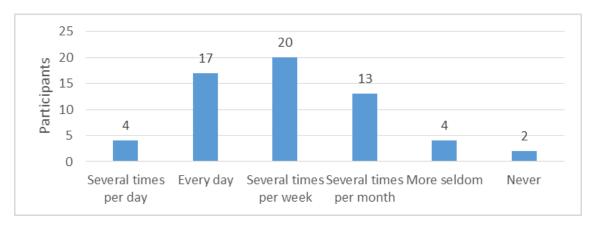


Figure 13. Eyetracking-study Q5 Amount of participants who watch television content online

The devices used for watching online content are presented in Figure 14. Participants were asked to estimate the usage in percentage and several alternatives could be chosen.

The presented values have been calculated by first summarising the results per device and then dividing the value received by the number of participants using that particular device. Figure 14 shows that the majority of online content is consumed with a computer while the tablet is the second most popular device. Other devices, such as Apple TV and Smart TV, as well as mobile phones account for approximately one fifth of the online viewing.

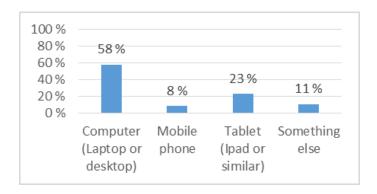


Figure 14. Eyetracking-study Q6 Devices used by all participants for watching online content

When asked about the online services used, visitors seem to prefer services that are offered without any cost to the consumer. In Figure 15, services that are free of charge are marked with green colour while those that require a fee are marked with light orange. Among the four most popular services, as can be seen in Figure 15, three are offered free of charge. By the number of users, Netflix is the only subscription-based service that can compete with the ones that are offered for free.

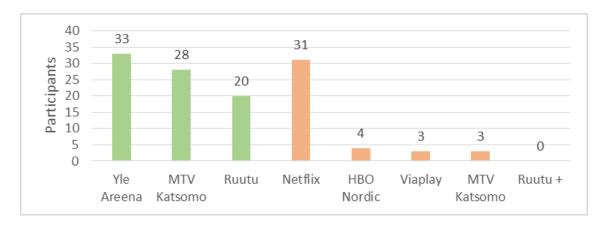


Figure 15. Eyetracking-study Q7 Amount of participants who regularly use certain online services

5.1.1 Presentation of new visitors

In order to distinguish new visitors from persons who already knew something about FOXplay, the author has divided the participants in two main groups. In total 44 persons had not visited the web page previously while 16 were familiar with the name or some content on the web page.

Among new visitors, 37 persons answered the questionnaire in Swedish and 7 in English. Table 2 and Figure 16 show that the average age for new visitors was 27,59. Out of the 44 new visitors, 34 were female and 10 male.

Table 2. Eyetracking-study Q2 Age, new visitors, descriptive statistics.

Age, new visitors				
Mean	27,59091			
Standard Error	1,359066			
Median	23,5			
Mode	22			
Standard Deviation	9,015022			
Sample Variance	81,27061			
Kurtosis	0,883829			
Skewness	1,474913			
Range	31			
Minimum	19			
Maximum	50			
Sum	1214			
Count	44			

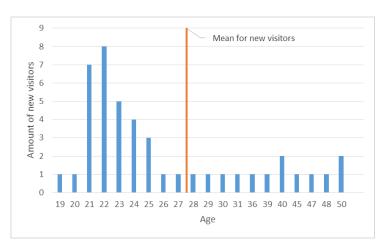


Figure 16. Eyetracking-study Q2 Age, new visitors, bar chart

During one week, new visitors watch television content in average for 8 hours and 30 minutes. As can be seen in Figure 17, this visitor group includes both those who only watch a few hours as well as those who spend more time watching television content.

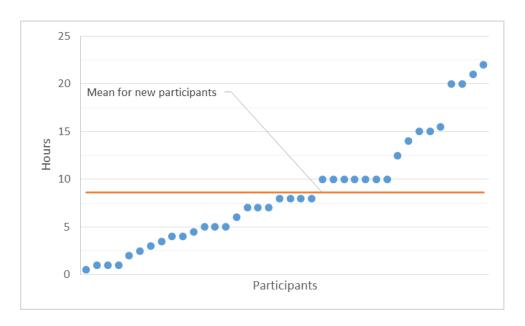
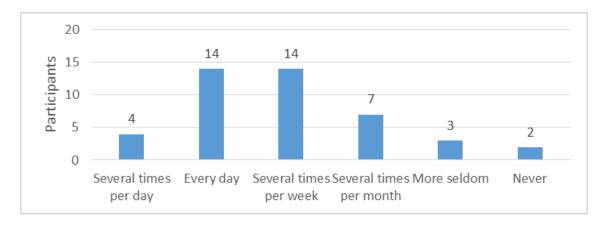


Figure 17. Eyetracking-study Q4 Average time new visitors watch television content during one week

The majority of new visitors watch television content online at least several times per week. Figure 18 shows that there are new visitors who are watching several times per day but also persons who are doing it more seldom as well as those who do not use the Internet at all for watching television.



 $Figure~18.~Eyetracking\hbox{-}study~Q5~Amount~of~new~visitors~who~watch~television~content~online$

Among new visitors, the computer is the most popular device for watching online content. As can be seen in Figure 19, the tablet comes in second place while the mobile phone shares the third place with other devices.

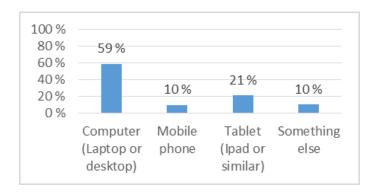


Figure 19. Eyetracking-study Q6 Devices used by new visitors for watching online content

According to Figure 20, most of the new visitors use Netflix while Yle Areena, MTV Katsomo and Ruutu are also popular. However, 12 of the 44 new visitors answered something else. These other alternatives, not shown in Figure 20, included online services by foreign television channels but also streaming services that might be considered as illegal.

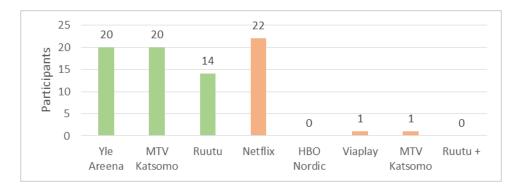


Figure 20. Eyetracking-study Q7 Amount of new visitors who regularly use certain online services

5.1.2 Presentation of familiar visitors

The familiar visitors consisted of 6 female and 10 male participants. The author wants to remind the reader that even though this visitor group is named as familiar visitors, it only means that these participants have previously either heard the name FOXplay or seen some of the elements presented in the eyetracking-study. Familiar participants preferred English since it was chosen by 14 persons while only two of them answered in Swedish. In Table 3 and Figure 21, one can see that the average age for familiar participants was 35,13.

Table 3. Eyetracking-study Q2 Age, familiar visitors, descriptive statistics.

Age, familiar visitors				
Mean	35,125			
Standard Error	2,183031			
Median	34			
Mode	34			
Standard Deviation	8,732125			
Sample Variance	76,25			
Kurtosis	-0,58313			
Skewness	0,315034			
Range	29			
Minimum	23			
Maximum	52			
Sum	562			
Count	16			

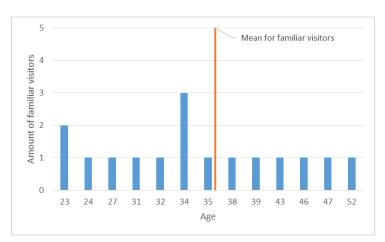


Figure 21. Eyetracking-study Q2 Age, familiar visitors, bar chart

Figure 22 shows that the average time familiar visitors watch television content during one week is approximately 10 hours. Even though there are more familiar participants who are below the mean, the distribution is relatively equal.

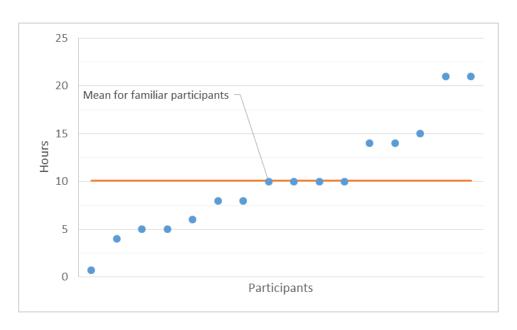


Figure 22. Eyetracking-study Q4 Average time familiar visitors watch television content during one week

As can be seen in Figure 23, the amount of familiar visitors who watch television content online several times per week equals to those who watch several times per month. This means that familiar visitors do not watch television content online as often as the new visitors.

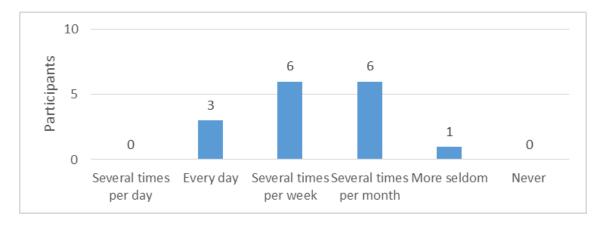


Figure 23. Eyetracking-study Q5 Amount of familiar visitors who watch television content online

Figure 24 shows that the computer is the device that is most used among familiar visitors while the tablet comes in second place. Other devices, such as Apple TV and Smart TV, are also popular whereas the mobile phone is not really used for watching online content.

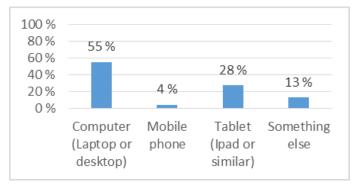


Figure 24. Eyetracking-study Q6 Devices used by familiar visitors for watching online content

Most of the familiar visitors choose Yle Areena when they aim to watch television online. As can be seen in Figure 25, other subscription-based services than Netflix are also relatively popular.

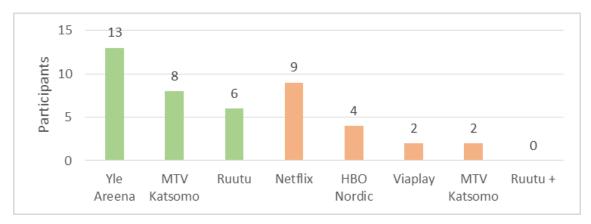


Figure 25. Eyetracking-study Q7 Amount of familiar visitors who regularly use certain online services

5.2 Welcome

As seen in Figure 26 and Figure 27, the first page shown to the participants was a welcoming image. The gaze plot for all participants, Figure 26, shows that visitors quickly found the main elements.



Figure 26. Eyetracking-study Image 01 Welcome with gaze plot for all participants

According to the heat map, Figure 27, the description about FOXplay as well as the text asking visitors to send feedback, "Lähetä meille mielipiteesi" received most of the attention. Participants observed also the left character and the text about "The Walking Dead" which was placed on the television.

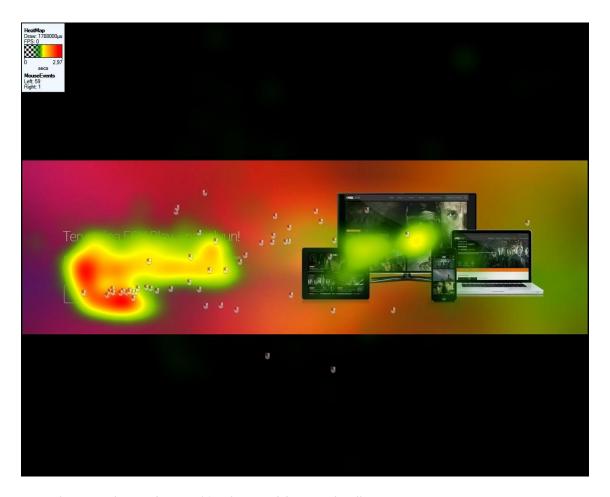


Figure 27. Eyetracking-study Image 01 Welcome with heat map for all participants

The text, "Tervetuloa FOXPlay-palveluun", meaning welcome to the FOXplay-service, was seen by 27 of the total 44 new visitors. In average, the text was noticed for the first time after 0,72 seconds and participants watched it for 1,01 seconds. Among 41 new participants, the description about FOXplay received the longest mean visit duration, 2,97 seconds, and it was noticed after 1,49 seconds.

The television was seen by 42 of the 44 new participants. Its mean time to first fixation was 4,23 seconds while the visit duration was 1,35 seconds. The area "Lähetä meille mielipiteesi" was noticed by 34 new visitors, receiving an average time to first fixation of 5,09 seconds and a visit duration of 1,29 seconds.

Participants who were already familiar with some content on FOXplay, spent shorter time on the welcoming image. Only 8 of the 16 familiar visitors noticed the text "Tervetuloa FOXPlay-palveluun". In average, the time to first fixation was 0,50 seconds

and the mean visit duration 0,55 seconds. The area receiving most viewing among familiar visitors, 1,82 seconds, was the television while the description about FOXplay had a viewing of 1,77 seconds. The television was seen by 11 persons for the first time after 1,69 seconds while the description was seen by 12 persons already after 0,82 seconds. Based on results from ten familiar visitors, the mean time to first fixation for "Lähetä meille mielipiteesi" was 2,71 seconds while its visit duration was 1 second.

5.2.1 Short analysis

The three areas; "Tervetuloa FOXPlay-palveluun", description about FOXplay and the large TV, are noticed first among both visitor groups. However, according to the mean results from the first welcoming image, new visitors seem to notice the different areas of interest more slowly and spend more time on watching them than those who already know something about FOXplay.

Even though there is a small difference in the order for the mean visit duration, the three areas; description about FOXplay, the large TV and "Lähetä meille mielipiteesi" are those receiving most of the attention on the first welcoming image. As one might expect, new visitors are more interested in reading the description while those who already know something about FOXplay focus slightly more on details.

Most of the mouse clicks are all over the web page. Since some participants asked the researcher during the test where they should click after seeing the welcome-image, these persons might have clicked anywhere in order to proceed. However, there is a concentration around the area "Lähetä meille mielipiteesi", meaning that visitors found the call to action.

5.3 Front page

When visitors write <u>www.foxplay.fi</u> in their browser, they arrive to the front page. The front page can consist of several different elements; slider, main promos, a selection of extra promos, automatically generated recent program content with channel id and areas

dedicated for advertisement. Availability of these elements vary depending on the day, due to changes in promoted series and needs of the advertiser.

Before seeing the six versions of the front page, participants were instructed to click on the element they would first go to. Gaze plots for the four scrollable pages show what participants had observed after 1, 2, 3, 5 and 7 seconds.

5.3.1 Presentation of Front page 1

The first version of the front page, shown to the participants, was an image containing; an advertisement by Viking Line about the show concept Bright Lights Big Cities, a slider promoting the series "Dubain lentokenttä", main promos with "S.H.I.E.L.D. Agentit" and "Intelligence – Agentti 2.0" and four extra promos. These, among other elements, can be seen in Figure 28 and Figure 29.

Figure 28 shows the gaze plot for all participants for the first front page. Most participants started watching on the middle of the page while there were also those who started in the top left corner. However, having seen the image for one second, viewers had focused on both areas. Consequently, viewers continue to explore the image by expanding the gaze to the surrounding elements.



Figure 28. Eyetracking-study Image 02 Front page 1 with gaze plot for all participants

The heat map, Figure 29, shows that the episode titles and descriptions for the series "Dubain Lentokenttä", "S.H.I.E.L.D. Agentit" and "Intelligence – Agentti 2.0 were the most observed elements. Human faces and the top advertisement by Viking Line were also very interesting. Out of the 60 participants, 12 would have immediately wanted to

book a voyage, "Varaa matka", from Helsinki to Stockholm or receive more information about the show concept Bright Lights Big Cities.



Figure 29. Eyetracking-study Image 02 Front page 1 with heat map for all participants

According to the statistics, nearly all new visitors noticed first the slider with "Dubain lentokenttä", in average after 0,38 seconds, while the top advertisement by Viking Line was noticed after 0,91 seconds. Even though the advertisement about Bright Lights Big Cities was noticed as second, it received the highest mean for visit duration, 3,36 seconds. "Dubain lentokenttä" had a visit duration of 3,08 seconds, meaning that new visitors observed it nearly as much as Viking Line.

More or less all of the participants knowing FOXplay, 15 out of 16, noticed these two areas. When comparing results from new visitors, for the slider and the top advertisement, to those who already knew something about FOXplay, the only difference was that the slider had a slightly longer visit duration among familiar visitors

than Viking Line. Among familiar participants, the average time to first fixation was 0,13 seconds for the slider and 0,56 seconds for Bright Lights Big Cities. The slider, "Dubain lentokenttä", received a mean visit duration of 2,83 seconds while the advertisement by Viking Line had a value of 2,66 seconds.

Consequently, the main promos were the objects noticed as third and fourth among both of the participant groups. In average, 40 of the 43 new visitors saw "S.H.I.E.L.D. Agentit" after 2,00 seconds while 37 persons saw "Intelligence – Agentti 2.0" after 3,91 seconds. Out of the total 16 familiar participants, 15 saw "S.H.I.E.L.D. Agentit" in average after 2,84 seconds while 13 saw "Intelligence – Agentti 2.0" after 2,73 seconds.

The visit duration for these objects followed the same pattern. New visitors observed "S.H.I.E.L.D. Agentit" for 2,08 seconds and "Intelligence – Agentti 2.0" for 1,78 seconds. Those familiar with FOXplay observed "S.H.I.E.L.D. Agentit" in average for 1,50 seconds while the mean visit duration was 1,14 seconds for "Intelligence – Agentti 2.0".

The majority of the new participants, 27 out of 43, noticed the extra promo for the series "Jaakon matkassa". It was seen for the first time after 6,33 seconds and its mean visit duration was 0,82 seconds. The second most popular extra promo among new participants, with a time to first fixation of 6,41 seconds and a visit duration of 0,81 seconds, was "Huijareiden kaupunki".

The extra promo for "Huijareiden kaupunki" was also popular among participants knowing something about FOXplay. Based on 9 of the 16 persons, it received 3,96 seconds as the mean to first fixation and 0,78 seconds as the visit duration. In average, ten familiar participants noticed the extra promo for "Dubain lentokenttä" after 4,47 seconds while "Jaakon matkassa" was seen after 4,78 seconds by eleven of the persons knowing FOXplay. "Jaakon matkassa" had a mean visit duration of 0,66 seconds while the extra promo for "Dubain lentokenttä received a mean of 0,55 seconds.

5.3.2 Presentation of Front page 2

On the second front page, Figure 30 and Figure 31, participants could scroll for the first time. The gaze plot, Figure 30, shows that all participants start by observing the slider for "Sara Chafak suolasta sahramiin" before continuing to the top advertisement by Finnmatkat. Having seen these two elements as well as the two main promos, visitors start scrolling.



Figure 30. Eyetracking-study Image 03 Front page 2 with gaze plot for all participants

The heat map, Figure 31, shows that participants focused most of the time on the description for the slider which promoted the series "Sara Chafak suolasta sahramiin". On the slider, the left part of her face as well as the eyes of the fish were attractive elements. Other elements receiving a lot of attention were one of the main characters in "S.H.I.E.L.D Agentit", the tiger in the series "Eläinkunnan hurjimmat" and the leopard in the series "Tappajaeläimet".

Both pieces of advertisement, Finnmatkat and Atria, were observed by the participants. The face in the series "Intelligence – Agentti 2.0" had also a high visit duration while the remaining areas were observed quite equally. Apart from the slider, clicks concentrated on both pieces of advertisement and the animals.

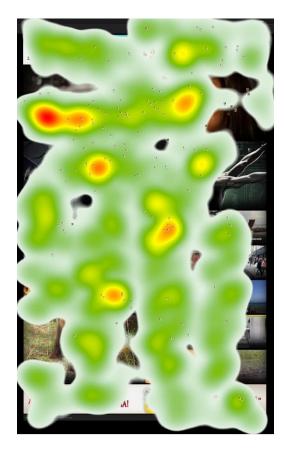


Figure 31. Eyetracking-study Image 03 Front page 2 with heat map for all participants

Among new visitors, the four areas with the longest average visit duration were also noticed for the first time in the same order. The slider with Sara Chafak holding a fish was seen by 40 of the 42 new visitors and it had a visit duration of 3,35 seconds. The top advertisement by Finnmatkat was noticed by 33 new visitors and its visit duration was 2,21 seconds. Both of the main promos were seen by 39 of the new visitors; the value for the left promo box with "S.H.I.E.L.D Agentit" was 1,64 seconds whereas the right promo box with "Intelligence – Agentti 2.0" had a mean of 1,34 seconds. The time to first fixation was 0,29 for Sara, 1,92 for Finnmatkat, 2,99 for S.H.I.E.L.D and 4,12 seconds for Intelligence.

Familiar visitors agreed with new visitors on three of the four most popular areas. "Sara Chafak suolasta sahramiin" was in average observed for 3,50 seconds by all of the 16 familiar visitors, Finnmatkat was seen for 1,92 seconds by 10 of the familiar visitors while 15 persons saw "S.H.I.E.L.D Agentit" for 1,14 seconds. Sara Chafak had a time to first fixation of 0,44 seconds, Finnmatkat 1,64 seconds and S.H.I.E.L.D 2,75 seconds.

The advertisement by Atria was seen by 28 new and 11 familiar participants. The mean visit duration was 1,15 for new and 0,97 for familiar. In average, new visitors saw Atria after 10,94 seconds while familiar saw it after 8,33 seconds.

5.3.3 Presentation of Front page 3

The third front-page, Figure 32 and Figure 33, contained a top advertisement by Nordea and a slider promoting an episode from the series "Huijareiden kaupunki". As can be seen from the gaze plot, Figure 32, visitors start by focusing on Nordea before observing the remaining elements.



Figure 32. Eyetracking-study Image 04 Front page 3 with gaze plot for all participants

The original name for "Huijareiden kaupunki" is Scam City. The text "Pidä varasi huippukunnossa" means take good care of your assets. According to the heat map, Figure 33, it was a good combination to have these two elements together since they seemed to support each other. Visitors focused also on the female characters in "Lyödään ällikällä" as well as the extra promo with Sara Chafak.

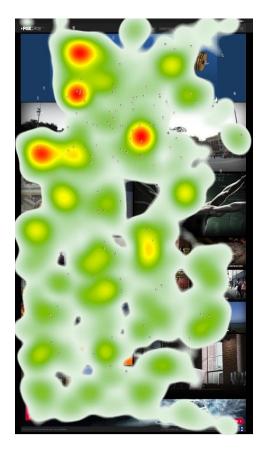


Figure 33. Eyetracking-study Image 04 Front page 3 with heat map for all participants

Nordea had an average time to first fixation of 0,55 seconds among new and 0,41 seconds among familiar participants. New visitors noticed "Huijareiden kaupunki" after 1,17 seconds whereas familiar participants saw it after 0,99 seconds.

Among new visitors, the slider with "Huijareiden kaupunki" was the most attractive area since it had a mean visit duration of 3,16 seconds. The second most watched area was the top advertisement by Nordea and its value was 2,63 seconds. "Huijareiden kaupunki" was seen by 42 of the 43 new participants and 14 of the 15 familiar participants. The advertisement by Nordea was seen by 40 of the 43 new participants and all familiar participants. The average visit duration among familiar participants was 2,59 seconds for Nordea and 2,53 seconds for "Huijareiden kaupunki".

The main promo for "Lyödään ällikällä" was noticed after 5,20 seconds by 40 of the new participants and it was observed in average for 1,53 seconds. The mean time to first

fixation for twelve familiar participants was 5,37 seconds while the visit duration was 1,11 seconds.

The advertisement by Nissan was seen by 24 new and 9 familiar participants. In average, new visitors saw it after 13,29 seconds while familiar visitors saw it after 9,67 seconds. The mean visit duration was 0,62 seconds for new participants whereas familiar participants observed it for 0,58 seconds.

5.3.4 Presentation of Front page 4

Figure 34 and Figure 35 show the fourth front page. The gaze plot, Figure 34, shows that even though visitors noticed in the beginning the top advertisement by Sonera, the interest was at that point of time more on the slider. Consequently, all participants continue to notice the remaining elements.



Figure 34. Eyetracking-study Image 05 Front page 4 with gaze plot for all participants

It can be seen from the heat map that the tiger from "Tappajaeläimet" with its description received more attention than the tiger from "Eläinkunnan hurjimmat". Figure 34 also shows that the description about and the car appearing on the image for "Supertehtaat" was an interesting element for the participants. Visitors seemed to focus on the advertisement by Prisma, placed among the extra promos, but also on the left guard from "Suomen Vartijat". The advertisement by Sonera and Sokos Hotels as well as the remaining elements had, more or less, the same amount of attention.

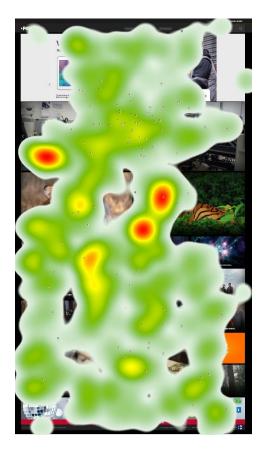


Figure 35. Eyetracking-study Image 05 Front page 4 with heat map for all participants

In average, the top advertisement by Sonera was the area with the lowest time to first fixation. Sonera was noticed by 40 new visitors after 0,50 seconds and by 13 familiar visitors after 0,45 seconds. The slider for "Supertehtaat" was noticed by 42 new visitors after 0,72 seconds and by 14 familiar visitors after 0,85 seconds. Among new visitors, the mean visit duration was 2,27 seconds for "Supertehtaat" and 1,48 seconds for Sonera while the values for familiar participants were 2,43 and 1,70 seconds.

The two main promos were seen by 41 new and 13 familiar participants. The mean visit duration for "Tappajaeläimet" was 1,22 seconds for new and 1,04 seconds for familiar visitors. New visitors noticed "Tappajaeläimet" after 3,68 seconds while familiar visitors saw it after 3,78 seconds. "Eläinkunnan hurjimmat" was seen after 3,62 seconds by new visitors and after 3,84 seconds by familiar participants. The average visit duration was 1,07 seconds for new and 0,91 for familiar participants.

Out of 43 new participants, 28 saw the advertisement by Prisma and 17 the one by Sokos Hotels. The mean time to first fixation was 8,48 for Prisma and 10,94 seconds for Sokos Hotels. New visitors observed Prisma for 0,63 seconds and Sokos Hotels for 1,58 seconds. Among familiar, 13 saw Prisma while 9 of the 15 saw Sokos Hotels. In average, visitors saw Prisma after 6,73 seconds and Sokos Hotels after 10,68 seconds. Prisma had a mean visit duration of 1,13 seconds while the value was 0,81 for Sokos Hotels.

5.3.5 Presentation of Front page 5

On the fifth front page, Figure 36 and Figure 37, visitors can see a slider promoting the series "Kuningaskalastajat". The main promo on the right-hand side has been replaced with an advertisement from Nelly, Visit Malaysia has an area in the middle whereas Viking Line has a large advertisement on the bottom of the page.

As can be seen from the gaze plot, Figure 36, visitors have quickly found the advertisement by Nelly, the description for "Kuningaskalastajat" and the main promo for "Tappajaeläimet". Having seen these three areas, visitors notice the extra promos as well as the advertisement by Sonera.



Figure 36. Eyetracking-study Image 06 Front page 5 with gaze plot for all participants

The heat map, Figure 37, shows that the woman sitting in the chair and modelling for Nelly received by far the longest relative visit duration. Visitors noticed also the woman on the right-hand side and the call to action "Tilaa täältä" meaning order here.

According to the relative visit duration for all participants, the remaining elements received an equal amount of attention. Those who observed the advertisement by Viking Line seem to recognize the advertiser after seeing the content since only a part of the name is observed. The advertisement by Nelly and the tiger from "Tappajaeläimet" receive the majority of the clicks.



Figure 37. Eyetracking-study Image 06 Front page 5 with heat map for all participants

According to the statistical data, the slider for "Kuningaskalastajat" was the area receiving the highest mean visit duration, 2,59 seconds, among 42 of the 43 new visitors. The advertisement by Viking Line was observed for 2,55 seconds by 29 new visitors, Nelly was seen by 42 with a mean value of 2,16 seconds while Visit Malaysia was visited for 1,34 seconds by 32 of the new visitors. The average time to first fixation was 0,52 seconds for Kuningaskalastajat, 1,26 for Nelly, 7,81 for Visit Malaysia and 9,98 seconds for Viking Line.

Among familiar visitors, Nelly had a mean visit duration of 2,88 seconds and a time to first fixation of 0,73 seconds. Nelly was seen by 13 of the 14 familiar visitors while all familiar visitors noticed "Kuningaskalastajat". "Kuningaskalastajat" was observed for 1,90 seconds and it was seen after 0,55 seconds. Ten of the familiar visitors saw the advertisement by Visit Malaysia in average after 6,66 seconds while Viking Line was seen by nine persons after 9,29 seconds. The mean visit duration was 1,36 seconds for Viking Line and 1,52 for Visit Malaysia.

The main promo for "Tappajaeläimet" was seen by 40 new visitors and 12 familiar. The time to first fixation was 2,81 seconds for new and 1,59 for familiar visitors. New visitors observed it for 1,12 seconds while the value was 0,99 seconds among those knowing already something about FOXplay.

The advertisement by Sonera, placed among the extra promos, was seen by 25 new visitors after 6,43 seconds and by 7 familiar after 4,80 seconds. The mean visit duration was 0,94 for new and 0,65 seconds for familiar. The extra promo for "Dubain lentokenttä" was seen by 26 new visitors and it received a mean visit duration of 1,15 seconds. Six familiar participants observed it for 0,26 seconds and noticed it after 7,59 seconds. Among new visitors, the mean time to first fixation was 7,38 seconds.

5.3.6 Presentation of Front page 6

A non-scrollable image with a slider by Sara Chafak was the last version of the six shown front pages. Compared to the five previous versions, this front page contained no advertisement. As can be seen in Figure 38 and Figure 39, the main promos with content from "S.H.I.E.L.D. Agentit" and "Intelligence – Agentti 2.0" were placed as in the first and second version of the front page.

The gaze plot, Figure 38, shows that participants seemed to start their visit in the middle of the page. Different elements were observed relatively quickly. The element receiving most attention on the heat map, Figure 39, was Sara Chafak licking dough. Consequently, its description was also read by the participants.



Figure 38. Eyetracking-study Image 07 Front page 6 with gaze plot for all participants



Figure 39. Eyetracking-study Image 07 Front page 6 with heat map for all participants

In average, participants spent most of their visit watching the slider. The mean visit duration for the slider with Sara Chafak was 2,82 seconds for new visitors and 2,42 seconds for familiar visitors. The second and third most watched elements were the two main promos. New visitors observed "S.H.I.E.L.D. Agentit" for 1,29 seconds and "Intelligence – Agentti 2.0" for 1,03 seconds. Among familiar visitors, these two main promos had an average visit duration of 1,25 and 1,23 seconds respectively.

The mean time to first fixation for new participants was 0,59 for Sara Chafak, 0,12 for "S.H.I.E.L.D. Agentit" and 1,72 seconds for "Intelligence – Agentti 2.0". Familiar participants had the following values; 0,50 for Sara Chafak, 0,54 for "S.H.I.E.L.D. Agentit" and 0,87 seconds for "Intelligence – Agentti 2.0".

5.3.7 Short comparison and analysis

Results from the six versions of the front page indicate that visitors tend to read episode descriptions for the slider. The visit duration for the image on the slider varies and depends usually on the chosen image as well as other available content. However, a character or an image with several details seem to attract visitors.

Similar attributes are applicable for advertisement on the front page. In addition to being informative and distinguishable, advertisement having a clear call to action receive more attention.

Table 4 shows the mean visit duration for all elements appearing on the areas for the two main promos. All of these elements are promos except for the advertisement by Nelly in the fifth front page. In most cases, as can be seen in Table 4, the element on the left-hand side receives a longer mean visit duration. However, even though the advertisement by Nelly was placed on the right-hand side, its mean visit duration was significantly higher than all values for the main promos.

Table 4. Eyetracking-study Front page 1-6 Mean visit duration for main promos

Mean visit duration for		all participants		new visitors		familiar visitors	
	Main promo	– Left	– Right	– Left	– Right	– Left	– Right
Front page 1: L: Shield	R: Intelligence	1,92	1,62	2,08	1,78	1,50	1,14
Front page 2: L: Shield	R: Intelligence	1,50	1,17	1,64	1,34	1,14	0,68
Front page 3: L: Lyödään	R: Intelligence	1,44	0,90	1,53	0,91	1,11	0,88
Front page 4: L: Eläinkun	R: Tappajael	1,03	1,18	1,07	1,22	0,91	1,04
Front page 5: L: Tappajae	l R: Nelly	1,09	2,33	1,12	2,16	0,99	2,88
Front page 6: L: Shield	R: Intelligence	1,28	1,08	1,29	1,03	1,25	1,23

Concerning the remaining promotional images, the two pieces of advertisement placed among the extra promos, those by Sonera and Prisma, were both seen by the majority of all the participants. Even though this advertising area was relatively small, the mean visit duration indicates that it is also a lucrative area to sell.

5.4 Series page

The main area on the series page consists of two larger and four smaller images. A banner underneath the main area is separating the promoted content from the automatically generated series content. On these two series pages, eight titles from the automatically generated content are visible.

5.4.1 Presentation of Series page 1

The gaze plot for the first series page, Figure 40, shows that in the beginning of the visit, participants focused more on the top left areas. Afterwards, the areas on the right-hand side as well as those lower on the page were also observed.



Figure 40. Eyetracking-study Image 08 Series page 1 with gaze plot for all participants

According to the heat map, Figure 41, participants spent most of the visit observing names for the promoted content. The male character in the episode image for "Kalle – Chef on the Beach" was an attractive element among all visitors. Participants focused also on the two larger episode images as well as the smaller images for "FOX Wild: Krokotiilien invaasio" and "Supertehtaat".



Figure 41. Eyetracking-study Image 08 Series page 1 with heat map for all participants

The area receiving most visibility in seconds by new visitors was the advertisement by Dan Sukker. Participants watched it for 1,75 seconds even though it took an average of 2,45 seconds before 37 of 44 new visitors noticed it for the first time.

Nearly all new participants, 43 out of 44, noticed the main image promoting the series "Huijareiden Kaupunki". The average time to first fixation was 1,11 seconds and new participants observed it for 1,51 seconds. The main image for "Eläinkunnan hurjimmat", placed on the right-hand side, was seen by 41 of the new participants. In average, it was seen after 1,76 seconds and the visit duration was 0,79 seconds.

Visitors knowing already something about FOXplay spent, in average, more time watching the main image for "Huijareiden kaupunki" than the advertisement by Dan Sukker. The mean visit duration for "Huijareiden kaupunki" was 1,26 seconds while the value for Dan Sukker was 1,19 seconds. "Huijareiden kaupunki" was seen after 0,57

seconds by 15 of the 16 familiar participants while ten persons noticed Dan Sukker after 0,98 seconds. Participants familiar with FOXplay stayed 0,81 seconds on the main image for "Eläinkunnan hurjimmat", making it the area with the third longest visit duration. "Eläinkunnan hurjimmat" was seen by 12 persons and it had a mean time to first fixation of 1,49 seconds.

The four smaller images were seen by nearly all new visitors as well as nearly all participants knowing already something about FOXplay. The average visit duration for new visitors was between 0,92 and 1,12 seconds while the values were between 0,60 and 0,75 seconds for the familiarized visitors. "Dubain lentokenttä" received the longest visit duration among new visitors whereas familiarized visitors were more interested in the small image with Legos promoting the series "Supertehtaat". Familiarized visitors noticed the Legos in average after 0,62 seconds while new visitors noticed "Dubain lentokenttä" after 2,06 seconds. The time to first fixation for the four small images was between 1,19 and 2,92 seconds for new visitors whereas familiarized visitors had a mean between 0,62 and 2,79 seconds.

On the automatically generated series content, new visitors stayed in average between 0,41 and 0,57 seconds per title. The visit duration for the familiar visitors was between 0,29 and 0,64 seconds. The majority of the visitors noticed at least one of these eight titles. The mean time to first fixation varied from 4,93 to 7,07 seconds for new visitors and from 3,77 to 6,97 seconds for the participants knowing already something about FOXplay.

5.4.2 Presentation of Series page 2

Faces were attractive elements on the second series page, Figure 42 and Figure 43. Figure 42 shows that having fixated on the first area, participants expanded the gaze to the surrounding areas.



Figure 42. Eyetracking-study Image 09 Series page 2 with gaze plot for all participants

As can be seen in Figure 43, participants focused on the episode descriptions as well as nearly all the images for the promoted content. The text in the advertisement by Lumene as well as the automatically generated content were also observed by the participants.



Figure 43. Eyetracking-study Image 09 Series page 2 with heat map for all participants

The advertisement by Lumene had the longest average visit duration among both new visitors, 1,44 seconds, and familiar visitors, 1,41 seconds. Most of the new visitors, 36

of 44, noticed the banner as fifth meaning that the mean for the first fixation was 2,53 seconds. Participants who already knew something about FOXplay saw it after 1,86 seconds. Based on results from 14 of the 16 familiar participants, Lumene was also approximately the fifth area that these familiar visitors noticed on the second series page.

In average, more or less all participants noticed first the main image, on the left-hand side, promoting a cooking show by Sara Chafak. The mean for first fixation was 0,53 seconds for new visitors and 0,22 seconds for participants familiar with FOXplay. New visitors had an average visit duration of 1,26 seconds while the value was 0,85 seconds for those knowing something about the service.

The male character from "Aivopelit" received less attention than Sara Chafak. It was noticed only by 37 of the 44 new visitors and 11 of the 16 familiar visitors. Among new visitors, "Aivopelit", had an average visit duration of 1,03 seconds while familiar visitors observed it for 1,09 seconds. This area was noticed by new visitors after 2,38 seconds and by familiar visitors already after 1,06 seconds.

Nearly all new participants noticed the smaller promoted areas with content from "24Kitchen: Sara La Fountain" and "Tappajaeläimet". In average, the area for "Tappajaeläimet" was seen as second, after 1,63 seconds, whereas "24Kitchen: Sara La Fountain" came third, having 1,72 as the time to first fixation. The images promoting "Jättimäiset rakennusurakat" and "Lyödään ällikällä" were noticed only by 35 and 32 of the 44 new visitors. These areas had a time to first fixation of 2,73 seconds and 3,63 seconds respectively. The average visit duration for the four small images was; 1,09 for "24Kitchen: Sara La Fountain", 0,94 for "Tappajaeläimet", 0,88 for "Jättimäiset rakennusurakat" and 0,59 for "Lyödään ällikällä".

The small promoted area with "24Kitchen: Sara La Fountain" was seen by 14 of the 16 visitors knowing already something about FOXplay and its mean time to first fixation was 1,04 seconds. Having 0,93 seconds as the mean visit duration made "Sara La Fountain" the third longest watched area on the second series-page among familiar visitors. The three remaining smaller promoted areas were noticed by 10 out of 16

familiar visitors in the following order; "Tappajaeläimet" after 1,78, "Jättimäiset rakennusurakat" after 2,82 and "Lyödään ällikällä" after 2,92 seconds. The order for the average visit duration was the same and their values were; 0,71, 0,59 and 0,53 seconds.

Approximately half of all the visitors noticed at least one of the eight series belonging to the automatically generated content. The time to first fixation for new visitors varied from 5,24 seconds to 9,22 seconds and the average visit duration was between 0,34 and 0,77 seconds. Among familiar participants, the mean time to first fixation for these eight series varied between 1,09 seconds and 5,82 seconds while the average visit duration had values between 0,19 and 2,30 seconds.

5.4.3 Short comparison and analysis

When comparing statistical data from the two series pages, it can be seen that the advertisement areas are attractive for new visitors as well as familiar visitors. The two banners, Dan Sukker and Lumene, received in most situations the longest visit duration and both images were seen for the first time relatively quickly.

According to the heat map, showing relative visit duration, visitors focus mostly on faces as well as episode descriptions while backgrounds are either left unnoticed or observed quickly. The advertisement by Lumene seems to be slightly more effective than Dan Sukker. The reason is that the woman receiving attention tempts the visitor to read the text in the advertisement "Katso ohjeet tämän meikkilookin luomiseen!", meaning watch instructions on how to create this make-up look.

Content on the left main image is noticed before and watched for longer time than a main image on the right-hand side. Since the images on the left-hand side have more small details than the ones to right, it might have made them more interesting and the reason why the mean visit duration is higher among all visitors. On the first series page, it is also possible that the main image for "Eläinkunnan hurjimmat" has a lower visit duration since the same image has been seen previously, for example as a main promo in front page 4.

Even though the images for the automatically generated series content were observed, persons tend to click on the elements in the main area. Results indicate that placement for the promoted content is not decisive, meaning that persons choose a series based on their personal interests instead of where it is located.

5.5 Program page

The program page can be visited when clicking on a series title. On the top of the page, general information about the chosen series is presented together with a larger background image. All episodes are arranged in a list according to season and episode order together with the season image and information about availability. The most recent available episode is also shown with an episode image as well as a description. On the right-hand side of the most recent episode, there is a possibility for advertisement that has the size of a square. These three program pages were not shown directly after each other.

5.5.1 Presentation of Program page 1

On the program page for the series "Eläinkunnan hurjimmat", Figure 44 and Figure 45, participants were instructed to choose an episode they could consider to watch. As can be seen in the gaze plot showing the situation after one, two and three seconds, Figure 44, visitors have relatively quickly observed all the main areas.



Figure 44. Eyetracking-study Image 10 Program page 1 with gaze plot for all participants

The heat map, Figure 45, shows that the focus stayed on the episode names in the list containing all the episodes. The episode in the middle of the list, number 9, has the highest relative visit duration. Since episode 10 is the newest episode, its clicks accumulate from the list as well as the area for the newest episode. Therefore, it seems like the most clickable episodes are number 9 and 10.

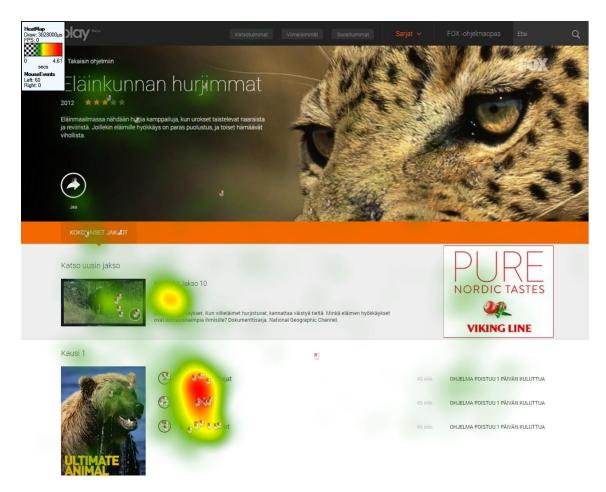


Figure 45. Eyetracking-study Image 10 Program page 1 with heat map for all participants

According to the statistics for the defined areas of interest, nearly all visitors seemed to notice first the picture for the newest episode. Its mean time to first fixation was 1,40 among new and 0,66 seconds among familiar visitors. New visitors observed it for 0,80 seconds while the value was 0,54 seconds for familiar visitors.

The area receiving the longest average visit duration among new visitors, 1,10 seconds, was the first episode name in the list with all the episodes. This name was seen by 24 of the 44 new visitors in average after 3,65 seconds. The second episode name was seen by

29 new visitors after 5,60 seconds and the third by 20 persons after 5,92 seconds. The mean visit duration was 0,93 seconds for the second episode and 0,82 for the third episode name in the list.

Out of 15 familiar participants, 4 persons saw the first name in the list after 4,71 seconds. The second name was seen by 3 persons after 2,40 seconds while the third was seen by five persons after 2,97 seconds. The first episode name had a mean visit duration of 0,51 seconds while the values for the second and third were 0,22 and 0,87 seconds respectively.

The advertisement by Viking Line was noticed by 32 new and 8 familiar participants. In average, new visitors saw it after 3,88 seconds while familiar visitors saw it after 3,49 seconds. Among new participants, the mean visit duration for Viking Line was 0,84 seconds while the value was 0,73 seconds for familiar visitors.

5.5.2 Presentation of Program page 2

On the second program page, Figure 46 and Figure 47, participants were instructed to find the area with a link to all the latest programs. Having viewed the page for three seconds, Figure 46, visitors had already found the main areas. The area meaning the latest, "Viimeisimmät", is situated in the top navigation menu. "Kokonaiset jaksot" means complete episodes and it is a link to this second program page that participants were already observing.



Figure 46. Eyetracking-study Image 18 Program page 2 with gaze plot for all participants

According to the heat map with relative visit duration, Figure 47, the majority of the participants seemed to click on "Viimeisimmät". Even though "Viimeisimmät" was also the most observed area, the area for "Kokonaiset jaksot" received attention as well as clicks. In addition to these two areas, participants read episode names, noticed the images and information about when episodes go offline, "Ohjelma poistuu".

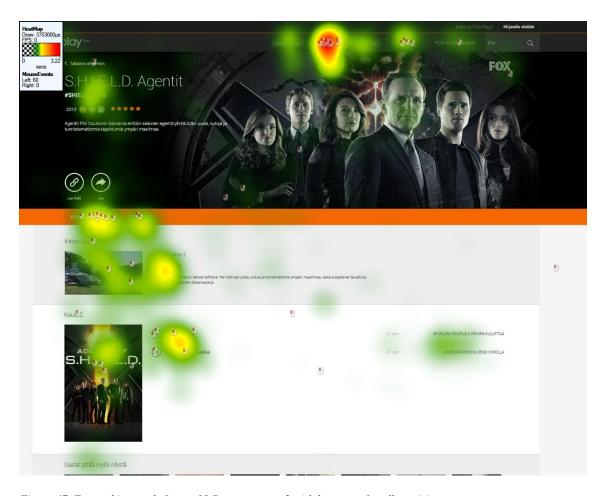


Figure 47. Eyetracking-study Image 18 Program page 2 with heat map for all participants

Statistics confirm that approximately every third participant noticed at least one of the three areas that have a link to all episodes; "Katsotuimmat", meaning most watched, "Viimeisimmät", meaning latest and "Suosituimmat, meaning most popular. Ten of all the 60 persons noticed the area "Viimeisimmät". "Viimeisimmät" was seen by 7 new participants after 7,88 seconds and by 3 familiar participants after 5,07 seconds. The mean visit duration was 1 second among new and 0,78 among familiar participants.

"Kokonaiset jaksot" was seen by 12 new participants after 4,93 seconds and by one familiar participant after 6 seconds. The mean visit duration was 0,70 seconds for new participants and 0,87 seconds for the familiar participant.

Since most of the instructions encouraged participants to choose the element they would normally click on, the author believes that it is possible that some participants misunderstood, did not read the instructions for or could not find the correct element on the program page. According to the statistical results, participants noticing "Kokonaiset jaksot", usually did not see any of the top navigation areas. It is also possible that those who clicked on "Kokonaiset jaksot", believed that it was the link to the latest episodes.

5.5.3 Presentation of Program page 3

The program page for Pound Puppies is the only page that also has the logo for FOX Kids. Participants were instructed to click on the age classification for the newest episode. As can be seen from both of the figures, Figure 48 and Figure 49, participants skimmed through the page in order to find the correct age classification.



Figure 48. Eyetracking-study Image 22 Program page 3 with gaze plot for all participants

Most of the participants seemed to understand that the age classification placed beside the newest episode is the age classification for the newest episode. This element received the highest relative visit duration as well as most of the clicks. The age classification placed on the top of the page, together with the general information, is the age classification for the series.



Figure 49. Eyetracking-study Image 22 Program page 3 with heat map for all participants

The age classification for the newest episode was seen by 24 new and 3 familiar participants. New participants saw it after 4,35 seconds while the value was 2,98 for familiar participants. The mean visit duration for the newest age classification was 0,78 and 0,32 seconds respectively. Out of 43 new visitors, 15 saw the general age classification after 6,77 seconds whereas it was seen by 5 of the 16 familiar participants after 1,96 seconds. The mean visit duration was 0,58 seconds for new and 0,61 for familiar participants.

New visitors noticed the advertisement containing hand soap by Disney after 3,76 seconds while familiar visitors saw it after 3,63 seconds. The mean visit duration was 0,71 for the 25 new visitors while four familiar visitors observed it for 0,49 seconds.

5.5.4 Short comparison and analysis

Results from all three program pages indicate that the main design is user-friendly. However, there are elements that are more popular than others. To exemplify, the author has made a comparison between the images.

Table 5 shows results for the three images in the same order as they appear on the web page. When comparing these values with each other, one has to take into account the instructions given for the program page but also that the three images do not always have content that is completely comparable with each other. However, it gives a guideline about the importance of the different elements. As can be seen, the character on the top main area seems to be the least important element.

Table 5. Eyetracking-study Program page 1-3 Mean visit duration for images

Element	Top mai	n area d	haracter	Newest episode image			Season image		
Mean visit duration for	all	new	familiar	all	new	familiar	all	new	familiar
Program page 1: Eläinkunnan hurjimmat	0,54	0,58	0,37	0,73	0,80	0,54	0,84	1,00	0,41
Program page 2: S.H.I.E.L.D. Agentit	0,70	0,72	0,57	0,88	1,02	0,45	0,81	0,88	0,49
Program page 3: Pound Puppies	0,48	0,43	0,65	0,58	0,61	0,49	0,31	0,31	0,00

5.6 Episode page

When visitors aim to watch an episode on FOXplay, they have chosen a title and arrived to the episode page. The area surrounding the image for the episode can be tailored according to the needs of the advertiser. Underneath the video-area, episodes are arranged in the same way as in the program pages. Participants could scroll only on the first episode page.

5.6.1 Presentation of Episode page 1

As can be seen in Figure 50 and Figure 51, the area around the episode image on the first episode page promoted a new pattern for chocolate bars. Fazer used the top advertisement area for communicating to potential customers about the new products. The areas on both sides of the episode, "Ateena-lista" from the series "Intelligence – Agentti 2.0", reminded visitors about the new chocolate patterns.

In the gaze plot for the first episode page, Figure 50, the last two images show what visitors had seen after five and seven seconds. It can be seen that visitors notice quickly the episode image and the top advertisement by Fazer. Afterwards, visitors continue by observing the chocolate patterns together with the remaining elements.

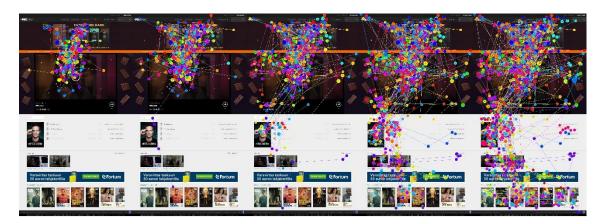


Figure 50. Eyetracking-study Image 11 Episode page 1 with gaze plot for all participants

According to the heat map, Figure 51, the most popular areas were the play-button for the episode and the two first episodes in the list with all the episodes. Visitors focused also on the advertisement by Fazer, the texts below the video, the automatically generated series content on the bottom of the page and the video clip appearing on the right-hand side.



Figure 51. Eyetracking-study Image 11 Episode page 1 with heat map for all participants

Statistics for the areas of interest confirm that all participants noticed the top advertisement by Fazer as well as the episode image for "Ateena-lista". Among new participants, the top advertisement received the highest mean visit duration, 2,29 seconds, while the value was 2,08 seconds for the episode image. In average, familiar participants spent more time on the episode image, 2,88 seconds, whereas the top advertisement received a mean visit duration of 2,17 seconds. Both visitor groups noticed first the episode image. The mean time to first fixation for the episode image was 0,60 seconds for new and 0,20 for familiar. New visitors noticed the top advertisement after 0,73 seconds while familiar participants saw it after 0,71 seconds.

Out of 44 new and 15 familiar participants, 18 new and 9 familiar saw either of the new chocolate patterns, appearing on both sides of the video-area for the episode. Two new participants and three familiar saw both pieces of advertisement. The banner on the left-hand side was seen by 13 new participants after 5,94 seconds and observed in average for 0,31 seconds. The banner on the right-hand side was seen by 7 new participants after 5,76 seconds and observed for 0,33 seconds. Seven familiar participants noticed the left banner after 5,18 seconds while five saw the right banner after 6,30 seconds. Among familiar participants, the mean visit duration was 0,65 for the left and 0,75 for the chocolate banner on the right-hand side.

The season image for Intelligence was seen by 33 new and 11 familiar participants. The mean time to first fixation was 4,71 for new and 5,34 seconds for familiar participants. New participants observed the season image for Intelligence in average for 1,13 seconds while the mean visit duration was 0,61 for participants who already knew something about FOXplay.

The first episode page contained also two video clips about the series "Intelligence – Agentti 2.0". The video clip placed on the right-hand side was seen by 32 new and 11 familiar participants while 17 new and 5 familiar noticed the one on the left-hand side. New visitors saw the one to the right after 6,92 seconds and observed it for 0,66 seconds while the values for familiar participants were 5,43 and 0,58 seconds respectively. The time to first fixation for the video clip to the left was 8,17 for new and 9,12 seconds for

familiar participants. In average, new participants observed the left video clip for 0,42 seconds while those knowing FOXplay stayed 0,50 seconds.

Among 23 new participants, the middle advertisement by Fortum had an average time to first fixation of 8,66 seconds and a visit duration of 1,06 seconds. Eleven familiar participants noticed it after 7,40 seconds and observed it for 0,56 seconds.

Most participants, 32 new and 12 familiar, noticed at least one of the titles from the seven automatically generated series content. When analysing the amount of persons who noticed these series, the most popular was "None of the Above" while "Kalle – Chef on the Beach" received the least amount of visibility. The mean visit duration for these seven areas, was between 0,74 and 1,38 seconds for new participants whereas the values for familiar participants were between 0,26 and 0,74 seconds.

5.6.2 Presentation of Episode page 2

The gaze plot for the second episode page, Figure 52, shows that visitors usually notice the episode image before seeing the top advertisement by Nelly. In the heat map, Figure 53, it can be seen that most visitors focused on the play-button and the episode title. Participants seem to also observe the female character in the episode image, the takeover by Nelly as well as the age classification for the episode. Out of 60 participants, the majority clicked on the play-button while 14 persons clicked on an advertisement by Nelly.



Figure 52. Eyetracking-study Image 12 Episode page 2 with gaze plot for all participants

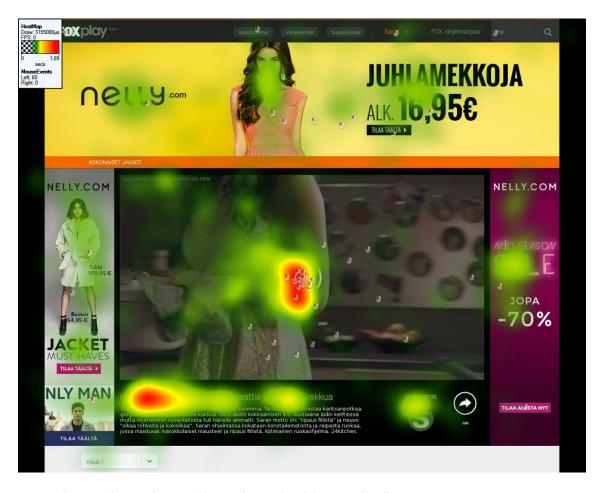


Figure 53. Eyetracking-study Image 12 Episode page 2 with heat map for all participants

Among all participants, the area receiving the lowest mean for first fixation as well as the highest for visit duration was the video square for the episode from "Sara Chafak suolasta sahramiin". The time to first fixation was 0,10 for new and 0,21 seconds for familiar. In average, new visitors observed the video square with Sara Chafak for 2,19 seconds while familiar visitors had 2,63 seconds as the mean visit duration.

After having seen the video square, more or less all participants noticed the top advertisement by Nelly. This banner, striving to sell party dresses, had an average time to first fixation of 1,23 seconds among new and 0,75 among familiar visitors. The two other pieces of advertisement by Nelly, placed on both sides of the video square, were slightly less popular but still seen by nearly all participants. In average, new visitors saw the banner on the left-hand side for the first time after 2,31 seconds and the banner on the right-hand side after 4,49 seconds. Familiar visitors noticed them after 2,00 and 4,11 seconds.

The mean visit duration for these three banners followed the same order as in the values for the first fixation, meaning that the area that was first noticed was also observed for the longest time. The values for new visitors were 1,34 seconds for the top banner, 1,21 seconds for the left and 0,77 seconds for the one to the right. Familiar visitors observed the top banner for 1,24 seconds, the left banner for 0,88 seconds and the right banner for 0,66 seconds.

Out of the areas placed below the video square, the majority of the participants noticed at least the episode title or the episode description. In average, more visitors noticed the episode title before seeing the episode description. The time to first fixation, for these two areas, among new visitors was 3,31 and 3,77 seconds while the values were 4,90 and 3,85 for familiar.

The episode title was the third longest observed area among new visitors with an average visit duration of 1,30 seconds. New visitors stayed on the episode description for 0,63 seconds. Visitors knowing already something about FOXplay spent in average 0,48 seconds on the episode title and 0,25 seconds on the episode description.

According to the results, the age classification was noticed by nine of the new participants and its average visit duration was 0,31 seconds. The production year or the duration for the episode were seen by five of the new participants while the share-button and the share-text received no visibility on the second episode-page. Only one familiar participant observed the age classification whereas the four other elements remained unnoticed.

5.6.3 Presentation of Episode page 3

Figure 54 and Figure 55 show the third episode page. Most of the participants focused on the episode title and the play-button, as well as the sign "Barcelona", before aiming to watch the episode about "Coca-Cola". The heat map also shows that all three pieces of advertisement were observed. Consequently, eight participants clicked on Norwegian while one person clicked on Hotels.com.



Figure 54. Eyetracking-study Image 13 Episode page 3 with gaze plot for all participants



Figure 55. Eyetracking-study Image 13 Episode page 3 with heat map for all participants

Statistics confirm that all participants noticed the video square with the episode from "Supertehtaat" whereas the top advertisement by Norwegian was seen by 40 new and 14 familiar participants. In average, new participants noticed the video square for "Supertehtaat" after 0,35 seconds and the advertisement by Norwegian after 1,53 seconds while the values were 0,72 and 1,21 for familiar participants. Both visitor

groups had a mean visit duration of 1,65 seconds for the episode from "Supertehtaat". Among new visitors, Norwegian was observed for 1,93 seconds while familiar visitors observed it for 1,55 seconds.

An identical advertisement by Hotels.com was placed on both sides of the video square. The left advertisement by Hotels.com was noticed by 23 and the one on the right by 22 of the 44 new participants. This means that eight persons noticed first the left and then the right, eight persons noticed them the other way around and the rest of the new participants noticed either the left or the right. Twelve of those sixteen new participants who noticed both banners, spent in total more time on the left hand side.

Among new participants, the average time to first fixation was 3,67 seconds for the banner on the left-hand side and 3,90 for the one to the right. The left banner was viewed for 0,73 seconds and the right banner for 0,53 seconds. Familiar participants noticed the left advertisement by Hotels.com after 2,92 seconds and viewed it for 0,83 seconds. The Hotels.com-advertisement placed on the right-hand side had a time to first fixation of 4,01 seconds and a mean visit duration of 0,52 seconds among the familiar participants.

The majority of all participants saw the title or the episode description for "Supertehtaat". These two elements were placed below the video square. In average, new participants noticed the episode title after 1,79 seconds and the description after 3,76 seconds. Familiar visitors saw the episode title after 2,24 seconds while the value for the description was 3,28 seconds. The episode title had a mean visit duration of 0,45 seconds among new and 0,57 seconds among those familiar whereas the values for the description were 1,60 seconds and 0,83 seconds respectively.

Elements placed beside the title and episode description received less attention. Seven of the new participants noticed the share-button for the Coca Cola-episode while five seemed to pay attention to at least one of the three age classifications. Eight new visitors saw either the production year or the season.

5.6.4 Presentation of Episode page 4

According to the gaze plot for the fourth episode page, Figure 56, visitors have relatively quickly observed the main elements. As can be seen in the heat map with relative visit duration, Figure 57, visitors are focusing on the play-button and the episode title. Regarding the episode image, the two characters in the middle received more attention than those sitting at both ends of the table.



Figure 56. Eyetracking-study Image 14 Episode page 4 with gaze plot for all participants



Figure 57. Eyetracking-study Image 14 Episode page 4 with heat map for all participants

In average, all participants noticed first and spent most time on the video square. The mean time to first fixation was 0,25 for new and 0,16 seconds for familiar participants. The values for visit duration were 1,82 and 1,96 respectively.

In average, 31 new visitors observed the top advertisement by Myllyn Paras for 1,42 seconds while the mean visit duration was 0,84 seconds for those 14 knowing FOXplay. The mean time to first fixation was 1,57 seconds among new and 1,38 for familiar.

The majority of the participants noticed at least one of the two identical pieces of advertisement by Nescafé. The amount of persons seeing both or only one of the two banners were equally distributed. New visitors saw the banner on the left-hand side after 2,71 seconds and observed it for 1,34 seconds while the values were 1,86 and 0,72 for familiar. The banner on the right-hand side was seen by 23 new participants after 4,79 seconds and observed for 0,80 seconds. Familiar participants noticed it after 2,68 seconds and it had a mean visit duration of 0.71 seconds.

The episode title was seen by 29 new participants after 2,90 seconds and six familiar participants after 2,13 seconds. The mean visit duration was 0,58 seconds for new and 0,54 for familiar. New visitors noticed the episode description after 5,37 seconds and observed it for 1,13 seconds. The episode description was seen by 16 new participants and one familiar participant.

5.6.5 Short comparison and analysis

Since these four episode pages were shown one after the other, the author believes it might have affected the results. In other words, it is possible that after the first two pages, some participants have learnt the design. Consequently, when seeing the third and especially the fourth episode page, these participants would have clicked immediately on the play-button in order to proceed.

The top advertisement is usually noticed together with the episode image. Visitors tend to notice the banners placed on both sides of the episode image after seeing the top advertisement. Results for the four episode pages indicate that these side banners

support the top advertisement. Table 6 confirms that when comparing these three advertisement elements, the top advertisement area has the longest mean visit duration and the highest frequency among both visitor groups.

The author believes that the reason why the side banners by Fazer received less visibility is because participants could see with their peripheral vision that these two pieces of advertisement contained similar images of the chocolate patterns. However, even though less participants fixated on these two banners by Fazer, seeing them blurred might have already helped them to remember the advertiser.

Table 6. Eyetracking-study Episode page 1-4 Mean visit duration and frequency for takeover advertisement area

Element: Takeover	Тор	Fazer Left	Right	Тор	Nelly Left	Right	Norwegian Top	Hotels.com Left	Hotels.com Right	Myllyn Paras Top	Nescafé Left	Nescafé Right
Appearing on	Epi	isode page	e 1	Epi	isode page	e 2	E	pisode page	3	E	1	
Frequency for new	44	13	7	42	35	33	40	23	22	31	24	23
Mean visit duration for new	2,29	0,31	0,33	1,34	1,21	0,77	1,93	0,73	0,53	1,42	1,34	0,80
Frequency for familiar	14	7	5	15	11	11	14	10	8	14	9	9
Mean visit duration for familiar	2,17	0,65	0,75	1,24	0,88	0,66	1,55	0,83	0,52	0,84	0,72	0,71

When comparing results for the episode title and episode description from the four episode pages, Table 7, it can be seen that the size and placement has affected the viewing. To exemplify, the episode description and episode title for "Sara Chafak suolasta sahramiin" was longer than those on the three other pages. Results show that viewers were either not interested in the episode with Sara Chafak or they did not have the strength to read it. On the other hand, having more space and a shorter text, as in the third and fourth episode page, increased the interest.

Table 7. Eyetracking-study Episode page 1-4 Mean visit duration and frequency for episode title and description

Element	Ep	isode	title	Episo			
Mean visit duration for	all	new	familiar	all	new	familiar	
Episode page 1: Intelligence	0,39	0,38	0,42		-	-	Ep
Episode page 2: Sara Chafak	1,09	1,30	0,48	0,56	0,63	0,25	Εŗ
Episode page 3: Supertehtaat	0,47	0,45	0,57	1,38	1,60	0,83	Εŗ
Episode page 4: Lyödään	0,58	0,58	0,54	1,09	1,13	0,48	Ep

Element	Ep	isode	title	Episode description			
f for	all	new	familiar	all	new	familiar	
Episode page 1: Intelligence	9	6	3	1	-	-	
Episode page 2: Sara Chafak	40	30	10	28	23	5	
Episode page 3: Supertehtaat	29	23	6	28	20	8	
Episode page 4: Lyödään	35	29	6	17	16	1	

5.7 Latest programs page

The upper area on the latest programs page is reserved for advertisement. Underneath the advertisement, the latest episodes are presented with clickable images and the name of the program. The lower area consists of an automated selection of series titles. These two pages were shown directly after each other.

5.7.1 Presentation of Latest programs page 1

The first latest programs page can be seen in Figure 58 and Figure 59. In the beginning, as can be seen in the gaze plot, Figure 58, the focus is either on the female in the advertisement by Glitter, the text "Viimeisimmät ohjelmat" or on the images for the first two latest episodes. Consequently, participants seem to expand the viewing to the surrounding areas.



Figure 58. Eyetracking-study Image 15 Latest programs page 1 with gaze plot for all participants

The heat map, Figure 59, shows that visitors were interested in the characters and names for the first four latest episodes as well as the first two automatically generated series while the remaining series were more or less equally popular. The advertisement by Glitter seemed to be effective since visitors focused on the face, the discount and the name of the company. Eight persons clicked on the banner while the remaining clicks were mostly distributed between the two first series and the first four latest episodes.

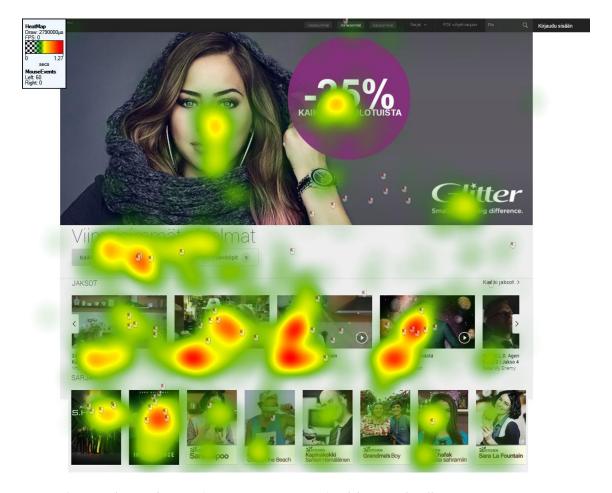


Figure 59. Eyetracking-study Image 15 Latest programs page 1 with heat map for all participants

Statistics confirm that nearly all participants noticed the advertisement area by Glitter. Among 40 new visitors, it received the lowest mean time to first fixation, 0,55 seconds, as well as the longest visit duration, 1,31 seconds. For the 14 familiar participants, the mean time to first fixation was 0,49 seconds while the visit duration was 1,02 seconds.

The main headline, "Viimeisimmät ohjelmat", was noticed by 30 new and 8 familiar participants. The majority of the visitors saw at least one of the smaller headlines, placed directly underneath the main headline, while nearly nobody saw the three smallest headlines; "Jaksot", "Sarjat" and "Kaikki jaksot".

The episode image placed as the third from the left, "Sara La Fountain", was seen by 36 new visitors and 11 familiar visitors. The mean visit duration was 0,62 seconds for new and 0,52 for familiar while the values for mean time to first fixation were 1,89 and 2,88 seconds respectively. The text for "Sara La Fountain" was seen in average after 4,56

seconds by 28 new visitors while 6 familiar visitors saw it after 5,32 seconds. The mean visit duration was 0,61 for new and 0,39 seconds for familiar.

In average, 34 new and 9 familiar participants noticed the series title image for "Intelligence". The mean time to first fixation was 4,10 for new and 2,80 for familiar. New participants observed it for 0,76 seconds while familiar had a mean visit duration of 0,82 seconds.

5.7.2 Presentation of Latest programs page 2

Based on the gaze plot for the second latest programs page, Figure 60, it seems like the majority started the visit either on the images for the first two latest episodes or on the advertisement for Gigantti before continuing to the surrounding areas.



Figure 60. Eyetracking-study Image 16 Latest programs page 2 with gaze plot for all participants

The heat map, Figure 61, shows that participants focused on the names for the first four latest episodes. Participants were also interested in the episode image for the first episode as well as most of the automatically generated series content. Visitors noticed the advertisement by Gigantti and it was clicked on six times. Even though both the series "World's Deadliest Animals" and the episode image for "Bostonin poliisit" received seven clicks, the majority of the remaining elements were also clicked on.



Figure 61. Eyetracking-study Image 16 Latest programs page 2 with heat map for all participants

In average, new visitors noticed Gigantti after 1,33 seconds and observed it for 1,68 seconds. Among familiar participants, the values were 0,53 seconds and 1,10 seconds. This meant that Gigantti, seen by 32 new and 14 familiar participants, was the area receiving the lowest mean time to first fixation as well the longest visit duration.

"Lyödään ällikällä" was placed as the first latest episode. The image was seen by 34 new visitors after 2,10 seconds while the text was seen by 25 new visitors after 2,62 seconds. The mean visit duration was 0,63 seconds for the image and 1 second for the text. In other words, new visitors noticed the image directly after Gigantti while the text had the second longest visit duration.

Familiar visitors saw the image for "Lyödään ällikällä" after 1,58 seconds and the text after 2,48 seconds. The image was seen by 14 familiar participants, receiving a mean visit duration of 0,46 seconds, while three persons saw the text for 0,55 seconds.

5.7.3 Short comparison and analysis

The advertisement by Glitter reached more viewers than Gigantti. On the other hand, Gigantti had a slightly longer visit duration. Since Gigantti had more text than Glitter, the author believes it is the reason why Gigantti achieved to increase the average viewing. However, these results indicate that the top area attracts viewers.

On both pages, viewers noticed all the latest episodes as well as the automated series content. The main headlines were also seen but nearly nobody saw the smallest headlines; "Jaksot", "Sarjat" and "Kaikki jaksot". This means that these three areas are either too small or not distinctive enough in order to draw attention.

5.8 Series titles

All series available on FOXplay are presented on the page for series titles. In these two images, the page has four rows and the maximum amount of series per row is eight. On the first series titles-page, the advertisement by "I need Spain" is placed in the bottom right-hand corner while on the second page it is in the middle of the second row. These two pages were not shown directly after each other. Participants were instructed to choose a series that seems interesting to them.

5.8.1 Presentation of Series titles page 1

On the first series titles page, Figure 62 and Figure 63, nearly all elements received attention. Figure 62 shows that after one second, most participants had already seen the third, fourth and fifth series on the second row. Consequently, persons start to observe all the series on the first row before continuing to the remaining elements.



Figure 62. Eyetracking-study Image 17 Series titles page 1 with gaze plot for all participants

According to the heat map showing relative visit duration for all participants, Figure 63, names and faces seemed to be the most attractive elements while the top information rows were not as popular. Having observed the series, visitors clicked on one of the presented series.



Figure 63. Eyetracking-study Image 17 Series titles page 1 with heat map for all participants

The advertisement by "I need Spain" with a castle, was seen by 23 new and 7 familiar participants. The mean visit duration was 0,70 for new and 0,37 for familiar. New visitors noticed the banner with a castle in average after 9,86 seconds while the value for familiar participants was 8,03 seconds.

The area with the longest visit duration among new visitors, 0,90 seconds, was the series "World's Deadliest Animals". The image with a lion, placed as the first title on the first row, was seen by 34 new and 11 familiar. Among familiar participants, it received a mean visit duration of 0,32 seconds. The mean time to first fixation was 4,10 for new and 2,34 seconds for familiar visitors.

Most participants, 37 new and 13 familiar, noticed the series "None of the Above". "None of the Above" received the lowest mean time to first fixation among both visitor groups and it was placed as the third title on the second row. The value was 0,85 seconds for new and 0,96 seconds for familiar. New visitors had 0,69 seconds as the mean visit duration while familiar observed it for 0,52 seconds.

"King Fishers", placed on the right-hand side of "None of the Above", was also seen by 37 new visitors and its mean visit duration was 0,63 seconds. Twelve familiar participants saw it for 0,50 seconds. The average time to first fixation was 3,21 for new and 1,02 seconds for familiar.

5.8.2 Presentation of Series titles page 2

The gaze plot for the second series titles page, Figure 64, shows that most participants seemed to have started the visit by observing the advertisement by I need Spain before fixating on the series on its left-hand side and the first row.



Figure 64. Eyetracking-study Image 21 Series titles page 2 with gaze plot for all participants

As can be seen in Figure 65, the heat map with relative visit duration for the second series titles page, visitors focused on names and faces for the series titles as well as the advertisement by I need Spain. The text saying "Voita kaupunkiloma Espanjassa" means win a holiday in Spain.

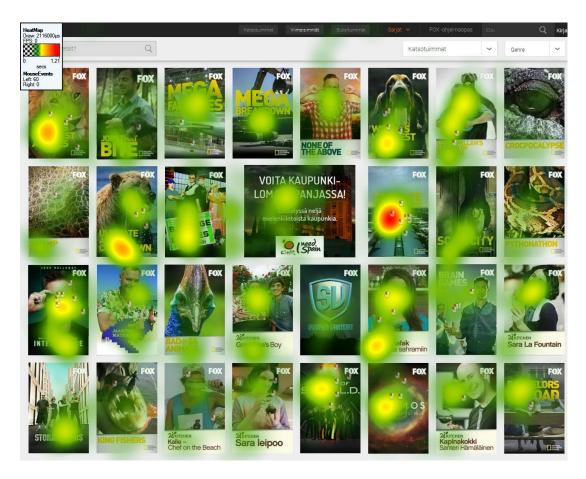


Figure 65. Eyetracking-study Image 21 Series titles page 2 with heat map for all participants

According to the statistics, most visitors, 35 new and 12 familiar, noticed the advertisement by "I Love Spain". It received the lowest mean time to first fixation among both visitor groups, 1,39 seconds for new and 1,96 seconds for familiar. New visitors observed it for 0,51 seconds while familiar visitors observed the advertisement for 0,77 seconds.

"Ultimate Airport Dubai" was the area receiving the highest visit duration among new visitors, 1,02 seconds. Familiar participants observed "Ultimate Airport Dubai" for 0,89 seconds. "Ultimate Airport Dubai" was placed as the sixth title on the second row. It was seen by 22 new visitors after 4,61 seconds while 9 familiar visitors saw it in average after 5,04 seconds.

5.8.3 Short comparison and analysis

Gaze plots for the two series titles pages confirm that visitors start by observing elements placed slightly to the left but still in the middle of the second row. Having seen these elements, visitors usually continue to the first row and afterwards to elements placed on the third and fourth row. The heat maps indicate that visitors do not focus on hardly recognizable series titles. To exemplify, such are the images for the series "Swamp Men", "Crocpocalypse" and "Pythonathon".

All three top elements, intended to facilitate the visitor when choosing a series, remained unnoticed. In most cases, the placement for a series is not decisive since visitors tend to search and click on series of their interest. As requested in the instructions, all visitors clicked on one of the series.

5.9 Latest episodes page

The latest episodes page includes a list of all available episodes on FOXplay. Episodes are presented with an image as well as a name containing information about the season and original airing order.

5.9.1 Presentation of Latest episodes page 1

The first latest episode page, shown to the participants, was a scrollable image with a lot of content. In addition to the episodes, it had also different kinds of advertisement; side banners on both sides of all the episodes, squares and rectangles between the episodes and a top advertisement area.

The gaze plot, Figure 66, shows the viewing after 1, 2, 3, 10, 20 and 30 seconds. As can be seen, in the beginning viewers focus on the top areas. However, the lower on the page viewers scroll, the less amount of overall attention is given to the elements.

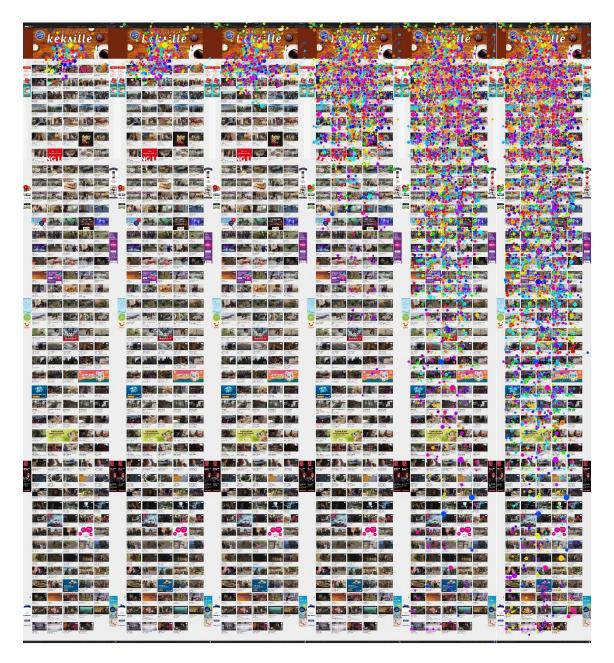


Figure 66. Eyetracking-study Image 19 Latest episodes page 1 with gaze plot for all participants

The heat map with relative visit duration for the first latest episodes page, Figure 67, shows that most visitors focused on the top elements. After having scrolled a few times, participants were still interested but apparently when realising that the design is the same but only the content changes, participants start skimming through the rest. Consequently, elements placed lower on the page received less attention.

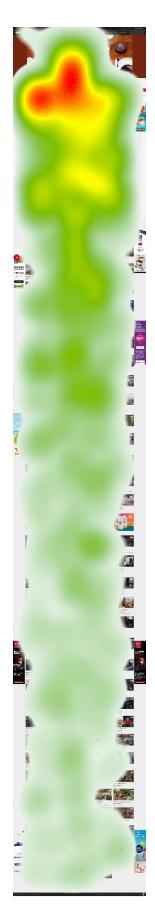


Figure 67. Eyetrackingstudy Image 19 Latest episodes page 1 with heat map for all participants

According to the statistics, the top banner by Fazer was seen by 42 of the 44 new visitors and 13 of the 16 familiar visitors. This banner had a large text saying "Kutsu ystävä keksille ja kahville!" meaning invite a friend for a cookie and coffee. The smaller text communicated to viewers that when sending an invitation, they could win a delicious cookie party for themselves and their friends. Apart from the texts, there was also a direct call to action, "Klikkaa tästä", meaning click here.

Fazer was the area with the lowest time to first fixation as well as the longest visit duration on the first latest episodes page. The time to first fixation was 0,17 seconds among new and 0,29 seconds among familiar participants. New visitors watched Fazer for 1,75 seconds while familiar participants watched it for 1,77 seconds.

Banners placed on both sides of the main area with the latest episodes were noticed only by a few people. Even though these side banners did not receive a lot of attention, banners placed between the episodes were noticed in some cases even better than the series content placed on the same row.

Table 8 shows all pieces of advertisement that were placed between the episodes on the first latest episodes page. The combination of letters and numbers on the row with the text "Appearing on" means the row and position the banner was placed on. For example, Viking Line had the combination R06 P4, meaning that it was placed on the sixth row as the fourth element from left. As can be seen, approximately half of all the participants noticed those pieces of advertisement that did not require a lot of scrolling. In other words, the result confirms that

participants were more focused before scrolling. However, even

though the amount of different persons noticing decreases for those elements requiring scrolling, the mean visit duration is more or less the same for all pieces of advertisement. This means that assuming a banner is seen, the promotional message decides whether visitors continue observing it.

Table 8. Eyetracking-study Advertisement appearing on Latest episodes page 1 between the episodes

Element:	Viking Line Bright Lights Big Cities	Viking Line Irtiotto	Dan Sukker Cheesecake	I Need Spain Holiday	Sonera Tabletti	Discshop Maleficient	Valio Yuju	Nordea Laiska Possu	Fazer Alku	Nissan White car	Finnair Dubai Malaga	Nordea Sombrero
Appearing on	R06 P4	R07 P2	R09 P3	R12 P4	R16 P2	R20 P3	R23 P4-P5	R24 P1	R27 P2-3	R33 P2	R34 P4	R38 P3
Frequency for new	26	18	25	12	9	11	5	6	7	7	5	6
Mean time to first												
fixation for new	13,38	13,06	16,98	22,51	27,07	22,30	20,41	31,69	33,13	41,71	46,65	40,34
Mean visit duration												
for new	0,53	0,46	0,64	0,53	0,37	0,63	0,40	0,40	0,41	0,50	0,63	0,42
Frequency for familiar	11	7	8	9	2	5	2	5	3	4	1	6
Mean time to first												
fixation for familiar	10,13	12,66	21,59	16,93	24,46	22,73	34,08	23,29	38,23	40,01	15,86	33,21
Mean visit duration												
for familiar	0,91	0,39	0,30	0,71	0,78	0,89	0,58	0,33	0,73	0,40	0,28	0,40

5.9.2 Presentation of Latest episodes page 2

On the second latest episodes page, participants were not able to scroll. In this image, it was assumed that participants had already scrolled for a while. As can be seen in the gaze plot, Figure 68, viewers tend to start in the middle before continuing to observe the surrounding elements.



Figure 68. Eyetracking-study Image 20 Latest episodes page 2 with gaze plot for all participants

According to the heat map, Figure 69, the area receiving most attention was the episode image and name for "FOX Wild: Eläinkunnan oudoimmat lemmikit". In this episode image, placed in the middle of the third row, a person is feeding a reindeer. Participants focused also a lot on the two first images on the fourth row, episode 7 from

"Intelligence – Agentti 2.0" and episode 5 from "Sara Chafak suolasta sahramiin". In addition to these three elements, the episode image for episode 4 from "Matkalaukkujen metsästäjät", which was placed as the fourth image on the fifth row, had a high relative visit duration.

Episode images remaining unnoticed or receiving less attention were usually very dark or they contained characters who were relatively small and unrecognizable. However, after having seen the first latest episodes page, participants seemed to have learnt the design since nearly all elements were noticed. The heat map also indicates that participants had clicked on a series that they considered as interesting.



Figure 69. Eyetracking-study Image 20 Latest episodes page 2 with heat map for all participants

5.9.3 Short analysis

Results from the two latest episodes pages show that the design is user-friendly. The episode images as well as the respective names seem to be easily found by the participants. However, those elements placed in the middle seem to attract more interest.

5.10 Information

Before finishing the first part with the Eye Tracker, participants were shown two pages with general information about FOXplay. The drop-down menu for programs, situated on the top of every page, has been selected with the mouse in order to make it visible to the participants.

5.10.1 Presentation of Information page 1

The first information page, Figure 70 and Figure 71, had two main areas with information; "Parasta sisältöä, parhaalta kanavaltasi" meaning the best content from your favourite channel and "Täydennä profiilisi tiedot ja saat kaiken irti FOX Playpalvelusta" meaning fill in your profile information and you will benefit more from the FOXplay–service. According to the gaze plot, Figure 70, visitors notice quickly the areas containing information.

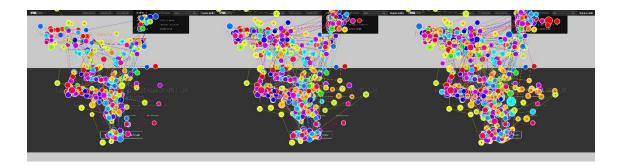


Figure 70. Eyetracking-study Image 23 Information page 1 with gaze plot for all participants

The heat map, Figure 71, shows that visitors focused on the left column in the drop-down menu and the sign "Rekisteröidy FOX Play –palveluun" meaning register to the FOXplay –service. The column on the right-hand side as well as most of the text areas

were also observed. Even though the majority of the participants wanted to register themselves, there were also those who aimed to select a title or click on one of the links to available programs.

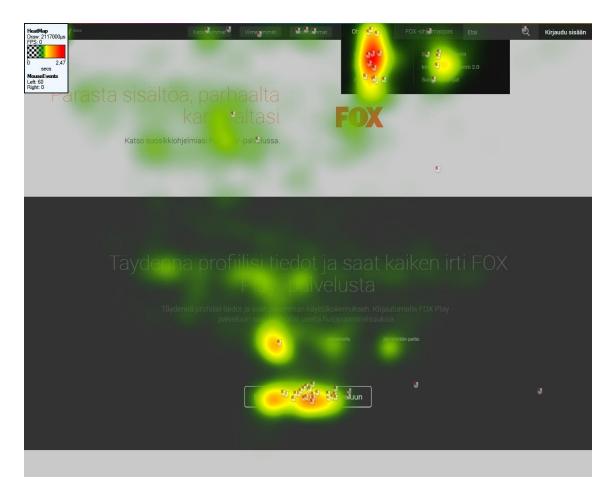


Figure 71. Eyetracking-study Image 23 Information page 1 with heat map for all participants

In average, on the page about FOXplay, nearly all visitors noticed first the text "Täydennä profiilisi tiedot ja saat kaiken irti FOX Play-palvelusta". The mean time to first fixation was 1,27 seconds for new and 1,42 for familiar visitors. New visitors observed the area for 1,47 seconds while the value was 1,59 for those knowing already something about FOXplay.

The sign "Rekisteröidy palveluun", meaning register to the service, was seen by 38 new visitors in average after 3,93 seconds while 10 familiar saw it after 5,14 seconds. The mean visit duration was 1,31 for both participant groups.

The area with the text, "Parasta sisältöä, parhaalta kanavaltasi" was seen by 35 new and 14 familiar visitors while 24 new and 5 familiar noticed the logo on its right-hand side. New visitors saw the text after 1,88 seconds and the logo after 5,42 seconds. The text had an average visit duration of 1,06 seconds among new visitors while the value for the logo was 0,28 seconds. Among familiar visitors, the text was seen after 1,58 seconds and the logo after 3,11 seconds. The text had 0,99 seconds as the mean visit duration while the value was 0,23 for the logo.

The two columns on the drop-down menu for programs were the two areas with the longest visit duration among new visitors. The column on the left-hand side had links to; the most watched, "Katsotuimmat", the latest, "Viimeisimmät" and the most popular programs, "Suosituimmat". The mean visit duration for the left column was 2,14 seconds for both participant groups. The left column was seen by 31 of the new participants in average after 2,83 seconds and by 11 familiar after 2,24 seconds.

The column on the right-hand side had links to three different series; "S.H.I.E.L.D. Agentit", "Intelligence – Agentti 2.0" and "Suomen Vartijat". This column was seen by 21 new participants and 9 familiar. The mean visit duration was 1,57 seconds for new and 1,17 for familiar while the values for first fixation were 8,22 seconds and 6,46 respectively.

5.10.2 Presentation of Information page 2

On the second information page, Figure 72 and Figure 73, visitors were given more details about FOXplay. Visitors started fixating either on top or on the bottom of the page, depending on the area clicked on the previous page. According to the gaze plot, Figure 72, visitors had quickly observed the two first columns in the drop-down menu, the main headline "Apua ongelmiin" as well as the headlines and text placed directly underneath.



Figure 72. Eyetracking-study Image 24 Information page 2 with gaze plot for all participants

The heat map, Figure 73, shows that visitors focused mostly on the two first columns in the drop-down menu, the list on the left-hand side and the headline "Mikä on FOX Play?" meaning what is FOXplay. Most visitors clicked either on the drop-down menu, one of the links in the top area or on the list placed on the left-hand side.



Figure 73. Eyetracking-study Image 24 Information page 2 with heat map for all participants

Statistics confirm that more or less all participants observed for the longest time the second column in the drop-down menu containing program recommendations. Among 39 new visitors, the mean visit duration was 2,37 seconds while the value was 1,26 for the 15 familiar. New visitors saw the column in the middle after 4,94 seconds while familiar visitors saw it after 3,78 seconds.

The third column in the drop-down menu had also program recommendations and it was seen by 28 new and 8 familiar. The mean visit duration was 1,47 for new and 1,06 seconds for familiar while the average values for the first fixation were 12,27 and 5,37 seconds respectively.

New visitors observed the links placed in the first column; the most watched, most recent and most popular content, for 1,89 seconds whereas familiar visitors had a mean visit duration of 1,20 seconds. The area was noticed after 5,39 seconds by 35 new participants and after 3,54 seconds by 12 familiar participants.

Approximately half of all the visitors noticed the main headline "Apua ongelmiin". The mean time to first fixation was 6,02 seconds for new and 3,63 seconds for familiar. In average, the 21 new visitors observed it for 0,75 seconds while 6 familiar observed it for 0,41 seconds.

The majority of all the visitors found the list on the left-hand side. The first text appearing on the list, "Usein kysytyt kysymykset", was seen by 19 new visitors in average after 7,44 seconds and by 4 familiar after 6,51 seconds. The mean visit duration was 0,49 seconds for new and 0,40 seconds for familiar visitors. The second text, "Ongelmatilanteet" had a mean time to first fixation of 9,92 seconds among new and 3,61 seconds among familiar. It was observed for 0,36 seconds by 18 new visitors and for 0,62 second by 7 familiar participants.

5.10.3 Short comparison and analysis

Since the two information pages were not identical, it is not possible to compare all values against each other. This meaning especially that the time to first fixation between similar elements can vary significantly depending on how the remaining content was observed.

Results from the first information page prove that visitors are able to find the desired information while the backgrounds are left more or less completely unnoticed. The same can be said about the second information page.

On the second information page, the amount of program recommendations in the second column was increased from three to six series titles. An additional column with six titles was also added while the first column in the drop-down menu was identical. Even though the visit duration for the first column slightly decreased, on the second information page, it was seen by more people. The decrease can easily be explained since visitors had just seen it on the previous page. According to the results, it was a good idea to increase the amount of program recommendations since both the amount of persons noticing as well as the total visit duration for the drop-down menu increased significantly.

5.11 Presentation of similar elements appearing on several pages

Some of the elements, such as the logo for FOXplay, appear on several pages. In order to have a knowledge of how visitors notice these similar elements, results from all of the pages have been combined.

5.11.1 Top elements

Table 9 shows the amount of participants who noticed at least once the different top elements. Even though on some of the pages participants were instructed to complete a

specific task, results for these pages have not been separated from the presented amount. As can be seen, more or less every element has been noticed by approximately half of the participants. There were participants who noticed many of these elements on several pages but also many persons who never saw any of them.

Table 9. Eyetracking-study Top elements Amount of participants noticing at least once

	Element	FOXp	lay-logo	FOXK	ids-logo	Katso	tuimmat	Viime	eisimmät	Suosi	tuimmat	Sarjat/	'Ohjelmat	Ohje	maopas		Etsi	Mil	kä on?	Kir	jaudu
		new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar
Γ	Amount of participants																				
	noticing at least once	24	8	4	0	26	5	20	5	22	9	24	7	15	6	28	6	8	1	6	2

5.11.2 Bottom elements

According to the results, Table 10, nearly nobody noticed the bottom elements. The element placed in the left-hand corner, "© 2014 FOX ja siihen liittyvät yritykset. Kaikki oikeudet pidätetään", received the highest amount of visibility since it was seen by 6 of the 60 participants.

Table 10. Eyetracking-study Bottom elements Amount of participants noticing at least once

Element	© - Oikeudet		UseinKysytyt Käyttoeh		toehdot	Tietosuoja		Eväste		Ota Yhteyttä		Finland		Flag		
	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar	new	familiar
Amount of participants																
noticing at least once	5	1	3	2	2	1	2	1	1	0	2	0	4	1	2	0

5.12 Pieces of advertisement visitors remembered

Nearly all participants, 51 persons, remembered at least one piece of advertisement they had just seen on FOXplay. However, most of the participants could name two, three or four advertisers while there were also persons who remembered five, six or seven. Out of 142 mentions; 121 were exact names of correct advertisers, 15 were descriptions while 6 were incorrect answers. The author wants to remind the reader that when acquainting oneself with these results, it is crucial to remember that not all pieces of advertisement had similar visibility on FOXplay.

Figure 74 shows the amount of exact names of correct advertisers all participants remembered. According to the results, Viking Line was the most remembered advertiser

with 28 mentions. Seventeen persons remembered seeing advertisement by Nelly while fifteen of all the participants mentioned Finnmatkat.

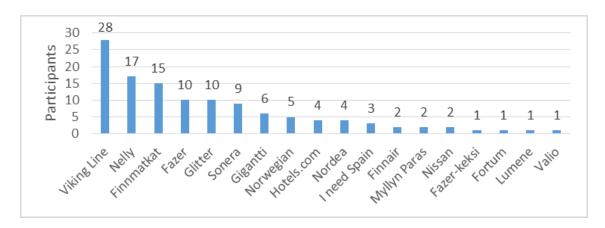


Figure 74. Eyetracking-study Q8 Pieces of advertisement remembered by all participants

Out of the 51 participants who remembered advertisement, 37 were new visitors while 14 were familiar visitors. As can be seen in Figure 75, even though there were some variations between new and familiar visitors, the order was more or less the same. The author wants to inform the reader that some of the mentions by those familiar with FOXplay could be misleading since these participants might have remembered advertisers they are dealing with.

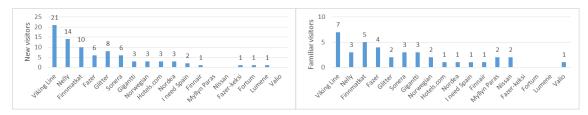


Figure 75. Eyetracking-study Q8 Pieces of advertisement remembered by new and familiar visitors

5.12.1 Viking Line

Viking Line was the most remembered advertiser since it was named by 21 new and 7 familiar participants. As a reminder, advertisement by Viking Line was placed on FOXplay as a top advertisement on the first front page, bottom advertisement on the fifth front page, square on the first program page and two times on the first latest episode page. Table 11 shows the frequency as well as the mean visit duration for both

new and familiar visitors. According to the results, Viking Line achieved good visibility with this combination.

Table 11. Eyetracking-study Pieces of advertisement remembered Viking Line

Element: Viking Line	Top advertisement: Bright Lights	Bottom advertisement: Paapuuri	Square: Pure Nordic	Square (R6P4): Bright Lights	Square (R7P2): Irtiotto arkeen
Appearing on	Front page 1	Front page 5	Program page 1	Latest episodes 1	Latest episodes 1
Frequency for new	40	29	32	26	18
Mean visit duration					
for new	3,36	2,55	0,84	0,53	0,46
Frequency for familiar	15	9	8	11	7
Mean visit duration					
for familiar	2,66	1,36	0,73	0,91	0,39

5.12.2 Nelly

Advertisement by Nelly was remembered by 14 of the 44 new participants and by 3 of the 16 familiar. In order to remind the reader, as can be seen in Table 12, Nelly replaced one of the main promos on the fifth front page and it had also a takeover on the second episode page. Results show that most of the participants noticed each advertisement.

Table 12. Eyetracking-study Pieces of advertisement remembered Nelly

Element: Nelly	Right main promo: Lily Aldridge	Top advertisement: Juhlamekkoja	Left side banner: Jacket+Man	Right side banner: Mid season sale
Appearing on	Front page 5	Episode page 2	Episode page 2	Episode page 2
Frequency for new	42	42	35	33
Mean visit duration				
for new	2,16	1,34	1,21	0,77
Frequency for familiar	13	15	11	11
Mean visit duration				
for familiar	2,88	1,24	0,88	0,66

5.13 Suggestions of improvement made by the participants

Before approving that the data can be used for this study, participants were given an opportunity to write down what they thought about FOXplay. A summary of comments, ideas and suggestions of improvement is presented.

5.13.1 Language

Some participants were hoping for an opportunity to change the language from Finnish to Swedish or English. Offering the web page in several languages would be seen as an advantage. This would allow visitors who do not understand Finnish to easily find content on FOXplay.

5.13.2 General comments about the web page

Most of the participants considered that the layout of FOXplay was beautiful, clear and easy to navigate on. The web page is also perceived as modern and colourful. Images to the program pages were considered as attractive. On the page with all the episodes, an opportunity to filter the content based on different variables would be seen as a positive feature. There was also a comment that the text pages were boring and the background colour was too dark. However, the overall impression was that the web page was well-done.

5.13.3 General comments about the advertisement

Participants, who commented about the advertisement, considered it was placed well and looked good together with the actual content. They said that FOXplay had advertisement of their interest and that it was directed to them. Even though some people thought there were too much or too large areas for advertisement, others had no suggestions of improvement.

6 DISCUSSION

Based on results presented in the previous chapter, several elements can be considered as effective. Depending on the advertiser, different needs and expectations can be fulfilled. Concerning advertisement, the pricing should be consistent and adequate. However, special solutions cannot be overused since otherwise they might lose the advantage achieved. The author also believes that it is important that the program content can be easily accessible and understandable in order to create a positive user-experience.

6.1 Effectiveness of advertising areas

Results show that there is a difference between pieces of advertisement as well as the areas where they are placed. Therefore, what is considered as effective depends on the needs of the advertiser.

In case the advertiser strives to be noticed quickly and receive a high visit duration from all viewers, the author suggests that the banner is placed on the front page on the top advertisement area. In other words, it should appear directly when the visitor has written www.foxplay.fi in the browser. From the perspective of FOX, when the front page has loaded for the first time, the top advertisement area should be priced as one of the most valuable areas with a high CPM. However, other top advertisement areas are also receiving a high mean visit duration and should be priced nearly in the same way as the first top advertisement on the front page.

On the front page, the main promo was replaced once by an advertisement. Even though, it resulted in a significantly higher mean visit duration for that particular area, the author suggests that FOX treats this option as a special case. The reason is that if visitors learn that the same area is often used for advertisement, it could result in banner blindness or in a decrease in the mean visit duration. In other words, participants would learn that the area does not always contain program recommendations. This meaning that when striving to find program recommendations, they might prefer to spend time on other areas instead. However, pieces of advertisement placed between the program

content blend in naturally with the remaining programs. Due to a higher amount of these areas, for example extra promos and the latest episodes page, the placement could be floating with an option to sell certain predefined locations for a premium.

The takeover on the episode page was also a lucrative solution. This would be an ideal option when an advertiser has several pieces of advertisement with a similar message or graphical design. FOX could decide to charge more for content appearing on certain kinds of pages. The author would also suggest, if and when possible, to combine the large episode image with the takeover to create a more memorable visual effect. To exemplify, the takeover with Nelly had a top advertisement with a female model selling party dresses while the episode image with a female character was wearing a dress but her head was not completely visible. After having seen one dress by Nelly on the fifth front page, as well as the episode image, this takeover could have made participants to start thinking about dresses again and remember the Nelly advertisement in the questionnaire. However, the option of combining program content with advertisement should be used carefully in order to not confuse the visitor.

6.1.1 Top advertisement

As can be seen in Table 13, top advertisement areas are always noticed by more or less every visitor. However, when comparing the mean visit duration, it can be seen that the value is significantly higher for the first advertisement, "Bright Lights Big Cities" by Viking Line, which was placed on the first web page shown to the participants. Otherwise, the difference in mean visit duration seems to depend on the advertisement as well as the remaining elements on each page.

Table 13. Eyetracking-study All top advertisement areas with mean visit duration and frequency

Element: Top advertisement	Bright Lights Big Cities	Finnmatkat	Nordea	Sonera	Fazer Pure Dark	Nelly Juhlamekkoja	Norwegian	Myllyn Paras	Glitter	Gigantti	Fazer Keksille
Appearing on	Front page 1	Front page 2	Front page 3	Front page 4	Episode page 1	Episode page 2	Episode page 3	Episode page 4	Latest programs 1	Latest programs 2	Latest episodes 1
Frequency for new	40	33	40	40	44	42	40	31	40	32	42
Mean visit duration for new	1	2,21	2,63	1,48	2,29	1,34	1,93	1,42	1,31	1,68	3 1,75
Frequency for familiar	15	10	15	13	14	15	14	14	14	14	13
Mean visit duration											
for familiar	2,66	1,92	2,59	1,70	2,17	1,24	1,55	0,84	1,02	1,10	1,77

6.1.2 Centre and middle page-wide advertisement

Page-wide pieces of advertisement placed on the centre or in the middle of the web page, Table 14, were noticed by nearly all participants. The middle pieces were visible on the screen after having scrolled while those in the centre could be seen immediately. Even though these two categories are not completely comparable with each other, the mean visit duration for those noticing was similar for all four elements. However, the author recommends to have the same pricing model for elements appearing as centre advertisement. Compared to the centre advertisement, the middle advertisement should be priced slightly lower and it should be based on how much below the fold the area is expected to appear on the web browser as well as on which page it appears.

Table 14. Eyetracking-study Centre and middle page-wide advertisement areas with mean visit duration and frequency

Element: Centre advertisement	Dan Sukker	Lumene	Element: Middle advertisement	Visit Malaysia	Fortum
Appearing on	Series page 1	Series page 2		Front page 5	Episode page 1
Frequency for new	37	36		32	23
Mean visit duration					
for new	1,75	1,44		1,34	1,06
Frequency for familiar	10	14		10	11
Mean visit duration					
for familiar	1,19	1,41		1,52	0,56

6.1.3 Square advertisement

Table 15 shows square advertisement appearing on the program- and series titles pages. These elements were seen by more or less the majority of all participants. Even though the placement was not identical for these four elements, as the reader might remember from the presented results, the mean visit duration was always below one second. However, these elements could have a similar pricing model since the author believes that the differences in the visit duration were caused by a change in surrounding content as well as instructions given to the participants.

Table 15. Eyetracking-study Square advertisement areas with mean visit duration and frequency

Element: Square advertisement	8 =	Disney Hand Soap	I Need Spain Castle	I Need Spain Holiday
Appearing on	Program page 1	Program page 3	Series titles page 1	Series titles page 2
Frequency for new	32	25	23	35
Mean visit duration				
for new	0,84	0,71	0,70	0,51
Frequency for familiar	8	4	7	12
Mean visit duration				
for familiar	0,73	0,49	0,37	0,77

6.1.4 Bottom advertisement

Results for the bottom advertisement, Table 16, show that less participants were willing to scroll until the end of the web page. However, three of the four elements were noticed by the majority of all participants. Those who did scroll were interested in the advertisement. The height seemed to affect the time spent watching the banner since Viking Line was the only banner differing from the normal size. In other words, it was the highest in size and mean visit duration. This means that the pricing for the bottom advertisement could be based on the top, centre and middle advertisement but an extra fee should be charged for banners exceeding the normal size.

Table 16. Eyetracking-study Bottom advertisement areas with mean visit duration and frequency

Element: Bottom advertisement	l Atria Perhetila	Nissan	Sokos Hotels	Viking Line Paapuuri
Appearing on	Front page 2	Front page 3	Front page 4	Front page 5
Frequency for new	28	24	17	29
Mean visit duration				
for new	1,15	0,62	1,58	2,55
Frequency for familiar	11	9	9	9
Mean visit duration				
for familiar	0,97	0,58	0,81	1,36

6.1.5 Discussion about previously presented advertisement areas

Results for advertisement appearing on the episode pages, Table 6, indicated that the takeover is a valuable area for the advertiser. The author believes that the reason why the takeover performs well is that the simplified design with the large episode image gives time to focus on the surrounding areas. In terms of pricing, FOX should try to always encourage the same advertiser to buy all three areas or to have a client who is willing to partner with similar advertisement that create a whole. This is expected to create synergy, the participant enjoys the three surrounding pieces of advertisement while waiting for the content to load.

Pieces of advertisement appearing between the program content are appealing for both viewers and advertisers. Those placed on the upper part of the page are more valuable since they tend to be noticed by more persons. However, the visit duration is more or less the same for all elements. This meaning that when somebody has noticed it, the content decides whether one will observe it for a long or a short time. Therefore, the author recommends that FOX would sell the top pieces of advertisement for a premium price slightly below but still comparable to the pricing for the square advertisement. The remaining elements could be sold as not as valuable areas with floating placement.

6.2 Effectiveness of program areas and other suggestions of improvement

Apart from advertisement, FOXplay needs to be effective content-wise. Even though advertisement is the source of income, it is crucial that a comprehensive but also user-friendly design is maintained. Therefore, based on the presented results, the author suggests some ideas of improvement that could be of importance from the perspective of the user.

6.2.1 General ideas

According to the results, the ability for a visitor to choose to navigate in their local language would be seen as an asset. Since FOXplay is launching in many countries with

the same content management system, the main navigation titles are in any case going to be translated to the local languages of that particular country. This means, integrating these would most probably be more of a technical issue but it would be appreciated by the users.

6.2.2 Program page

For example on the first program page, participants had the possibility to choose an episode they would like to see from the list with all the episodes for a series. Results show that the majority of the participants clicked on one of the episode names appearing on the list instead of the play-button. The author suggests that these names are made clickable, as the play-button, in order to facilitate visitors to view the episodes.

6.2.3 Bottom elements

As presented in the results, the bottom elements were hardly noticed by anyone. In order to receive visits to these pages, appearing as links on the bottom elements, improvements should be made. Possible suggestions by the author would be to increase the size, change the colour and moving some of the elements to the list with the top elements.

7 CONCLUSION

In order to please both viewers as well as the advertisers, certain areas have been defined and studied. Even though there are differences in the placement, the need for the advertiser decides what effectiveness is. From the perspective of FIC Finland, the ideal placement for one banner striving for many impressions could be the top advertisement on the first front page. In addition, combining program content with advertisement allows different kinds of solutions. However, even though an advertisement can perform well alone on one page, it is recommended that the campaign consists of several pieces of advertisement placed on different parts of FOXplay in order to hopefully guarantee and create a memorable campaign. On the other hand, content should be appealing since without users, there is nothing to sell. Therefore, images cannot be very dark or contain characters who are relatively small and unrecognizable. This meaning that elements with tempting characters should be accomplished while co-operation between both views are still necessary. Suggestions for further research would be to find out how visitors perceive digital video together with the static content presented in this study.

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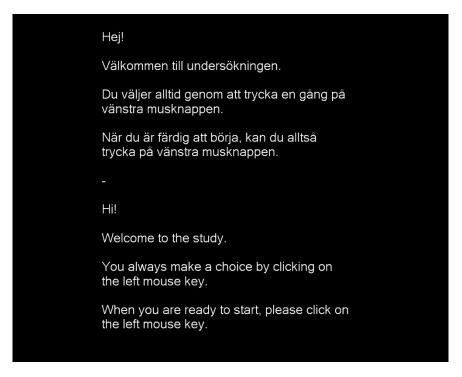
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APPENDICES

Appendix 1: Questions in Eye Tracker (In Swedish and English)





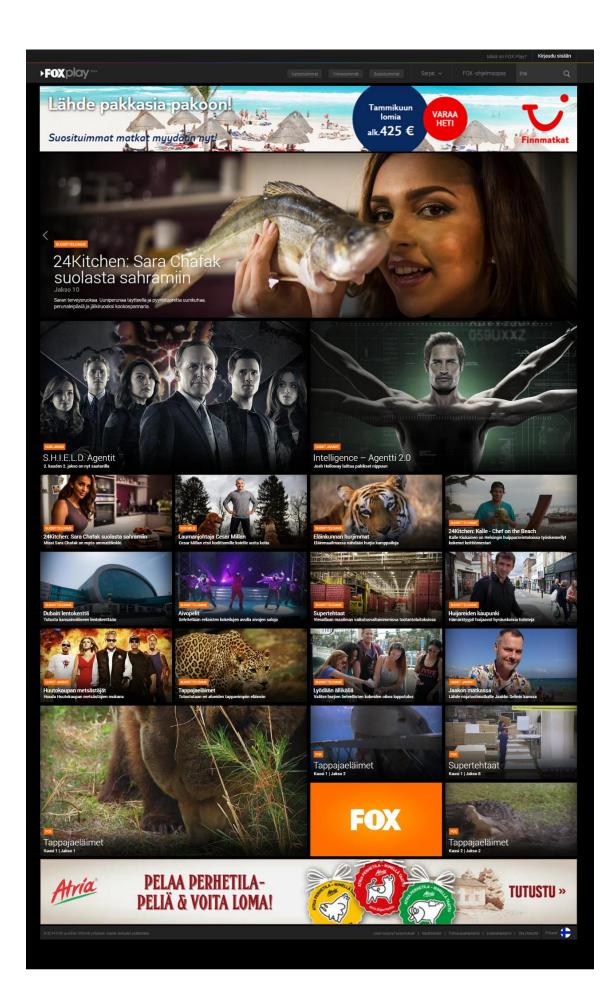
Du har skrivit adressen i webbläsaren.

Vart skulle du gå först?

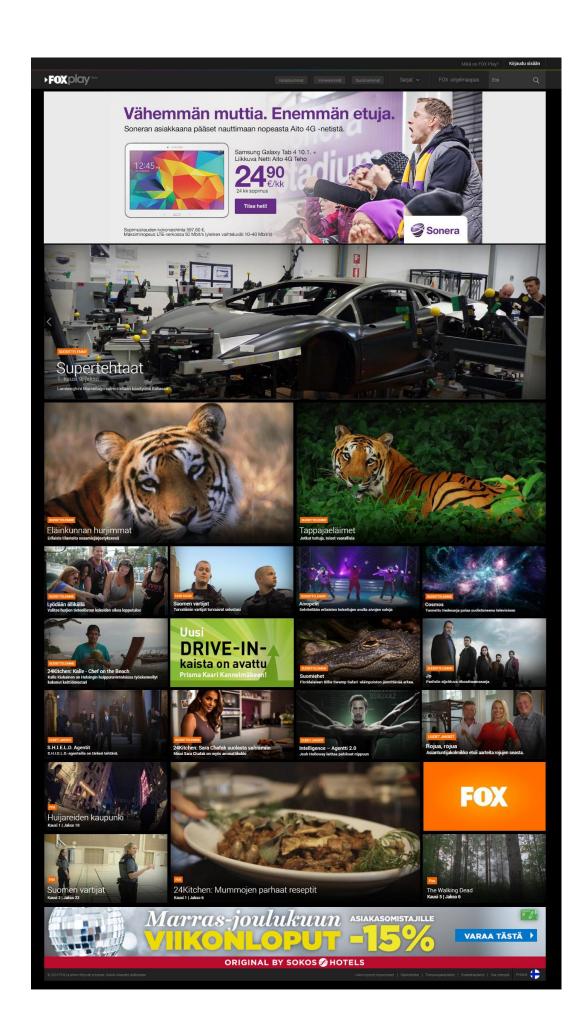
You have written the adress in the browser.

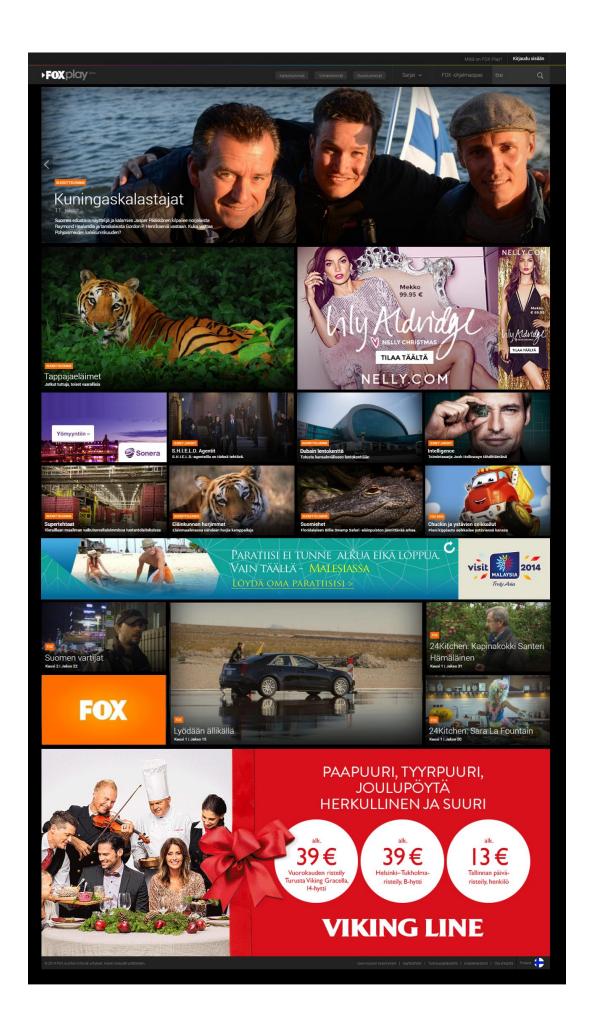
Where would you go first?









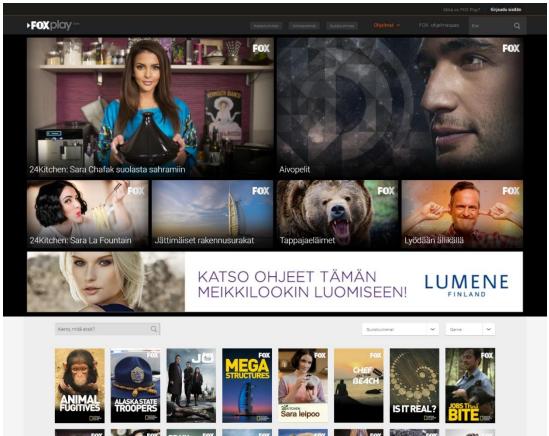


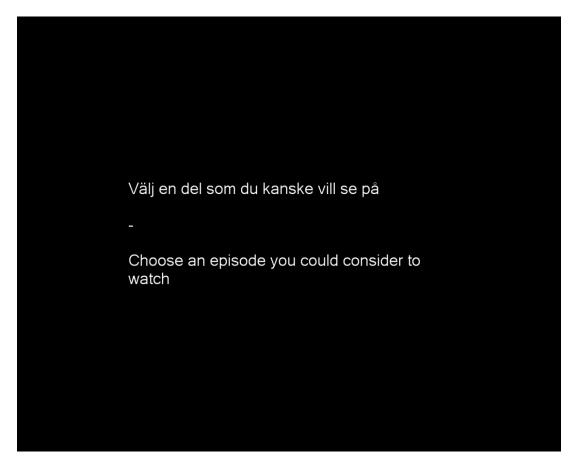


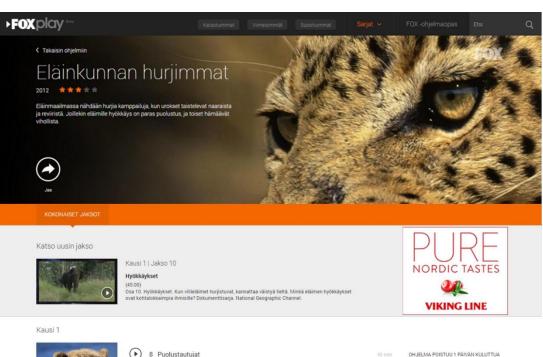
Välj en serie som verkar intressant för dig

Choose a serie that seems interesting to you







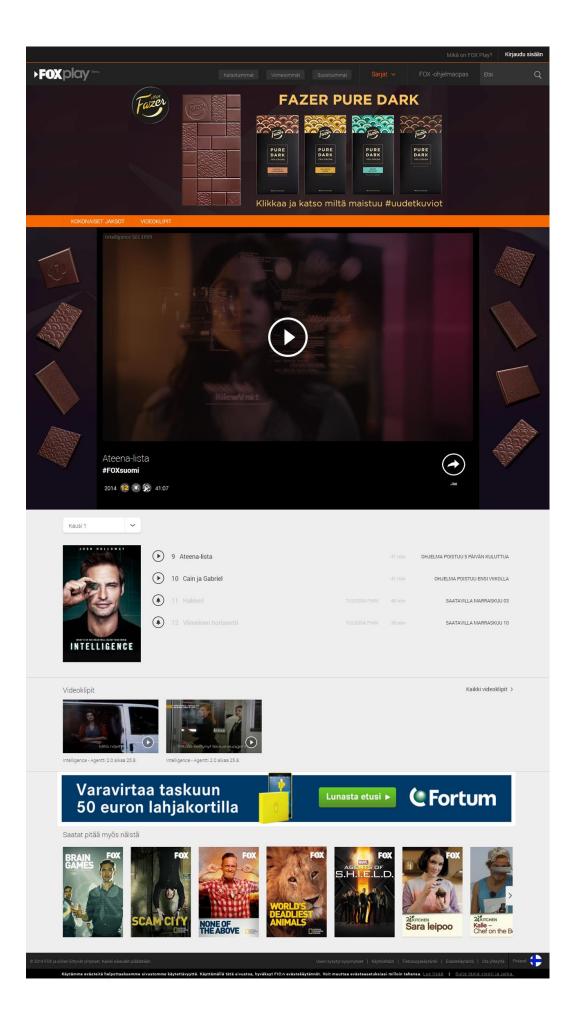


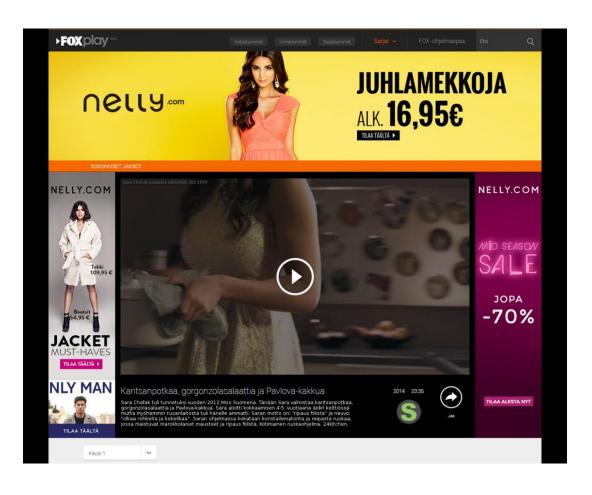


8 Puolustautujat
 9 Selviytyjät
 10 Hyökkäykset
 10 Hyökkäykset
 10 Hyökkäykset
 10 Hyökkäykset
 10 Hyökkäykset
 10 Hyökkäykset

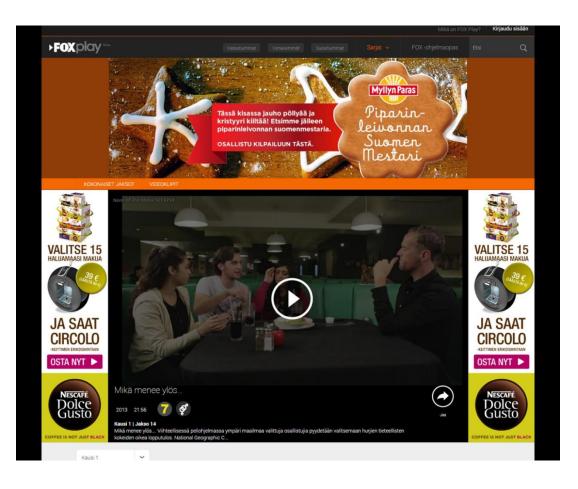
Vart skulle du klicka på de följande sidorna?

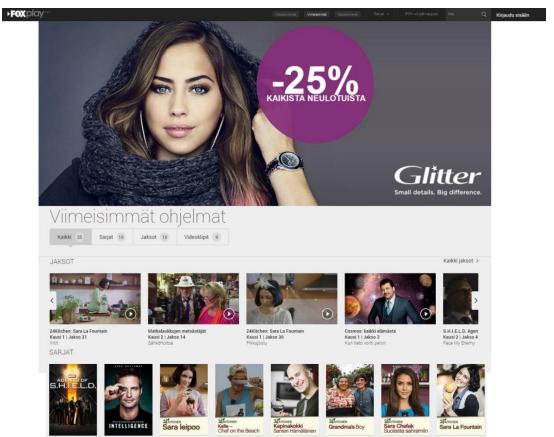
Where would you click on the following pages?





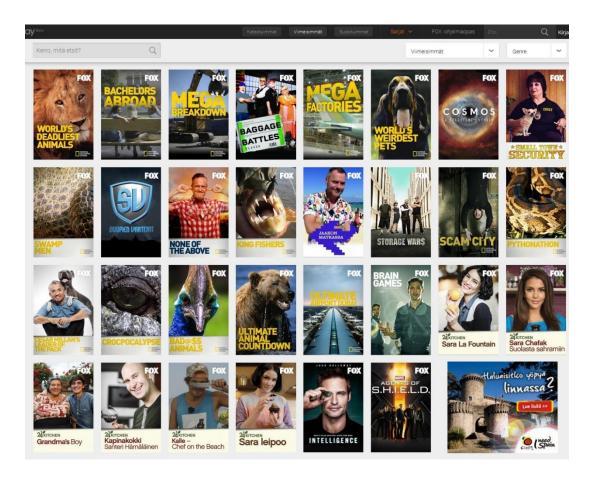




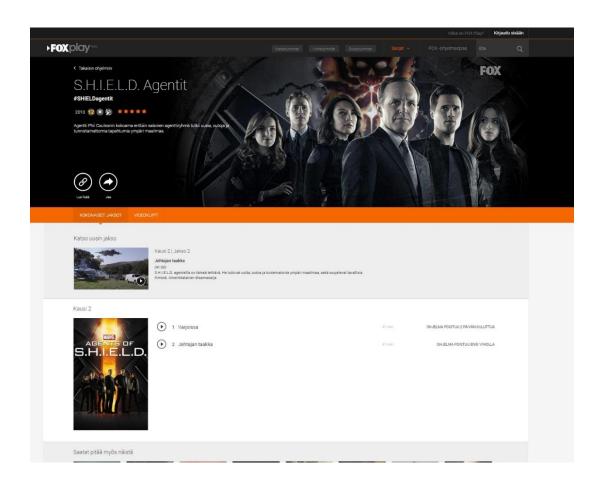




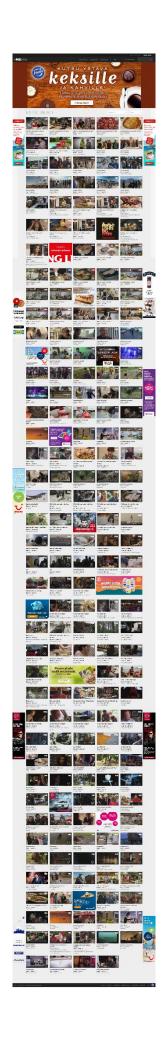


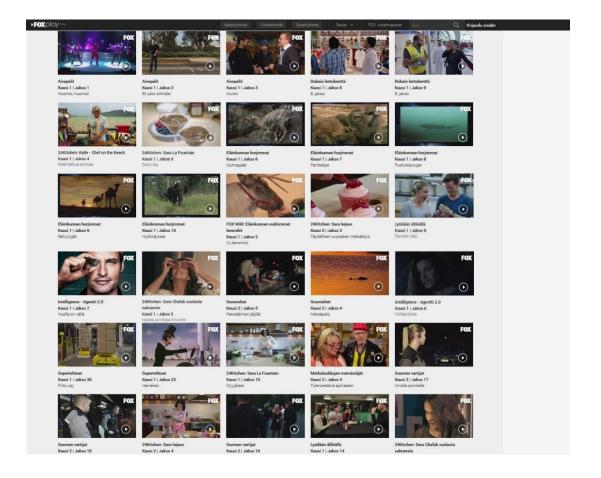


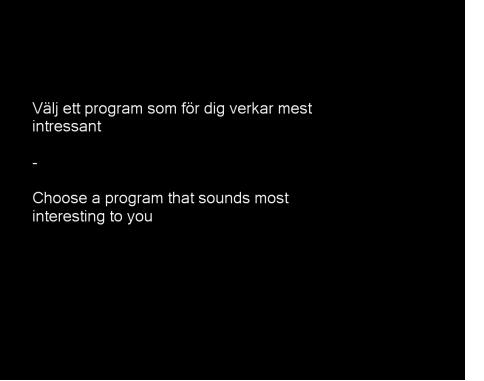


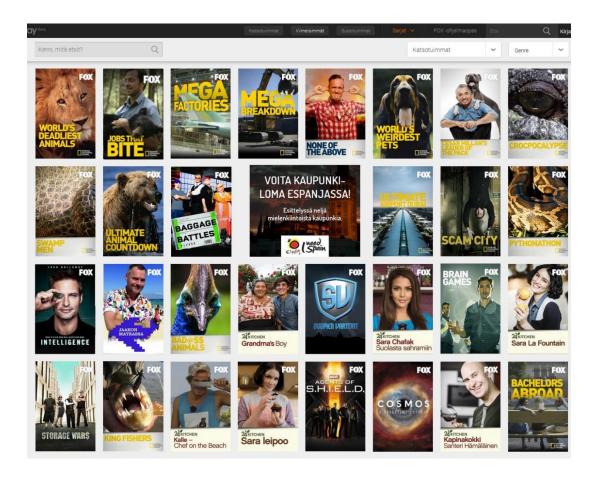


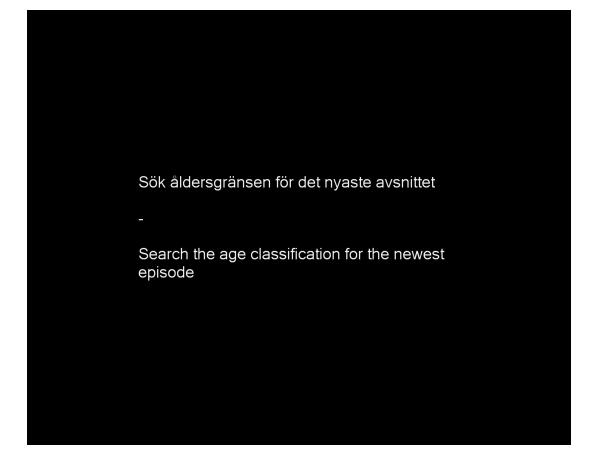




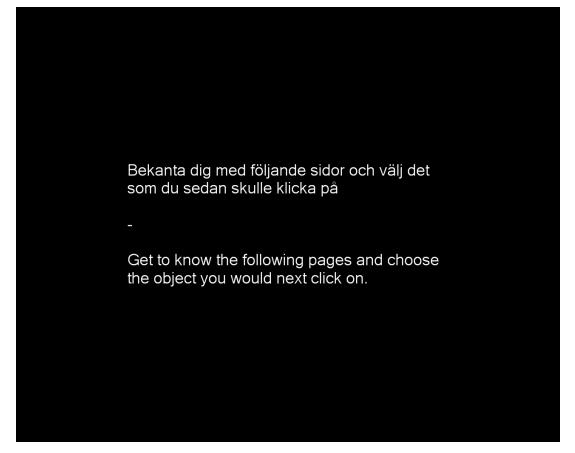


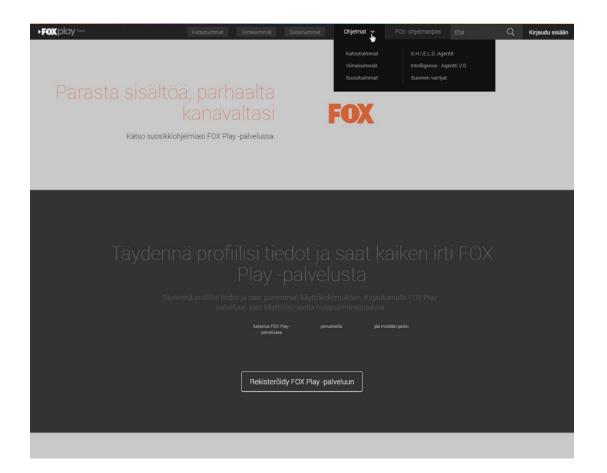


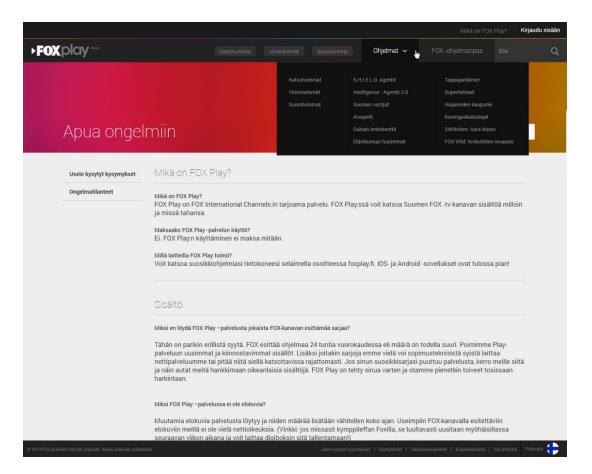












Var vänlig och svara ännu på ett kort frågeformulär

Please answer now a short questionnaire

Appendix 2: Questionnaire (In Swedish)

Identifieringsnummer:

Frå	gefori	nulär
undersöknin frivilligt och	gen är at datan ko	görs av Edward Marschan, studerande vid yrkeshögskolan Arcada. Syftet med ta reda på hur innehåll och reklam upplevs på Fox Play. Deltagande är ommer att användas för att kunna analysera Eye Tracker-delen tillsammans nationen. Enskilda respondenter kan inte identifieras utgående från det
1	Kön	
	[] []	Kvinna Man
2	Ålder	
3	Vad he	eter nätsidan som du just tittade på?
4	Hur m	ycket tittar du på tv-program i medeltal under en vecka?
	[] []	Uppskatta tiden i timmar och minuter: Jag tittar inte alls på tv-program
5	(Med 1 interne	rta ser du på tv-innehåll via internet? tv-innehåll menas hela tv-serier eller filmer från en betalbar eller gratis tettjänst. Detta inkluderar alltså INTE korta nyhetssändningar, intervjuer eller material.)
	(C) (C) (C) (C) (C) (C)	Flera gånger om dagen Varje dag Några gånger i veckan Några gånger i månaden Mer sällan Aldrig Vänd Vänd

6	Om du svarade "ja" på något i fråga 5, använder du vanligtvis (Du kan kryssa för flera alternativ)
	Uppskatta användning i % (Totalt 100)
	Dator (Bärbar eller bordsmaskin)
	,
	Mobiltelefon
	Surfplatta (Ipad eller motsvarande)
	Något annat, vad?
7	Använder du regelbundet någon av följande tjänster? (Kryssa för den tjänst eller de tjänster som du använder. Med avgiftsfri menas att tjänsten erbjuds till konsumenten utan abonnemang. Med betalbar menas att tjänsten kräver någon form av betalning för att kunna se innehållet.) — Yle Areena (avgiftsfri) — MTV Katsomo (avgiftsfri) — Ruutu (avgiftsfri, Nelonen Media) Netflix (betalbar) — HBO Nordic (betalbar) — Viaplay (betalbar) — MTV Katsomo (betalbar) — Ruutu + (betalbar) — Ruutu + (betalbar) Något annat, vad? (skriv i rutan nedanför)
8	Vilka annonsörer märkte du på sidorna? (Skriv namnen på ALLA som du minns eller beskriv dem så noggrant som möjligt)
9	Vad tyckte du om sidan? Övriga förbättringsförslag gällande reklam och programsidorna.
Jag godkänn	er att datan får användas för ovannämnda undersökningsändamål.
Unde	rskrift:
Namı	nförtydligande

Appendix 3: Questionnaire (In English)

Que	estion	naire
The aim of the Participation	ne study is volun	red by Edward Marschan, student at Arcada University of Applied Sciences. is to find out how content and advertising is perceived on Fox Play. Itary and data will be used to analyse results from the Eye Tracker with the ion. Identification of single participants from the published result is not
1	Gende [] []	Female Male
2	Age	
3	What i	is the name of the webpage you were just looking at?
4	How n	nuch television content do you watch in average during a week? Estimate the time in hours and minutes: I do not watch television content
5	(Televi free in similar	often do you watch television content online? ision content means watching complete series or movies from a chargeable or ternet service. This does NOT include short news programs, interviews or r content.) Several times per day Every day
	(최 (최 (전 (전)	Several times per week Several times per month More seldom Never Turn

Identification number:

6	If you answered "yes" in question 5, do you usually use a (You can choose several alternatives)
	Estimate the use in % (In total 100 %)
	Computer (Laptop or desktop)
	Tablet (Ipad or similar)
	Something else? What:
7	Are you regularly using some of the following services? (Mark the service or services you use. Free means something that is offered without any cost to the consumer. Paid means that the consumer has to pay a fee in order to use the service.) Yele Areena (free) MTV Katsomo (free) Ruutu (free, Nelonen Media) Netflix (paid) HBO Nordic (paid) Viaplay (paid) MTV Katsomo (paid) MTV Katsomo (paid) Ruutu + (paid) Something else, what? (write in the box below)
	MTV Katsomo (paid)
	Ruutu + (paid)
	Something else, what? (write in the box below)
8	Which advertisers did you see on the pages? (Write ALL names that you remember or describe them as good as possible.) What did you think about the page? Do you have any other suggestions of
	improvement about the advertisement and programpages.
I approve t	hat the data can be used for the study purposes described above.
Sig	nature:
Cla	rification of signature:
Cla	integral of signature.