ARCADA

Wi-Fi in Cafes

Wi-Fi Use and its Impact on the Café Scene in Helsinki

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Abstract:

The advent of Wi-Fi (wireless internet) has revolutionized the way people work and communicate by freeing them from the confinements of their offices and studies. With more and more cafes embracing this Wi-Fi culture, it is worthwhile studying the impact of Wi-Fi on the café environment, which is the focus of this research. The study was conducted on 7 cafes in Helsinki. The focus was on the degree of use of such services, awareness about Wi-Fi security, the attitude of café customers and opinions of café managers. Data was gathered through face to face interviews with café managers and self-completion survey with café customers. According to the study, café Wi-Fi is used by more than 60% of the respondents and the majority of them (89%) are happy with cafes having Wi-Fi, though they might not necessarily use them. In addition to doing school or office work, people have even conducted business meetings and record deals at cafés with the aid of café Wi-Fi. So in that sense, Wi-Fi in cafes have helped integrate work and socializing. These trends indicate that café Wi-Fis are gradually being established as an important element of the café. Some café managers expressed concerns about people occupying a table for hours on end with their laptops during lunch time or other busy hours of the day. Though the problem is not so severe at the moment, the managers will have to introduce some measures in the future to keep it in check, for instance, setting time limits on the use of café Wi-Fi through the use of log in codes. Also, using marketing tactics like consumer segmentation, the café owners can find out what kind of people are the active users of Wi-Fi and thereby design campaigns like giving discount to students (who according to the study are active users of Wi-Fi) outside busy hours, organizing café space considering both the users and non-users of Wi-Fi and so forth. Wi-Fi security is barely a concern for majority of the café Wi-Fi users at the moment. People mostly use the café Wi-Fi for checking emails and browsing news and social networks. Besides, tourists could use Wi-Fis for maps or information about certain services. However, the use of sensitive online services, for instance, online banking is not really popular at the moment. This might be the reason for people not being so worried about online security while using café Wi-Fis. Nevertheless, it can be assumed that people doing office work are aware of VPN (Virtual Private Networks) or other equivalent security measures in case they intend to access sensitive company information over the café Wi-Fi network. Using internet applications, for instance location based advertising and keeping eyes and ears open for latest updates in the world of internet and online security will help enrich the café Wi-Fi experience for all concerned.

Keywords:	Cafe, Coffe-shop, Wi-Fi, Socializing, Online
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Glossary of terms used

WLAN: Acronym for Wireless Local Area Network. WLAN in this study refers to a wireless internet network to which one can log on with a device with wireless adapter and surf the internet without the requirement of any cables.

Wi-Fi: Wi-Fi is also based on WLAN technology. However, Wi-Fi is a registered trademark of Wi-Fi Alliance. The devices which are Wi-Fi certified (i.e. comply with certain standards set by Wi-Fi Alliance) are interoperable irrespective of their brands. Most of devices used to log on to WLAN (or Wi-Fi hotspots) these days are Wi-Fi certified.

VPN: "A Virtual Private Network (VPN) is a network technology that creates a secure connection over a public network such as the Internet or a private network.

1. INTRODUCTION

1.1 Background

One of the many recreational spots people visit on a regular basis are coffee shops. The purpose can be to get refreshed with a cup of coffee or to snack between meals. People also go to cafes to socialize, discuss business issues with colleagues or just to kill time. With addition of internet, an almost indispensable part of people's everyday lives, the cafes (coffee shops) today have come a long way in terms of catering to the needs of their customers. Hence, it is worthwhile studying how the café business is performing in the presence of this added element, i.e. wireless internet (or Wi-Fi).

1.2 Research Aim and Research Questions:

The aim of this study is to research on the impact of Wi-Fi on cafes in Helsinki. The main issues to be covered are: the relationship between various demographic segments like age, gender, occupation etc. and "use of café wifi", the impact on café culture and customer attitude towards such services. Besides, inspiration from the field of services marketing shall be used as a guide for effective service management in cafes. The research questions formulated are given below:

Research Question 1: Is there a relationship between demographic segments like age, gender, occupation etc. and "use of café Wi-Fi"?

Research Question 2: To what extent is the café Wi-Fi being used and how it has impacted the café business?

Research Question 3: What do people use the café Wi-Fi for? Are they aware of risks involved with use of public Wi-Fis?

2. LITERATURE REVIEW

2.1Café Culture:

Some of the aspects of café culture have been mentioned by Hartmann Maren (2009) in her article related to media consumption published in European Journal of Communication. She argues that both sociality and individuality are related to the café environment. So, people can either meet friends, get to know strangers or engage in individual activities like sifting through newspapers and books. During the 17th century, while the cafe culture was still being established in the English society, "the coffeehouse was a place for like-minded scholars to congregate, read, as well as to learn from and debate with each other." (Cowan, 2005 pg. 91) In the past, for some, a café also used to be a place to actually concentrate in their work away from the noisy and cold environment in their work places. (Hartmann)

In the modern context as well, cafes seem to have preserved their centuries old tradition so that customers can go about their affairs in a comfortable and relevant setting. The cafes have taken into account the contemporary social culture – the internet dependent lifestyle, in designing a customer friendly environment. The presence of Wi-Fi networks in cafes provides people with that 'internet' environment which is almost indispensable to carry out their day to day activities, be it learning, doing business or socializing. Though other measures have also been taken to include consumer relevant elements in the cafes, for example: Starbucks selling New York Times and Wall Street Journal in its cafes (Reagan, 2010), nothing really competes the bond between café and Wi-Fi.

The café culture in most parts of Europe distinguishes from the American "on the run" life style. A typical day in the States would involve rushing to the Starbucks to grab a coffee in a paper cup on the way to work or school. On the other hand, Europeans, with some exceptions, tend to sit and sip their coffees. They expect a personal touch to the services they get in coffee shops. An article in The New York Times clearly explains this citing the example of French café culture. The Starbucks concept in Paris might be the trendy thing to do, especially for a group of youngsters, tourists and embracers of American life style. The article describes the use of laptops in cafes as an American thing to do. (Alderman, 2012)

Compared to Paris, Helsinki seems to be more forgiving in café culture as it is quite normal to see people rushing to the nearby "Robert's Coffee" or "R- kioski" to grab a cup of coffee and sip it along the way to work or school. However, there does exist a certain degree of personal touch to the services offered; for instance, the staff at the branch of "Robert's Coffee" in Arabia shopping center give positive comments about the customers (be it appearance or anything else) besides the regular greeting. It is also quite common to see customers sitting with their laptops in cafes which are not American Franchise. It would be quite fair to say that café culture is not as conservative in Helsinki as it is in Paris.

An article in the technology section of *The Guardian* describes the link between Wi-Fi and coffee shops from the perspective of cafe and small restaurant businesses from a town in England- "Internet is the equivalent of the never-ending coffee cup, only better: it doesn't require heating and barely needs any electricity. And it doesn't interfere with the normal run of business, just enhances it." (Arthur, 2011) However, this portrayal of the relationship between Wi-Fi and café business seems to be a bit too positive. Hiding behind their computer screens and being too much engaged in the virtual world, the café Wi-Fi embracers might be missing the opportunity to get to know the people around them present in the café. Likewise, the ones that come to cafes just to take a break from the everyday hustle and bustle might have some concerns about such Wi-Fi-café environment.

Considering the issues raised in the last couple of paragraphs, it is crucial to hear the opinions of café owners and customers on whether the presence of Wi-Fi's in cafes is good or bad for the café culture.

2.2 What is Wi-Fi?

In simple words, "Wi-Fi is connectivity". It enables the access to internet without the need of cables and wires and specially comes in handy while travelling. In addition to accessing the internet, Wi-Fi also makes it possible to connect a device with another, for instance to share documents and photos between computers, access printers and so forth. The development of Wi-Fi technology dates back to the mid-90's when the co-operation among engineers and researchers around the world led to the formation of the

Wi-Fi Alliance. Wi-Fi Alliance takes care of testing and certifying that the products using Wi-Fi technology are interoperable and secured. (Wi-Fi Alliance, 2012)

Any device with a wireless network adapter can log in to wireless internet networks (assuming that the network is either open/public or the user has the access information to the network). Today such devices are ubiquitously spread among people in the form of smart phones, tablet computers, laptops and so on. Moreover, the presence of such wireless networks at different public locations like schools, libraries, cafes, trains etc. enable people to surf the web without being confined to their homes or offices. Thanks to the growing knowledge-population and unconventional employment opportunities like self-employment and contract employment that provide people with freedom to make parks and cafes with Wi-Fi's, their ad-hoc offices. This practice is popular among students and writers as well. (Davidson and Rafailid)

2.3 Internet use and security issues

A survey conducted in the February of 2011 by the Finnish mobile manufacturing giant, Nokia and a Finnish mobile phone operator, DNA shows that half of the users of smartphones "actively use all the features" of their devices. According to the study, 56% of the smartphone users surf internet and 53 % read emails. While mobile banking services are not so popular yet, people are likely to get more attracted towards such services in future. Also, the use of office applications, e-books and audio books on smart phones and other similar devices is expected to grow according to the study. (DNA, 2012) This shows that internet is a "need" for this internet –dependent population and the savvy cafes/ coffee shops in Helsinki have jumped right in to address this need.

A map showing the Wi-Fi hotspots in different locations in Helsinki has been made available by the City of Helsinki (2009) which can be accessed through the following link:
(http://ptp.hel.fi/wlan/index_en.html?zoom=4&lat=18515&lon=49535&layers=BTTTT#). Just by clicking on the different Wi-Fi spots indicated on the map one can get the information about which business or public spot is providing such service. The list goes on from libraries and public parks to cafes and bars.

However, this convenience comes with a price. People using such Wi-Fi networks without necessary security protocols are prone to information breeching by hackers. This information could include anything from bank log-in information to sensitive company information depending upon what the users of Wi-Fi do on such networks. One method used by the hackers to accomplish this is by setting fake "free Wi-Fi hotspots" which connects the users to their (hackers') computer. A careless user would not bother to verify if such network is authentic (Donnell, Corey O', 2006). Another technique is "eavesdropping" in which a hacker within 100 feet of the "user-Wi-Fi network" can monitor the data being sent over the network (Acohido, 2007). So, in this study it will be useful to see if the respondents are aware of the security threats posed by public Wi-Fis and if they take any precautions against them.

2.4 Consumer Segmentation:

To find out more on what kinds of customers actively use café Wi-Fi, customer segmentation was performed. This knowledge would ease the process of getting to know the customers and understand their behavior and needs so as to design targeted marketing campaigns. Market segmentation based on demographic and behavioral factors was done.

2.4.1 Demographic segmentation:

Demographic segmentation classifies the consumer markets based on age, gender, occupation, education, religion, family size etc. (Kotler and Armstrong, 2010). Kotler and Armstrong argue that demographic segmentation is the most used basis for segmenting consumer groups owing to the ease of measuring them. Besides, consumer needs, wants and frequency of product usage are closely related to changes in demographic factors. For this study only three of the above mentioned demographic factors were chosen: age, gender and occupation. This segmentation has been used to conduct "chi-test for independence of variables" to see if there exists any relationship between age/gender/occupation and the "use of café Wi-Fi". The chi-test has been discussed under a separate head in the "Methodology" section below.

2.4.2 Behavioral Segmentation:

This segmentation classifies the consumer markets based on knowledge, attitude, uses or responses to a product. (Kotler and Armstrong, 2010) The focus in this study is on user status and usage rate. User status classifies the customers into groups like "non-users", "potential users", "first timers", "regular users" of a product or service. The aim is to retain regular users, encourage first timers to become regular users and attract targeted non-users/potential users.

Usage rate refers to the frequency of use of a product or service, based on which, the customers can be divided into "light", "medium" and "heavy" product users. Heavy users, though a small percentage of the total number of users, make up a large share of the total consumption. (Kotler and Armstrong, 2010) In this study, if such group is identified, it would be worthwhile considering how the users of that group can be targeted.

2.5 Services Marketing:

Unlike products, services have four special features: intangibility, inseparability, variability and perishability; that should be taken into account while designing marketing strategies. (Kotler and Armstrong, 2010)

Intangibility

Services cannot be seen, tasted, felt, heard or smelled before purchase.

Inseparability

Services cannot be separated from their providers.

Services

Variability

Quality of services depends on who provides them and when, where and how.

Perishability

Services cannot be stored for later sale or use.

Figure 1:Nature and Characteristics of a Service (Source: Kotler and Armstrong, 2010)

2.5.1 Service intangibility:

As service is not a physical product and cannot be seen before it is used, the consumers try to find out about the service quality through people, price and image of the service provider. In fact, the service provider can be considered as the product and it is in his best interests to convey a positive message about the quality of service provided. (Kotler and Armstrong, 2010) However in the context of this study, the physical facilities of the café and the internet service can be seen as tangible elements while the staff interaction, quality of food and drinks and Wi-Fi are intangible.

2.5.2 Service inseparability:

Unlike products, the provider of the service has to be present while delivering it to the consumer. So, the interaction between the service provider and the consumer of the service is the key feature of service consumption.

2.5.3 Service variability:

Even within a single business, for instance a café, the service varies from personnel to personnel and depending upon the circumstances and personal situation of the employees. Though the same brand, the services obtained from different outlets of "Wayne's Café" around Helsinki varies. It can also vary within the same branch depending upon the time of the day, the rush, the staff member serving the customers and so forth. Every staff has a personal touch to the way they serve the customers. However, it is worthwhile setting standard guidelines so that the service providers do not stray off course.

2.5.4 Service perishability:

Since services cannot be stored like products for later sale or use, problems arise when the demand fluctuates. The cafes should be prepared for such fluctuations in demand for instance, by increasing the number of staff during rush hours and providing discounts outside rush hours.

2.5.5 The service-profit chain:

The way an employee interacts with the customers forms a major part of the service value delivered. (Kotler and Armstrong, 2010) Thus it is of immense importance to prepare the employees to serve the customers in a manner that would give them the value for their money. To achieve this, it is equally important to treat the employees the right way and give them the support they need to make a successful dealing with the customers. This idea has been depicted in the figure below.

Internal service quality

Satisfied and productive service employees

Greater service value

Satisfied and loyal customers

Healthy service profits and growth

Figure 2: The Service-Profit Chain (Source: Kotler and Armstrong, 2010)

2.5.6 Managing Service Differentiation

The answer to price competition is to have a differentiated offer, delivery and image. (Kotler and Armstrong, 2010) In this study as well, it is relevant since all the cafes interviewed had free Wi-Fi in them and provided pretty much the same services with the exception of slight price differences depending upon the location of the cafes. First off, it is of vital importance to have competent and reliable customer-contact people, since the interaction plays a big part in how the customers perceive the service of the café. Secondly, the physical environment should be designed keeping in mind the customers. For instance, if the café has a lot of customers using its Wi-Fi, separate desks for users of Wi-Fi can be arranged so that they can work in a relaxed and peaceful setting. Building a unique image using symbols and branding are also options worth considering, especially for café chains. In fact McDonald's, which happens to be one of the participants of this survey, seems to be quite successful at this.

Figure 3:The Golden Arches of McDonald's (Source: Famous Logos,2012)

The "Golden Arches" signify the authenticity of the brand worldwide. Initially separate, the arches were later fused to form the letter "M" which stands for the name of the food chain. The colors used, golden and red and "McDonald's" printed in simple font enhance the bold and uncompromising corporate image of the food chain. (Famous Logos, 2012)

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2.5.7 Managing Service Quality

In addition to providing differentiated offers, maintaining consistency in quality of service is equally important if the service firms want to stay ahead of the competition. In case of cafes, this can be ensuring quality interaction with the customers. In addition to that, maintaining the café facilities and providing consistent, high speed Wi-Fi are also important.

Taking a customer driven approach and identifying their expectations is the trend in service industry. (Kotler and Armstrong, 2010) So in this study, the goal would be to identify how the customers view the café Wi-Fi services, whether they are happy with it or not, what share of customers actually uses the café Wi-Fi and so forth. Understanding how customers behave and what they expect would help the cafes offer targeted services to the customers as per their expectations.

Measuring the quality of a service is more abstract than measuring a product quality. (Kotler and Armstrong, 2010) Therefore, the cafes should not compromise with the above mentioned issues like quality customer interaction, well-maintained facilities along with being regularly up to date with Wi-Fi and internet security issues. The goal should be to maintain consistency in service or even improve the service quality while keeping a track of customers' needs.

There is always room for error no matter how much focus on service quality is given. Since it is not always possible to deliver exceptional services owing to various factors under and out of one's control, there should be provisions for good service recovery. Kotler and Armstrong (2010) argue that "Good (service) recovery can win more customer purchasing and loyalty than if things had gone well in the first place." The key is to empower the staffs who directly deal with the customers at the counter. They should have a reasonable level of authority to resolve any problem without having to go through unnecessary bureaucracy.

This topic is quite new and the findings from this study can be helpful in assessing the positive and negative impacts of Wi-Fi on café businesses, café culture and user information security. In addition to that, recommendations based on findings of the study and ideas from "services marketing" can help enhance the existing café management prac-

tices. Also, there are prospects for further research on the topic, for instance "how the café culture in Helsinki differs from those in other parts of the globe", "good practices for café businesses", "factors affecting customer flow in a café" etc.

3. METHODOLOGY:

3.1 Research Approach

The study was inspired by some online articles on "Wi-Fi in cafes", for instance, an article by The Guardian titled, "Free Wi-Fi with that coffee? Why cafes are embracing an age of connectivity" (Arthur, 2011) and "No More Perks: Coffee Shops Pull the Plug on Laptop Users" (Alini, 2009) from The Wall Street Journal. However, there has not been much academic research on the topic since the phenomenon of providing Wi-Fi in cafes had not really caught on until mid 2000s; "Wi-Fi" came out in 1999. (Wi-Fi Alliance, 2012) Nevertheless, the research started out with a deductive approach based on whatever literature sources were available. In deductive approach, a researcher bases his research hypothesis (hypotheses) on existing theories related to a topic. This theory and the hypothesis deduced from it are the precursors to empirical studies in the form of data gathering. (Bryman and Bell, 2011,p.11) In this study, the research issues pertaining to the deductive approach are, 'checking if the presence of wifi in cafes had helped increase the café sales', 'checking if there is a relationship between demographic segments like age, gender, occupation etc. and "use of café Wi-Fi"', 'explaining how the presence of Wi-Fi in cafes has affected the café culture' and 'Wi-Fi security issues'.

As the research progressed into the information gathering and analysis stage, some adjustments had to be made in the initial research questions. Especially, finding out whether the presence of Wi-Fi in cafes had helped increase the customer flow turned out to be impractical for several reasons discussed later in the "Findings and Discussion" section of the study. So, the focus was shifted on studying how people spend time in the cafes, to what extent people use café Wi-Fis, their opinion on the presence of Wi-Fi in cafes etc. This approach of adjusting the research questions as per the inferences drawn from the empirical research is known as induction. (Bryman and Bell, 2011)

3.2 Research Methods:

The study involved both qualitative and quantitative type of information gathering. The respondent sample chosen for the study were café managers/owners and café customers since, this study is directly relevant to those two groups. Semi-structured interviews were used to gain the perspective of the café managers/owners on the issue whereas the customers were probed through self-completion questionnaires. The methods chosen are described below:

3.2.1. Self-Completion Questionnaire:

According to Bryman and Bell (2011), self-completion questionnaires are advantageous over face to face interviews as:

- Self-completion questionnaires are quicker and cheaper to administer.
- Absence of an interviewer avoids the tendency of respondents to exhibit social desirability; some respondents, opposite to what they do or believe, might want to give socially palatable responses in the presence of the interviewer.
- Self-completion questionnaires have mostly close ended questions and unlike in face to face interviews, the problem of interviewers asking the questions in different ways or order does not exist. This ensures consistency in the administering of questions.

Instead of sending the questionnaires out by post or through internet, they were directly distributed to the customers in the cafés with the permission of the cafe managers. This provided the advantage of targeting exclusively the café goers. The goal was to gain information about who the customers were, their behavior in cafes, how they reacted to the presence of Wi-Fi services in cafés and their awareness of Wi-Fi security. While most of the questions were close ended, a couple of them were open-ended as well. The questionnaire can be found in the "Appendix" section of the study.

3.2.2. Semi-Structured Interview:

Semi-structured interviews are conducted with more focus on the interviewees' perspectives on the topic being studied hence, the questions act as a guide only and can be administered and modified according to the responses of the interviewees. (Bryman and Bell, 2011) Face-to-face semi-structured interviews with café owners or managers were used to find out if the presence of Wi-Fi had helped increase the customer flow in cafés and how the introduction of Wi-Fi had affected the café culture.

3.3 Data Collection

Initially, when the researcher tried to contact the cafe managers via email, there were hardly any responses, let alone positive responses. So for most of the part, the researcher had to personally visit different cafes around Helsinki followed by telephone calls to convince the café managers for an interview appointment. Altogether, managers from seven different cafes around Helsinki agreed for the interview. Notes were taken during the interview and analyzed later.

In case of the customer survey, the questionnaires were distributed personally by the researcher to the café customers under the permission of the café managers. The results were entered into excel files for further analysis. Both the analyses from interview from the managers and from the customer survey have been presented in the "Findings and Discussion" section of the study.

3.4 Statistical Tests used:

With the aid of "chi-square test for independence", it was ascertained whether there exist relationships between "Age/Gender/Occupation" and "Use of café Wi-Fi. The variables age, gender and occupation were taken based on demographic segmentation described in the literature review section above. The following are the conditions required to conduct a chi-square test: (StatTrek, 2012)

- Simple random sampling: the sample is randomly chosen and there is an equally likely probability of all the objects chosen to occur.

- Categorical variables: i.e. the variables should be qualitative; like sex, occupation, age-group etc.

- Minimum frequency count for each cell in a contingency table (two-way table for examining relationships between two categorical variables) should be 5.

- The actual population should be at least 10 times bigger than the sample population.

The test was conducted to find out if there exists any relationship between the variables mentioned above (age/occupation/gender) and the use of café Wi-Fi. In case there exists a relationship, targeted marketing strategies can be designed along with offering specific services according to the user group (based on age/gender/occupation). The finding from the chi test have been discussed separately in the "Findings and Discussion" section below.

3.5 Reliability and Validity:

One of the conditions to ascertain reliability of a measure is that it should produce similar results when administered at different occasions, also known as stability. (Bryman and Bell, 2011) Since the customer survey and semi-structured interview were carried out just once, the question of measuring the stability (which requires measuring the same thing at different occasions) was ruled out. Likewise, the interviews and surveys were administered by a single interviewer, which eliminated the need of checking for inter-observer consistency; another condition of reliability.

A preliminary test or "pilot study" of the questionnaire was conducted by administering the questions among the researcher's friends. This was to ensure its face validity, i.e the questions made sense and were relevant to the purpose of the study. (Bryman and Bell, 2011) After the pilot study, some of the questions were modified to better suit the aim of the study while some new questions were added to the questionnaire based on the responses from the pilot study and feedbacks from the participants of the pilot study.

To ensure that the responses of the café managers were not distorted by their mood or the situations they were in, an interview time that would best suit the managers was arranged. In some cases, under the request of the managers, their identity was kept anonymous so that they could freely express their concerns. Likewise, while asking the customers to fill the questionnaires, care was taken not to disturb them in the middle of their lunch (meal).

3.6 Limitations:

For practical reasons, the sales of the cafes before and after the installation of Wi-Fi could not be compared. And from subjective interviews with the café managers alone, it was not possible to ascertain if the presence of Wi-Fi in the cafes had helped increase their sales. Also, since the study was conducted within a small area (mostly downtown Helsinki) it might not necessarily be a representative of the café culture around the globe.

4. FINDINGS AND DISCUSSION:

To find out whether the provision of Wi-Fi has helped attract more customers, the initial intention was to compare the sales figures of the cafes before and after the installation of Wi-Fi. However, as the study progressed, this did not seem to be feasible for several reasons. Firstly, some cafes already had Wi-Fi installed right from their establishment day. In addition to that, presence of Wi-Fi's is a commonplace for most of the cafes in Helsinki, not to mention, they are free of charge to their customers (the customer either gets a code from the counter to log on to the café Wi-Fi or the café has an open Wi-Fi). Citing the above points and other similar reasons, the interviewees more or less concurred on the notion that the presence of Wi-Fi had not really influenced the flow of customers in the cafés. However there might be other factors which play an important role in attracting customers but such factors are out of the scope of this study. So, this study instead focuses on the café culture and how café goers see the presence of Wi-Fi in cafes and their awareness of Wi-Fi security.

4.1 Participants:

Face to face interviews were conducted with managers at 7 different cafes in Helsinki. After asking for permission, managers from 6 of the 7 cafes allowed the researcher to distribute self-completion questionnaires to the café customers. 38 completed questionnaires were obtained from those 6 cafes. The interviews and survey results are in the "Appendix" section of this study.

4.2 Wi-Fi use:
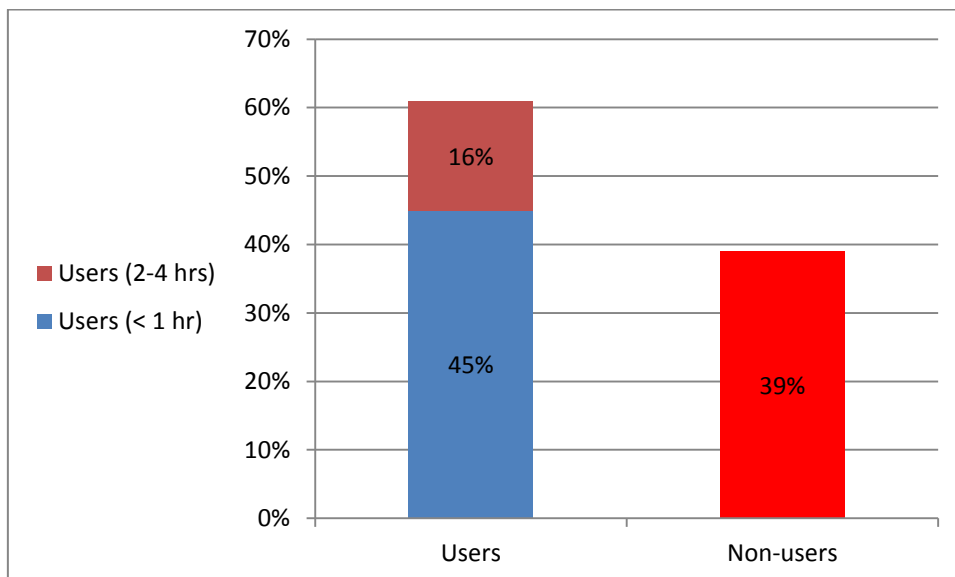
Figure 4: Share of users and non-users of cafe Wi-Fi

61% of the respondents use Wi-Fi in cafes while the rest 39% don't. 16% of the participants use it for about 2-4 hours while 45% use it for less than an hour when they visit a café.
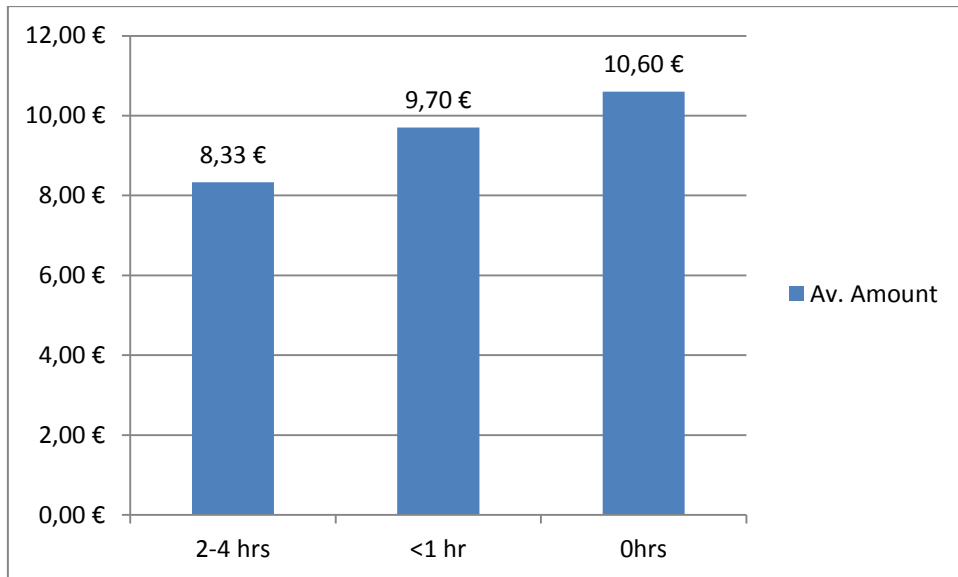
Figure 5: Average amount spent v/s time spent on cafe Wi-Fi

Among the ones using café Wi-Fi for 2-4 hours per visit, the average amount spent is €8.33 per person per visit. This is slightly less than the average amount €9.7 spent by the ones who use the café Wi-Fi for less than an hour per visit. And the average for non-users of Wi-Fi is €10.625.

So customers spending more hours on internet do not necessarily give more revenue to the cafes. This contradicts with the notion of "heavy users" contributing to a large share of revenue discussed before. One explanation to this could be that the café Wi-Fi users are so absorbed in their business that they do not want to disturb themselves by ordering something to eat or drink every hour or so. The impact of this on the business might not be that obvious as the share of such customers (who use café Wi-Fis for 2-4 hours per visit) is fairly small (16%). However, in busy hours, the café might lose some business as in those 2-4 hours the café table could be used by three or four customers one after another instead of just one customer using it for the whole period of time (2-4 hours).

4.2.1 Results from the Chi-test

Data obtained from the self-completion survey was classified separately according to age, occupation and gender (based on demographic segmentation described in the litera-

ture review section above) and "whether the participants use café Wi-Fi or not" in a two-way contingency table:

Table 1: "Gender" v/s "Use of café Wi-Fi"

	Uses café Wi-Fi	Does not use cafe Wi-Fi	row total
male	10	4	14
female	10	14	24
column total	20	18	38

Two hypotheses were formulated as given below:

H0 (null hypothesis): "Gender" and "Use of café Wi-Fi" are independent.

H1: "Gender" and "Use of café Wi-Fi" are not independent.

Then using the "chitest" function in excel, the p-value was calculated. P-value tells if there is significant evidence to reject the null hypothesis. For this study, a p-value under 0.05 is considered significant. After chi-test, the p-value was 0,076322 which is greater than the significance level 0,05. So, we accept the null hypothesis, i.e. **Gender and the use of cafe Wi-Fis are independent.**

Table 2: "Occupation" v/s "Use of café Wi-Fi"

	Uses café Wi-Fi	Does not use café Wi-Fi	row total
Student	11	4	15
Employee	9	8	17
column total	20	12	32

In this case, other occupations such as "Entrepreneur" and "Home Duties" were ignored since the numbers of participants in those categories were not large enough to include them in the chi test. Like before, two hypotheses were formulated:

H0 (null hypothesis): "Occupation" and "Use of café Wi-Fi" are independent.

H1: "Occupation" and "Use of café Wi-Fi" are not independent.

After chi-test, the p-value was 0,0234417 which is less than the significance level 0,05. So, we reject the null hypothesis, i.e. **Occupation and "use of cafe Wi-Fi" are not independent.** In this case, it can be observed that students are active users of Wi-Fi as the number of students using cafe Wi-Fi is clearly more than double the number of students not using it. This is quite natural owing to the fact that internet is an indispensable part of today's education and learning system. Besides, socializing opportunities, information about events, entertainment and much more are available on the internet, so Wi-Fi in cafes is in a way a "boon" for the students.

The employees do not seem to be as avid as the students in using café Wi-Fis. There could be many explanations for this. Firstly, not every job requires intensive use of internet. Also, the employees might visit the café to just relax and not think about work and internet. However, some employees like doing their office work in the cafes enjoying the relaxed atmosphere with a cup of coffee and something to snack on.

Table 3: "Age-group" v/s "Use of cafe Wi-Fi"

	Uses café Wi-Fi	Does not use café Wi-Fi	row total
10-29	14	7	21
30+	9	8	17
column total	23	15	38

Only two age groups were used to perform the chi-test for ease of measuring.

H0 (null hypothesis): "Age-group" and "Use of café Wi-Fi" are independent.

H1: "Age-group" and "Use of café Wi-Fi" are not independent.

After chi-test, the p-value was 0,0389412 which is less than the significance level 0,05. So, we reject the null hypothesis, i.e. **"Age-group" and "Use of cafe Wi-Fi" are not independent**. In this case, it can be observed that the 10-29 age group are active users of Wi-Fi compared to the participants who are of age 30 years or older. It is worth noting that most of the participants in the age group 10-29 could be students.

4.2.2 Implications for targeted marketing:

Since occupation and age-group have a relationship with "the use of café Wi-Fi", the café managers could design specific marketing campaigns targeting the active users of café Wi-Fi while not forgetting other customers who do not use it.

- Since students are more active in using café Wi-Fi than employed people, offering discounts on drinks to students during certain hours, especially outside busy hours can help avoid the cafes being overcrowded. Also, discounted drinks can encourage such Wi-Fi users to order more drinks as they continue working on their laptops.

- The above point is also relevant to the segmentation based on "age-group". The chi-test showed that the age group 10-29 is more active in using café Wi-Fi than the 30+ age group. And it is quite likely that young students who actively use internet for different purposes from school activities to socializing form a majority of that age group. So, offering student discount as described earlier can in this case as well help alleviate the problem of cafes being overcrowded.

- Internet is just an added element to the café. Socializing over a cup of coffee is still the essence of café culture. Considering this crucial aspect, the cafes that are often frequented by Wi-Fi users can allocate a separate area with small desks for individual Wi-Fi users. This would make the café space more organized and favorable for users and non-users of Wi-Fi alike.

4.3 Importance of cafe elements:

In the questionnaire, the participants were required to rate different café elements like refreshments (food and drinks), Wi-Fi services and environment for socializing on a scale of 1-5 (very important to not important at all).
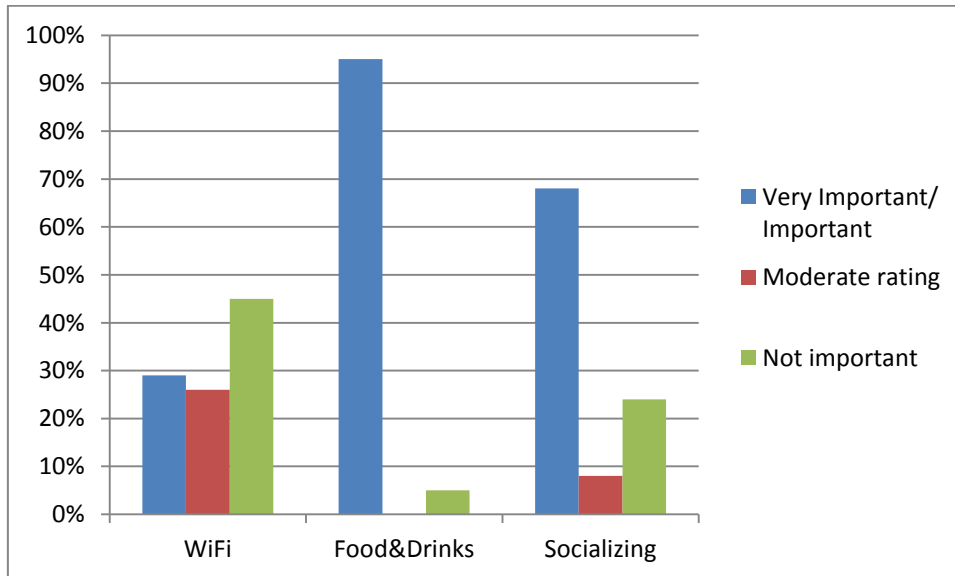
Figure 6: Rating of different café elements by participants

29% of the respondents consider Wi-Fi to be very important (or important) aspect of cafes, 26% consider it is nice to have Wi-Fi in cafes while for the rest 45%, it is not so important (or not important at all) to have Wi-Fi in cafes.

95% of the respondents consider refreshments (food and drink) to be very important (or important) while the rest 5% do not consider them to be of primary importance.

68% of the respondents consider socializing to be a very important (or important) cafe element, 8% consider it to be not important at all while the remaining 24 % are of mixed opinion.

In addition to food (and drinks) which is the essence of cafe, socializing is also a very important element; 68% of the participants agree with it. Likewise, the combined per-

centage of participants in favor of having Wi-Fis in cafes is 55%. Considering the proliferation of social networking websites on the internet, it can be assumed that the participants in favor of café Wi-Fis saw the service (Wi-Fi) as an opportunity to socialize virtually in addition to socializing in person with friends or other customers present in the cafés. Since social networking is not the only phenomenon on internet, those in favor of café Wi-Fis are also students and employees for whom internet is almost indispensable to get their school assignments or office work done.

On the other hand, those 45% of the respondents, who do not consider Wi-Fi to be such an important part of the cafes might be the ones who do not actively use the internet, for instance retired people or people who do jobs that do not require the use of internet that often. They could also be people, who after using computers the whole day at their office, just want to relax at the café without having to worry about work. Or simply they could be the people who want to enjoy the café environment the traditional way with more live interaction with the people present on the spot than crouching behind computer screens.

4.4 Customer opinions/attitude:

To probe further into the issues mentioned in the previous section, open comment boxes were included in the questionnaire so that people could express their opinions about Wi-Fi in cafes. Some of the comments from the customers who use café Wi-Fis were:

- **"Very happy. It helps pass the time whilst waiting for others to arrive. "**
- **"Great. You can log in and say you are at Robert's Coffee at Arabia. "**
- **"It is really important and nice to have free Wi-Fi so you can work during the cafe."**
- **"I use internet at home. But abroad it's easy when you need a map or something."**

The above comments from the café customers show how café Wi-Fis can come in handy at different situations from socializing online, searching for info or service to continuing one's office or school work.

Likewise, following were the comments from respondents who do not use café Wi-Fis.

- **"My laptop is too heavy to carry around and I pay for internet connection on my phone. But, it's a really nice extra service."**
- **"I visit cafes to relax and chat with friends and not use my phone. Helpful when away travelling to access important information."**
- **"My phone includes internet but not everyone has internet in phone."**

From the above comments it is quite clear that though the customers do not use Wi-Fis in cafes, they still consider it to be a useful service. And fairly enough, if the customers are with their friends, they would rather engage in conversation with them (friends) than surf internet on their gadgets. A separate question was included in the questionnaire asking if the customers were happy with the presence of Wi-Fis in cafes regardless of whether they use it or not. 89% replied that they were happy with it and only 5% were of the opposite opinion.

4.5 Wi-Fi security:

According to the study, none except one of the respondents take any precautions before logging on to cafe Wi-Fi. This relaxed attitude of people might be because they believe the Wi-Fis provided by cafes have a secured connection since some of the cafes require a log in code to let the customers access their internet. However, the majority of the cafes in the study had an open connection meaning that anyone with a device could access the café Wi-Fi without having to feed in the log in codes. Still people use them readily. As long as one is just browsing the news or using social networks, Wi-Fi security should not be that great of a concern.
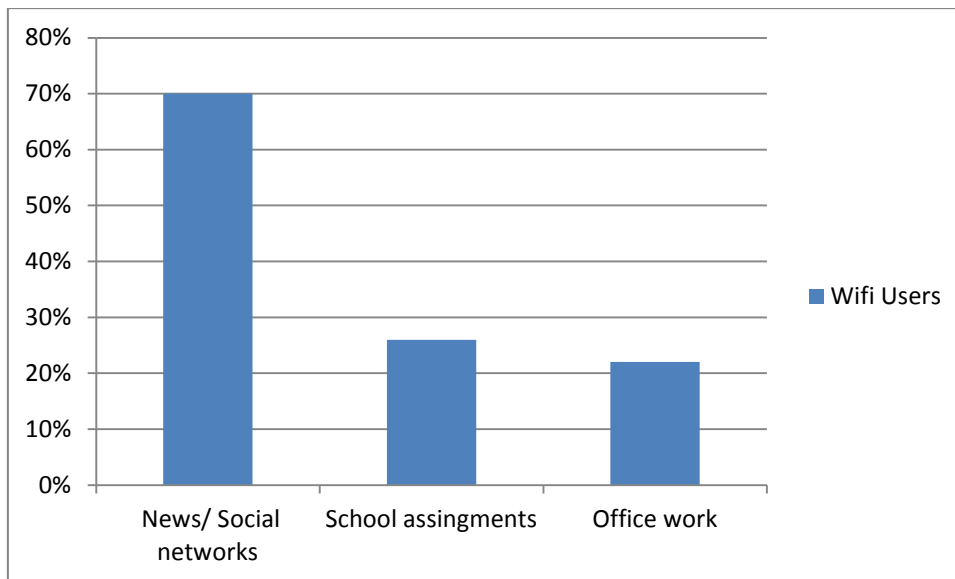
Figure 7: How people use Wi-Fi in cafes

According to the survey, 70% of the café customers use the café Wi-Fi to browse through the websites of news and social networks. Only 26% did school assignments and 22% did their office work in cafes. Those doing their office work might have security features like VPN (Virtual Private Network) on their devices which helps them to stay at ease while using café Wi-Fis for office work.

Also, since smart phones are more convenient to use over laptops in cafes, there is not really a concern about security since use of sensitive services on smart-phones, for instance, online banking are not so popular at the moment according to the study conducted by Nokia and DNA (mentioned earlier in the literature review section). But since new technologies and applications are being developed every day, it is just a matter of time before Wi-Fi security in cafes becomes a key issue for all concerned.

4.6 Opinions of café managers:

As mentioned before, a total of seven café managers provided their opinions on the research questions posed earlier. A short account of each of those cafes along with the opinions of their mangers have been summarized below:

4.6.1. mbar, City Centre:

mbar was established in 1998 and has provided internet services in its café since then. So, in this case, it is not possible to answer whether café Wi-Fi has helped increase the sales. At mbar, the customers get to use the computers present at the café for a certain charge, which of course makes up for a small portion of the sales. However, they can log on to the café's Wi-Fi from their laptops or smartphones free of charge. According to the manager of the place, **most of the cafes today have Wi-Fi services in their cafes. This, to some extent, rules out the chances of one café being preferred to others on the grounds of having "Wi-Fi services" alone.**

When posed the question about the impact of Wi-Fi on café culture, he answered that there are some customers who sit for 2 or 3 hours using the cafe's Wi-Fi on their laptops or smartphones with just a cup of coffee. At the same time, there are some others who buy much more than just a cup of coffee, like salad, sandwich and so on. There are also **some customers, especially students who make the café their office, sitting even longer than 2 or 3 hours. When the café gets crowded, this can be a problem since no one else except the Wi-Fi user's friends wants to sit at the same table.** The manager or the staff cannot force the Wi-Fi users to leave even if it seems profitable to do so. If a long time has passed and the customer has not ordered anything, they can go and ask him/her if he/she needs more coffee or something to eat.

But, it is not just about being all alone and busy in one's work. Presence of Wi-Fi has also brought new ways of socializing. The manager at mbar mentions that the **café along with its wireless internet service provides a good environment for people to hold meetings away from their offices in a more casual setting. He further added that there can be a group of people who need to work on some project, like opening a restaurant or discussing music deals. This way, people can work and socialize at the same time.**

4.6.2 Café Picnic, Ruoholahti:

Established 13 years ago, the café is located near the Ruoholahti metro station among a small cluster of multinationals like Nokia, PricewaterhouseCoopers, Tata consulting, Accenture and other companies. According to the manager, the café has had Wi-Fi ser-

vices for the last two or three years. Unlike in other branches of Café Picnic, the Ru-oholahti branch does not require customers to provide a log in code to use their free Wi-Fi service. **Owing to the presence of business and IT related cluster of companies in the area, the café Wi-Fi is really a boon to some of the customers who mostly use it to work on their devices (laptops, tablets etc.).** According to the manager, the internet users are mostly working people and they usually spend about an hour or two on the internet. However she claims that **the presence of Wi-Fi has not really impacted the customer flow in the café.**

While discussing about the impact of Wi-Fi on café culture, the manager mentioned that **people mostly work using the internet during the morning hours when they are feeling fresh and active. However, they tend to socialize during evenings (after work). There also exists the issue of one person sitting with his/her laptop at a table for four. However, they seem to be understanding and leave when the café is busy**, especially during the lunch hours.

4.6.3 Café TinTin Tango, Töölö:

While interviewing the café managers of different cafes, one of them recommended café TinTin Tango for the study as it hadn't been long since the café started providing Wi-Fi services. Situtated in Töölöntori, Café TinTin Tango has served the café goers since 1994. It has had Wi-Fi services for an year and a half now. The Wi-Fi is free of charge for the customers; they get a code to log into the café Wi-Fi network.

 When asked whether the introduction of Wi-Fi services had helped attract more customers, the café in-charge, Mervi pointed out that it had to some extent. There are some customers who use the café Wi-Fi to work on their laptops, with some using it for up to 2-3 hours. Though such customers are usually few in number, there can be inconvenience when the place gets crowded. According to Mervi, the provision of Wi-Fi has **not really affected the café culture** and there have not been any complaints from the customers either.

4.6.4 Robert's Coffee, Kumpula:

The Arabia shopping center in Kumpula is frequented by locals and students studying in the nearby institutions. Robert Coffee, which is situated on the 2nd floor of the shopping center does not have a Wi-Fi service of its own, instead, the customers use the Wi-Fi provided by the shopping center. So**, the café's customers have always had access to free Wi-Fi ever since its (café's) establishment. Hence, it is hard to tell if the presence of Wi-Fi has helped attract more customers.**

According to the café manager, the customers who use such services can be from any group: employees or students. It is common for them to sit at the café for 2 to 3 hours. However, the number of such customers is not that many.

4.6.5 Café X, Helsinki:

The manager from this café agreed for an interview under the condition of remaining anonymous, hence, it has been named as Café X for ease of reference. Like some of the cafes discussed earlier, Café X also has had internet ever since its establishment. The service has been provided by the real-estate owner and is free of cost. According to the manager**, the place is popular among students, entrepreneurs and people involved in online companies among others. In fact, at times the place has served as a meeting place for some small businesses which don't have an office of their own.** The manager recounted some instances when he received requests from people to organize small business occasions in the café.

With its location and availability of free Wi-Fi, the café provides a good environment to its customers to socialize, engage in school/office work or business activities. However, the manager expressed some concerns that resonate with what other café managers mentioned. For instance, there have been cases when **some people sit in the café surfing the net for hours in a row (even up to 9-10 hours) with just a cup of coffee while other customers, with their tray of snacks and beverages struggle to find a vacant table. Besides, some small businesses (as described earlier) that pick Café X as a meeting place for them and their customers might affect the image of the café if the products or services they (those small businesses) provide are not so genuine.** The latter problem however has been checked after learning from past experiences.

All things considered, the manager mentioned that "people need to change". He pointed out that having more Wi-Fi hot spots in the open locations around the city could help alleviate the problem of concentration Wi-Fi users in cafes.

4.6.6 Chico's, Arabia:

Situated in Arabia Shoppin Center, Chico's restaurant has been there for about 10 years now. Though there is a free Wi-Fi service from the Arabia shopping center, Chico's provides a Wi-Fi service of its own to its customers. The customers get the access code from the counter and can surf the net for 3 hours. The service has always been free for its customers. Despite its proximity to a university and a polytechnic, the Wi-Fi using customers are mostly working people.

According to the manager, it is quite rare for people to come to the café with 'surfing Wi-Fi' being their main purpose. However, she described her personal experience from a trip to Spain where, **being a tourist, Wi-Fi was an important café element for her; for example, to access information about the surrounding places or to use maps.** In that sense, Chico's Arabia is less likely a place with high demand for Wi-Fi, than some café located at the city center, where the presence of tourists is relatively abundant.

4.6.7 McDonland's, Sokos (City centre):

While not necessarily a café, McDonald's attracts customers from all walks of life. Owing to its location (in the city centre), it is also likely to be frequented by tourists. According to the manager of the restaurant, the Wi-Fi service was installed about 4 or 5 years ago and is provided free of charge. When asked if there was any special reason for having free Wi-Fi, the manager replied that it was the company policy (McDonald's being a franchise business). But, unlike mbar and Café X mentioned above, McDonald's Sokos, despite its location (in the city center) has not really seen an impact of Wi-Fi services on the customer flow or on the café environment. **One reason for this can be that McDonald's is rather a place for eating than socializing over a cup of coffee.** However, while interviewing the manager, a few of the customers could be seen engaged with their mini laptops or smartphones; apparently surfing the free Wi-Fi.

5. CONCLUSION AND RECOMMENDATIONS:

Owing to the impracticalities described above in the Discussion section, the initial research aim of testing if the presence of Wi-Fi in cafes had helped increased their business was discarded and focus was shifted on the current café culture and people's opinions and attitude towards Wi-Fi in café. It was argued in the literature review section that the café culture in Finland is not as conservative as in some parts of Europe, for instance France. The data obtained from the customer survey concurs with this point. 61% of the respondents use café Wi-Fi and 89% are happy with the presence of café Wi-Fi regardless of whether they use it or not. However, eating and drinking is still the primary activity people do in cafes, followed by socializing and using Wi-Fi.

From what has been discussed above, especially from the opinions of café managers, it is quite clear that having Wi-Fis in cafes has not really helped increase the sales in cafes. Wi-Fi in cafes is rather a trendy thing and in some cases a taken for granted part of the café environment. People would anyways visit a cafe for some refreshment, irrespective of whether it has Wi-Fi or not. However, for the active users of internet, for example students or tourists, café Wi-Fi can be an important factor in choosing which café they visit, provided that there are several cafes nearby to choose from.

As revealed from the chi-test for independence, the occupation "student" and age group "10-29" are active users of café Wi-Fi. To avoid the problem of cafes overcrowding due to laptop users sitting at tables for hours on end, options like offering student discounts (which would also include most of the 10-29 age group) are worth considering. Also changing the café layout to better accommodate both the users and non-users of Wi-Fi can help create a favorable café environment for the customers.

 The presence of Wi-Fi can also influence the amount of time people (specially Wi-Fi users) spend in cafes. But according to the study, the number of people spending many hours using café Wi-Fi is relatively low, so other people not getting place to sit due to café Wi-Fi users occupying a table for many hours should not be that big of a problem. Nevertheless, it depends on the location of the cafes as well. For instance the managers of cafes located in the city centre like mbar and Café X shared their experiences of facing such problems during busy hours.

It is quite apparent that having Wi-Fi in cafes alone is not helping them increase their business. However, using the right tactics, the café Wi-Fis can be more useful and productive; for instance by taking advantage of location based advertising. The modern smartphones have GPS chips which make it possible to identify the location of the user within seconds. Let's say a tourist at a café is searching for a cheap hostel in the town through his smartphone. If there happens to be a hostel nearby within a few blocks from the café, an ad about the hostel will be sent to the tourist's device (given that the hostel uses location based advertising). This will encourage the tourist to go check out the hostel since it is only a few blocks away and he might probably end up staying there. In this example both the tourist and the hostel benefit from location based advertising, but what has the café (whose free Wi-Fi the tourist is using) got to gain? If the tourist really stays at the hostel, he might be frequenting the café for some refreshments or for using the free Wi-Fi, since he is already familiar with the place.

What if the tourist does not stay at the aforementioned hostel? In that case, the café might not really be gaining so much compared to the previous case where the tourist does stay at the hostel near the café. However, there is another way the café can gain; by using location based advertising to advertise itself to the passersby or people with in its proximity. Just like the tourist in the previous example looking for a hostel, there might be people looking for a café or a place with (free) Wi-Fi.

Since the majority of respondents, including the ones who do not use café Wi-Fi are in favor of having Wi-Fi in cafes, it is quite apparent that Wi-Fi has found a place for itself in the café milieu. Wi-Fi can be seen as a part of the contemporary café culture as almost 61% of the respondents use café Wi-Fi. As discussed above, café Wi-Fi provides its users with a plethora of opportunities from online socializing, accessing information to doing office or school work. As claimed by the manager of café X (see above), people have even been able to conduct meetings and business deals in cafes. These trends indicate that Wi-Fi in cafes will soon be a "must have" element of the café instead of a "nice to have" extra service.

As indicated by the study, people rarely bother to see if the network they are using is safe or not. The majority of the users use café Wi-Fi services to quickly browse through the daily news or visit social networks or check emails. There are also tourists who want

to look for information about places or services available in a particular location. One would hardly think about internet security in these activities, unless he/she is accessing some sensitive company related information. As discussed earlier, the trend of using security sensitive services like online banking on public Wi-Fis has not really caught on, so online security has not been much of an issue at the moment among people. The things we see and hear in daily media about multinational corporations and government services being victims of cyber-attacks do not apply to normal café goers as most of them have nothing to do with such corporate giants or government bodies.

With positive feedbacks from the majority of the respondents, the Wi-Fi seems to have enhanced the café experience for its customers, especially for those who use café Wi-Fis. In addition to on the spot socializing, which according to the survey is one of the core elements of the café; cafés with their Wi-Fi's provide an opportunity for virtual socializing as well. When we talk about working online, some might argue that internet has taken away people's freedom by creating a culture where people can work just any-where, given that they find a wireless internet network to hook up their devices to. However, people doing their office or school work in cafes might have a different view of things. They might instead find the café environment to be favorable which inspires them to concentrate on their work away from the mundane environment at their offices or studies (as in the olden days; please refer to the first paragraph of literature review). Though there are some instances of café Wi-Fi being an inconvenience during busy hours, they are relatively less and do not pose an immediate threat on the café environment.

To measure the quality of their Wi-Fi service, the cafes can see if the number of Wi-Fi users is increasing or decreasing on a monthly basis. This can quite easily be achieved by setting log in codes for access to café Wi-Fi. Just by looking at the number of log in codes requested for per month, the cafes can work out the number of Wi-Fi users per month. However, there are other factors as well that affect the customer flow in the café, for instance quality of customer service provided by the staff (which varies from person to person and also in case of the same person depending upon his/her mood). Likewise external factors, for instance weather might be responsible for the fluctuation in cus-tomer numbers. Such external factors were not part of this study, so, it would be inter-esting to see how they dictate the customer flow at any given time of the year.

It is also worthwhile keeping a track of the overall number of customers per month and not just Wi-Fi users. Calculating the proportion of Wi-Fi users out of total number of customers and measuring whether the proportion is increasing or decreasing can give an idea about the popularity of Wi-Fi in cafes. Non-users of café Wi-Fi also form an important part of the café customer group. In fact, according to the study, non-users of café Wi-Fi spend more on average than Wi-Fi users. Arranging separate desks for Wi-Fi users could be a wise way to accommodate both the users and non-users of Wi-Fi. Likewise keeping a check on the quality of café Wi-Fi and customer service can ensure that the customers are reciprocated with the service they deserve for their money. Service cannot be stocked like products so a good way of being prepared is to increase the staffing during busy hours and offering discounts outside rush hours so as to have reasonable number of customers per staff. All things considered, customer retention (be it users of Wi-Fi or non-users) should be the focus of café managers.

As discussed before, the service providers should always be prepared for a good service recovery as errors can happen despite one's best efforts to avoid them. For instance, if the internet stops working while the Wi-Fi users are logged in, the café can offer a discount on their (Wi-Fi users') coffees next time they visit the café. Likewise, if the food or drink offered or any service for that matter is not up to the standard, the customers should be immediately compensated.   The staff dealing with the customers should be empowered to take quick actions in such situations. If they have to wait for the café manager to resolve the issue, it might be too late and the café might lose some of its customers.

Learning from the café chains like McDonald's (as discussed in the literature review section), smaller cafes can try branding themselves. Setting standard guidelines for dealing with customers and managing the café will create a specific identity idiosyncratic to the cafe. This identity coupled with a meaningful logo can create a unique image about the café in people's mind. This would help people know what to expect when they hear the name of the café or see its logo. As the smaller cafes begin to expand their operations, branding becomes an almost indispensable part of their marketing strategy.

Benefitting from consumer segmentation (for instance based on occupation and age-group described above) and working out consumer targeted business tactics like offering student discounts and organizing café space keeping in mind the users and non-users of café Wi-Fi are options worth considering to bring out the café-Wi-Fi synergy. It is also worthwhile keeping one's eyes and ears open for developments in the world of internet and technology. Supplementing small features like location based advertising (as explained before) and other relevant applications along with being up to date with the necessary security protocols can help people make the best out of their café Wi-Fi experience.

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APPENDIX

The semi-structured interview guide and customer survey questionnaire can be found below:

Semi-Structured Interview Guide (For Face to Face Interview with café managers)

Research Question 1: Has the presence of Wi-Fi services in cafes helped attract more customers?

- Is it possible to compare the sales figures before and after the installation of Wi-Fi?
- Is the Wi-Fi service free of charge? Is there any special reason for why it is/ is not provided free of charge?

- If it is provided free of charge,
  - o Has it always been free?
  - o Is there a special group of customers who look for free Wi-Fi service?

Research Question 2: How has this change (provision of Wi-Fi) affected the café culture? (Are people visiting the cafes to get refreshed and socialize or are they turning the café tables into their work desks?)

Research Question 3: What is the general customer attitude on the presence of Wi-Fi in cafes? If positive, are they satisfied with the quality (i.e. speed, security etc.) of such Wi-Fi's?

Customer Survey on Wi-Fi in Cafes

This survey is intended at gathering information from customers regarding Wi-Fi services provi
by cafes in Helsinki. This survey is part of a thesis work aimed at studying the "impact of Wi-Fi
cafe businesses" in Helsinki. The findings from this study can provide useful information to caf
owners/managers about the general attitude on the presence of Wi-Fi in cafes and how it has
affected the way people use cafe services. Thus, your participation can provide important clues
suggestions for further improving of Wi-Fi and cafe services in future.

Age
- ○ 10-19
- ○ 20-29
- ○ 30-39
- ○ 40-49
- ○ 50 and above

Gender
- ○ Male
- ○ Female

Occupation
- ○ Student
- ○ Employee
- ○ Entrepreneur
- ○ Freelancer
- ○ Other (Please specify)

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1. **Please rate the following cafe elements according to their importance to you.**

	Very Important				Not important at all
Refreshments (food and drink)	1	2	3	4	5
Wi-Fi services	1	2	3	4	5
Socializing	1	2	3	4	5
Other (Please specify) …………............	1	2	3	4	5

2. **How much do you usually spend every time you visit a cafe?**

○ Less than €10   ○ €10-€20   ○ €20-€50   ○ More than €50

3. **Do you use the Wi-Fi services provided by cafes?**

○ Yes   ○ No.

If answered "No", is there
a special reason for not using
such services? Please explain.

* PLEASE SKIP TO NO. 4 FROM HERE IF YOU ANSWERED "NO".

3.1 How often do you use the café Wi-Fi services?

○ Every day   ○ Few times a week   ○ Not so often

3.2 How long do you usually use Wi-Fi services every time you visit a café?

○ Less than an hour   ○ 2-4 hours   ○ More than 4 hours

3.3 Do you take any precautions before logging on to such networks provided by cafes?

○ No   ○ Yes (please specify)

3.4 What do you usually do on such Wi-Fi networks provided by cafes?

○ Browse news, social networks etc.   ○ School assignments   ○ Office work   ○ Other (please specify)

………………………..

4. Are you happy with cafes having Wi-Fi services in them? Please explain if possible.

○ Yes   ○ No

5. Additional comments relevant to this survey.

Thank you for participating!

Cafe	S. No.	Age	Gender	Occupation	Rating of Cafe elelments according to their importance from 1(most) to 5 (not at all)					Amount usually spent (€)	Whether they use wifi in cafes or not?	How often they use the cafe Wi-Fi service?	Time spent on Wi-Fi per visit (in hours)	Do they take any precautions before using cafe wifi?	What do they usually do on cafe Wi-Fi?	Are they happy with cafes providing Wi-Fi?	Comments
					Food & Drink	Wi-Fi Services	Socializing	Other	please specify								
Cafe Picnic, Ruoholahti	1.	10-19	F	Student	1	2	1	4		10-20	Yes	Every day	2-4	No	School assignments	Yes	-
	2.	30-39	M	Employee	1	3	4	-		<10	No	-	-	-	-	-	"(I use) wi-fi only if I am a frequent visitor, otherwise (I use) 3G."
	3.	40-49	F	Employee	1	1	3	3		20-50	Yes	Few times a week	<1	No	Office work	Yes	"I need it (cafe Wi-Fi)."
	4.	20-29	F	Student	1	1	3	-		<10	Yes	Every day	2-4	No	Browse news, social networks	Yes	-
	5.	10-19	F	Student	1	4	3	5		10-20	No	-	-	-	-	No	-
	6.	40-49	M	Entrepreneur	1	3	3	-		10-20	Yes	Not so often	<1	No	Office work	Yes	-
Cafe TinTin Tango, Töölöntori	7.	20-29	M	Student	2	3	2	-		<10	Yes	Few times a week	2-4	No	School assignments	Yes	-
	8.	40-49	F	Employee	1	1	5			<10	Yes	Every day	2-4	No	Play games	Yes	-
	9.	20-29	F	Employee	2	5	1	3	house music	<10	No	-	-	-	-	Yes	"My laptop is too heavy to carry around and I pay for internet connection on my phone. But, it's a really nice extra service."
	10.	20-29	F	Employee	1	5	1	-		<10	No	-	-	-	-	Yes	-

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Location	#	Age	Sex	Occupation													Comment
	11.	30-39	F	Employee	1	4	1		-	<10	No	-	-	-	-	Yes	"There is no need to use the wifi services provided by cafes."
	12.	20-29	F	Employee	2	5	1		-	<10	No	-	-	-	-	Yes	-
	13.	20-29	M	Student	2	4	2		-	<10	Yes	Few times a week	<1	No	Browse news, social networks	Yes	"Checking messages on Facebook. "
Robert's Coffee, Arabia	14.	40-49	M	Employee	1	3	2			10-20	Yes	Few times a week	<1	No	Browse news, social networks	Yes	"Great. You can log in and say you are at Robert's Coffee at Arabia. "
	15.	40-49	F	Entrepreneur	1	3	3			<10	No	-	-	-		No	-
	16.	40-49	F	Home Duties	1	2	3	-		10-20	Yes	Few times a week	<1	No	Browse news, social networks	Yes	"Very happy. It helps pass the time whilst waiting for others to arrive. "
	17.	40-49	M	Employee	1	5	5		-	<10	Yes	Not so often	<1	No	Browse news, social networks/Office work	Yes	-
	18.	20-29	F	Student	1	4	1			<10	No	-	-	-	-	Yes	"I don't have a laptop. (But,) it's a great opportunity for those who want to use internet outside their homes."
	19.	50+	M	Retired	2	2	1		-	10-20	No	-	-	-	-	Yes	"I don't have a laptop."
	20.	50+	M	Retired	1	5	1		-	10-20	No	-	-	-	-	Yes	-
Cafe X	21.	20-29	F	Student	2	4	1		-	<10	Yes	Not so often	<1	No	Browse news, social networks/School assignment	Yes	-
	22.	10-19	F	Student	1	3	1	-		<10	Yes	Not so often	<1	No	Browse news, social networks/School assignment	Yes	-

Location	No.	Age	Gender	Occupation													Comment
	23.	10-19	F	Student	2	5	1	-		<10	No	-	-	-	-	Yes	"My mobile doesn't have an internet."
	24.	20-29	M	Student	3	1	2	-		<10	Yes	Every day	<1	No	Browse news, social networks/School assignment	Yes	"Because (it) is cheaper."
	25.	30-39	F	Employee	1	1	1	-		<10	Yes	Few times a week	<1	No	Browse news, social networks	Yes	-
	26.	10-19	F	Student	2	3	2	-		<10	Yes	Few times a week	<1	No	Browse news, social networks	Yes	"It is really important and nice to have free wifi so you can work during the cafe."
	27.	30-39	F	Employee	1	5	1	-		<10	No	-	-	-	-	Yes	"I visit cafes to relax and chat with friends and not use my phone. Helpful when away travelling to access important information."
Chico's, Arabia	28.	40-49	F	Employee	1	3	2	1	listening music	10-20	No	-	-	-	-	Yes	I use internet at home. But abroad it's easy when you need a map or something.
	29.	50+	M	Employee	1	4	2	-		20-50	No	-	-	-	-	Yes	There is no need to use cafe wifi.
	30.	20-29	M	Employee	1	3	1	-		<10	Yes	Not so often	<1	No	Browse news, social networks	Yes	
	31.	30-39	M	Employee	1	4	2	-		10-20	Yes	Not so often	2-4	Yes	Browse news, social networks	Yes	use secure connection
	32.	20-29	-	-	2	5	2	-		10-20	No	-	-	-	-	Yes	My phone includes internet but not everyone has internet in phone.
	33.	20-29	M	Employee	3	4	2	-		<10	Yes	-	<1	No	Browse news, social networks/ Office work	-	-

	34.	20-29	F	Student	1	4	3	-			No	Not so often	<1	Yes	-	Yes	For precaution about using internet: don't use them at all. However, if someone doesn't have a computer, cafe wifis are good.
										10-20							
	35.	20-29	M	Student	1	2	2	-		10-20	Yes	Not so often	<1	No	Browse news, social networks/ Office work	Yes	-
McDonald's Sokos	36.	10-19	M	Student	2	2	1	1	-	<10	Yes	Every day	2-4	No	School assignments	Yes	-
	37.	10-19	M	Student	2	3	3	-		<10	Yes	Few times a week	<1	No	Browse news, social networks	Yes	If you get bored you can just browse the net and do all kinds of stuff.
	38.	40-49	M	Employee	2	1	-	-		<10	Yes	Not so often	<1	No	Browse news, social networks	Yes	That is one of the main reasons I visit Cafes.