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THE IMPACTS OF ADBLOCKING IN ONLINE ADVERTISING

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THE IMPACTS OF ADBLOCKING IN ONLINE ADVERTISING

This Bachelor's thesis studies the impact adblocking is having on online advertising. The goal was to study why internet users have started to use adblocking software, how websites have adapted to the loss of advertising revenue, how important is the lack of advertising in subscription services, and how much are users ready to pay for different types of subscription services that do not have any advertising. Adblocking software has seen huge growth over the past years, and it is becoming a serious threat to online advertising industry.

Different existing research and surveys were studied in order to get a good picture of how adblocking software is affecting online advertising. The survey that was created for the thesis was quantitative and it was about internet usage preferences. 55 Users answered the survey. The goal of the survey was to find out users preferences to online advertising, internet usage and paid subscriptions.

In conclusion, the results of the thesis indicate that annoying and intrusive ads are the main reasons why people have started using adblocking software. Internet users don't have anything against ads themselves, it is the poor quality ads that drive users to adblocking. Advertisers should focus on improving the quality of the ads and create less intrusive and annoying ads. Subscription models that have monthly fee are increasingly popular, and the lack of advertisement is one of their most important features.

KEYWORDS:

Online advertising, Adblocking, Subscription services,

Sampo Halsinaho

MAINOSTEN ESTO-OHJELMIEN VAIKUTUS INTERNET MAINONTAAN

Tässä opinnäytetyössä tutkitaan mainosten esto-ohjelmien vaikutusta internet mainontaan. Päämääränä oli tutkia miksi verkon käyttäjät ovat alkaneet käyttää mainostenesto-ohjelmia, miten verkkosivut ovat sopeutuneet, miten tärkeää mainosten poissaolo on maksullisissa tilauspalveluissa, ja kuinka paljon ihmiset ovat valmiita maksamaan erilaisista tilausmalleista joissa ei ole mainoksia. Mainosten esto-ohjelmien suosio on ollut kovassa kasvussa viime vuosina ja niistä on muodostumassa vakava uhka online-mainonnalle.

Useita olemassaolevia aiheeseen liittyviä tutkimuksia ja kyselyitä tarkasteltiin jotta saataisiin mahdollisimman hyvä kuva mainosten esto-ohjelmien vaikutuksesta nykyiseen internet mainontaan. Opinnäytetyötä varten laadittu tutkimus oli laadultaan kvantitatiivinen ja siinä kyseltiin ihmisten verkkokäytön tottumuksia. Kyselyyn vastasi 55 henkilöä. Vastausten perusteella pyrittiin saada selville ihmisten verkkokäytön tottumuksia, ja heidän suhtatumista internet mainontaan ja maksullisiin tilauspalveluihin.

Opinnäytetyön tuloksista voidaan päätellä että häiritsevät mainokset saavat käyttäjät käyttämään mainosten esto-ohjelmia. Käyttäjät eivät ole itse mainoksia vastaan, vaan niiden huono esittämistapa saa käyttäjät käyttämään mainosten esto-ohjelmia. Mainostajien tulisi keskittyä mainosten laadun parantamiseen, ja huolehtimaan etteivät mainokset häiritse käyttäjiä. Maksulliset mediapalvelut ovat hyvin suosittuja, ja mainosten puute on yksi niiden tärkeimmistä ominaisuuksista.

ASIASANAT:

Verkkomainonta, internet mainonta, mainosten esto-ohjelmat, tilauspalvelut

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LIST OF ABBREVIATIONS (OR) SYMBOLS

Ad	Advertisement
CTR	Click-through rate

1 INTRODUCTION

1.1 Background and Motivation

This thesis focuses on the adblocking in online advertising, and how it is affecting the business landscape of online advertising on the user's and content creator's viewpoint. Some of the statistics and data is from the USA, since most of the popular internet sites originate from there. Source for the data is mentioned in the relevant charts. The focus of this thesis is adblocking software used in desktop and laptop computers. Mobile adblocking usage is rapidly increasing, but vast majority of it is localized to Asia, especially to India and China. Mobile adblocking has not yet taken off in western markets, but is due to set off in near future. (Pagefair, 2017)

YouTube typically shows a 30 second ad before a video, which you can skip after 5 seconds. These ads are customized, and can vary each time you watch the same video. Like other ads, they can be customized to suit the viewer's profile, assuming that YouTube can track it. YouTube usually offers a certain amount of money to video creators, based on how much viewers the video has. YouTube pays approximately from \$2 to \$5 per 1000 views if the video has rollout-ads (video commercial before the actual video). (Pinnel, 2015) Adblocking software prevents these types of advertisements from showing, because they are a separate entity from the video itself. You can integrate the advert in the video itself, but by doing so you lose the possibility of customizing the advert to fit the needs of the viewer, and you can't track its effectiveness. Instead, the ads are inserted in the video, for example as a 15 second into before the actual content in the video starts. The viewer can skip this by using the YouTube video software, but it won't be blocked by the adblocking software. It also would be the same ad for everyone, losing the benefits of customization that the regular rollout-ad has. (Google support, 2017)

Some YouTube channels have realized the effects adblocking have, and have changed the way they generate income. Before they were dependent on the ad income from their videos, but nowadays there are alternatives to them. Private donations, personalized merchandise, and a new direct revenue source, patreon. Using patreon, people can pay a certain amount of money each month to the person/group of their choosing. For example, an educational YouTube channel called "In a Nutshell – Kurzgesagt" has a patreon program that has 3,349 patrons that generate \$12,540 dollars to him every

month. (Patreon, 2016) This allows the channel to have an income outside of the ads shown on YouTube, and bypass the effects of adblocking. This is just one of the examples that has happened due to adblocking.

While I was in an exchange in Utrecht, Netherlands I had an opportunity to study advertising. We had to choose a topic in marketing and advertising and write an essay about it, and I chose adblocking. While working on it, I realized how broad the topic is and how much there is to explore. I have personally used adblocking software for a long time, and have been following the news regarding online advertising.

I have always had an interest towards advertising, and it was one of the reasons I chose international advertising minor while studying in Netherlands. Having a good thesis on an area of advertising, for example adblocking would be a great asset to have while applying to advertising jobs in the future. It shows interest towards the field of business, and extended knowledge of the subject.

I have personally used adblocking software for several years. Since I started using them, my web browsing experience has become much better in multiple ways.

1.2 Objective of this thesis

The primary objective of this thesis is to study how adblocking affects online advertising and what has caused web users to start using adblocking software. The second aim is to study the popularity of subscription services, and how important is the lack of advertisement in different subscription services.

This thesis seeks answers to following questions:

Identify the main reasons using adblocking software.

How have websites started to adapt to loss of advertising revenue?

What alternative revenue channels can web sites use besides advertisements?

How important is the lack of advertisement in online streaming services?

How much are people willing to pay for different types of online content?

1.3 Structure of this thesis.

This thesis is constructed of 5 parts. Motivation, background and reasons for this thesis are covered in first part, introduction. Literature review covers adblocking, media usage, different website models, alternative revenue sources and streaming services. Research methodology will be described in chapter three. Part four is the empirical findings of the thesis, where answers to the survey will be analyzed, and compared to the secondary data collected. Last part is the conclusion, where we will review the key findings on ad blocking and subscription services, and suggestions on how to improve advertisements so that users don't have to depend on adblocker in order to have a satisfying web experience. It also includes limitations of this thesis and suggestions for future research.

2 LITERATURE REVIEW

2.1 Ad Blocking

Adblocking software blocks certain types of advertising from showing on user's web browser. Including, but not limited to video ads, Facebook ads, google AdWords, banner ads, and pop-up ads. Adblocking software use filters to recognize ads from other content. For example, an element that is coming from a known ad server (for example, adserver.yahoo.com) is automatically blocked. Adblocking extensions act like a firewall between the web browser and all known ad servers. Most ads are blocked by open-source web browser extensions, installed by end users. The database of blocked ad servers is curated by a large and active open source community. (Pagefair, 2015)

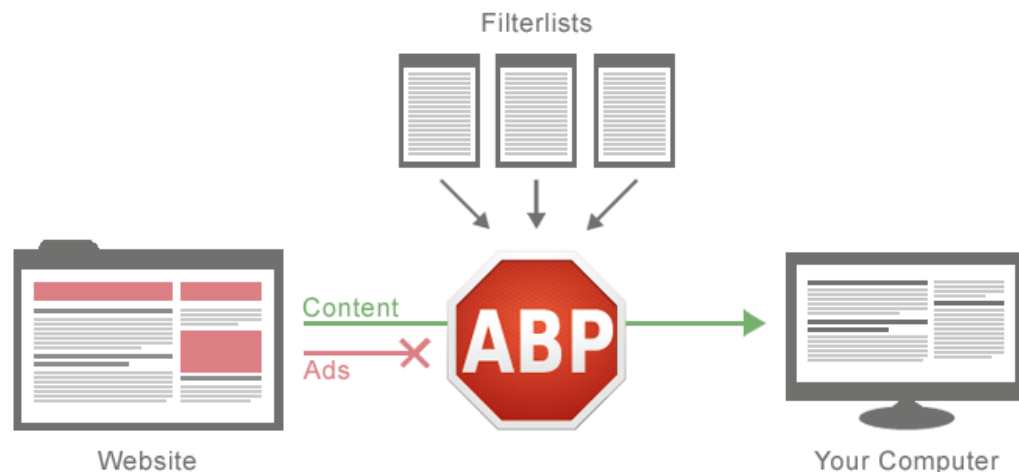


Figure 1 – How does an adblocker work (Adblockplus, 2017)

First adblocker was developed in 2002 by Henrik Aasted Sorensen. A small browser extension that could block ads with user created filters. The original source code inspired multiple adblocking software's, including Adblock, Adblock plus, and uBlock Origin. Adblock and Adblock plus are the two most popular adblocking software's. Adblock Plus was released in 2007, and was the first adblocking software to gain mainstream popularity. Currently it is available for all the major internet browsers; Google chrome, Firefox, Opera and Safari. Inspired by its popularity, "Adblock" extension was released in December 8, 2009, when extension support was added to Google Chrome. Currently it is available for Google Chrome, Firefox and Safari. Primary features of Adblocking software's are blocking unwanted content. Adblock plus has the following features: Blocking advertisement, such as video ads, image ads, pop-ups and flashy banner ads.

It disables tracking to help users stay anonymous while browsing internet. Malware protection by blocking domains that are known to spread malware. (Palant, 2006)

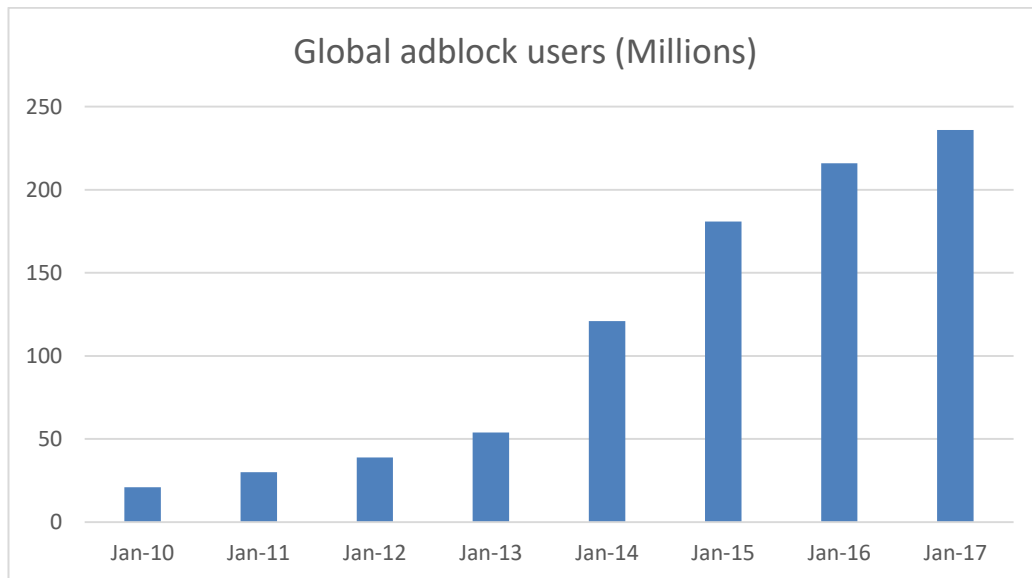


Figure 2 – Global adblock users (Pagefair, 2017)

Globally there are 236 million desktop and laptop adblock users in January 2017. (Pagefair, 2017) Google chrome is the main driver in ad block growth, partly Due to its popularity and easiness of 3rd party extensions that can be installed in google chrome. In 2015, 126 Million Adblocking extensions were installed on google chrome browsers, 48 million in Mozilla Firefox, and 22 million in other web browsers. (Pagefair, 2015)

There is a large difference is adblocking rates between different industry websites. Users that visit sites that cater to young, technologically capable audience are much more likely to use adblocking software than other users. Websites that focus on gaming, Social networking and Tech/internet are worst affected by adblocking. Government/Legal, charitable organizations and real estate websites are the least affected. (Pagefair, 2015)

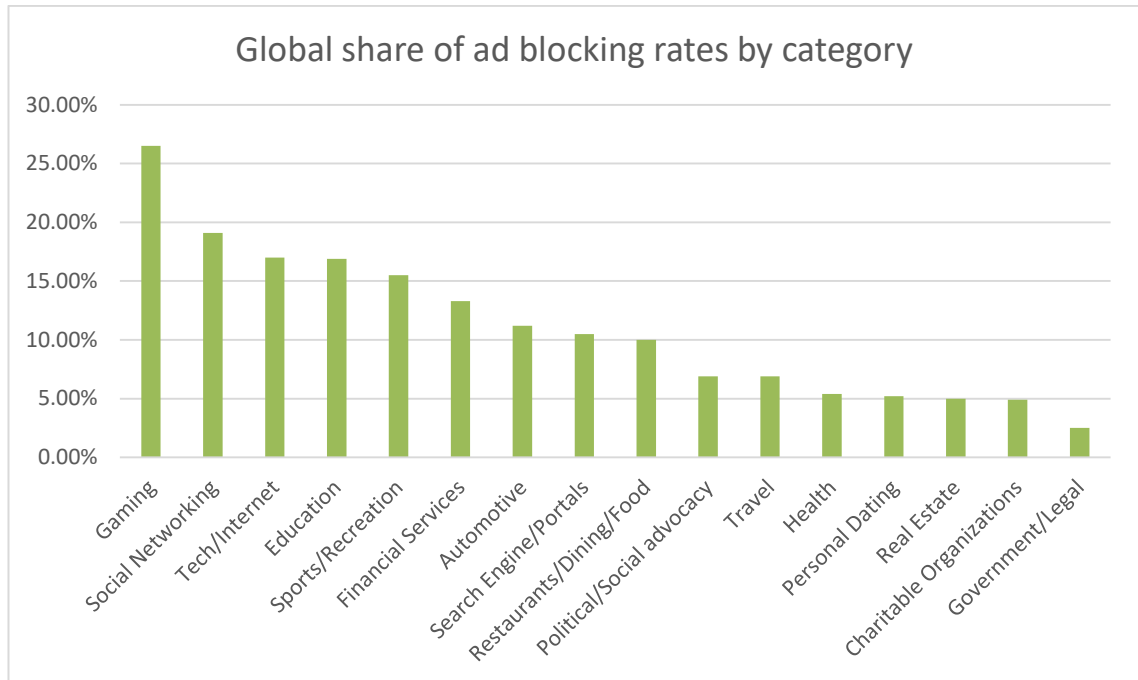


Figure 3 - Ad blocking by industry (Pagefair, 2015)

In USA, average adblock user rate is 18%. People aged 25-34 have the highest average adblock usage rate at 22%, while people over 65 have the lowest average adblock usage rate at 15%. Men are 34% more likely to use adblocking software on laptop and desktop computers than women. (Pagefair, 2017)

Word and mouth and media attention are the largest contributors to adblock growth. 37% of adblock users heard about it from a friend, colleague or family member, and 28% from the internet, news, or media. Men were most likely to hear about adblocking from internet, news or media, while women were most likely to hear about adblocking from family member. (Pagefair, 2017)

2.1.1 Reasons to start using adblocker

There are multiple reasons people start using adblocking software. However, the main reasons are:

- Ads are annoying, intrusive and interruptive.
- Security and privacy reasons.
- Ads take too much bandwidth/slow website loading speed

Advertisement in traditional media and internet might differ from each other in several ways, and so can advertising avoidance. Internet can be seen as a medium for finding knowledge, entertainment or performing tasks. This might make people avoid internet ads more than ads in traditional media. Cho and Cheon (Cho & Cheon, 2004) theorized three different factors that affect internet users ad avoidance; Perceived Goal impediment, Perceived Ad Clutter, and Prior Negative Experiences. (See Figure 4)

As stated previously, internet has other uses than just entertainment. When users actively find information or have a specific goal in mind, advertisements in internet are perceived more intrusive than in other media. Internet advertisements can therefore interrupt user's actions, which might result in outcomes such as aggravation, negative attitudes and ad avoidance. Internet advertisement can disrupt user's web viewing, distract from the web pages content and hinder user's attempts to search for desired information. All of these combined create perceived goal impediment, which in turn leads to advertisement avoidance. (Cho & Cheon, 2004)

Elliot and Speck define perceived ad clutter "as a consumer's conviction that the advertisement in medium is excessive" (Elliott & Speck, 1998) Ad clutter on the internet can be defined as the number of advertisements that appear on a web page (ad excessiveness). Too many advertisements in the internet contributes to the perception of advertisement clutter. This might lead to negative attitudes towards advertisements and cause ad avoidance. (Cho & Cheon, 2004)

When it comes to Internet advertisements, prior negative experience can be attributed as dissatisfaction and perceived lack of utility. When internet ads aren't what they promised, that can lead to negative experience. These negative experiences can cause user to avoid internet advertisements. (Cho & Cheon, 2004)

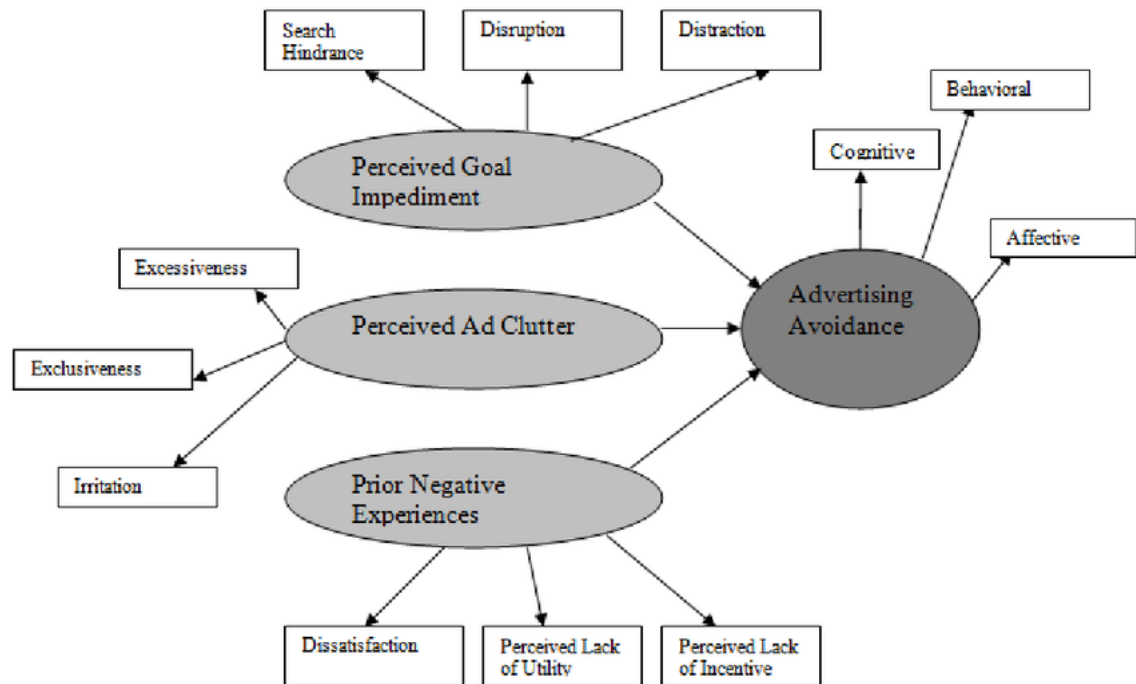


Figure 4 - Ad avoidance model (Cho & Cheon, 2004)

In some cases, online advertising is used to distribute malware to end users computers. Advertisement that is used in malicious purposes is called “malvertising”. Clicking on a so-called malvertisement can make your computer vulnerable. Popular and reputable websites with high traffic are used, including sites such as Yahoo.com, Nytimes.com, bbc.com. Google removed 780 million bad ads, a nearly 50% increase from 2014. When told how to protect against malware from advertising, adblocking is one of the suggested methods. (Zamora, 2016) According to study concluded by Association of National advertisers, ad-fraud caused 6.3 Billion dollars’ worth of damage in 2015. Online advertisements were the second-most common source of online malware, accounting for 16% of all of the malware on the internet. Malvertising not only directly harms the user whose computer becomes infected, it also damages the responsible web site’s reputation. While users need to be aware of the possible malware and maintain common sense while using internet, the responsibility is on the site publishers and the advertising intermediate (Cyphort inc., 2015)

2.1.2 Adblock walls

Since adblocking has become more common, some sites have implemented a way to prevent access to users who have adblocking software in their internet browser. They have become more popular as more web users have started using adblocking software. In a research done by pagefair, 90% of adblock users have visited a site that had an adblock wall. 74% of these users leave the website when encountering said adblocking wall. Older people are more likely to leave the website than younger users. (Pagefair, 2017)

Forbes started blocking access to their site to some users who had adblocking software installed on their web browser in 17th of December 2015. From December 17 to January 3, 21 million visitors were asked to turn off their adblocking software, and 42.4% of those did turn off their ad blocking software. (DVorkin, 2016) Since their adblock wall implementation, their Alexa has dropped from 169 to 250.

Bild.de, tabloid website published by Axel Springer completely blocked access to their site to users who have adblocking software installed in October 13 2015. Option for ad-free access was given for 2.99 Euros. Ever since that, their site rankings have dropped significantly. (Wolde, 2015) Their Alexa website ranking went from 280 to 590.

Wired started completely blocking access to their site to users who are using adblocking software installed in February 2016. An option was given for an ad-free version of wired.com for \$1 a week. (Wired, 2016) Since their adblock wall implementation, their Alexa has dropped from 710 to 1200.

2.2 Advertising, media shares

The world of media is going through major changes, mostly driven by the increasing popularity of digital services. In 2015, digital advertising in USA grew 13% to a total of \$52.2 Billion, a 28% share of total advertisement spending in 2015. Television advertisement grew 1.7% to a total of \$78.8 Billion. (Lunden, 2015) Globally the picture is similar. Digital advertisement sees rapid growth, while traditional media sees either slow growth (television) or is in decline (consumer papers, newspapers). Online marketing has grown tremendously in the past years, and is currently the second largest media type in advertising, behind TV. It is estimated that nearly \$187 billion was spent

on advertising in 2015. TV advertising share of this is \$78.8 billion, and digital share \$52 Billion. Digital remains the fastest growing category in advertising. (McKinsley&Company, 2015)

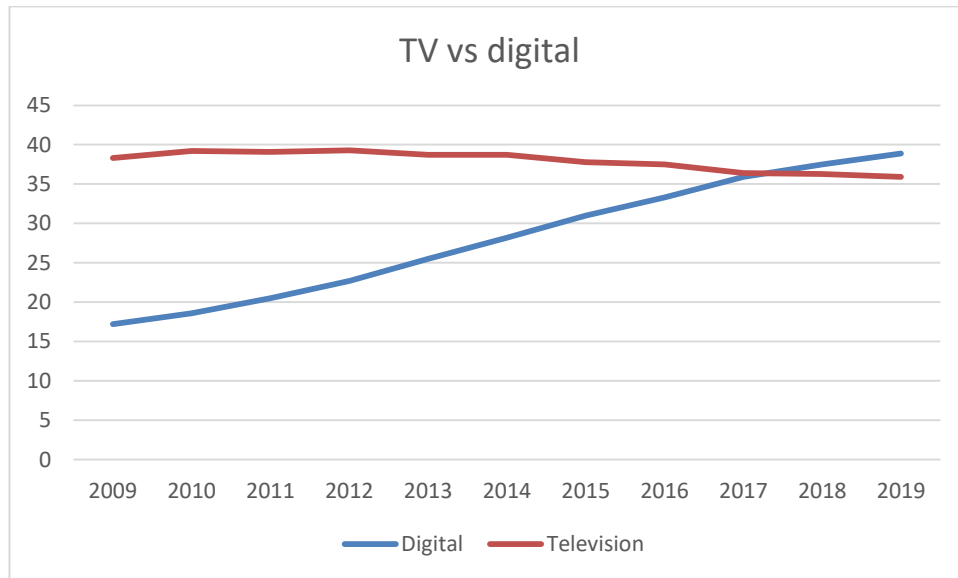


Figure 5 – Global advertisement shares by category (percent) (McKinsley&Company, 2015)

Mobile based impressions and sales are the primary growth driver in digital advertising. In 2016, mobile advertising was 45% of total digital advertising. It is expected that in 2017 mobile advertising will become the leading form of digital advertising. Social media, video and search advertising are the fastest growing portions of digital advertising. They are also most rapidly transitioning into mobile landscape. 2016 was the first year that desktop-based ad sales saw no growth. One reason for this shift to mobile-centric digital advertising is the decline in desktop impressions caused by adblockers. Mobile advertising is still mostly unaffected by adblocking. In 2016, display banner ad sales shrank by -3%, first time they have seen decline since their introduction. Other, more exiting types of advertisements have taken their place, such as influencer marketing. (Letang & Stillman, 2016)

2.3 Mobile adblocking

Adblocking software has not yet found its way to mobile devices in North America or Europe. Manufacturers or distributors do not offer pre-configured adblocking packages

in North America or Europe, which is holding back adblocking in Mobile devices. Partnerships between device manufacturers and distributors are more coming in Asia, which is accelerating the rapid growth of mobile adblocking in Asia. (Pagefair, 2017) 94% of all mobile adblocking usage is in Asia, with China and India being the being the forerunners in mobile adblocking. India has 136 million devices with adblocking software installed, while China has 116 million. More than half (59%) of the mobile phones in India have adblocking software installed. USA has 18% desktop ad blocking rate, and 1% mobile ad blocking rate. India has 1% desktop ad blocking rate, and 28% mobile ad blocking rate. (Pagefair, 2017)

As adblocking improves page load speed and reduces bandwidth, Asian markets are more attractive for mobile adblocking as mobile data infrastructure is less developed there than it is in North America or Europe. (Pagefair, 2016)

It is estimated that the first well implemented mobile adblocking solution in North America or Europe will gain a large user base from former desktop adblock users. (Pagefair, 2017). In March 2016 there were 8.9 Million active users of adblocking software in North America and Europe. From September 2014 to March 2016 there were 4.9 million content blocking and in-app adblocking apps downloaded from app stores in Europe and North America. Adblocking browsers have more than twice as many users in Europe than in North America. While content blocking apps are three times more popular in North America. (Pagefair, 2016)

UC browser in its different versions is overwhelmingly most popular adblocking browser in market. Its main selling points are faster downloading, data saving and ad blocking. (Play store, 2017). UC browsers have more users than all other forms of mobile adblocking combined. (Pagefair, 2016)

2.4 Subscription and advertisement models

There are different ways to pay for the upkeep of a website. Most common ways are subscription model and advertisement model. In Subscription model, user pays for a fixed amount per week, month or year for services or content. In Advertisement model website offers free access to their services or content. In exchange, the website sells advertisement in order to make money. (Kokemuller, 2013) In 2010 Internet Advertisement bureau Europe surveyed the value of digital services financed by online

advertisement. Key findings were that users have large benefit from free web services, significantly larger than the advertisement revenue that the websites earn from providing these services. More than 80% of current web users generate more value from using the web than what they would be willing to pay not to see any ads. What web users were willing to pay in total was less than the online advertisement revenue generated from advertisement, therefore making the economic equation of Internet innovation unsustainable. (Internet Advertisement Bureau, 2010)

2.5 Streaming services

Streaming services are getting increasingly popular. On this section we will be looking into different streaming services, focusing on Netflix, Hulu, amazon prime, Spotify and YouTube red.

Netflix was founded in 1997. Originally they offered DVD-by-mail service, and expanded into online streaming service in January 2007. While their DVD-by-mail service was relatively successful (They delivered their billionth DVD in February 2007), they started to move away from the mail service and invest more time and effort into the now growing streaming service. (Netflix, 2017) From its introduction in 2007 to 2017, Netflix streaming service has seen steady growth. (Statista, 2017) Netflix generated \$8.3 Billion in revenue in 2016. (Netflix, 2017)

Currently Netflix offers three streaming plans: (Netflix, 2017)

1 Screen – Watch on 1 screen at a time in Standard Definition. Download videos on 1 phone or tablet. €7.99/month

2 Screens + HD - Watch on 2 screens at a time. HD available. Download videos on 2 phones or tablets. €9.99/month

4 Screens + Ultra HD - Watch on 4 screens at a time. HD and Ultra HD available. Download videos on 4 phones or tablets. €11.99/month

Netflix does not show any ads on their streaming service. Ad-free experience is becoming more and more valuable to customers. In a survey done by Exstreamist, 79% responded that they would rather pay more to not see advertisement while streaming. (Toledo, 2015) In a survey done by Allflicks, 90% said that they would rather pay more for Netflix than see advertisement while streaming. (Lovely, 2016). In Exstreamist's

survey, 56% of participants would cancel their subscription if Netflix started showing advertisements. In Allflicks survey, 74% would cancel their subscription if Netflix started showing advertisements. 27% of participants would listed “too many ads” as a reason to cancel their subscription

Hulu is an American subscription video on demand service. They offer two different plans, Limited commercial plan at \$7.99 per month, and no commercial plan at \$11.99 per month. (Hulu, 2017) Hulu dropped its free streaming service on August 8 2016. (Spangler, 2016) It was a free streaming service plan that relied on advertisements to generate revenue.

YouTube red is a paid membership to YouTube that offers multiple benefits compared to the basic version of YouTube. It offers Ad-free videos, ability to save videos to watch offline, background play, audio mode and access to Google play music subscription. YouTube explains how ad-free videos work as following: *“With YouTube Red, you can watch millions of videos without ads. Videos on YouTube Red won’t include pre-roll or mid-roll video ads, banner ads, search ads, homepage banner ads, and in-video text-overlay ads. You may still see incidental branding or promotions embedded in creators’ content that isn’t controlled by YouTube. Ad-free videos are supported across all devices and platforms where you can sign in with your YouTube account.”* (YouTube, 2017) Launched in October 2015, YouTube red has gathered 1.5 million paying subscribers to this date. (Singleton, 2016)

Amazon Prime video is a video on demand service that is. Originally part of Amazon’s Prime subscription, in 18 April 2016 it was split from Amazon prime and is offered separately for \$8.99 per month in the USA, or €5.99 in Europe. It is still included in the Amazon prime, which costs \$10.99 per month. (Amazon, 2017) As Amazon Prime video is part of amazon prime, it is difficult to accurately estimate how many people actively use amazon Prime video.

Spotify is one of the world’s largest music streaming services with over 100 million monthly users. They offer two different streaming plans. Free occasional with occasional advertisements between songs. Premium plan at 9.99€ per month without any advertisement. (Spotify, 2017) In 15 September 2016, 40 million users had the premium subscription. (Mihai, 2016)

All of these streaming services share the same common thing; the lack of advertising. Hulu had a free streaming service that had ads, but it has been discontinued. This

reinforces the idea that customers are trying to avoid ads as much as possible. Every streaming plan has a similar price range, with monthly subscription costs being between 5.99 euros or dollars to 19.99 euros or dollars.

Name	Media Type	Price per month (€)
Netflix	Video	7.99/9.99/11.99
Hulu	Video	7.99/11.99
Amazon prime video	Video	5.99
YouTube Red	Video	10
HBO Now	Video	14.99
Tidal	Music	9.99/19.99
Spotify	Music	9.99
Apple Music	Music	9.99

Figure 6 - Comparison of online subscription services

2.6 Alternative channels for income

As ad blocking is becoming ever more popular, online advertising needs to start adapting in order to survive. With reported CTR as low as 0.05% from online displays and banner ads, (Chaffey, 2017) content creators and websites have started to look for different sources of income than ads.

Patreon is a website that allows content creators to directly receive payment for their work. Users pay a certain amount per month or per content release (video, blog post, song etc.) Founded in May 2013, more than 125,000 content creators signed up to Patreon in its first 18 months. In November 2014 Patreon announced that they were paying 1 Million dollars per month to its network of content creators (Dredge, 2015)

Out of the ten largest Patreon creators, seven use YouTube as their primary distribution platform. (graphtreon, 2017) Traditionally, content creators that use YouTube as their distribution platform rely on the ad revenue from advertisements shown in their video. Either Video ads before the feature video, display ads on the right side of the feature video, overlay ads that appear on the lower 20% of the feature video or sponsored cards that display content that can be relevant to the video that is being viewed. (Google, 2017)

Following the rise of social media sites such as Instagram, YouTube, snapchat and other platforms, Influencer marketing is becoming increasingly popular. Influencer marketing is a type of marketing where the focus is on an individual, instead of the target market. Influencer marketing is about using a well-known online influencer to promote a certain

product or service through their personal social media accounts. Celebrity branding has been around for a long time, but influencer marketing focuses on smaller and more focused audiences. Instead of reaching millions of random people through celebrities, influencer marketing reaches audiences of tens to hundreds of thousands (Adweek, 2017). In a study done by Nielsen Catalina solutions and tapinfluence, Influencer marketing reported 11 times better return of interest than traditional banner ads. (Tapinfluence, 2017)

3 RESEARCH METHODOLOGY

3.1 Research methods

The goal of this thesis is to understand the reasons people have started using adblocking software, and the effects adblocking is having on online advertising. Primary data was collected using the survey created for this thesis. Secondary data was collected from various surveys, news articles, blogs and literature.

Research methods refer to systematic, focused and orderly collection of data for the purpose of obtaining information from them, to solve and answer our research problems or questions. The methods are different from techniques of data collection. By methods we mean data collection through historical review and analysis, surveys, field experiments and case studies, while by techniques we mean a step-by-step procedure that we follow to gather data and analyze them for finding the answers to our research question. (Ghuri & Gronhaug, 2002, pp. 85-88)

Difference between qualitative and quantitative research is procedure, not 'quality'. In qualitative research, emphasis is on understanding. Qualitative research has three major components;

- Data: Collected through different methods, such as interview, observations or surveys.
- Interpretive or analytical procedure: the techniques to conceptualize and analyze the data in order to create findings or theories
- Report: Verbal or written. In our case, a thesis.

Quantitative research collects and analyzes data in a logical and critical way. Qualitative research requires larger sample size than qualitative data in order to be trustworthy. Using tools such as graphs, charts and tables is a great way to visualize quantitative data. Quantitative and qualitative methods are often not mutually exclusive, and are often used to support each other. (Ghuri & Gronhaug, 2002, pp. 85-88)

Quantitative research methods were used in this thesis. A survey about adblocking preferences was created to find out what causes people to use adblocking software. The survey also included questions about subscription models to see if adblocking and the rising popularity subscription models have any connection.

3.2 Data collection and analysis

When there is no available or insufficient data to answer our research question, data must be collected by the researcher. This is called Primary data. Research questions, design and problems define what we should be looking for, and how should we look for it. Primary data can be collected by observations, experiments, surveys and interviews. (Ghauri & Gronhaug, 2002, pp. 76-83)

Main advantages of primary data is that they are collected for the particular research. Questions are constructed in a way that gives us the best answers and questions align with our research questions and research objectives. Disadvantages of primary data are cost and time. Collecting primary data can take a long time and cost a lot of money. Researcher might have limited resources to access, which might limit the number of possible answers to a questionnaire, survey or interviews. (Ghauri & Gronhaug, 2002, pp. 76-83)

Secondary data is information that is collected by someone else than the researcher. It can be collected for same or different purpose than our research. Secondary data helps us answer research questions or solving some or all of the research problems. Secondary data provides a benchmark results that we can use when analyzing our own primary data. (Ghauri & Gronhaug, 2002, pp. 76-83)

Main advantages of secondary data is the saving in time and money. Other advantages it gives something to compare the primary data with. Combining both primary and secondary data might be the best way to answer some research questions. Secondary data has disadvantages as well. One of the main problems is that the data collected for another study was collected for different reason, and therefor might not completely 'fit' our problem. (Ghauri & Gronhaug, 2002, pp. 76-83)

This thesis uses both primary and secondary data. Primary data was collected from the online survey that was answered by 55 people. The survey was created using a survey tool Webropol, and was made in English since the audience was worldwide. Target group was internet users of all demographics, both adblock users and non-adblock users. The survey consisted of eleven questions, regarding online advertising, adblocking and paid subscription services. Questions had yes/no answers, Likert-scales and multiple choice questions. Secondary data was collected from various surveys, news articles, blogs and literature.

4 SURVEY FINDINGS

In order to get up to date information about users adblocking preferences, an online survey was conducted. Due to its convenient nature, online survey was selected. Personal interviews were being considered, but as the final survey was mostly quantitative an online survey was chosen as the method. The survey was open for five days from 1st of March to 5th of March and gathered a total of 55 answers. Survey focused on adblocking preferences, experiences about online advertisement and subscriptions on regular and streaming websites. Target group was internet users, both adblock users and non-adblock users. Of the respondents, 33 (60%) were men and 22 (40%) were women. Age ranged from 13 to 60, with majority being between 20 and 30. As adblocking is a global trend, I wanted to get answers from all over the world. For this, the survey was posted on a forum dedicated to academic and casual surveys (www.reddit.com/r/SampleSize/), as well as to author's friends. 55 answers were received in the end.

After having 55 answers to the survey, we get 13% margin of error for the survey. (surveymonkey, 2017) On some questions there were not enough answers from women, and therefore no analysis was done on their behavior compared to men.

The Survey had few goals to fulfill. It was to confirm and reinforce existing data found from previous research done on adblocking, and provide as up-to-date information as possible about the subject. Chart types were selected in order to visualize the answers as best as possible, and a constant theme was used throughout the answers when possible. There was eleven questions in total.

4.1 Demographics (Questions 1 & 2)

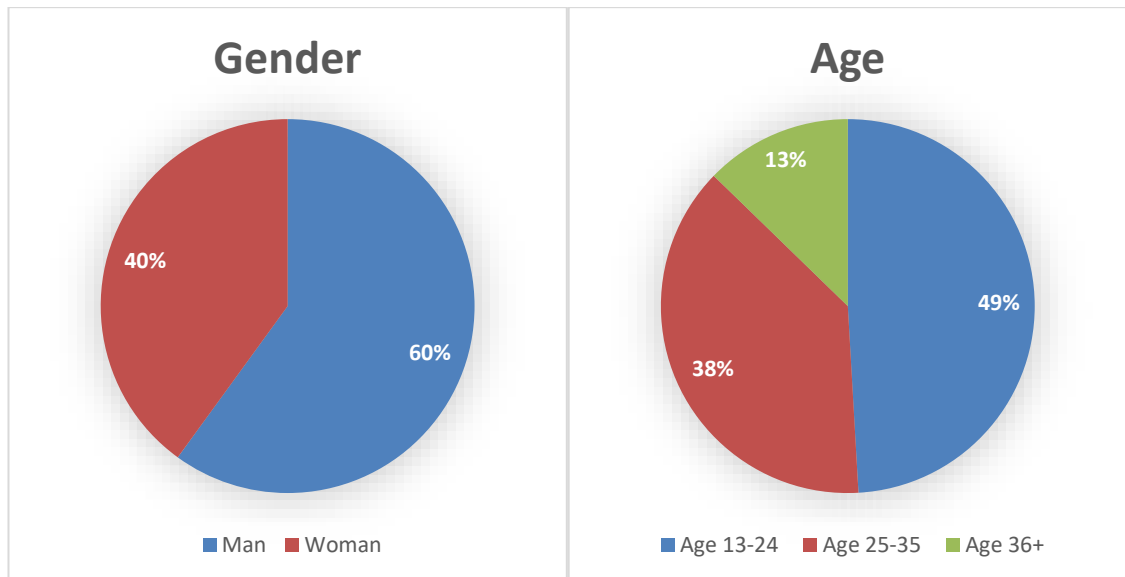


Figure 7 - The gender distribution

Figure 8 - The age distribution

Of the respondents, 33 (60%) were men, and 22 women (40%) Age ranged from 13 to 60, with majority being between 20 and 30. Only 5 people were over 37 years old, which is why I was not able to create effective correlation in age demographics in questions. Youngest respondent was 13 years old, and oldest was 60 old.

4.2 Adblocking usage

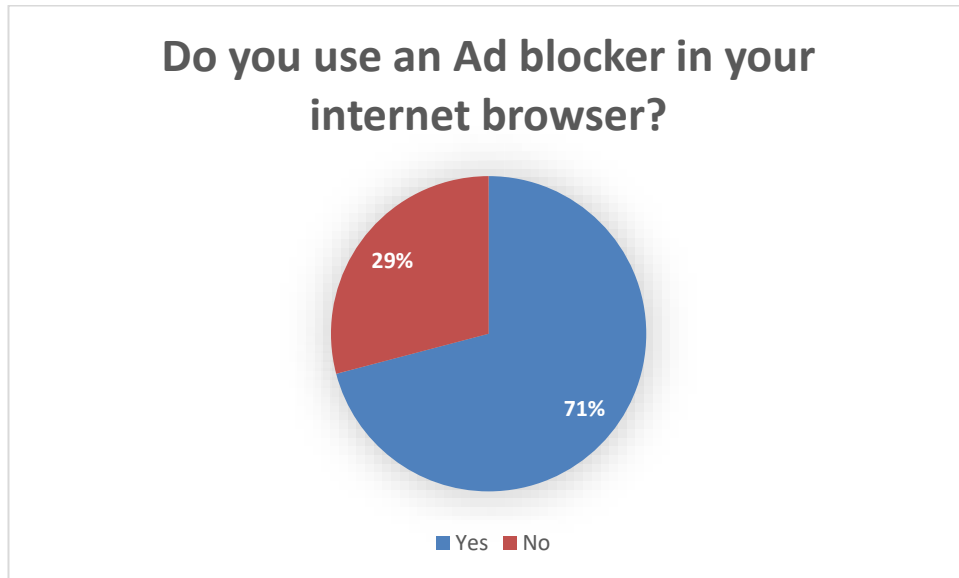


Figure 9 - Adblocking usage

39 (71%) Answered that they use adblocker, while 16 (29%) answered that they do not use adblocker. There was a significant difference in adblock use between genders:

- Of 33 men, 30 (91%) answered that they do use adblocker, and 3 (9%) answered that they do not use adblocker.
- Of 22 women, 9(41%) answered that they do use adblocker, while 13(59%) answered that they do not use adblocker

Pagefair's 2017 adblock survey states that men are 34% more likely to use adblock software on desktop and laptop computers. Our findings support that statement. While our numbers indicate that men are much more likely to use, it can be attributed to small sample size. Those who answered no went did not answer next two questions.

4.3 Adblock user motivations

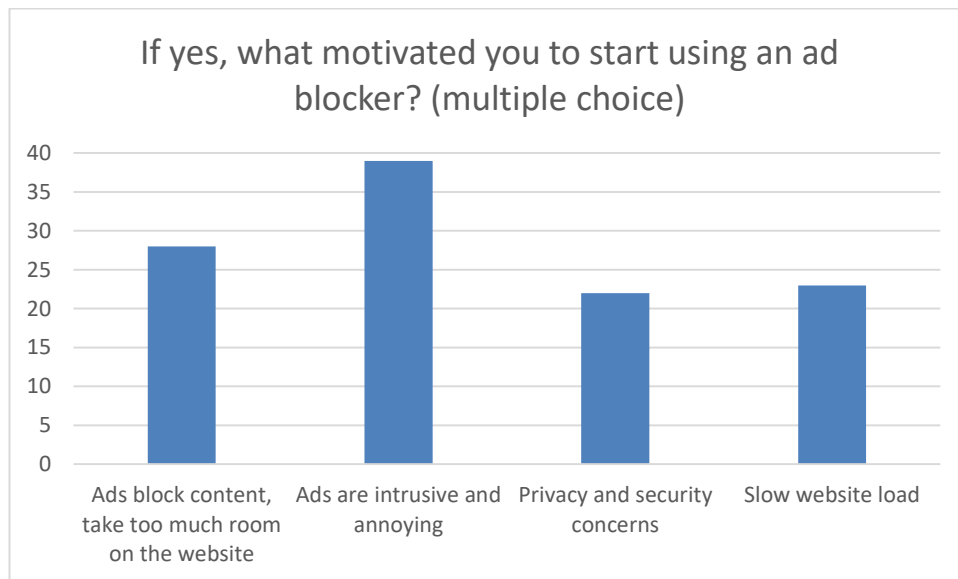


Figure 10 – Motivations behind adblocking

Ads being annoying and intrusive was the leading choice in what motivated users to start using adblocker. In fact, everyone (39 out of 39) who said that they used adblocker selected it as an option. Pagefair’s 2017 report on adblocking has security (30%) and interruptive ad formats (29%) as leading reasons for adblock usage. (Pagefair, 2017) Our findings seem to support their data. Hubspot’s survey on adblocking preferences had similar results. When asked why they use adblocker, 64% find ads annoying and intrusive, 54% say that ads disrupt what they are doing, and 39% have security concerns (An, 2016).

Pagefair’s 2017 report states that women are 38% more likely to indicate concerns about security as their main motivation. (Pagefair, 2017) In our survey, 7 out of 9 women (78%) listed security as their reason to start using adblocking software. Of men, 15 (50%) listed security as a reason to start using adblocking software. Women seem to value security and privacy more, while men are more interested in smoother user experience. Every choice received a lot of answers in our survey, which indicates that adblocking is not solving just one problem for users. In Pagefair’s survey, over 70% of the respondents chose more than one reason as “most important”, which reinforces the previous finding. (Pagefair, 2017)

4.4 Adblocking walls

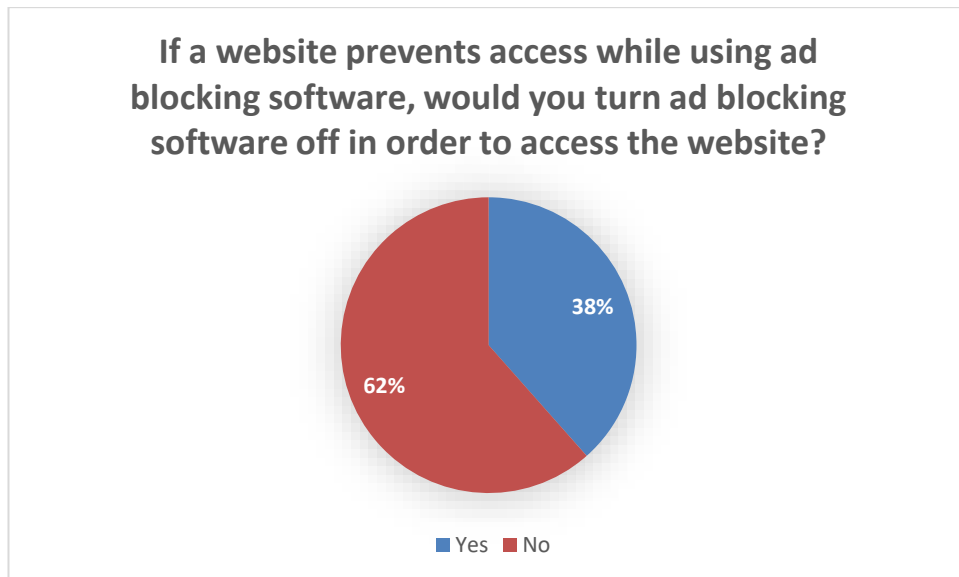


Figure 11 - Reactions to adblocking walls

When asked if users would be willing to turn off adblocker in order to access website, majority would not be willing to turn it off and would rather leave the site. In Pagefair's 2017 report 74% of the respondents said that they would leave the website when facing and adblock wall. In our survey 62% of the respondents would rather leave the website than turn off the adblocking software.

- Of men, 66% would leave the website rather than turn off the adblocking software.
- Of women, 50% would leave the website rather than turn off the adblocking software.

Pagefair's report indicates that older people are more likely to leave the website when faced with adblock wall than younger people. (Pagefair, 2017)

Looking at our results and previous examples (Bilt.de, Forbes, Wired.com), it seems that "Adblock walls" are not an effective method. Visitors are very likely to go to other similar websites, and are only likely to turn off the adblocking software if the site has exclusive content that cannot be obtained elsewhere.

4.5 Ad preferences

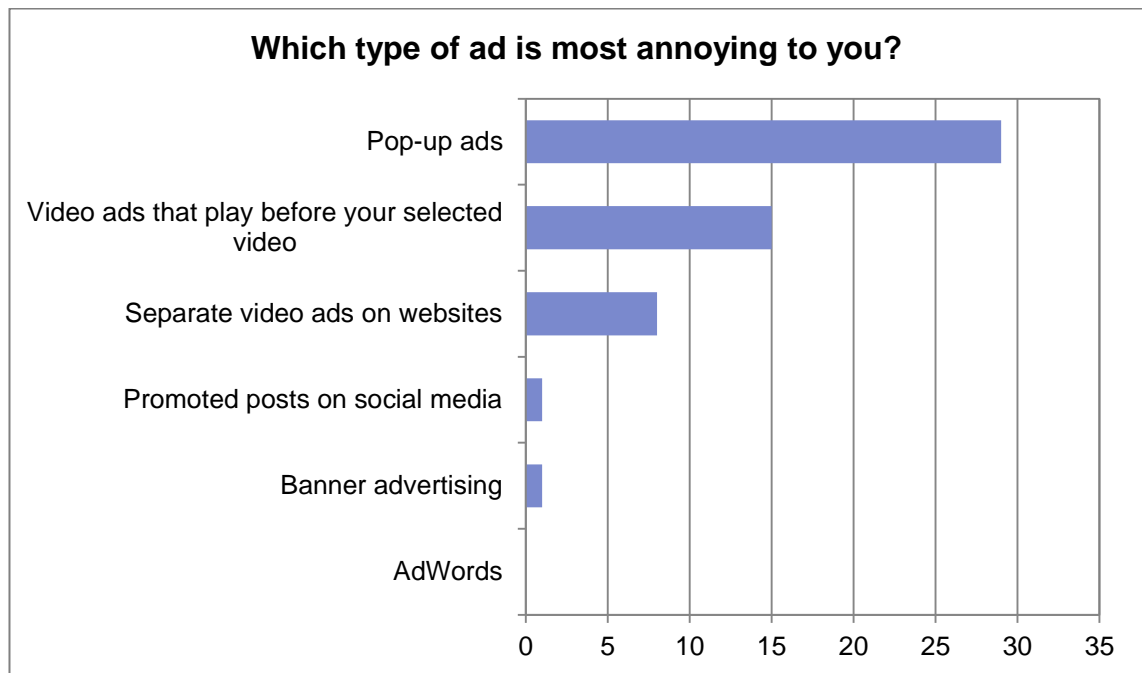


Figure 12 - Ad preferences

Majority of the respondents selected pop-up ads as the most annoying ad type, with video ads being the second most annoying. Banner ads and AdWords are much more discreet, and only one person selected them. Promoted posts on social media received only one vote. There was little difference in how men and women answered.

According to Pagefair's 2017 survey, Static banner ads were the most preferred ad format, and non-skippable video ads were the most disliked. (Pagefair, 2017) In a survey done by Hubspot.com, 73% of respondents disliked online pop-up ads. (An, 2016)

Ad formats that interrupt the web browsing experience are the primary cause of frustration to web users, and are one of the main reasons people start using ad blocking software. Static ads such as banner ads and text ads are much more preferable, and are accepted by web users. Text ads rarely interrupt our web browsing, while automatically played video ads and pop-ups can cause distractions and frustrate web users.

According to Hubspot's survey, 91% of people agree that ads are more intrusive today than they were two to three years ago, and 87% agree that there are more ads in general (An, 2016).

4.6 Willingness to subscribe and donate to websites

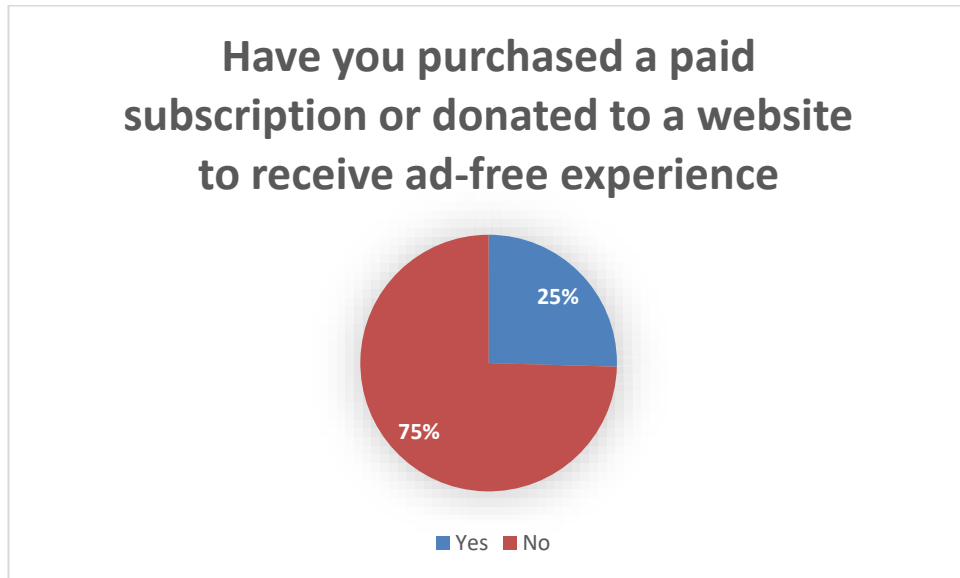


Figure 13 - Subscription and donation practices

Majority of the respondents have not purchased a paid subscription or donated to a website for an ad-free experience. 30% of men have paid for a subscription or made a donation, while 18% of women had done the same. In a survey done by Hubspot, 15% of the respondents said that they could turn off adblocking software if website offered fewer ads in exchange for a paying subscription. (An, 2016)

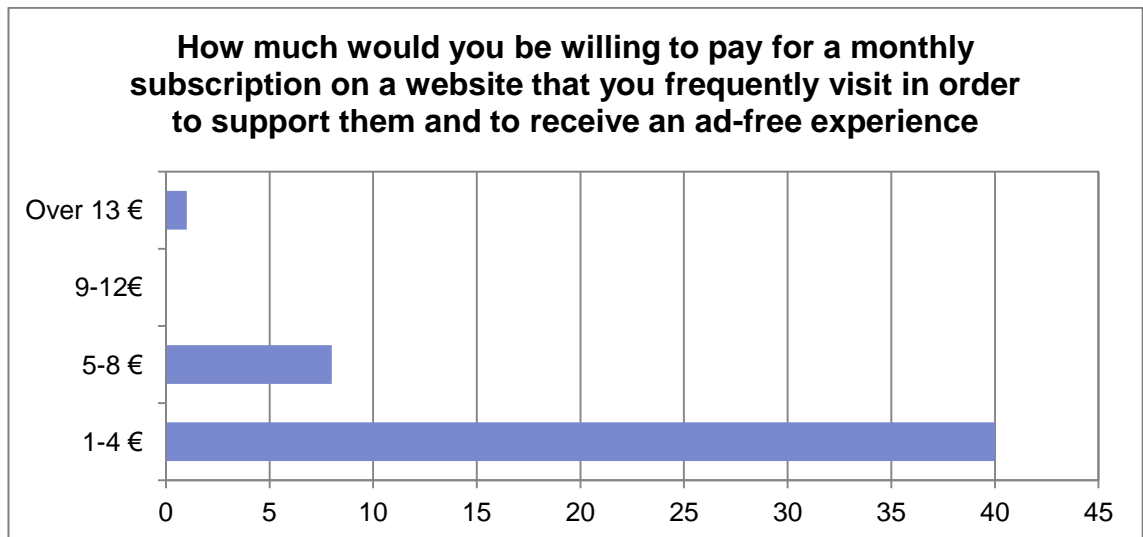


Figure 14 - Amount of money users are willing to pay or donate to not see any ads

Majority of the respondents were willing to pay under €5. Only 18% of respondents were willing to pay more than €5. No option was given not to pay, so this data should be analyzed as how much people would be willing to pay, not as if they are willing to pay.

In a survey conducted by Allflicks, majority of the people were willing to pay 1-3 dollars more per month for their Netflix subscription in order not to see any ads (Lovely, 2016). In a survey conducted by Exstreamist, majority of the people were also willing to pay 1-3 dollars more per month for their Netflix subscription in order not to see any ads. 78% would rather pay more than see any ads. (Toledo, 2015)

4.7 Streaming services

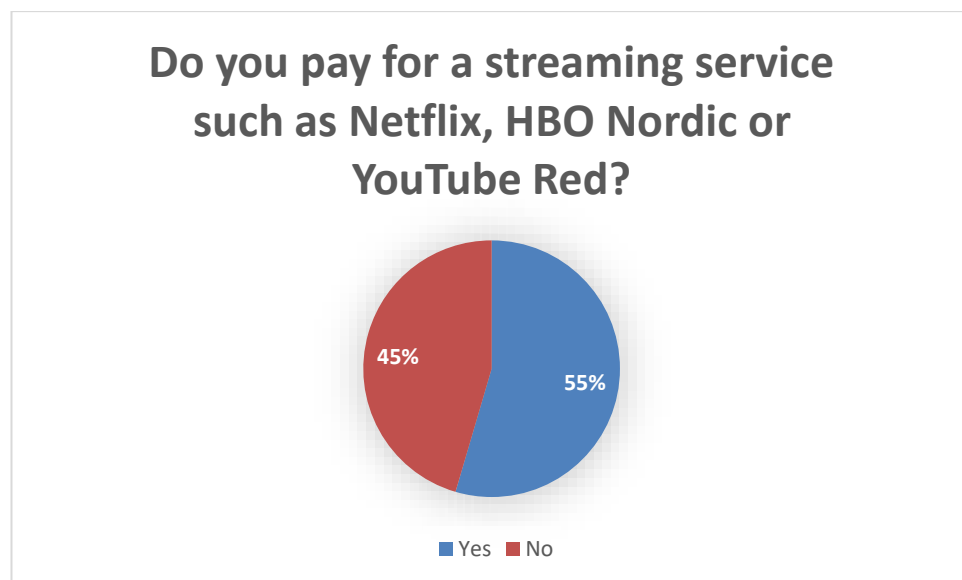


Figure 15 - Subscription preferences

30 of the respondents said that they are currently paying for a streaming service, while 25 are not paying for one. 68% of women are currently paying for a subscription service, while only 45% of men are currently paying for a subscription service

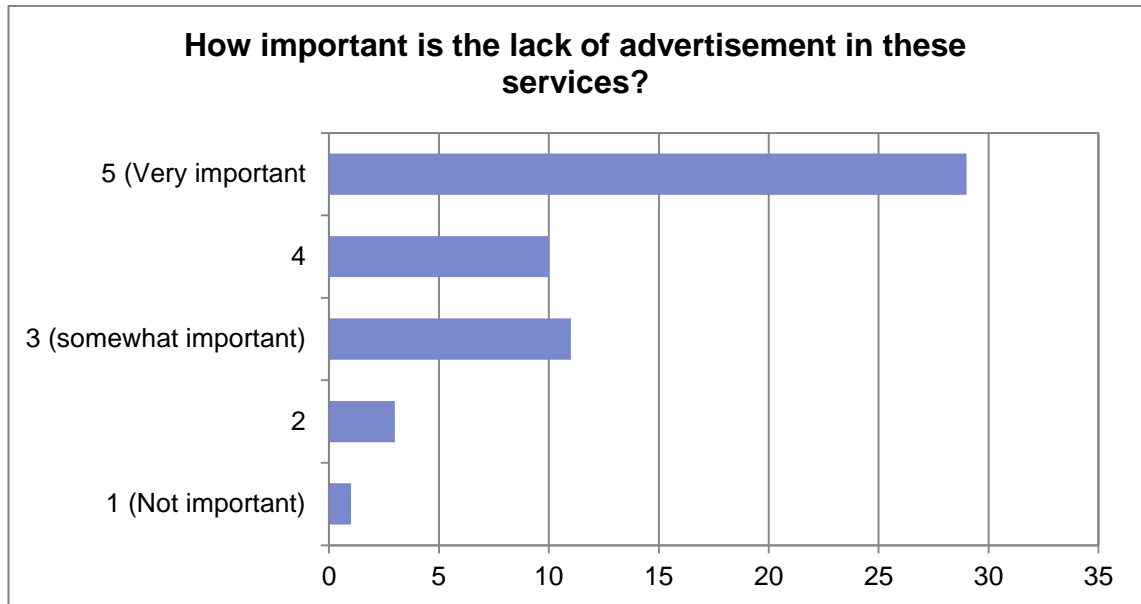


Figure 16 - Importance of lack of advertisement in subscription services

When asked about the importance of lack of advertisement in these services, majority of the respondents considered it very important.

Total average was 4.2.

For men, average was 4.5

For women, average was 3.6

(Note; this question was also asked from those who do not currently pay for a subscription service. Even if they are currently not paying for a one, they might be considering doing so and might have formed an opinion on the importance of advertisement, or the lack of it.)

Lack of advertisement is one of primary benefits for Netflix compares to traditional television. According to research done by Allflicks, 90% of respondents would rather pay more for Netflix than watch advertisements. If Netflix started showing ads, 74% of respondents said that they would rather cancel their subscription than keep paying for subscription and watch ads. (Lovely, 2016). In a survey done by exstreamist, 79% would rather pay more for Netflix than watch ads, and 56% would cancel their subscriptions if they had to watch 3rd party advertisements. (Toledo, 2015)

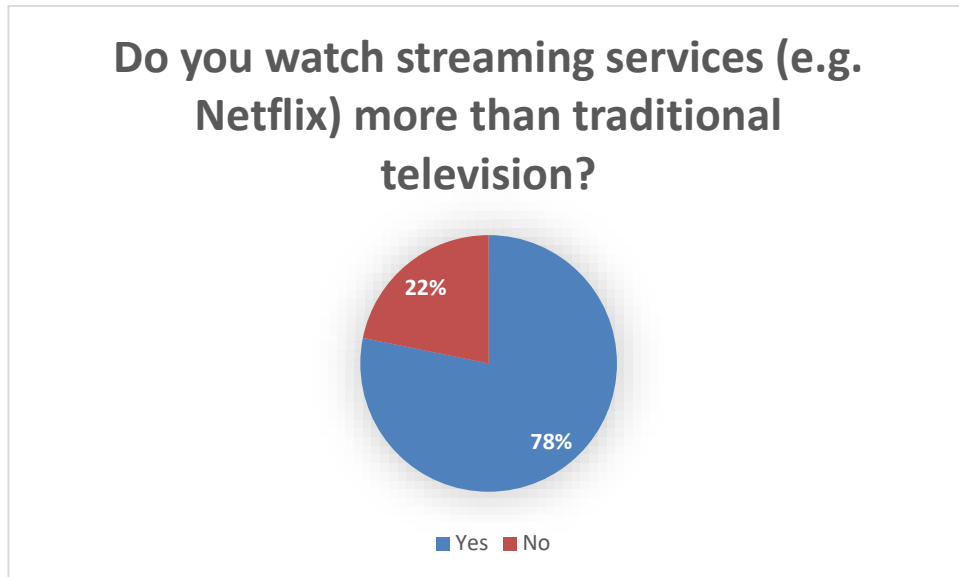


Figure 17 - Streaming service use rates

Majority of the respondents said that they watch streaming services more than television.

Average time spent watching television is going down every year, especially for young people. Time spent watching television has dropped from 4 hours 34 minutes in 2011 to 4 hours 15 minutes in 2015. (Marketingcharts, 2017) Netflix subscriber count has went up from 26.5 Million in 2012 to 81.5 Million in 2015 (Statista, 2017)

5 CONCLUSION

5.1 Research findings

Based on our survey and secondary data, adblock users are likely to be young men who are interested in technology, and spend more time online than average internet user. They visit technology related web sites and use social media. Advertisements that disrupt the online experience were the main reason why users have started to use adblockers, followed by security and privacy concerns.

Websites have adapted to adblockers in various ways; Blocking content from users who have adblockers installed, asking adblocking users to whitelist their page, introducing a paid subscription model besides free, advertised model. Subscription services, Influencer marketing and directly donating to content creators are all gaining more popularity, and are not affected by adblocking. Adblocking walls that block adblock users are not effective in making users turn off their adblockers, instead they are more likely to make users stop visiting the site. Asking for user to whitelist the page can make some users turn off the adblocker for that site. (DVorkin, 2016)

Theoretical framework and the gathered data from the survey both show that adblockers are gaining popularity, and will continue to do so. Users have nothing against the ads themselves, and understand that they are necessary for sites to operate. It is the low quality, disruptive ads that drive users to seek out ways to block them, and have a better online experience. Ad avoidance is a symptom of bad advertising practices, not from user's innate want to block advertisements. From our survey and secondary data, we can conclude that the three main reasons behind the increasing adblocking usage are disruption, security and privacy issues, and inconvenience (slow website load). Disruption and inconvenience line up with Cho and Cheon's theory of ad avoidance. Too many and too excessive advertisement create perceived ad clutter. Perceived goal impediment is the result of Interruptive ads that disrupt and distract user. (Cho & Cheon, 2004) In order to gain back the users trust, advertisers and publishers need to listen to users feedback and create advertisement that are not distracting, and don't compromise users security.

Subscription services that rely on copyrighted material have enough value that they can charge more for subscription than other sites. Users are ready to pay from one to four

euros to access websites without being exposed to advertisements. For subscriptions that provide access to copyrighted media material without being exposed to ads (Netflix, Spotify), users are willing to pay more, and the lack of advertisement is a big part of their value. (Toledo, 2015)

5.2 Limitations and suggestions for future research

This thesis had some areas where future studies could improve upon. The survey had too few options in some questions, especially in question 3; “what motivated you to start using an ad blocker”? What could make users turn off their adblockers could be examined, a simple yes/no question does not give much value. A reliable correlation in how men and women use adblockers differently could not be made because of low number of answers. While most answers to the survey came from Finland, answers were not geographically separated. Pagefair’s studies on adblocking were used quite extensively in this thesis and some parts relied too much on them. An interview with person working in digital advertising could give some insights regarding how adblockers affect advertising agencies strategy.

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Appendix: Questionnaire

Questionnaire for Thesis; THE IMPACTS OF AD BLOCKING IN ONLINE MARKETING

I am doing a thesis on the effects of adblocking in online marketing and advertising. Below is a short survey with questions regarding internet usage, advertisement preferences and opinions about paid streaming services. Thank you for answering!

Personal information

1. I am a

Man

Woman

2. How old are you?

—

—

—

Ad blocking

3. Do you use an Ad blocker in your internet browser? *

If you answer no, go to question 6

- Yes
- No

4. If yes, what motivated you to start using an ad blocker? (multiple choice)

- Ads block content, take too much room on the website
- Ads are intrusive and annoying
- Privacy and security concerns
- Slow website load

5. If a website prevents access while using ad blocking, would you turn ad blocking software off in order to access the website?

- Yes
- No

6. Which type of ad is most annoying to you?

- AdWords
- Banner advertising
- Promoted posts on social media
- Separate video ads on websites
- Video ads that play before your selected video
- Pop-up ads

Subscription services

7. Have you purchased a paid subscription or donated to a website to receive ad-free experience

- Yes
- No

8. How much would you be willing to pay for a **monthly** subscription on a website that you frequently visit in order to support them and to receive an ad-free experience

- 1-4 €
- 5-8 €
- 9-12€

Over 13 €

9. Do you pay for a streaming service such as Netflix, HBO Nordic or YouTube Red?

Yes

No

10. How important is the lack of advertisement in these services?

1 (Not important)

2

3 (somewhat important)

4

5 (Very important)

11. Do you watch streaming services (e.g. Netflix) more than traditional television?

Yes

No