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# Marketing plan for a High-Tech Product

Case company: EcoLeaks

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<p>The purpose of this study was to prepare a market analysis for a start-up company in the area of High-Tech and mobile applications market. The outcome of the research was a marketing plan and business recommendations for the case company.</p> <p>The research process included action research, interviews with the representatives of the case company and direct observations. The action research included selection of a focus, clarifying theories, identifying research question, then collecting and analysing the data, and finally completing the marketing plan and drawing the conclusions. The interviews were conducted at the beginning of the thesis process and took a form of discussions with the start-up idea owners.</p> <p>The business idea of the case company was to combine the mobile application business and environmental consciousness among private users. The major findings and observations in the field revealed that the mobile applications business is blooming and the corresponding market is growing, as well as peoples' awareness of the environmental issues is growing. When it comes to the environmental aspects, people have more trust to the information shared by private individuals and people like themselves, rather than authorities and bigger commercial organizations, especially those involved in the construction business. Thus, the research results were showing favourable situation and a good business potential for the case company, willing to combine mobile application and environmental issues.</p> <p>For the marketing strategy, the author recommends to focus on entering the market with own service offer, in order to create visibility, build the brand image and attract the customers, with further keeping them on using the service. It is recommended to launch the major service (free for the end users) along with additional features, which customers can buy for a separate fee. Finally, 95% of customer satisfaction in service rating should be aimed at and expanding to the international market (Baltic states and Northern Europe for the beginning) later on.</p>	

For the future steps the author recommends to prepare a budgeting plan and a 1<sup>st</sup> year implementation program, since those were left out from the current research. For the long-term planning, it is recommended to evaluate the results of the 1<sup>st</sup> year operations, so that the marketing strategy could be corrected accordingly.

Keywords

High-tech, marketing, strategy, market analysis, mobile, m-commerce, e-commerce

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## 1 Introduction

### 1.1 Case company

Case company for this research work is a start-up called EcoLeaks. EcoLeaks offering a service, which operates through web-portal and mobile phone application, installed to users' phones. Web-portal steered and controlled by a private institution. Portal is freely open to public and anyone can register as a user there. New users are added to a database with their Social Security ID and phone number. Users can download to his/her mobile phone application for taking the measurements.

Sample measurements are taken with a help of special sheets, which are normal passive indicators, changing its colour depending on the tested sample substance. A finite number of sheets for collecting environmental measurement samples can be ordered by users. New sheets can be ordered, when old ones are used sufficient amount. After a measurement is taken, it is compared to a reference sheet, which is delivered together with the sampling sheets or can be integrated in the testing sheets. Sheets for measurements have random codes (reference number), linked to the customer ID.

In order to submit a measurement, users have to take a picture with mobile phone camera of sample sheet and reference sheet; the picture and GPS data from the place where measurements taken (possibly also short description of the tester's place and landscape picture) are uploaded to EcoLeaks web-portal. Instructions for taking sample measurements are provided through the application on mobile phone.

### 1.2 Research purpose

The purpose of the study is to prepare a marketing plan for a given start-up case company. The marketing plan will focus on the analysing the potential of the business idea, market potential, including the study on the target customers and competitors in the market niche.

### 1.3 Exclusions and limitations

The collection of data is limited to Finland and collected locally, for the easy of execution and as a starting environment of the business idea. The outcome of the research study will be limited to a marketing plan and a revenue model, to be suggested for the given case company. Budgeting and 1st year implementation program are excluded from the study.

### 1.4 Results

The result of the study represents a marketing plan and a revenue model, recommended for the given case company.

### 1.5 Structure of the thesis

Chapter 1 presents the scope of the thesis, research question and gives a brief overview of the case company. Chapter 2 presents the conceptual framework for the research study and provides a literature overview relevant to the research question. Chapter 3 presents the market analysis and the marketing plan for the case company. Chapter 4 includes conclusions and discussion on the topic, as well as the recommendations for the marketing plan implementations.

## 2 Conceptual framework

This chapter will provide a reader with some findings from previous research in the area of marketing of high-technology products, give an overview of what is already known about the current topic and what do other researchers say about it.

### 2.1 Marketing of high-tech products

#### 2.1.1 Defining high-tech product

As commonly known, marketing is an important consistent part of a product's commercial success. A brilliant idea of a new innovative and great product can never reach the mass market if not communicated well, and on the opposite, an average product or service, which is presented well to the public can be sold in masses and bring great profits to its provider. The key to success is in understanding customer needs, market requirements and the nature of the product or service. Julie Wilson, principal at Fort Worth-based Regian & Wilson, a company that has a multitude number of high-tech firms in its client portfolio, says, that "many marketing experts, even those with high-tech as a primary client base, say the basic principles of marketing apply to every enterprise. The critical issue is looking at your product or service and deciding who your target market is (Shepherd, Shawn 1999: p6A).

However, while most agree proven techniques have to underpin marketing choices in the high-tech industry, there are a number of professionals who say the sector offers a unique challenge (Shepherd, Shawn, 1999: p6A). Therefore the nature of a product should be understood and taken into account, in order to become successful in this challenging sector. As defined by Tow and Joshi (2011: 338) High-tech products are those, which meet any of the following characteristics: (a) considered to be a radical innovation, (b) a product whose function depends on technology or principles outside the scope of the average consumer's knowledge; (c) a product needing technology significantly different from the rest of the market. Gardner et al (2000) explains that high-tech products are those that use technologies considered to be the leading edge or stated of the art in a particular field, meaning technology inherent in emerging from the laboratory into practical application, which is exactly the case with EcoLeaks – software application com-



bined with service for the consumers. EcoLeaks service can also be categorized as innovative, following Dewar and Dutton (1986) and Rogers, (1995), who defined innovation as an idea, practice or material artefact perceived to be new by the unit of adoption.

Nevertheless, today the development of new technology is progressing rapidly and in the high-tech industry the question of customer acceptance and perception of tech-intensive products/services becomes even more relevant than in consumer goods industry (Lee et al, 2009). Besides, the market conditions for such products or services are considered to be challenging, because due to high R&D investment the market has characteristics of being fast in a pace of change, followed by risk and uncertainty (Kidiyoor, 2010).

Now, when the high-tech products are defined as a class, it is important to understand the difference between marketing of high-tech products and consumer goods, and choose the marketing and revenue models accordingly. Often we face a situation, when high-tech products are so innovative that they require unusually aggressive approaches to help customers understand a product or service, which they might not even understand at the beginning.

### 2.1.2 Interdisciplinary Strategic Marketing Framework

Consumers are more sophisticated now and have better understanding of technology, due to a fast Internet and globalization of the markets. Therefore they have become more demanding and less loyal to a particular company or product/service, due to easier comparison of the competitors and substitutes. High level of market saturation does not make it easier to get through the crowd and reach the high-tech customer.

According to Tow and Joshi (2011), Interdisciplinary Strategic Marketing Framework represents one of the means to implement strategic and marketing practice changes which will allow a firm to more effectively market its high-tech products and as a result gain competitive advantage and gain more profit. They suggest using an interdisciplinary approach in marketing strategies, when dealing with high-tech products, defining an interdisciplinary specialist as one having integrative experience in both marketing and science. Such a person may have a degree in interdisciplinary studies or a combination of degrees or experience in both, enabling better access to a product, and select the best marketing strategies (Tow, Joshi, 2011: 338). Employees with such a background have

a number of remarkable benefits over the traditional disciplinary ones: better understanding of business processes and implications to shareholders values, better understanding and higher appreciation of the science behind a product, easier communication with both upstream developers and downstream end users of the product or service.

Trying to sell high-tech products from a point of view of one discipline can be unsuccessful and challenging. Thus it is important to understand the significance of a combination of both areas: technology innovation, which is hidden behind the given product or service and the human aspect, which makes a product attractive to end-users. For researchers and developers, who understand the technology, it might be difficult to understand consumer needs and what part of the technology is the most attractable and marketable for the consumers.

Therefore the communication and co-operation between researchers and marketers during the whole process is crucial for the commercial success of the product or service. This is why it is important to combine science and marketing knowledge together in one package. By combining the viewpoints of the developing scientists with the shared goals of the marketers, (and by creating a successful, interdisciplinary marketing plan), a strategy of cross-disciplinary communication and collaboration will yield a more effective, integrative, and interdisciplinary model of marketing high-tech products (Tow, Joshi, 2011: 341). This is a reason why an interdisciplinary team is a better for understanding of how the technology can be used to create a marketing campaign.

Thus, when dealing with innovative product and for a campaign to become successful, it is important to invest considerable effort in explaining the technology to the consumers, which they are not yet aware of. The explanation should be given for both: what this given technology represents itself, as well as the benefits it brings to the everyday use. This dual approach is vital, and interdisciplinary specialists are especially qualified to lead marketing campaigns which communicate the benefits of a new technology and to drive radical innovations (Tow, Joshi, 2011).

### 2.1.3 Specific vs. Nonspecific science marketing

The amount of scientific details used in the marketing campaigns for the new high-tech products should be decided individual and in accordance to the case. For this purpose

Tow and Joshi (2011: 344) propose two different strategies to be used in marketing of high-tech products, according to the product type and characteristics.

First strategy type is called “specific” science marketing, which is recommended for radical innovations and the second one is a “nonspecific” marketing, recommended for incremental innovations.

Authors also introduce two more classifications of high-tech products’ characteristics: “cool factor” and “efficacy factors”, where cool factors characterizes a product which contribute more to a consumers image (as a name suggests) and become a fashionable attribute (similar to Apple products), and efficacy factors bring more of a tangible benefit when using a given product over its competitors.

Thus, in case of Specific science marketing authors suggest building a marketing campaign around emphasizing the “efficacy” factors of the product, demonstrating product or service superiority and showing how the technology function and how it can improve the consumers’ life and what the real benefits of “unfamiliar technology” are. This one often happens through product demonstrations and is used for driving sales. Doing so effectively would be difficult for strictly “disciplinary” marketers without a science background with which to interpret and distil the product’s technology into a successful marketing campaign (Tow, Joshi, 2011).

With the Nonspecific science strategy, marketing campaign would be based on highlighting any technical or scientific aspect of the product that might provide a competitive advantage. In such cases, marketing campaigns concentrate on some technical or scientific feature, which bring the consumer a feeling of exclusiveness and advantage, but is not really specifically defined or truly understood by consumer, more that the “cool factor”. Authors bring an example of marketing the products with “anti-oxidant” and “organic” characteristics, which have become widely spread nowadays. The terms are marketed as science, but are not scientifically defined or proved and therefore not truly understood by consumers (Tow, Joshi, 2011: 345).

As can be easily understood, the choice whether to use a scientific or non-scientific strategy, or a combination of both, can vary depending on a product. A combination of those two is also possible to use. In the case of EcoLeaks, it is easy to demonstrate in practice how the indicator samples work, how to upload and share information through the service

provided and what benefit the use of correlating service bring: knowing exactly the ecological situation around where they go for a walk, go fishing, build houses, etc... The technology behind the service is easy to understand for a consumer and therefore no special artificially scientific words are needed. Specific science marketing strategy will be easy to apply for demonstration.

#### 2.1.4 Marketing and Commercialization Issues

After the technology has been invented, there are some critical issues to be discussed and evaluated prior to going live – i.e. start launching the product to the market. Market research is good to conduct before launching the product, which will reveal the current situation on the target market. It will show whether there is a potential need for such a product, are there customers, are there competitors on the market and who are they, is there a replacement product or service – all these details will help to save the resources from the unreasonable waste and to plan the marketing strategy in its best direction, customized for the current case.

Touhill et al (2008: 120) suggest seven most important aspects to answer before going ahead with the product, thus the market analysis can be built on those:

1) Is the innovation uniqueness? With this question one should critically evaluate the innovation, to become aware of what is available on the market already and try to understand how is it different from existing products, is it better, what is the novelty in it. No business is operating in a vacuum, so it will be good to be able to evaluate own product and develop a suitable market strategy for this. The resources will be wasted, if the technology is not as unique, as inventor thinks, or your competitors have come up with the similar thing a while ago.

2) Is the technology really needed? An answer to this question will show whether the technology has a practical application, are there potential users for that and whether they really need it.

3) How big is the potential user audience? Answer is a continuation to the previous question. After it is confirmed, that potential for the technology exists, it will be easier to calculate how many potential users are on the market, thus giving a more realistic picture of the target market itself.

4) Is there a proven record of success? This question is relatively easy to answer, as it depends on the company. In case of a start-up coming up with a first project it will take more effort to get customers know about it. If the company already exists, then it is easy to see the history of success. Well-known brands are easier to sell: "Lack of suspicion makes everybody's job easier? (Touhill et al, 2008: 210)

5) Does the innovation application use its best capacity? Sometimes the idea on how to apply the technology depends on the evaluator's point of view. An engineer and a marketer might have different point of view. Whether an engineer might come up with a brilliant innovative technology, a marketer will have a better view on how to present it to users and how to make the most benefit of it. That is why marketers are valued for their creativity. Thus, the company willing to sell the innovative product successfully should have both, engineers and marketers in a team working together.

6) How long will it take to finalize the project? This is again a continuation of the previous question – engineers and marketers should coordinate together the progress of the work and ensure the information flow and mutual understanding inside the team.

7) Potential competition on the market? This one is a very clear and important question, correlating with the first one for the market research. There are little chances that the technology will be unique of its kind, so it is important to know who the competitors on the market are, what their product is and whether there are substituting products.

#### 2.1.5 Assessment: Technological vs. Business and Marketing

When preparing a new innovative technology for market release it should first come through certain assessments. Touhill et al (2008: 122) divide this stage into two main stages: technological and marketing with business assessment. According to the authors, technological assessment is easy to conduct, because the technology can be easily tested by engineers and test groups, showing the results whether it simply works or not. "Assessing technology readiness assures that new products will integrate smoothly with downstream design and manufacturing processes and perform as expected in the user's environment" (Clausing, Holmes, 2010: 52).

While the technology assessment is relatively easy to conduct, it represents a critical phase for the successful release of the innovative product. Clausing and Holmes (2010: 52) claim, that in the absence of a technology readiness assessment, unstable performance will disrupt later stages in the development process or, even worse, appear once the product is in the hands of the customer. Thus it truly important to ensure, that the technology is ready and functioning as designed, prior to releasing it to the market.

However, after the technology is tested well and approved to be ready for release, “determining if people will buy an innovation even if it works wonderfully is another matter” (Touhil et al, 2008: 122). For the business and marketing assessment the company can use the findings from the market research, discussed earlier in this chapter. A carefully chosen strategic model based on thorough business and marketing assessment will guide the innovation team to making profit with their product. Thus, the challenge is how to create that right business model.

Touhil et al (2008: 122) suggest that “the investor and entrepreneur work in parallel with the inventor and technologist”, where entrepreneur is responsible for managing the marketing and commercialization assessment and inventor is responsible for the technological testing together with engineer team. Touhil et al (2008: 32) define an entrepreneur as a person whose brilliance is highlighted by an ability to blend different perspectives and fuse them into winning teams. An Investor is defined as a person (or a group) who support financially the project or concept to be brought to a conclusion (Touhil et al, 2008: 17) and technologist is defined as a “cohesive team member who works for on-time performance, cost-efficiency, and a useful product that will sell well, a technologist should actually cultivate the trait of quite rationality” (Touhil et al, 2008: 23).

However, “the tasks (of an investor and entrepreneur) don’t have to be done sequentially... but when both jobs are finished, the team can move directly to the decision as to whether or not to continue with the innovation. Input for decision making is equally important from both the technological and business processes” (Touhil et al, 2008: 122).

#### 2.1.6 Crossing the Chasm

When trying to sell new innovative technology to the mass market, companies often meet strong resistance from the mass public. Such a resistance to change and novelty is

based on the human nature and is very common, when people are introduced or forced to use something new.

In the marketing of high-technology innovation there exists a term “chasm”. Originally the word “chasm” is defined by a Collins dictionary as “a very large difference between two things, groups of people, ideas, etc. especially one that you think will never change” (Sinclair, 1987: 230). In marketing and technology it means a gap during the early start up period between early adopters of the technology (individuals who feel enthusiastic about the new technology and are always easy accepting innovation) and the early majority (so-called pragmatics). Geoffrey More developed and presented the theory of the chasm in early 1990-s in his book “Crossing the Chasm”.

Thus, bringing the cutting-edge innovation to the mass market has never been easy. The main risk and challenge in bringing the product to the market is in transition from an early market dominated by a few visionary customers to a mass market with mainstream behaviour dominated by a large block of customers, so-called pragmatics in orientation. “The gap between these two markets, heretofore ignored, is in fact so significant as to warrant being called a chasm, and crossing this chasm must be the primary focus of any long-term high-tech marketing plan. A successful crossing is how high-tech fortunes are made; failure in the attempt is how they are lost” (Moore, 2006: 5).

Customers of high-tech products can be divided into the following groups, according to their behaviour and acceptance of the technology: innovators (also called “technology enthusiasts”), early adopters (“visionaries”), early majority (“pragmatics”), late majority (“Conservatives”) and laggards (“Sceptics”) and are laid out through the technology adoption lifecycle as shown in the figure below:

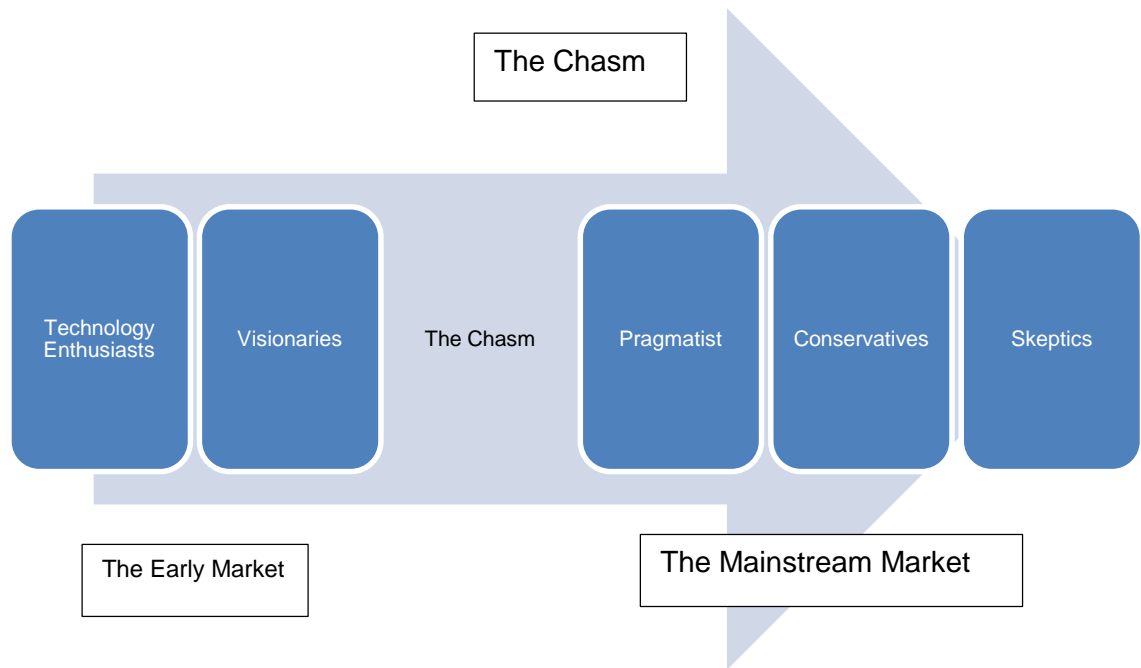


Figure 1. The Chasm (G.Moore).

Consumers can be divided further into two groups: the early market, consisting of technology enthusiast and visionaries, and the mainstream market, consisting of all the rest. The Chasm represents a gap between the early and the mainstream markets, as seen in the figure above. The representatives of the early market are easy customers for the innovative start-ups, because these people are willing to try out all the novelties voluntarily due to their own interest and curiosity. However, those who sit in the mainstream market are more conservative by nature and will use and pay only for something, which proves to work and benefit them, as consumers. Thus, the mainstream market consumers will first wait and see, if the innovation is working and spreading well between the enthusiasts and visionaries, and only after that, slowly and carefully will dare to try themselves. And this is how the product can enter the mainstream market.

Therefore, crossing the chasm is the critical moment for the innovation on its way to the mass market. The success of the company pushing a new innovative product to the market will depend on the strategy they have chosen to come over the chasm and how they address target customer, both – on the early stages and in the conditions of mass market.



## 2.2 Mobile Applications' Marketing

### 2.2.1 Definition

Turban et al (2010: 383) defines Mobile Commerce (m-commerce), called also an m-business as one, which “includes any business activity conducted over a wireless telecommunications network. This includes B2C and B2B commercial transactions as well as the transfer of information and services via wireless mobile devices”.

M-commerce is a logical next step in the chain of e-commerce, where mobile devices create an opportunity to deliver new services to the market, aiming at both existing customer, as well as attracting new ones. At the beginning of the mobile devices era, the small screen size and short battery life were considerably limiting business opportunities: However nowadays, after the growth of mobile and smartphone sales and popularity, the niche has huge recognized potential and should be considered seriously as an opportunity. This subchapter will discuss the distinguishing attributes and key drivers of m-commerce and revenue model.

### 2.2.2 Attributes of M-commerce

M-commerce and E-commerce have some common features. However, there are some key attributes of the m-commerce, which make a difference and give an opportunity for development of new applications and are only possible for the mobile environment. These are described by Turban et al (2010: 383-384) and are as follows:

- Ubiquity – meaning the availability at any given time and any location, wherever the end user is; this feature provides easier information access in real-time environment, which is highly valued in the modern high-pace rhythm of everyday life;
- Convenience – smartphones and mobile devices are becoming more convenient and easy to use all the time, smaller and with longer life batteries, they become faster and more powerful, which increases even more its popularity among users; this gives an opportunities to even more people connect easily and faster to Internet and exchange information with other users;

- Interactivity – due to the previously mentioned ubiquity, the communication becomes more interactive, as the users can continue the information exchange, regardless their location, and there is no need to wait until one can get online and log-in to their desk computers (in the case e-commerce);
- Personalization – compared to the desk computers, mobile devices are purely personal devices in most of the cases, thus giving an opportunity personalize the service and the way the information is being delivered to each particular user through the personal settings and user profiles for the applications;
- Localization – location-based m-commerce is a knowledge of where a user is physically located at any particular moment is key a key to offering more of the relevant mobile services and information in real time.

### 2.2.3 Drivers of M-commerce

The development of m-commerce has been forced by some of the technological, business and economic factors, outlined by Turban et al (2010: 384-385):

- Widespread availability of more powerful mobile devices: There are nearly 7 billion mobile subscriptions worldwide, estimates The International Telecommunication Union (May 2014). This is equivalent to 95.5 percent of the world population; in Finland there were more than 170 subscriptions per 100 inhabitants in 2013 (Undata, 2015). The devices are continuously increasing in power, functionality and features that support m-commerce and the mass market for it.
- The handset culture: The modern common trend among young people and young adults of 15- to 25-year old age group is in using mobile smartphone and devices in everyday life very intensively. These users will constitute a major market of online buyers once they become earning money and will consume the service a lot during their working lives (Turban et al, 2010, 385).
- The service economy: “The transition from a manufacturing to a service-based economy is encouraging the development of mobile-based services, especially when customer service is a differentiator in highly competitive industries” (Turban et a., 2010, 385). People are having more on more resources and less time, thus

are willing to pay for the services, including those received via mobile technology, which supports the m-commerce again.

- Vendor's push: Mobile operator companies, as well as the companies producing the devices are advertising the many potential applications of m-commerce so that they can push new technologies, products and services to buyers. The advertising expenditure by these companies to encourage business to "go-mobile" or "mobilize your business" is huge (Turban et al., 2010, 385).
- The mobile workforce: Modern trend in working life is so, that more and more people are doing their jobs remotely from their main work location, either due to the business trips and customer location, or in order to balance their personal and work lives. This in turn promotes m-commerce and different aspects of life "going mobile".
- Increased mobility: as a consequence of the previous point, many people are spending longer times commuting or travelling from point A to B, so many of them, especially executives are doing considerable part of their work on the go, so the mobile technology is used there as well.
- Improved price/performance: due to the technology progress, the ration between price and performance is improving, making the devices and services more available and affordable than before, which increases the consumption of them and boosting m-commerce.
- Improving bandwidth: also the bandwidth and speed of the information transmission is improving all the time, improving the consumption of mobile services.

#### 2.2.4 Difference between E-commerce and M-commerce

There are many similarities between E-commerce and M-commerce, and the latter one emerged from the first one, there are some differences between the two of them. The differences subsist mainly in the type of communication, the types of Internet access devices, the development languages and communication protocols, as well as the enabling technologies used to support each environment. The mentioned differences were

described by Little (Little, 2001). Not going too deeply into technical details, the differences are shortly described below:

- Communication mode: the communication in e-commerce is happening mainly via a wired connection to a Local Area Network (LAN), and the one in m-commerce is via wireless network.
- Internet Access Devices: wired e-commerce takes place generally via desktop and laptop computers, while wireless m-commerce happens via mobile devices (smartphones, tablets, etc.), meaning that the devices are more personal in use, than the desktop computers. This fact gives more opportunity for more personalized service and since most of the mobile devices have the location-aware functions, also a more of the location based services. However, the other side of the location-aware function is that it might be a threat to personal privacy issues.
- Development Languages and Communication Protocols: the development language used in wired technologies (HTML – Hyper Text Markup language) is widely known and spread internationally. The development languages and protocols used in mobile internet are different in Japan (cHTML – compact HTML by DoCoMo) and the rest (most part) of the world (WML – Wireless Markup Language). Thus the differences in protocols cause some compatibility issues and might result into function limitations.
- Enabling Technologies: Functional limitations arise due to the fact, that a tested and trustworthy system is absent for the m-commerce environment and new standards are under continuous development. These include issues cookies, WAP, JAVA, Active Server Pages, etc.

#### 2.2.5 M-commerce Value Network and Revenue models

Turban et al (2010: 73) defines a revenue model as a model which “outlines how the organization, or the EC project, will generate revenue”. The difference from a business model is, that the later one describes the process a company will use to generate the revenue. The revenue model can be part of the value proposition or it may complement it (Turban et al, 2010, p.73).

Chaffey et al (2009: 114) states, that “revenue models describe methods of generating income for organization“. And business model is defined as “a summary of how a company will generate revenue, identifying its product offering, value added services, revenue sources and target customers” (Chaffey et al, 2009: 670), thus supporting the idea of Turban, that a revenue model can be a part of business model. Furthermore, according to Chaffey, there are some differences between the revenue models for existing companies and new ones, thus for the existing companies, revenue models have been based on the income from sales of products or services (Chaffey et al, 2009: 114). That can happen through the direct sales from the service supplier, or via an intermediary, in return for some commission. Other methods of generating revenue might include selling the advertising space or some other digital services that were not previously available. In any way, the mix of the options for the best ROI should be revised and selected according to each case separately. Following is an overview of possibly revenue models, which might be useful for the case company of this thesis work.

It is also important to understand the composition of the m-commerce value chain and its composition, since the revenue models might involve payments by the customer to any member of the value network, or the revenue model itself may involve other members of the value network. Turban defines a value chain as a linear one, where each party has a clearly defined role that contributes to the overall process in a serial manner (Turban, 2002: 867):

*Technology Platform Vendors -> Infrastructure and Equipment Vendors -> Application Platform Vendors -> Application Developers -> Content Providers -> Contents Aggregators -> Mobile Portal Providers -> Mobile Network Operators -> Mobile Service Providers -> Handset Vendors -> Customers*

Figure 2. M-commerce Value Chain (Source: Turban, 2002)

However, the m-commerce environment is developing at a high pace, creating entirely new business landscapes, where the members of the value network are overlapping and do not necessarily preserve a sequential nature and where all the market players need to contribute for the industry to reach an optimal level. The new m-commerce value net-

work proposed by Coursaris and Hassanein (2002) reflect the relation between the members in more interactive way, followed by short description of each member of the value network:

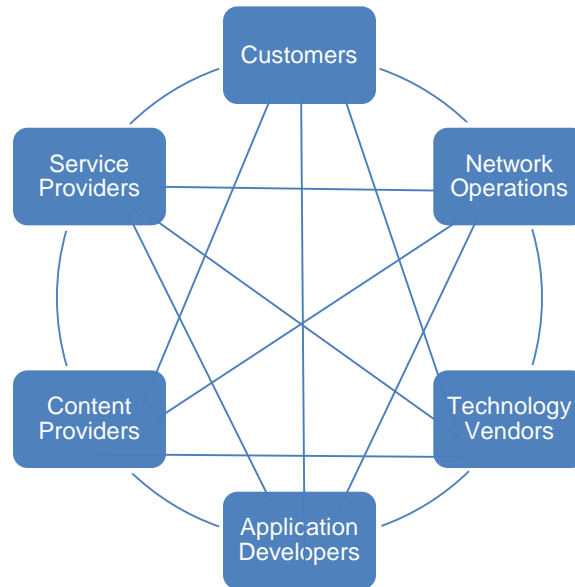


Figure 3. The m-commerce Value Network (Source: Coursaris and Hassanein, 2002)

- Customers: obviously one of the most important members of the value network, defining the need for presence for the rest members of the network;
- Network Operators: second most important member in the value network and are crucial in the success of the m-commerce industry, as they are responsible for a wide range of activities (including investing in the network infrastructure supporting non-voice services, educating customers about the availability and uses of new services, etc.). Such companies typically utilize a subscription fee business model with customers, as well as a transaction-based fee business model with content providers (Coursaris and Hassanein, 2002: 10)
- Service Providers: “Similar to the various Internet Service Providers (ISPs) for the wired Web, Mobile Service Providers (MSPs) emerged to provide an easy way for customers to gain access to wireless networks and available solutions. In addition to this function, some literature includes content providers and operators under this category, as they have come to expand their offerings into the area of servicing customers as well (Coursaris and Hassanein, 2002: 10). In other words, the customers are buying the service and products, produced by others

from MSPs. The typical business models for this group are based on subscription fees or fees based on the per-minute charge.

- **Application Developers:** these group includes software developers and system integrators, responsible for a wide range of services, such as hosting and transaction processing, as well as delivering a practical solution to customers based on available technology. Consequently, with the successful software and systems and when the customer needs are met, the return will be high for all involved in providing non-voice mobile services. The product being offered to the customer might be an off-the-shelf, customized (developed to meet specific customer need) or hybrid (based on generic product with some further customization). The business model used by these companies is based usually on software licensing fees, utility transaction costs and subscription fees. (Coursaris and Hassanein, 2002: 10).
- **Technology Vendors:** are those who “transform what is desired and theoretically designed to what is actually available. They supply the necessary hardware and some of the software to enable the convergence of telecommunications and IP networks, ranging from transmission towers to mobile handset receivers... These groups need to coordinate their efforts to prevent market inefficiencies, such as delays in releasing appropriate handsets for the latest networks made available... Such inefficiencies can cause not only financial turmoil for some of the players, but even complete abandonment and failure of new technology initiatives. The typical business model for this group is based on sales or leasing, as well as license and/or maintenance fees applicable to software.” (Coursaris and Hassanein, 2002: 10).
- **Content Providers:** is a cumulative name for a group of companies, through which customers get access to the information they need, and include content providers (like Reuters), content aggregators (like digitallook.com) or portal providers (like Yahoo). Current trend in the mobile industry is that content providers have an exclusive agreement with network operators and where the customers subscribe to a network and thus gain an access to an exclusive set of content providers. “This is a symptom that is being addressed in efforts to provide a truly ubiquitous wireless network that is not only technologically compatible, but also offers unrestricted access of content to all mobile users regardless of carrier selection. The

typical business model is based on advertising and subscription fees.” (Coursaris and Hassanein, 2002: 10).

### 2.2.6 M-commerce Revenue Models

E-commerce market place has several online revenue models, which can be utilized in the m-commerce environment. Those can be divided into two major groups – those which involve customers directly, and those which do not – when the other members of the value network are paying a fee (for advertising, etc.) and the customers enjoy using a service for free (partly, paying for additional features, or totally). Those which include payment by customers are paid apps, in-app purchases, subscription model and brokerage (the last one can include both payments – from a customer or from other members of a value network). Those including payment from other members of the value network are in-app advertising, payment clearing, hosting, and pay-per-click. The most common of the models and their advantages and draw-backs are discussed in more detail below. (Turban, 2002; Kalakota, 2002; Chaffey et al, 2009).

1. Paid applications: is a simple revenue model, where a customer has to pay a fixed fee to the application provider/developer for downloading the application. For the paid applications it is common to offer a free trial period of few days to attract customers, when they can use an app for free and then make the purchase. This way it is easier to attract customer, when a new and unknown idea being offered to the market. The problem with this revenue model is that customers often skip the paid applications and services and look for a free alternatives, since the choice and offer is very wide and a competition in the m-commerce environment is very high. So, a careful market research and evaluation of the competitors is essential when considering this type of a revenue model.
2. In-app purchases: also known as “Freemium”, where a customer has an application for free but has to pay for additional services, which can be of two major types:
  - a. A customer buys additional features to a free application (for example, often used in mobile games, where customers are being offered to buy additional power or devices for the game character; or buying an extra



account to the apps which follow some statistics – gas consumption, home accounting, etc.)

- b. A customer can use an application for free, but then having continuous advertisement there, or can pay for a premium account and have ad-free account and some additional features in an app.

With the in-app purchases (freemium) revenue models, a developer/ application owner should ensure that the additional features and services for the in-app purchase are constantly being added and updated, to ensure the consumers continue using it and spend money.

Another point with the in-app purchases is that they should be priced wisely, so that they seem to be cheap and affordable, so that consumers keep on buying them regularly;

3. Subscription model: a revenue model, where customer have to pay monthly or yearly payment fee for using an application or service (for example, Amazon Prime, Adobe, Netflix). The benefit of the revenue model is that it is easier to forecast the upcoming earnings and to rely on a steadier stream of revenue. Companies often offer new customers a month of free usage to attract new ones. However, with this revenue model companies have to maintain a high level of customer service to ensure customers remain loyal.
4. Brokerage: a model where revenue is generated from the process of buying and selling of products or services between two or more separate entities. Can be conducted as B2B (Business to business), B2C (business to customer) or C2C (customer to customer). So, the service provider/app owner can charge a fee for each transaction done. However, since the model makes sense only when there are many users, it can be challenging to attract many customers to generate a visible revenue, and the companies should be careful with pricing, as the customers might choose a different intermediary or buy directly from each other.
5. Advertising: is a case, where companies pay content providers in exchange for advertising space. On one hand this can benefit both parties of the deal: giving

the service providers an opportunity to keep the prices for the end-user lower (or offer service for free). But on the other hand, excess of advertising can distract customers and bring frustration in the experience of using a given service. In a sponsorship revenue model (typically a fixed fee for a period), as an option, features provided by other content providers are included on the site for a fee. For example, a bank sponsoring the Money section on a media site. Advertising based revenue model, will not work (or will not bring too much of a revenue) if not used regularly. However, essential applications and services, which are used daily, or even few days a day will work perfectly – like weather forecasts applications;

6. Payment clearing: is a fee (usually in percentage from the total sum), paid to a third party merchant for processing of a purchase made wirelessly.
7. Hosting: when service providers outsource hosting to other companies, when lacking the necessary technology or expertise in their own field.
8. Pay-per-click: is in fact similar to the in-app advertising, except that in such a revenue model advertisers pay the site owners every time their advertisement been clicked. In such cases advertiser usually using keyword phrases relevant to their target market.

### 2.2.7 Value Proposition to m-Consumers

As defined by M.Skok in Forbes, a value proposition is “a positioning statement that explains what benefit you provide for who and how you do it uniquely well”. In other words it “describes your target buyer, the problem you solve, and why you’re distinctly better than the alternatives” (M.Skok, 2013). In a nutshell, a good value proposition should include the following:

- Relevancy – i.e. describe how your particular product or service can solve your customers’ problems or improve their situation;
- Quantified value – tell what specific benefits your product or service can deliver;
- Unique differentiation – explain your customers why they should choose you instead of another substitute (P. Laja, 2012)

There are different ways for preparing a value proposition, but the most important thing is to keep it clear and simple – what is it, for whom and how it is useful. Should be easy to read and should not take long time to understand. As proposed by P.Laja, a value proposition should come in a form of a short text, including a headline, sub-headline and one paragraph of text, where:

- Headline reflects the idea of what the end-benefit for the customer is. Should be in one sentence, which grabs attention;
- Sub-headline, which can come as 2-3 sentences paragraph, which elaborates a bit more what the offer is, for whom and why is it useful;
- 3 bullet points listing the key benefits or features of the product or service being offered;
- Besides, the value proposition can include some visual material, as the images communicate much faster than words (P. Laja, 2012).

Thus, if still following the P.Laja's theory, a good value proposition should answer the following questions:

- What product or service is your company selling?
- What is the end-benefit of using it?
- Who is your target customer for this product or service?
- What makes your offering unique and different?

## 2.3 Marketing plan for service businesses

### 2.3.1 Defining a marketing plan

As defined by McDonald and Payne, marketing plan is a framework for identifying where and why marketing resources are going to be allocated, when they are to come into play and how they are to be integrated in order to make maximum impact. It should represent a series of activities which are tackled in a logical sequence in a way which leads to the setting of marketing objectives and the devising the programs to meet them. The output of this process is the strategic marketing plan (McDonald, Payne, 2006: 38).

As elaborated further at Chaffey and Smith, strategy “summarizes how to achieve the objectives and guides all the subsequent detailed tactical decisions” (2008: 454). In other words, objectives define what a company want to achieve and strategy formulates how

to get there. Further details of the strategy are called tactics, which in turn tend to be short term and flexible, while strategy itself is longer term and more enduring (Chaffey and Smith, 2008: 464).

### 2.3.2 Why needed

“Marketing is designed to provide a longer-term strategic customer-driven orientation rather than a short-term tactical triumph” (McDonald, Payne, 2006: 4). In other words, marketing plan will bring a better coordination of activities and individuals of the organization. Other benefits in favour of investing time and resources into preparing a thorough marketing plan are presented in the table below:

<ul style="list-style-type: none"> <li>• Increase the likelihood of identifying external developments</li> <li>• Prepare the organization to meet change</li> <li>• Minimize non-rational responses to the unexpected</li> <li>• Improve communications between executives and departments</li> <li>• Reduce conflicts that inevitably arise when organizational direction is unclear</li> <li>• Force management to think ahead systematically</li> <li>• Balance corporate resources more effectively against market opportunities</li> <li>• Provide a framework for the continuing review of operations</li> <li>• Most telling of all, lead to a higher return on investment</li> </ul>
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Figure 4. Benefits of having a marketing plan (McDonald, Payne, 2006, p. 38).

### 2.3.3 Steps and Phases of a Process when Preparing a Marketing Plan

When working on a marketing plan, one should remember, that “the process is clearly cyclical, in that monitoring the value delivered will update the organization’s understanding of the value that is required by its customers (McDonald, Payne, 2006: .6). This chapter will go through a theory of structure of a marketing planning process, which will be utilized later on in the marketing plan for the case company itself.

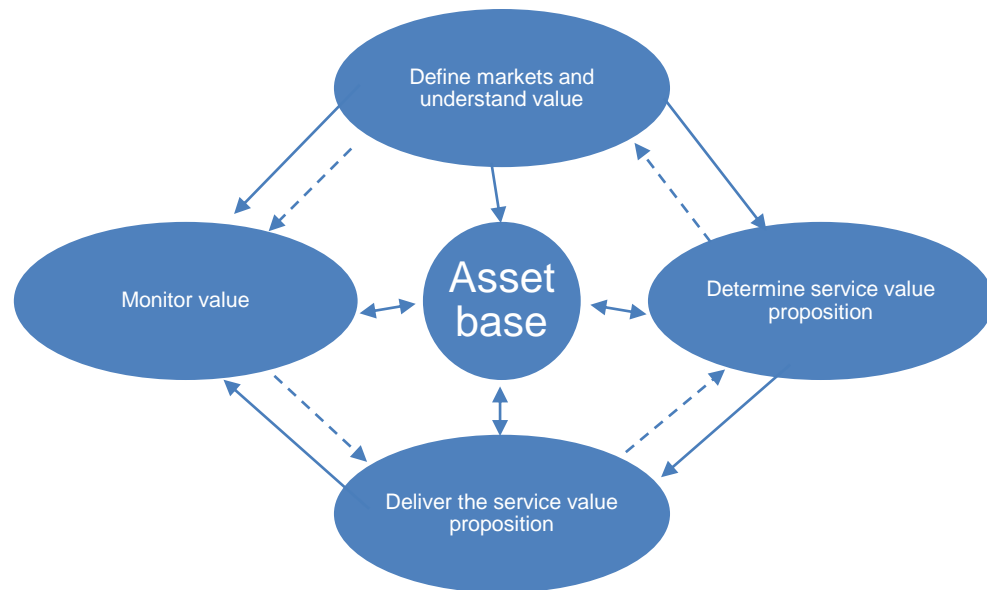


Figure 5. Overview of marketing map (McDonald, Payne, 2006, p.7).

As shown in the scheme above, marketing process can be divided into four major steps:

- (1) Defining markets and understanding value;
- (2) Determining service value proposition;
- (3) Deliver the service value proposition;
- (4) Monitoring value;

Where steps 1 and 2 are related to strategic planning process, also known as developing market strategies, and steps 3 and 4 are related to the actual implementation in the reality of the planned and then evaluating the results.

As McDonald and Payne explain further, the first step (Defining markets and understanding value) includes: definition of the corporate mission and objectives and specifying markets of interest, as well as external and internal market research, often conducted through a SWOT analysis.

Second step – determining value proposition – according to the authors “is more commonly referred as strategic marketing planning”. The key input to this process is the prioritization of target markets, based on an analysis of customer needs and the relative attractiveness of different customer segments, which was produced by the previous process” (McDonald, Payne, 2006: 9).

The process of determining of the value proposition is divided into 4 steps by McDonald and Payne as follows:

- Choosing markets/segments;
- Defining objectives (market share, volume, value or contribution by segment);
- Defining price/value proposition – should be considered from the point of view what customer cares about and should contain the four “C’s”: Cost, Convenience, Communications and Consumer wants and needs;
- Defining marketing strategies – meaning how value is to be delivered/communicated

After the above mentioned steps has been clarified, the company gets an estimate of the costs and how the price and value proposition will affect sales. This in turn will give a basis for the future marketing strategies.

Step 3 – delivering value proposition – is done with a help of various marketing activities and communicating programs.

Step 4 is monitoring value, which is an essential part of the company’s evaluation and correcting the strategy. There are different ways of monitoring the value and it can be compared against that which was in value proposition, or in objectives, or against expected or against the overall effectiveness.

Preparing a marketing plan should be addressed as a processed, with many phases and numerous steps, including a lot of research work and analytical approach. To navigate during the process, McDonald and Payne propose to organize this work into four phases, which are in turn are broken down to ten consecutive steps all together. However the steps are interrelated and the whole process is highly interactive (McDonald, Payne, 2006: 43).

The four phases of the marketing plan are as follows:

- Phase One: Establishing the strategic context
- Phase Two: Conducting a situation review
- Phase Three: Formulating marketing objectives and strategies

- Phase Four: Allocating budgets and developing a detailed first-year implementation plan

Figure 6. Four major phases of marketing planning process (McDonald, Payne, 2006: 42).

As McDonald and Payne state – “It is crucial to do the right things as well as to do things right!” (2006: 42). Right things mean here a continuous dialogue with the customers to ensure that the company is making what they want. And the right way of doing things mean the systematic approach and continuous measurement and evaluation and the ability to predict the changes in the business, economy, legislation, technical market and competitive environment in the area of operation. The final outcome of the marketing planning process is the strategic marketing plan. The ten steps of the four phases are presented in the graph below, followed by some more details in the paragraph below:

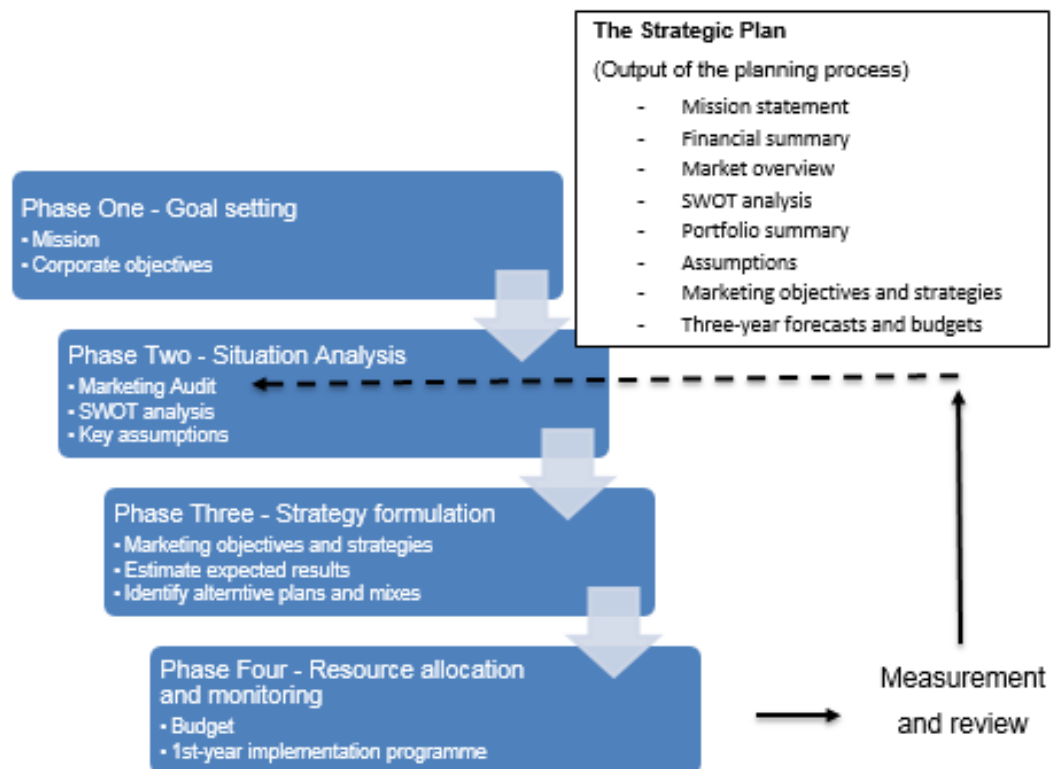


Figure 7. The strategic marketing planning process for services. McDonald, Payne, 2006: 49).

Step 1: Formulating Mission statement, which is an important starting point, as it gives a feeling of a clear purpose and sense of direction for both, the stakeholders and employees. As defined by Business Dictionary, a mission statement is a “written declaration of

an organization's core purpose and focus that normally remains unchanged over time". As elaborated by Mc Donald and Payne, it is "an enduring statement of purpose that provides an animated vision of the organization's current and future business activities, in service and market terms, together with its values and beliefs and its point of differentiation from competitors. A mission helps determine the relationships with each of the key markets with which the organization interacts, and provides a sense of direction and purpose which leads to more correct independent decisions being made at all levels of the organization" (2006:65). In other words it should be formulated in a brief and highly personalized manner, preferably put in written form, and should be communicated clearly. A good mission statement should possess the following qualifications:

- Being not too narrow, neither too broad and be focused on the company's activities. In case, when a mission statement is formulated too narrowly, the company can miss the opportunities and potential customers; and when formulated too broadly, the company can get distracted from its core business.
- Understanding the target customers and their expectations. Due to the fact that a mission statement should be formulated for the purpose of strategically focusing the business activities, it helps to be clearer about the purpose and thus, it becomes easier to define the target customers and to know the level of sophistication of this requirements.
- Define the business area. Even though this might seem obvious, but in many companies people can be confused with this question. It is important to recognize own company's distinctive competence, in order not to miss valuable opportunities.
- Be market oriented and focused on the customer needs, rather than focusing too closely on the service product.
- Should be reviewed regularly (but not necessarily changed often)
- Its development should be "enterprise-wide consultative process, which involves input from different functional areas and management levels. The more managers and staff involved in formulating the mission, the more committed they will be to it." (McDonald, 2006: 78)



Step 2: Defining corporate objectives, which are needed for stakeholders to be able to measure the success of the company, and also reflecting the purpose of the company's existence. According to McDonald (2006), the corporate strategies and objectives should cover some (or much) of the following:

- Market standing (sales and market share by market segment and the nature of services provided)
- Innovation (new areas of possible development)
- Productivity (of employees and effective use of capital and resources)
- Financing (sources of funding; levels of investment in fixed assets)
- Staff performance and development (management and worker attitudes, readiness to change)
- Public responsibility (to the government/ local community/ legislative requirements)

Besides, the setting of the objectives can be defined in two different ways, as reflected in the scheme above:

Service company	
Focus on service:	Focus on customers:
<ul style="list-style-type: none"> <li>- Efficiency</li> <li>- Technology</li> <li>- State of the art developments</li> <li>- Things</li> <li>- Is inward looking</li> <li>- Like a machine</li> </ul>	<ul style="list-style-type: none"> <li>- Customer satisfaction</li> <li>- Customer needs</li> <li>- What customers actually want</li> <li>- People</li> <li>- Is outward looking</li> <li>- Flexible</li> </ul>

Figure 8. Different types of organizational focus (McDonald, 2006)

Step 3: Marketing audit, including current situation analysis and all the relevant data, as well as future trends and their possible effect on the business. This will help a company to understand, where it is situated now and how it relates to the environment in which it is going to operate. Even though marketing audit is usually a separate document, it will be included in the marketing plan part of this research work, due to its importance for the marketing plan itself. Besides, marketing audit can be carried out on a regular basis, so that the management of the company can notice new trends and changes on the market

on time and take the actions applicable to own company’s operations. Marketing audit is usually structured as following:

- Internal, including
  - organization and
  - services/products sub-audit
- External, including
  - customers and markets (market segmentation),
  - competition and
  - business environment sub-audits

Step 4: SWOT analysis, which highlights the major ingredients of marketing information from the considerable amount of data, collected by the marketing audit in the previous step. As highlighted by McDonald (2006: 140) “a well-reasoned SWOT analysis provides the basis for setting objectives and strategies”. For the better understanding of the situation it is recommended to extend a classical SWOT analysis in a decision tree manner, where each individual element may have several implications (i.e. “which means”) and each having several recommended actions correspondently. And finally, risks can be calculated by applying a risk matrix for the SWOT, as shown in a table below:

		Chances of occurring			
		0-25%	25-56%	57-75%	76-100%
Impact on the company:	High				
	Med				
	Low				

Figure 9. Risk analysis for opportunities and threats. (Source: McDonald, 2006)

Step 5: Key assumptions, meaning the future assumptions based on the analysis and data collected through marketing audit and SWOT analysis (from the two preceding steps 4 and 5). Key assumptions will work here as a basis for objective and strategy setting. With the help of key assumptions, a company can outline the critical to the success or failure factors for the strategic marketing plan, focusing on the impact they can

have on the organization as a whole and on each segment on the market. According to McDonald (2006), key assumptions might include:

- Inflation rates
- Growth of the economy
- Changes in political/legislative framework
- Interest rates
- Demographic predictions

Furthermore, McDonald (2006) recommend to list the key assumptions in the following groups:

- The general economy
- The service “industry” sector under consideration
- The company’s markets
- Competitors
- Internal organizational factors
- Technological and other developments

Step 6: Marketing objectives and strategies – this step should be concerned about which services are provided for which markets, again based on the data collected through the previous steps – SWOT analysis and assumptions. As defined by McDonald (2006):

- A marketing objective is “a precise statement which outlines what is to be accomplished by the service company’s marketing activities”
- A marketing strategy is “the means by which a marketing objective is achieved” – i.e. how

Thus, marketing objectives should focus on the profit, revenue and market share a company is willing to achieve. Which in turn, will provide the guidance for marketing strategies on how to bring together a marketing mix to achieve the objectives for each segment (McDonald, 2006: 148).

For setting marketing objectives it is important to understand where a case company is at the moment and what type of services it is trying to promote. With the help Ansoff

matrix, it is easy to identify that, a case company for this research is represented in the present market and new service, meaning that the objective should be focused on the service development – developing new services for existing market (more detailed analysis on this can be found in Chapter 3 of this paper):

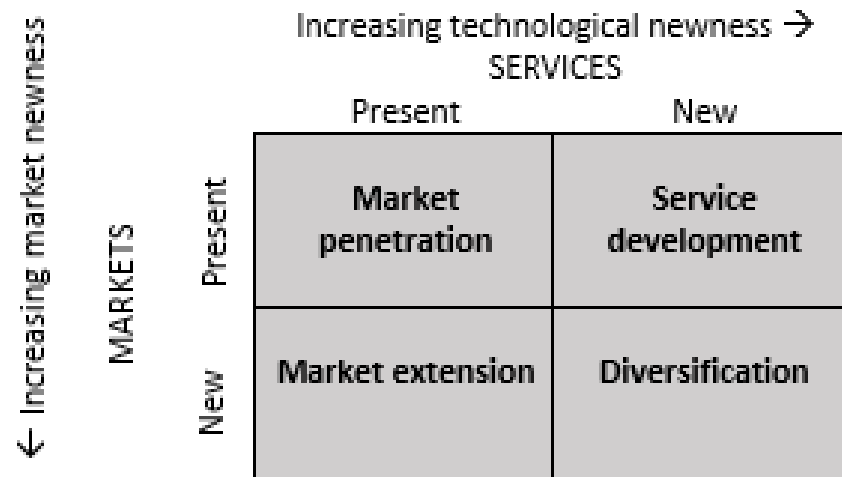


Figure 10. Ansoff matrix (McDonalds, 2006)

A marketing objective should be formulated in a clear and precise manner, well communicated and be easy to evaluate and measure. Therefore, for a good formulation, McDonald stated the major criteria for a marketing objective (2006: 148).

- Relevant – linkage to the company mission and objective
- Specific – focused on a clear and specific goal
- Measurable – should be quantifiable in terms
- Time bound – should be limited in time – i.e. dates and deadlines for achievement set
- Challenging – should be realistic, but not be too easy to reach, so that a work should be done
- Focused – target on the markets and service the company willing to address

Besides it is advised to organize the objectives in a logical sequence and split into three levels, as proposed by McDonald (2006: 148):

- Level 1: Broad marketing objectives – meaning long-term profitability in relation to the company's objectives. With this one a set of expectations are communicated to the employees of the company
- Level 2: Objectives for key result area – objectives defined more precisely, especially for the key areas
- Level 3: Supportive sub-objectives for the broad objectives – based on sales volume, geographic expansion and services offering extension

Marketing strategies, in turn should include the following seven major elements, according to McDonald (2006: 163), which are described briefly below and as shown in a following scheme:

- Product/service – the general policies for product and service deletions, modifications, additions, design, packaging, etc.
- Price – the general pricing policies to be followed for product/service groups in market segments
- Place – the general policies for distribution channels and intermediaries
- Promotion – the general policies for communication with customers under the relevant headings, such as: advertising, sales force,, sales promotion, public relations, exhibitions, direct mail
- People – general policies for people management as part of the service delivery process
- Processes – the general policies for processes by which a service is created and delivered to customers
- Customer service – the general policies for customer service management, including service level, which help build long-term customer relationships

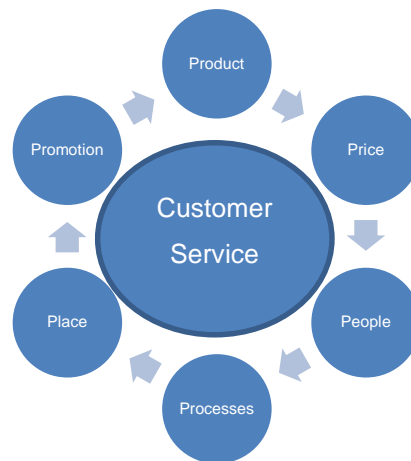


Figure 11. Marketing Strategies for service business (Source: McDonald, 2006)

Step 7: Estimation of the expected results is needed for keeping up with the progress and effectiveness of the business. In case the expected results exceed much the expectations, then the targets should be revised and set at a higher level. Accordingly, if the results are much below the expectation, then it is good to revise the targets and methods. The estimate on the expected results should include a review of the following:

- Projected sales revenues
- The costs of sales
- The costs of marketing
- Operating expenses
- Overhead expenses

Step 8: Identify alternative mixes, on the basis of previously conducted SWOT analysis and gathered data, as the first solution might not be always the best one. The alternative plan should cover anticipated lower or higher levels of demand. As a minimum recommendation, a company should have:

- “A defensive contingency plan – which takes into account the possibility that the assumptions surrounding the marketing audit were unduly optimistic and thus responds to threats that might materialize; and
- An offensive contingency plan - which is really the converse of the one above and seeks to take advantage of opportunities, should they occur” (McDonald, 2006: 166)

Step 9: Preparing a budget can take place after all the analysis are done, so it is possible to plan the costs for the sales programs, staff and distribution. The marketing budget can be split into three different parts:

- The revenue budget
- The “marketing capacity” budget
- The capital expense and finance budget

However, in the case company there is a limitation, due to the fact that it is a start-up with no or little starting capital, so it makes it difficult to develop a detailed marketing budget plan. So instead, the next chapter will present the methods and recommendation on how to market a service with no or little budget.

Step 10: Preparing first-year detailed implementation program, which will lead the company towards its strategic goals. This step is essential to ensure that what was planned is really realized in practice. The implementation program should include the elements of the marketing mix described earlier:

- Service product plan – including the product options (as discussed under the Ansoff matrix), differentiation, positioning, life cycle and portfolio analysis, branding, physical evidence and new service development strategies.
- Promotion and communication plan, paying attention to the following subsections:
  - o changing nature of the environment
  - o marketing operations and the new sales processes
  - o the possible need for CRM systems for underpinning tailored communications
  - o impersonal communications
  - o advertising
  - o “other” markets for communication
  - o sales promotion
  - o public relations
  - o personal communications
  - o sales plan

- Price, with attention to pricing objectives, demand, costs, competition and pricing methods;
- Place – location decisions, channel decisions, new possible channels and how they work together;
- People – as the employees of the company are having a great impact of what kind of services the customers are receiving, this becomes a very important part of the planning. Thus, internal marketing is a good method to bring people of the organization together. However this might be more applicable to a bigger existing companies, rather than a small start-ups;
- Processes – “the processes by which services are created and delivered to the customer can be a major factor within the services marketing mix, for customers perceive the delivery system as part of the service itself”. (McDonald, 2006: 224)
- Customer service, including a customer service strategy, monitoring, control and review.

With this ten step planning process, proposed by McDonald and Payne, it becomes easier to monitor and follow up on the progress and identify problems (if any) at an earlier stage, and thus undertake preventive and correction actions with better success. It was discovered, that companies, which have this detailed marketing plan process, face fewer problems and perform better at the long run (2006: 47).

As seen from the figure, the whole process of the marketing planning is a cyclical process, and each steps is giving a basis for the next one, as well as providing a feedback for the preceding one. At the end of the process, a measurement and review should take place, bringing some corrective suggestions to the phase two – marketing audit and SWOT analysis.

#### 2.3.4 Problems – to pay attention to: Buying behavior

One of the problems faced while preparing a marketing plan is to identify correctly a target group, as the principles of buying behaviour can be different between the different contexts. Thus, for the situation and current state analysis, this chapter will review the aspects of potential customers.

So, the buying behaviour of a private customer will be different from one of those buying for a commercial or government organization. (Palmer, 2011: 152). A number of reasons



can affect the perception of risk and uncertainty that customers feel when considering to purchase a service. Below is the list of problems, according to Palmer (2011: 161):

- The level of tangible evidence that is available to support evidence of the service process and outcomes: when service providers use tangibles to demonstrate their services. For example an airline company might use a copy of an extra comfortable airplane seat, when trying to sell Business Class seats;
- The level of buyer's involvement in the service: the perceived risk of a decision is often higher in cases where the level of involvement is high (like in health services), rather when it is low (like in rental of a video)
- The novelty of the purchase: a customer who is buying a service for the first time, will be feeling more risk, than the returning customer;
- The purchaser's individual risk threshold: is difficult to forecast and varies a lot among individuals;
- Situational factors affect perceptions of risk: how desperate and urgently a customer needs a service (like in a case when being late to an airport one might pay more for a taxi, rather than taking a public transport);
- Possible perception of safeguards available to consumers that reducing perceptions of risk: if a legislation protects customers from non-delivery of a service, then the customers will feel less risks involved when purchasing that service for the first time;
- Loss of reputation for commercial buyers: it will be more difficult to win a customer for an unknown service provider.

Though the list of the possibly affecting reasons and risk factors for a customer, the solution to win the fears is quite easy. Trial use period, offered to new customers proved to make them return and buy more service for a longer period of time. (Palmer, 2011: 163).

When learning about customer preferences, companies need to collect and analyse a lot of information. There is a number of research methods for studying consumer behaviour and this number continues to grow. Research methods need to be chosen carefully depending on the case and area of operations, and include both, quantitative and qualitative methods. Although qualitative and quantitative methods are often seen as opposite ends of a research techniques spectrum, their methods overlap. Palmer describes some of the methods, which can be used when studying customer behaviour (Palmer, 2011: 169):

- Conjoint analysis – “is a versatile marketing research technique that can provide valuable information to analyze the real-life trade-offs that consumers make when evaluating a range of features or attributes that are present in competing service offers” (Palmer, 2011: 169). Method includes collecting data and further “choice simulations” conducted by the marketer. Limiting factor is that in reality the creative combining of attributes defines the final choice of a particular individual.
- Observational techniques – “used to describe buying behavior, but they do not in themselves provide explanation” (Palmer, 2011: 169). Experimental observational method can reflect how individuals interact with the service, but can have some issues with ethical side.
- Quantitative survey – “give the appearance of a rigorous, scientific approach” and gives the “thinking that you can’t argue with numbers” (Palmer, 2011: 170). However, there is a possibility of poor sampling, invalid measurements, bad analysis and incorrect interpretation.
- Qualitative technique – “offer deeper insight into buyers’ thought processes as they choose between competing service offers” (Palmer, 2011: 171). A commonly used approach of this method is the focus group.

As mentioned above, there is a number of techniques for studying consumer behaviour. However, as Palmer states, most of the correct decisions were based on the casual observations, which is especially true in case of small business. It is important to keep in mind, that information on its own is not enough for making any conclusions, and “that it is quality and timeliness of interpretation of data that gives a firm a competitive advantage” (Palmer, 2011: 171).

### 2.3.5 Problems – to pay attention to: Service (Product) Life Cycle

Another problem in marketing of services, highlighted by Palmer is a shorter life cycle compared to tangible goods. This is especially true in cases where high-technology is involved and in the sector of mobile phones, as those have in particular high pace of innovation (Palmer, 2011: 231).

“Services with a high-technology base can have very short life cycles, as rapid growth prompted by new opportunities now available are soon eclipsed by the appearance of a newer technology which makes the service redundant” (Palmer, 2011: 231).

Traditionally, a product/service life cycle has five stages, which are presented in the figure below and explained in some more detail further. The figure graphically shows the changing stages of the product or service, through the timeline, where each stage requires own adjustments to marketing activities (Palmer, 2011: 231):

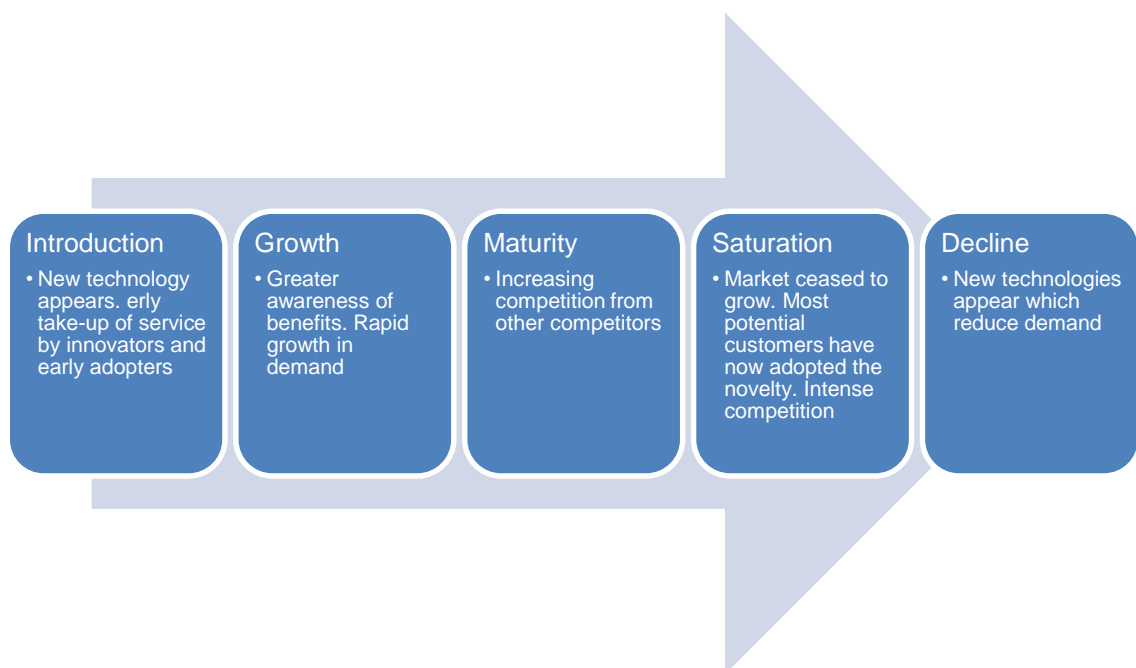


Figure 12. The five stages in the product/service lifecycle (Palmer, 2011: 231).

- 1) Introduction – many people might be afraid to try something new, especially when it concerns services, where intangibility prevents prior evaluation;

- 2) Growth – at this stage the new service is already tested by some users and become reliable and more readily available; sales volumes grow and competitors starting to appear;
- 3) Maturity – now most who wanted the service have already bought it and market start to be filled with competitors;
- 4) Saturation – the growth in the market slows down significantly, due to large number of competitors and competition happens mainly through the price;
- 5) Decline – demand falls down and new substitute products and services take over, causing previous products to drop out from the market.

For a successful marketing plan it is important to know the concept of services' life-cycle, so that the company is able to locate wisely its resources and finance according to the marketing activity. Thus, during the growth stage it is wise to invest into advertising and launching programs, while during the stage when the service goes into decline, all promotional activity may be cut. Additionally, it will be helpful for a company to make use of its marketing-mix decisions: "Although life cycles may be unpredictable for services in terms of the length of time a service may remain at a particular stage, the understanding that services are likely to change in their sales and profit performance over a period of time implies a need for proactive service-mix management" (Palmer, 2011: 232).

Therefore, when a demand for a service enters the declining stage, a service company needs to widen its portfolio in order to remain competitive – for example by developing new services. New service, however, does not require a totally new invention, but can take a form of one of the following: process change, outcome change, changes to associated tangibles, service line extensions or major innovation (Palmer, 2011: 235).

The idea of creating new services is elaborated by Zeithaml et al. They claim that "not all new services are "new" to the same degree. New services options can run the gamut from major innovations to minor style changes (Zeithaml et al, 2006: 256):

- Major or radical innovations - meaning new services for markets as yet undefined;
- Start-up business - consist of new services for a market that is already served by existing products that meet the same generic needs;
- New services for the currently served market – when a company is offering new services previously not available to their existing customers;
- Service line extensions – augmentation of the existing service lines;

- Service improvements – one of the most common type of service innovation (faster execution, extended service hours, etc.);
- Style changes – most modest service innovation, although is highly visible and have high level of impact on customers' perception.

### 2.3.6 Marketing Plan and Recommendations as an Output of the Marketing Research

This chapter will discuss what component a marketing plan should include, which will be implemented in the marketing plan for the case company in chapter 3 later on in this research work. According to McDonald and Payne, a good marketing plan should be brief enough and free of unnecessary details. Same as good report, it should be authoritative and easy to understand. The main purpose of the marketing plan is to specify in a clean and clear way the company's starting point, its target and the ways to getting there. The finalized plan should represent a so-called "selling document" for the organization's marketing strategy. (McDonald, Payne, 2006: 62).

According to Chaffey and Smith, marketing plan should be based on situation analysis, including KPI, customers, competitors and intermediaries, SWOT analysis, as well as PEST factors, which cannot be controlled by a company, but should be aware of. The situation analysis help a company to understand where it is situated at the moment. The authors define the components of a situation analysis as following:

- KPIs – "key performance indicators which identify the business's success criteria, results, data and measurements against benchmarks";
- SWOT analysis – "identifying internal strengths and weaknesses, as well as external opportunities";
- PEST - "political, economic, social and technological variables, that shape the marketplace" (Chaffey, Smith, 2008: 444).

McDonald and Payne formulate a marketing strategy, as "the overall route to the achievement of specific objectives and should describe the means by which marketing objectives are to be reached, the time program and the allocation of resources", which "reflects the company's best opinion on how it can most profitably apply its skills and resources to the marketplace" (McDonald, Payne, 2006: 161). According to the authors, the major components of the services marketing mix are as presented in a figure below. The component were explained in more detail earlier in this chapter.

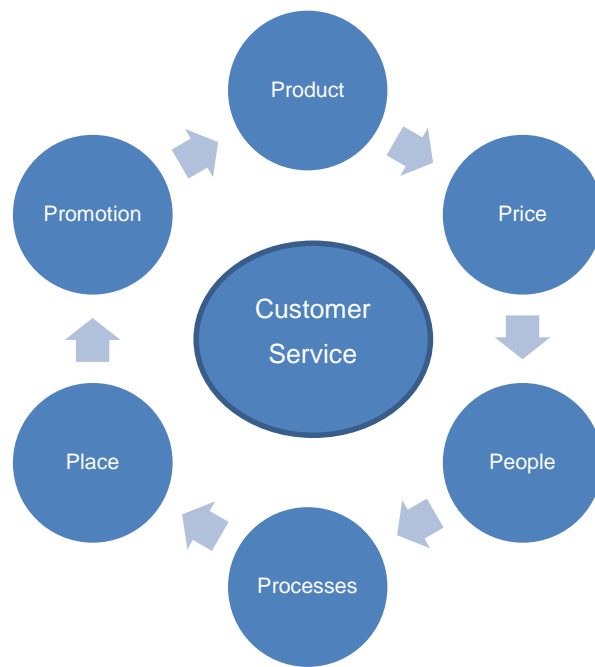


Figure 13. Major Elements of services marketing mix (McDonald, Payne, 2006: 163)

Furthermore, McDonald and Payne state that marketing strategies would include also such components as:

- Policies and procedure relating to the services to be offered, such as number, quality, design and branding;
- Pricing levels to be adopted, margins and discounts;
- Advertising and sales promotion – the creative approach, type of media, amount of spend, etc.;
- What emphasis would be put on the sales approach, sales training, etc.;
- What intermediaries might be used, i.e. distribution channels;
- What customer service level will be required;
- Specification of processes used to deliver services;
- Strategic issues relating to staff (McDonald, Payne, 2006: 162).

### 2.3.7 Service Blueprint as an Output of the Marketing Research

One of the outcomes of the marketing research and planning should be a service blueprint, and this chapter will go through a theory of it, which then will be implemented for

the case company in the chapter 3 later in this research work. As defined by Zeithaml et al. (2006: 267-273), a service blueprint is “a picture or map that accurately portrays the service system so that the different people involved in providing it can understand and deal with it objectively regardless of their roles or individual points of view”. Palmer adds, that with a help of a blueprint an organization can “gain a holistic view of how the elements of the service relate to each other” (Palmer, 2011: 54).

The idea of a blueprint was first developed by Kingman-Brundage in 1989, and represents itself a graphical approach aimed at mapping of the service process and showing how customers, assets and information are processed. Thus the map shows in a simply way all the interactions between the customers and a company, as well as the visibility – meaning the processes which are seen to the customer and which are not (Palmer, 2011: 54-55).

The blueprint is especially useful on the developing stage for the service, as it can be challenging to describe service concept otherwise. “One of the keys to matching service specifications to customer expectations is the ability to describe critical service process characteristics objectively and to depict them so, that employees, customers and managers alike know what the service is, can see their role in its delivery, and understand all the steps and flows involved in the service process” (Zeithaml et al, 2006: 267). Unlike other process flow diagrams, blueprints include customers and their views of the service processes.

The figure below shows the components of the typical blueprint for services. Typically a blueprint would include four key components: customer actions, onstage and backstage contact employee actions and support processes (Zeithaml et al, 2006: 268):

- Customer actions include steps and actions undertaken by customers as a part of purchasing or consuming process - i.e. may include phone calls to a company, visits to an office, meeting the personnel, etc.;
- Onstage contact employee actions are the steps performed by employees and visible to the customers, including face-to-face meeting, answering phone calls, interviews, etc.;

- Backstage contact employee actions are the action by the employees which are performed behind the stage and aimed at preparing for the meeting, phone calls with the customer, etc.;
- Support processes include internal work, performed to support the delivery of a service.

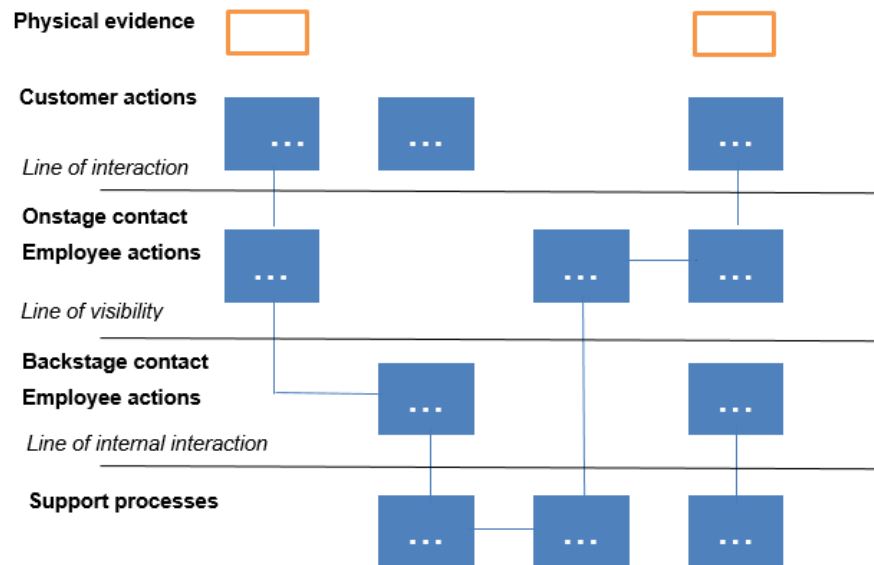


Figure 14. Service Blueprint Components. Zeithaml et al. (2006: 268).

Furthermore, action areas in turn are separated by horizontal lines: line of interaction, line of visibility and line of internal interaction. Line of interaction shows the direct interaction between a customer and a company representative. Line of visibility shows which part of the service is seen to a customer and which is not. Line of internal interaction separates contact employee activities from those of other service support activities and people. In case the service includes both, a human and technology based interaction, then the onstage area can be cut by an additional horizontal line to show that difference. On the contrary, if there is no human interaction at all during the service, then the contact area of the blueprint can be excluded (Zeithaml et al, 2006: 269-271).

Also the physical evidence is seen at the top of the scheme above each point of contact between a customer and company representative. These takes a form of tangible and visible objects and might take a form of office or shop interior design, paper documents or brochures or employee uniform, etc.



Thus, the great benefit of a blueprinting is that any of the stage can be elaborated into further detail and own separate blueprint and studied more carefully. This becomes especially useful in case of any service failures, helping to isolate the problem and solve it. Additionally blueprints help to provide an overview for employees, so that everyone knows what he or she is supposed to do and to “illuminate the customer’s role and demonstrate where the customer experiences quality, thus contributing to informed service design” (Zeithaml et al, 2006: 273).

A service blueprint can be used and read in a variety of ways, depending on the purpose. The table below summarizes the ways in which a blueprint can be used and showing the questions it can give an answer to. Zeithaml et al highlight four different ways of reading and using service blueprints (2006: 272):

	Purpose	How to use/read a blueprint (BP)	Questions to be asked
1	Understand the customer’s view of the process or the customer experience	BP to be read from left to right, tracking the events in the customer action area	-How is the service initiated by the customer? -What choices does the customer make?  -Is the customer highly involved in creating the service, or are few actions required of the customer?  -What is the physical evidence of the service from the customer’s point of view?  -Is the evidence consistent with the organization’s strategy and positioning?
2	Understand contact employees’ roles	BP to be read horizontally, focusing on the activities directly above and below the line of visibility	-How rational, effective and efficient is the process?  -Who interacts with customer, when, and how often?  -Is one person responsible for the customer, or is the customer passed off from one contact employee to another?
3	Understand the integration of the various elements of the service process, or to	BP to be analyzed vertically	-What actions are being performed backstage to support critical customer interaction point?  -What are associated support functions?

	identify where particular employees fit into a bigger picture		-How are handoffs from one employee to another taking place?
4	Redesign the service	BP to be looked at as a whole to assess the complexity of the process	-How the service might be changed? -How the changes from the customer's point of view would impact the contact employee and other internal processes?

Figure 15. Ways of reading and using service blueprints (Zeithaml et al, 2008)

Another benefit of building a blueprint is that during the process of building it, many of the other minor goals of an organization might be achieved. According to Zeithaml et al (2006: 273) those might include the following:

- Clarification of the concept
- Development of a shared service version,
- Recognition of complexities and intricacies of the service that are not initially apparent,
- Delineation of roles and responsibilities

### **3 The Marketing Plan for EcoLeaks**

This chapter will go through the marketing plan and some concrete suggestion for EcoLeaks, which are aimed to help the company in its first steps in entering the market and winning their customers. The Marketing plan suggestion is based on the theoretical background discussed in the previous chapter.

#### **3.1 Executive summary**

EcoLeaks is a start-up company, which does not have running operations yet at the moment. This business plan includes the market research conducted prior to the start of the operations and includes useful information and recommendations, which are aimed to help the company make a successful start and attract customers. The company staff includes passionate and enthusiastic professionals willing to promote their software product. The headcount of the company will consist of two people, working on the software side and developing the application. All the rest supportive functions (accounting, etc.) will be outsourced and bought when necessary.

The business idea of EcoLeaks is to offer their customers a combination of a service with a small set of supportive product and software. The service will allow people to take the measurements of the outdoors water (lakes, rivers, etc.) and to see how clean it is and what is the pH level. The results then can be saved to the map with the help of the software application developed by EcoLeaks and installed to the customers mobile phone, along with the picture of the result showed on a measurement stripes (provided and send by post, when a customer is subscribing to the system), picture of the place where the measurement is taken and a geotag of the place. Later on, the submitted results can be seen on a map on the company's web-site on a big screen, shared with other users and discussed. Thus, the company will develop and provide the mobile application, along with the measurement stripes for testing and online account for the users.

The target client of EcoLeaks are people who are worried about environment, with a special focus on those who actively participates in the outdoor activities (hiking, running, fishing, camping, cycling, etc.), families with children and with pets – all of those who want to ensure, that their environment is clean and safe to spend time there. As the using

of the service includes active use of the computer, Internet and smartphones, the estimated age range of the target group is to be 26-35 years old, according to the market research, which is presented in more details in the corresponding chapter.

EcoLeaks' mission is to help our users to monitor your environment and raise the awareness of the water cleanliness in the surrounding. Bearing in mind, that every single contribution and measurement count, the aim of the company is to provide an easy to use application and a channel for information sharing to support the customers. Besides, by sharing freely the information about our environmental situation, the company can help the community to preserve clean water and the nature in a better condition.

The future objective is to have a map, available online for the public use, where people can see the condition and cleanliness of the outdoor waters. According to the marketing research conducted, people tend to trust more to the information collected by the community and other people like them, rather than to the government and official authorities. So, when the information will be collected by private individuals and shared through a non-commercial organization, it should attract many users and follower. The initial target is have the map coverage with measurements in Finland, then expand to Baltic countries and further to Europe in the future.

### 3.1.1 Objectives for the Marketing Plan

The goal of this research work is to develop a marketing plan for the case company for their first year of operation. The plan includes a background research of the market environment in a given field of operation, marketing strategy and recommendations on the marketing programs. The current problem of the case company is that as a starting business they need to attract customers and win a market share for their operations.

The marketing plan will explore the opportunities for business, define target group and marketing segment for focus, as well as propose a marketing strategy and action plan.

### 3.1.2 Case company

EcoLeaks is a service, which operates through web-portal and mobile phone application, installed to users' phones. Web-portal steered and controlled by a private institution.

Portal is freely open to public and anyone can register as a user there. New users are added to a database with their Social Security ID and phone number. Users can download to his/her mobile phone application for taking the measurements.

Sample measurements are taken with a help of special sheets, which are normal passive indicators, changing its color depending on the tested sample substance. A finite number of sheets for collecting environmental measurement samples can be ordered by users. New sheets can be ordered, when old ones are used sufficient amount. After a measurement is taken, it is compared to a reference sheet, which is delivered together with the sampling sheets or can be integrated in the testing sheets. Sheets for measurements have random codes (reference number), linked to the customer ID.

In order to submit a measurement, users have to take a picture with mobile phone camera of sample sheet and reference sheet; the picture and GPS data from the place where measurements taken (possibly also short description of the tester's place and landscape picture) are uploaded to EcoLeaks web-portal. Instructions for taking sample measurements are provided through the application on mobile phone.

Some of the users can get more expensive and advanced analysers (for example with conductivity meter, NFC and Bluetooth) and then information can be sent automatically via cell-phone to the web-portal. In the future almost all the measurement data related to the environment can be measured with the help of NFC sensors.

Visibility of results is not only available to those who have been taking the measurements, but can be shared freely with everyone else. In future results can be shared for example through Google maps (concerned pH-levels only, water system condition to be agreed separately). The idea is that each measurement seen on the maps would have information about a person collected it, date, quantity and a result of the measurement itself. Users can collect and save the data and areas they are interested in for personal use.

EcoLeaks portal will be translated into different languages and there will be own pages for different countries. Foundation will support its function (measurement sheets, software development, etc.) through the help of interested enterprises, who can get in return their names to the list with supporting organizations, getting good publicity and to a list with enterprises' turnover.

## 3.2 Phase One

### 3.2.1 Mission Statement Proposal

The mission statement presented here is a proposal, which can be used as it is or serve as a starting point for the discussion between the company's employees. As discussed in chapter two of this research study, a mission statement becomes more effective, when developed by employees of different layers. Thus it is recommended to brain-storm and discuss the proposed mission statement with the employees. In addition, the mission statement should be then re-evaluated and corrected if needed after some time (in 1-2 years' time, which is a short time, but proposed intentionally because the company is a start-up and the mobile industry environment is changing continuously at a high pace).

#### **EcoLeaks mission statement**

- EcoLeaks mission is to help our users to monitor your environment and raise the awareness of the water cleanliness around us
- Every single contribution and measurement count, so at EcoLeaks we strive to provide an easy to use application and a channel for information sharing to support our customers
- We believe that by sharing freely the information about our environmental situation, we can help preserving clean water and keep up our nature and community

### 3.2.2 Company Objectives

The suggestion would be to focus on the customers, rather than on a service, due to the fact that the company is starting with one product/service, thus it is important to understand the customer needs and what they really want, to focus on customer satisfaction, be flexible and outward looking. This will help to enter a market and gain initial market share. In the future, after having built own customer base and with clear understanding, it will be easier to bring new services and expand operations (if that will come up as an option in future).

As discussed in chapter two, the objectives must be set in order for company to know what everyone is expected to achieve. The outcome should be possible to measure, so

it is good to formulate it in a quantitative terms. Firstly, the short-term business objective should be focused on company growth and, as mentioned earlier, customer base growth. The objectives can be set as following:

- Profit: as a start-up, the sales numbers might experience a lot of fluctuation during the first year. However, the target might be set to grow the company's profit from zero to positive results.
- Growth: reaching the positive revenue after one year of operations.
- Innovation: adding at least one new feature/service option to the portfolio every two years; improving map coverage and fixing the bugs in the software on a regular basis.
- Corporate image: to gain market recognition and become visible on the local market in Finland after one year of operations.
- Services: achieve the satisfactory level of customer service.
- Staff: achieve employee satisfaction and avoid high employee turnover during the first year of operation. In ideal case scenario stick with the initial employee head count – no reductions, no increase, unless the workload requires so.

### 3.3 Phase Two

#### 3.3.1 Marketing Audit

##### 3.3.1.1 Internal

###### 3.3.1.1.1 Product Life Cycle

The idea of EcoLeaks was born in 2012, but the starting and planning phase has been quite and with no big progress so far. The product has not been launched and is still at the planning phase. The marketing plan that the author has prepared is aimed to help the project to proceed to the launching phase and start the first year operations.

First the product should be introduced to the public, creating brand awareness and building brand image itself. At the moment there is no direct competitor as such, so the concept itself should be introduced to the public. The challenge will be to attract the customer segments to something new to them, which has not been used before.

Further challenge would be to spread the product and service to other countries and attract international customer segment, as the local market in Finland is relatively small. More about customer analysis will be discussed in the following chapter.

Promotion process and channels should be designed thoughtfully in order to reach all the new customer groups. In other words, the focus of an early stage of the product and service life cycle is on the delivering the brand promise and attracting new customers. It is important to invest into creating a positive image, which in turn will stimulate positive word of mouth.

### 3.3.1.2 External

#### 3.3.1.2.1 Macro Environment: PEST analysis

Macro environment is analysed with a help of PEST tool, which provides essential information in a clear way and includes the main factors influencing business operations of a case company. PEST analysis includes political, economic, socio-cultural and technological aspects.'

Political/Legislative - As presented in the figures above European Commission is concerned about environmental issues, invest money in researching the problem and is favorable in questions related to environmental protection and raising the awareness.

Economic – Domestic (Finnish) and international (Europe in particular and globally in general) sales growth of smartphones (required for the EcoLeaks mobile applications) and health and well-being sensors.

Socio-cultural – people awareness and interest towards environmental issues and problems is growing. With the growth of wealth people get more environmental conscious. The European Commission report on environmental issues (2008), shows that 78% of European citizens agree, that environmental problems have a direct effect on their daily lives, and for 96% of respondents it is important to protect the environment. 87% of respondents are ready for taking concrete actions for environmental reasons – also called in the report as “Environmental pragmatics”.



	Very important	Fairly important	Total Important
<b>EU 27</b>	<b>64%</b>	<b>32%</b>	<b>96%</b>
<b>Environmental problems</b>			
Direct effects	69%	29%	98%
No direct effects	46%	44%	90%
<b>Environmental products</b>			
Intention + action	79%	20%	99%
Intention + no action	66%	32%	98%
No intention+ no action	48%	40%	88%
<b>Environmental actions</b>			
Many actions	87%	13%	100%
Some actions	76%	23%	99%
A few actions	61%	35%	96%
No action	49%	38%	87%

Figure 16. How important is protecting the environment to you personally. Attitudes of European citizens towards the environment, European Commission, 2008

In Finland, the number of people, who say that protecting the environment to them personally, is on the good level, however still lower, compared to the closest neighbor countries in Europe, where the first expansion of EcoLeaks can start: 47% of Finns say it is very important and 50% fairly important, compared to Sweden with 89% and 10% correspondently and Estonia – 62% and 34%:

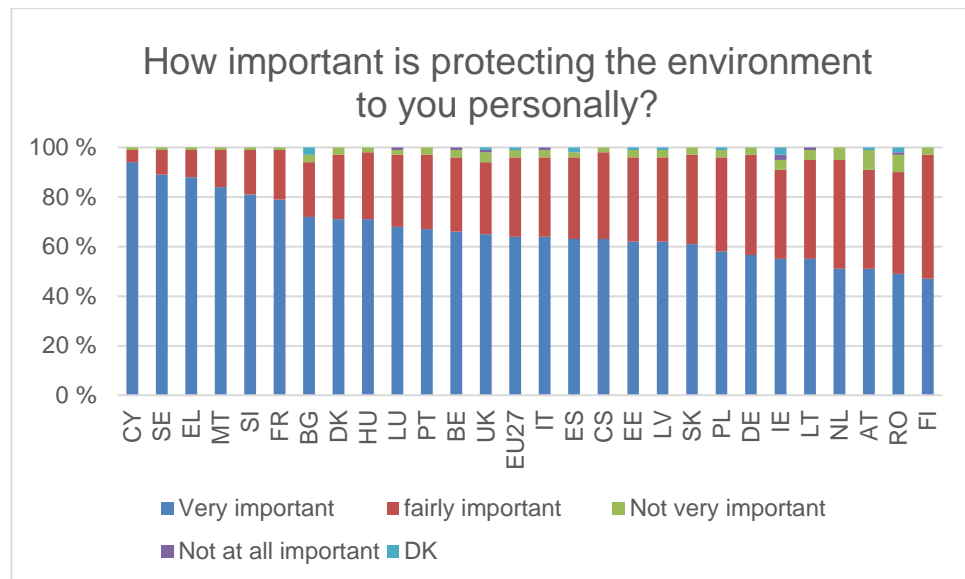


Figure 17. Attitudes of European citizens towards the environment, European Commission, 2008

Technological – growing tendency in the industry of mobile applications and well-being/environmental sensors, high R&D activity. Rate of Innovation and technological change.

### 3.3.1.2.2 Operating Environment – Market size, growth rate and trends

The environmental consciousness has been raising globally over past years. According to the latest report of European Commission published 5.7.2013 80% of Europeans are concerned about the environmental impact of products. According to the survey, majority of respondents said they are willing to change their shopping preferences and purchase more of the environmentally-friendly products. The survey showed that 77% of respondents are ready to pay more for the environmentally friendly products, however it was roughly only half of them (55%), who said that they are confident about the products origin and impact. Meaning that there is a room for an application, which will allow people to conduct an independent check of the nature resource (water, lake, pH level, etc.) (EU 2013).

Research, conducted by the request of European Commission, in relation to the attitudes of European citizens towards the environment, shows that roughly half of the respondents are concerned about water pollution, and that it has the leading position among other environmental issues (Table 1). Same research also showed that more than half

of the respondents (55%) are willing to receive more information about environmental solutions (EU 2008).

Also worth of mentioning, that more than third part of respondents (35%) are concerned about the impact of chemicals used in everyday products on our health. This is something which the ordinary people like us would be potentially interested in testing at home, if a simple tool would have been available for that.

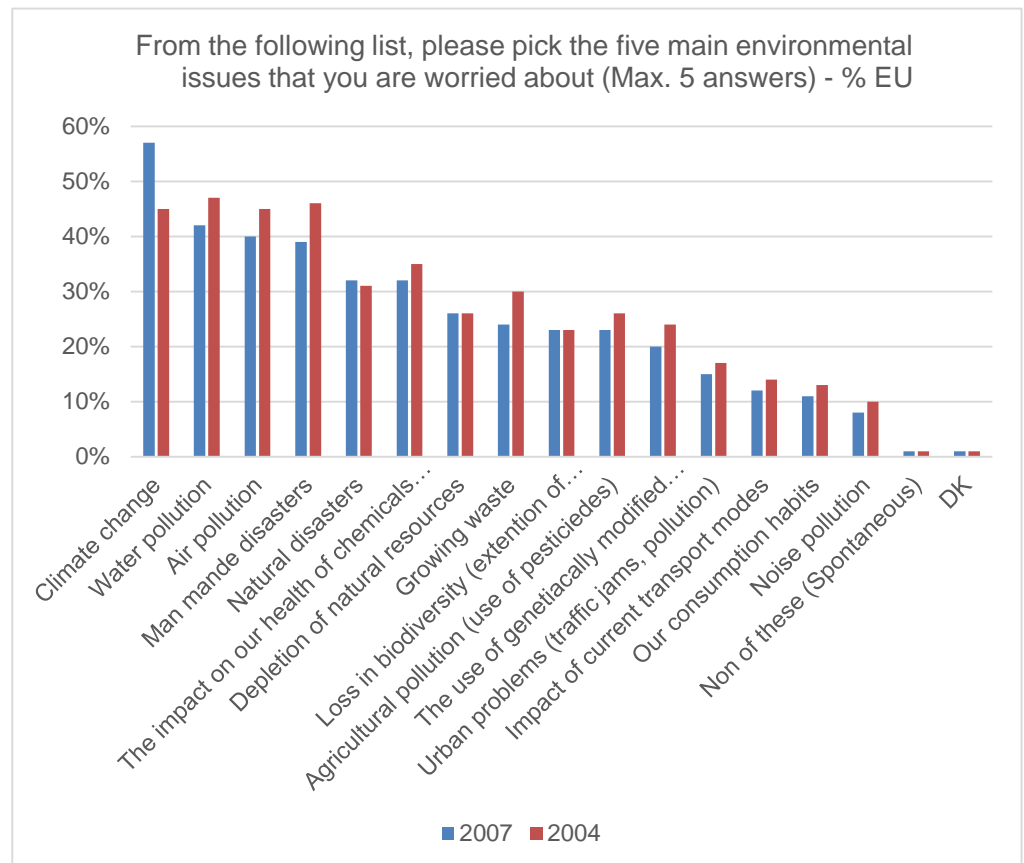


Figure 18. Environmental issues that European citizens are worried about. Source: Special Eurobarometer report, European Commission, 2008

At the same time, the popularity of mobile phones, and especially smartphones continues to grow as well, same as usage of internet applications, including green applications. As a result, mobile device application developers have realized the potential in the trend and offer consumers a way to “marry” the popularity of mobile devices with the growing environmentally conscious attitude (Strickland 2009).

According to the freshly published report by Teleforum Ry in 2013 (funded by Tekes), shows that the market share for smartphones and tablet devices is growing rapidly in

Finland and that on average every fourth household in Finland has at least one at the moment (fall 2013, when the report was published). The amount of devices is expected to grow and smartphones and tablets are becoming consumer's primary devices compared to so-called feature phones (the report addresses all other mobile phones than smartphones as "feature"; smartphones are those which have "advanced application programming interfaces for running third-party applications").

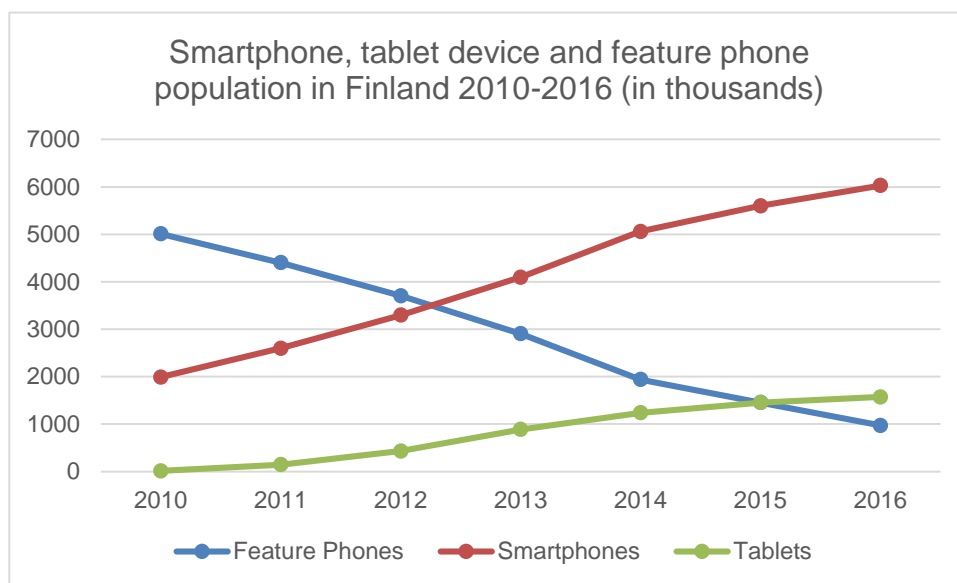


Figure 19. Smartphone, tablet device and feature phone population in Finland 2010-2016 (in thousands). Source: Teleforum (2013).

Also if we look into sales numbers of mobile smart devices, both in Finland and in Europe – the numbers have growing tendency. Smartphone sales boomed in 2009 and overcame featured phone sales numbers in 2010. According to the Teleforum report more than 50% of the Finnish mobile phones were smartphones already by mid-2013 and 75% of mobile phones purchased in the first half of 2013 were smartphones. Recently the major mobile phone operators claimed that smartphones comprise more than 60% of the total mobile phone sales. It is expected that in future no other phones than smartphones will be available at the market and featured phones will become rudiment.

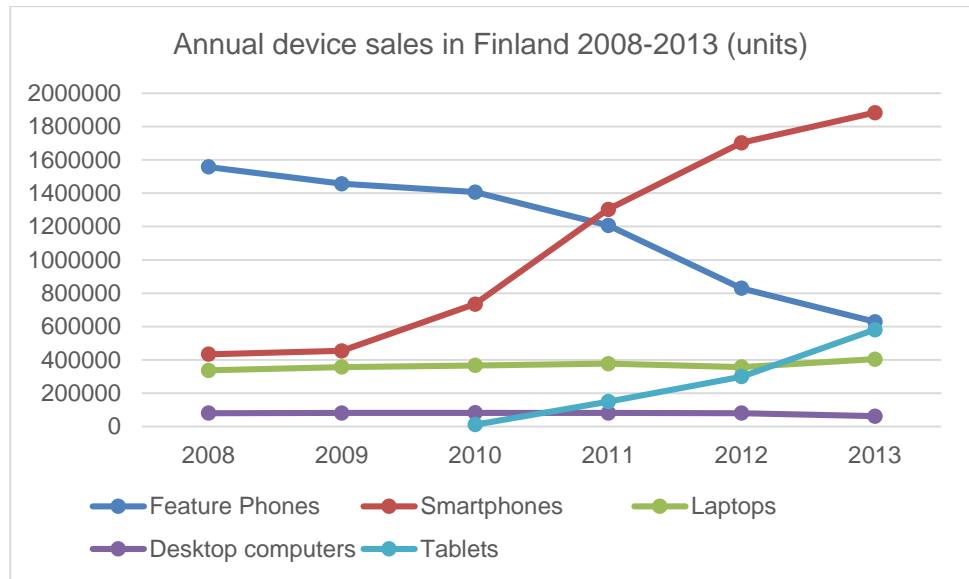


Figure 20. Annual device sales in Finland 2008-2013 (units). Source: Teleforum (2013).

Same report shows that the total market for mobile content grew 31% in 2012 to 404 million euros and continues to grow. Even though the growth pace is forecasted to slow down slightly in nearest future it is still continuing to grow, as shown in the Figure 3 below. The report looks at the growth of mobile content in Finland in general, where mobile content means mobile services include SMS based content services, premium rate calls, application stores and other. For the interest of our case, we look into the application stores growth.

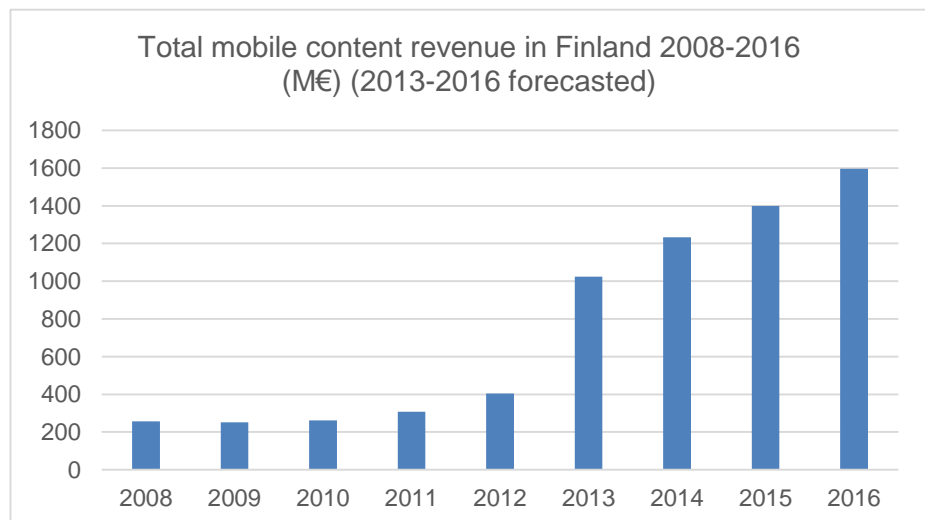


Figure 21. Total mobile content revenue in Finland 2008-2016 (M€), including mobile content export. Source: Teleforum (2013).

As illustrated in Figure 4 below, the share of mobile applications and other mobile services are growing sharply:

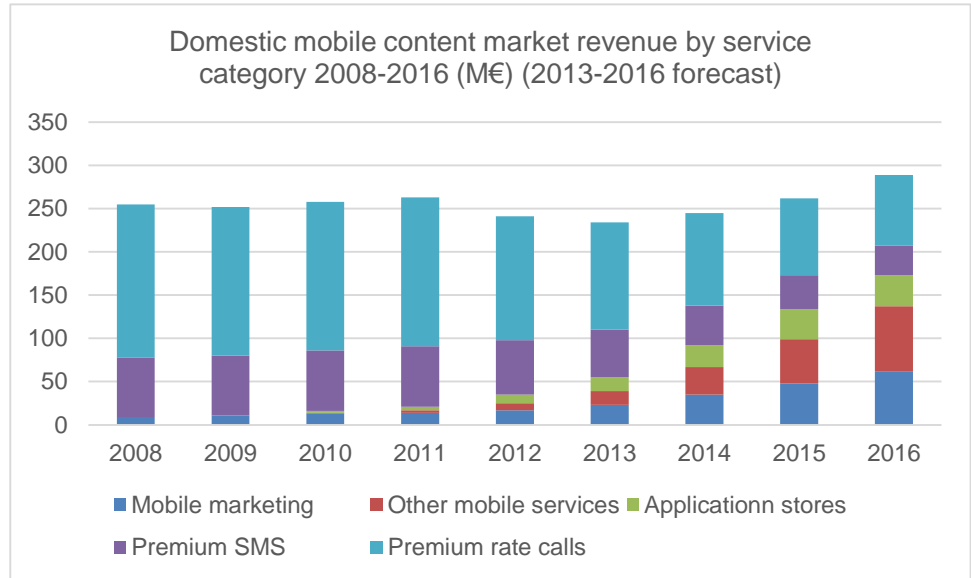


Figure 22. Domestic mobile content market revenue by service category 2008-2016 (M€). Source: Teleforum (2013).

Mobile applications and sensors monitoring environmental issues (such as EcoLeaks) can be considered to be similar to the health-care applications group. According to the research conducted by ON World, the industry for wearable sensors for mobile health and fitness devices is growing rapidly and is forecasted to grow up to 515 million units shipped globally.

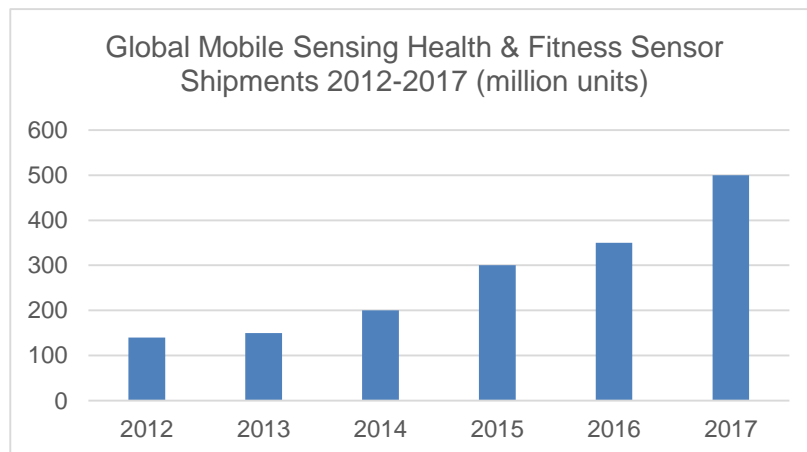


Figure 23. Global Mobile Sensing Health & Fitness Sensor Shipments 2012-2017 (million units). Source: ON World.

For the success factors it is important to win the trust from consumers and provide the reliable data to the end users. Commercializing product over the limit can cause some suspicious reaction from the consumer end. Therefore it is important to choose carefully where to look the funding from and cooperation with. According to the European Commission research, conducted in 2012, most of the respondents trust “Environmental protection associations” (42%) when it comes to the environmental issues, followed by “Scientists” (32%). However, top two responses has dropped in their popularity – from 48% to 42% and from 35% to 32% correspondently, while the mass media (television and newspapers) has risen in trust by 9 and 6 point correspondently.

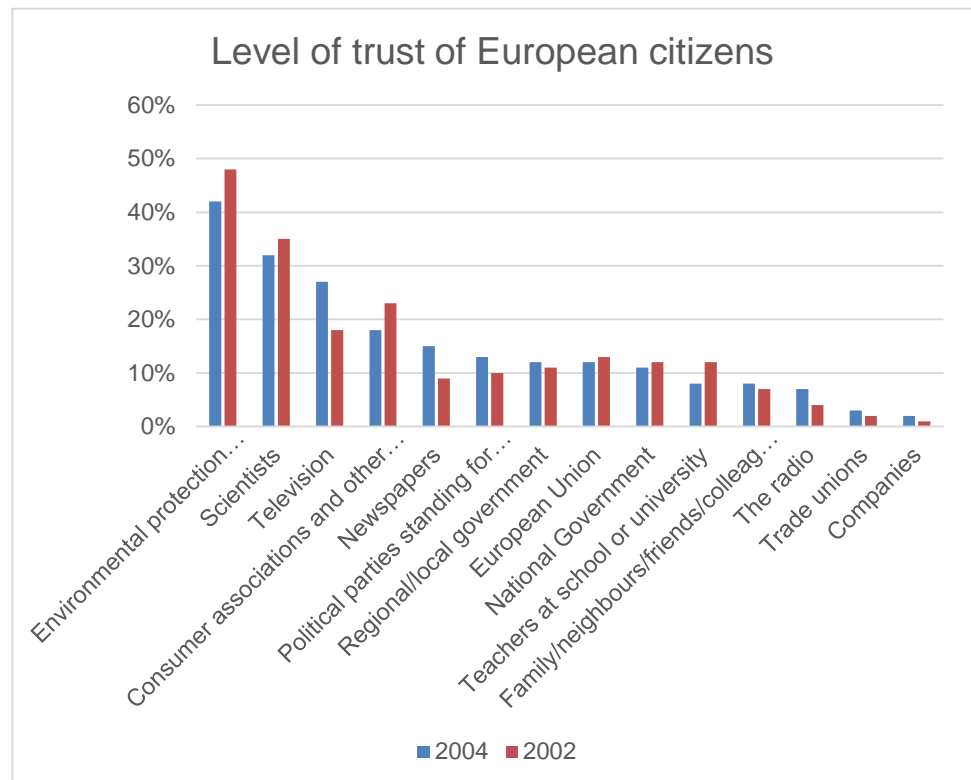


Figure 24. Level of trust of European citizens, when it comes to environmental issues. Source: Special Eurobarometer report, European Commission, 2004.

### 3.3.1.2.3 Main Partners

EcoLeaks Company does not have any partners at the moment, as a new-comer and start-up company. However, it will be beneficial for the company to find some partners. Below are some of the suggested companies and organization, which can be recommended for co-operation.

App-campus can be a good example of a starting point for a small company. AppCampus is a joint-project of Aalto University and Microsoft, offering financing and coaching services in mobile technology, design and usability, as well as Go-to-Market trainings and other supportive activities. Benefits of participating in the AppCampus project is that they do not take any commission from the investment, but require that a successful application is expected to be available exclusively on Windows Phone Store for the first 90 days. To participate in the project, developers need to fill in the submission form and make sure that the application is differentiated for the Windows phone platform, has a potential to generate a high number of downloads and has a convincing overall proposal.

Environment.fi – is a joint website of Finland's environmental administration, together Envelope – a newsletter of the Finnish environment institute Syke. The web-pages of the mentioned sources have collected information on the environmental situation in Finland, quality of water, beaches, forests, etc., giving recommendations on where to go for a hiking in the nature and how to behave in order to ensure comfortable and safe time. There is even a map of Finland in PDF-format, showing the ecological status of surface water, however the map is very general, cannot be zoomed and not interactive. So for the EcoLeaks there is a good potential to add their contribution to a map – adding updated information and more interaction.



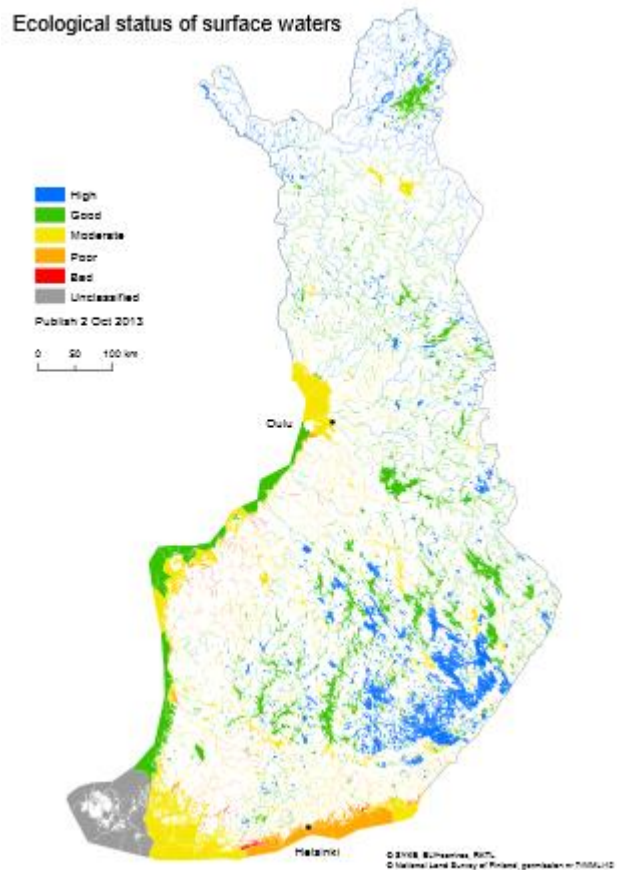


Figure 25. Ecological status of surface waters. Source: Envelope, 3/2013

#### 3.3.1.2.4 Competition Analysis

Other Similar Services: Quite a few companies manufacture sensors and meter for water quality sampling, but majority of them are oriented for professional use and involve some bigger equipment, with no possibility to synchronize the results over the air with users' mobile phone. Additionally, Majority of the manufactures are located in US, with some of them having representatives in Europe. However, none of the companies have representatives in Finland or Northern Europe.

Horiba – a company manufacturing wide range of instruments and systems for applications, ranging from automotive R&D, process and environmental monitoring, in-vitro medical diagnostics and a wide range of R&D and QC measurements, including a multi-parameter water quality meters, which represent a competitive device at some extent. However, the device does not represent high threat, as it is oriented for professional use

and not useful to everyday private use, and that the company has little presence in Europe – closest to Finland representatives are located in Russia and Germany, otherwise in South- or Central-East Europe.



Figure 26. Multi-parameter Water Quality Meter, produced by Horiba. Source: Horiba corporate website (2014).

YSI – is another company, manufacturing sensors, instruments, software, and data collection platforms for water quality sampling, water quality monitoring, and environmental monitoring, is also located in US and the only European representative is in UK. Their equipment also is more oriented for professional usage, rather than private.

RS Hydro is a British company, manufacturing extensive range of portable, single parameter handheld and multi-parameter water quality meters, also has quite a massive equipment, even in the category of “portable” ones. Price ranges starting from 100£.



Figure 27. Pocket pH-tester (left) and portable pH-tester (right), produced by RS Hydro. Source: RS Hydro corporate website (2014).

Other Sources of Similar Information: In Finland it is possible to check water quality in the various laboratories of official supervision authorities like Evira (Finnish Food Safety Authority). The laboratories can be found across the country, but the analysis often has a fee and takes time to conduct. Also a private user will not be able to see, the analysis results of others, taken from a particular place.

The sample can be taken by the customer him/herself and taken to the laboratory or ordered to be taken from the laboratory staff. Such service taken by staff will cost €50/hour (of staff work), plus laboratory expenses in Jyväskylä (random price check; Source: webpages of Lauka town, Jyväskylä region). In Lohja similar analysis will cost €55/hour plus travel expenses and €39/visit (Source: webpages of Lohja town).

Besides of the fees and *bureaucratic* difficulties (ordering a sample to be taken, going to the laboratory, filling in the blanks, etc.) the procedure is time consuming, do not have the visibility to the other users and is relatively difficult to find the provider for.

#### 3.3.1.2.5 Customer Analysis

An environmental research, conducted by Tampere city in 2012 showed, that women are on average more concerned about environment (80% women vs. 60% men). The survey showed also a difference in respondents concerns, depending on the age group and the topic – thus, most of the respondents (88%) who were worried about exhaustion of the natural resources (including water as one of the components) were of the age group 26-35 years old.

According to the same research, the educational background also makes a difference on how concerned about environment people are: respondents with higher level education (universities and applied science universities) are concerned more than others about water pollution, chemicals in nature and natural resources. Also respondents with own families with children are naturally more concerned about environment, than those without children.

Thus, the ideal target group should be females aged 26-35, preferably with higher level education and children. Another fact, why females should be targeted with more intense than men, is that few recent studies from 2012-2014 have showed the new tendency –

women buying more gadgets than men. However, this does not mean, that men should not be considered as a target group as well, since 60% of them are concerned about environment, as mentioned earlier.

In numbers it means, that in Finland there are around 690.000 people of both sexes aged 25-35 (data from Statistic Center of Finland, 2013). However, due to the fact, that statistic does not reflect how many of those people of particular age group have higher education and children at the same time, the author suggests, that the main criteria for the target group would be age factor.

<b>Age</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
0– 4	154 901	148 105	303 006
5– 9	153 815	147 058	300 873
10–14	148 863	142 279	291 142
15–19	159 903	153 643	313 546
20–24	174 276	166 595	340 871
25–29	174 367	165 567	339 934
30–34	180 608	170 172	350 780
35–39	174 775	165 351	340 126
40–44	161 204	154 636	315 840
45–49	186 147	182 119	368 266
50–54	187 930	187 002	374 932
55–59	184 987	189 252	374 239
60–64	186 942	194 226	381 168
65–69	170 935	185 301	356 236
70–74	107 976	127 939	235 915
75–79	81 987	109 574	191 561
80–84	54 199	89 561	143 760
85–89	27 473	60 612	88 085
90–	9 076	31 914	40 990
<b>Total</b>	<b>2 680 364</b>	<b>2 770 906</b>	<b>451 270</b>

Figure 28. Finnish population divided by age groups, Tilastokeskus, 2013

Other two factors, which define the target group – education and children – should be considered when choosing the distribution channels. Distribution channels are discussed in the following chapter. However, to get a rough estimate, there are around 580.000 different types of families with children in Finland, which gives around 1.039.000 individuals (data from Statistic Center of Finland, 2012).

	<b>Families with children (0-17 y.o.)</b>	<b>Individuals</b>
Families	578 409	
Change 2011/2012, %	-0,4	
Family type		
Married, no children	.	
Partnership, no children	.	
Married, with children	352 159	704318
Partnership, with children	107 751	215502
Mother and child	102 013	102 013
Father and child	16 081	16 081
Registered male couple	6	12
Registered female couple	399	798
<b>Total</b>	<b>578 409</b>	<b>1038724</b>

Figure 29. Families in Finland, Tilastokeskus, 2012

As for the level of education, there is 83-85% of people aged 25-35 have education (data below includes those, who have completed a degree at upper secondary school, professional studies, universities of applied sciences and other universities). Another positive note, that the total percentage of individuals completed a degree has been slowly growing for the past 6 years, so no decline is expected either in future (data from Statistic Center of Finland, 2012).

<b>Age</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
	%					
15-19	13,1	13,0	13,3	13,3	13,8	13,7
20-24	80,7	80,6	80,6	80,6	80,7	81,0
25-29	84,7	84,1	83,8	83,7	83,5	83,4
30-34	86,4	86,5	86,6	86,2	85,7	85,3
35-39	84,2	84,4	85,0	85,7	86,3	86,8
40-44	84,9	84,9	85,0	85,0	85,0	85,0
45-49	83,1	84,1	84,9	85,3	85,4	85,5
50-54	77,0	78,3	79,6	81,1	82,5	83,8
55-59	67,5	69,9	72,1	74,3	76,2	77,8
60-64	58,9	60,5	62,1	63,9	65,9	68,1
65-	35,0	36,7	38,4	40,4	42,6	44,6
<b>Total</b>	<b>64,8</b>	<b>65,5</b>	<b>66,2</b>	<b>67,0</b>	<b>67,7</b>	<b>68,5</b>

Figure 30. Population of Finland conducted an educational degree, Tilastokeskus, 2012

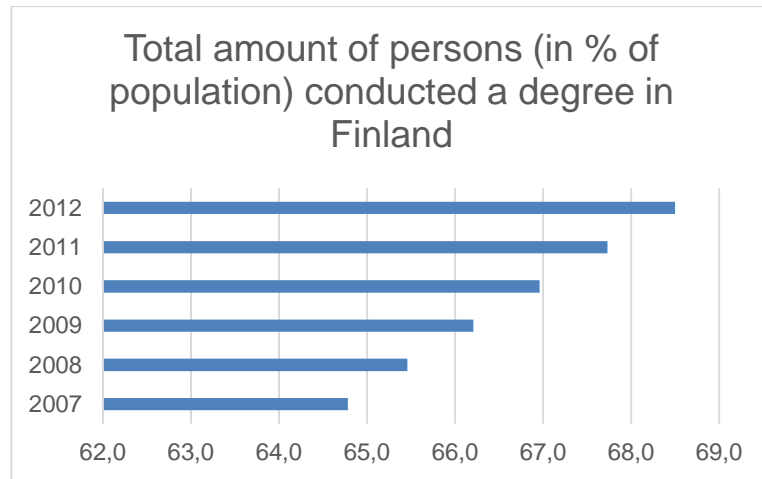


Figure 31. Total amount of persons (in % of population) conducted a degree in Finland

### 3.3.2 SWOT Analysis

Below is an extended SWOT analysis, presented in a form of decision tree, where each factor is elaborated with its meaning and actions required:

<i>SWOT element</i>	<i>Which means</i>	<i>Actions needed</i>
<b>Strengths</b>		
<ul style="list-style-type: none"> <li>No competition - no direct replacement for the application and measurement sensors</li> </ul>	<ul style="list-style-type: none"> <li>Easier to win customers</li> </ul>	<ul style="list-style-type: none"> <li>Active marketing program, making yourself visible and winning customers, before competitors come to the market</li> </ul>
<ul style="list-style-type: none"> <li>Highly motivated and enthusiastic personnel</li> </ul>	<ul style="list-style-type: none"> <li>Better competence, efficiency and professionalism</li> </ul>	<ul style="list-style-type: none"> <li>Promote capability to customers</li> <li>Staff retention program, bonuses and motivation</li> </ul>
<b>Weaknesses</b>		
<ul style="list-style-type: none"> <li>newcomer to the market</li> <li>unknown name to the consumers</li> <li>no existing customer base</li> </ul>	<ul style="list-style-type: none"> <li>Challenge to win the customers' attention</li> <li>Need to "introduce" yourself as a company to public</li> <li>Make customers start using the service</li> </ul>	<ul style="list-style-type: none"> <li>Active marketing program</li> <li>Creating visibility</li> <li>Participating in related fairs and events, to create publicity</li> </ul>

<b>Opportunities</b>		
<ul style="list-style-type: none"> <li>• current trend is towards raising environmental consciousness and taking care of the environment and well-being</li> </ul>	<ul style="list-style-type: none"> <li>• Good business potential and opportunities for sales and development in the given segment</li> </ul>	<ul style="list-style-type: none"> <li>• Green lights to ramping the marketing campaign and starting the operations</li> </ul>
<b>Threats</b>		
<ul style="list-style-type: none"> <li>• Some commercial organizations (in construction, oil, etc.) might be not happy, when individuals can freely check the water composition and situation in public places/nature and therefore might be some resistance (like those attacking Greenpeace, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Some challenges in finding the compromise and trying to create a win-win situation to both sides</li> </ul>	<ul style="list-style-type: none"> <li>• Creating some benefits for companies, so that they become partners, not the opponents in the issues of saving the environment – advertising them as supportive organizations in return for some monetary support</li> </ul>

Figure 32. SWOT analysis of EcoLeaks (in a form of decision tree)

Below is the SWOT analysis summary, based on the marketing analysis discussed in the previous chapter:

Internal	<b>Strengths</b>	<b>Weaknesses</b>
	<ul style="list-style-type: none"> <li>• No competition - no direct replacement for the application and measurement sensors</li> <li>• Highly motivated and enthusiastic personnel</li> </ul>	<ul style="list-style-type: none"> <li>• newcomer to the market,</li> <li>• unknown name to the consumers,</li> <li>• no existing customer base</li> </ul>
External	<b>Opportunities</b>	<b>Threats</b>
	<ul style="list-style-type: none"> <li>• raising environmental consciousness</li> </ul>	<ul style="list-style-type: none"> <li>• commercial organizations (in construction, oil, etc.) having conflict of interests</li> </ul>

Figure 33. SWOT analysis summary

### 3.3.3 Key Assumptions

This chapter presents the key factors, which are considered by the author as critical to the success or failure of the strategic marketing plan for a given case company:

Assumption	Implication for marketing plan
<p>The general economy:</p> <ul style="list-style-type: none"> <li>- Economic stagnation continue in Finland and Europe in general</li> </ul>	<p>-&gt; to keep pricing low or free for the end customer and look to finance the project from the bigger and strong players/companies, which are less affected by stagnation</p> <p>-&gt; focus on cost reductions and less price-sensitive segments</p>
<p>The service "industry" sector under consideration:</p> <ul style="list-style-type: none"> <li>- Customer continues to keep the strong position - is the "kind"</li> <li>- The percentage of the technologically savvy consumers continue to grow</li> </ul>	<p>-&gt; focusing on the high level of customer service and keeping the high level of customer satisfaction</p> <p>-&gt; expanding the service, adding new features, expanding the map coverage and accuracy</p> <p>-&gt; expanding the service to the international markets</p>
<p>The company's markets:</p> <ul style="list-style-type: none"> <li>- Environmental consciousness will continue to grow</li> <li>- Threat for the environment continues with continuation of the constructions works everywhere</li> </ul>	<p>-&gt; focus on keeping the customers</p> <p>-&gt; building brand/app loyalty</p> <p>-&gt; develop additional features and options for the existing customers and attracting new ones</p>
<p>Competitors:</p> <ul style="list-style-type: none"> <li>- Competitors coming up with the similar services/offer</li> </ul>	<p>-&gt; focusing on keeping the customers and resisting the competition with loyalty program and pricing methods</p>



<p>Internal organizational factors:</p> <ul style="list-style-type: none"> <li>- Growing workloads, in the service meeting the demand on the market</li> </ul>	<p>-&gt; keeping own employees satisfied, so that they do not leave from the company to competitors or establishing own start-up</p> <p>-&gt; growing the staff in accordance with the workloads growth (if proves to be the case)</p>
<p>Technological and other developments:</p> <ul style="list-style-type: none"> <li>- New technology coming to the market in the area of measurements</li> </ul>	<p>-&gt; investing in the R&amp;D</p> <p>-&gt; following the trends in the environment protection areas</p> <p>-&gt; developing new services and features within own area of expertise</p>

Figure 34. Key assumptions, critical to success for EcoLeaks

### 3.4 Phase Three

#### 3.4.1 Marketing Objectives and strategies

**Objective:** As discussed in Chapter 2, the case company is at the moment in the Service development stage, as defined by Ansoff matrix: there is a present market for the environmental issues and new service, which EcoLeaks is going to provide to the customers, as there is no such exact product on the market at the moment. Thus, the objective set up for EcoLeaks can be formulated as following:

- Level 1: Focus on entering the market with own service offer - creating visibility, building the brand and attracting the customers, with further keeping them on using the service.
- Level 2: Launching the major service (free for the end users); launching additional features, which customers can buy for a separate fee.
- Level 3: Achieve at least 95% of customer satisfaction (service rating); expanding to the international market (Baltic states and Northern Europe for the beginning).

**Strategy:** Bearing in mind, that in our case a service is a new one, in which the case company has little strength yet, it needs to be heavily promoted. At the same time, the sales at the beginning might be low, so it is more appropriate to use sales and market

share goals as a measure of effectiveness, rather than present value calculations. The strategic proposal is further elaborated in the following marketing mix.

### 3.4.2 Marketing Mix

**Product/Service:** First core service and product combination to be taken to the market is as described in the company presentation earlier and represents a mobile phone application, where a user can take measurements of the water outdoors with specific measurement sheets, and upload the observation results to a web-portal. There the information is stored, can be shared with other users and be used for own reference.

From using the services provided by EcoLeaks, the customers will get a benefit of receiving a reliable information concerning the environmental situation and get the possibility to run the test and measurements themselves. The atmosphere of trust and reliability of the information source will come from the fact, that the measurements are provided by the private persons, same as a customer him/herself, and not by a bigger commercial organization, which might be interested in the good results for some particular area due to future construction plans, for example.

The great competitive advantage of the product and service is that it can be delivered to the customers online (through the mobile application and company's website) and supportive materials (testing stripes) are delivered by post. So this does not limit the customer's physical location and makes delivery and use of the service easier for both parties.

**Price:** As discussed in earlier chapter about the revenue models (2.2.6), the pricing suggestion for EcoLeaks would be to use an in-app purchasing model, so that installation of the application and basic usage (including starting package of the testing materials and basic functions) are free of charge for the private end users. However, if a user will be willing to use more functions within an application (to be specified which ones) or have a commercial free use (no in-app advertising) – then there will be a monthly fee for those type of versions and a fixed price for additional functions. In this way, the new users will have lower barrier to start using the application and service, because of no opening fees, and the company will be receiving payments from other organization willing to place their commercial ads. Also the payments will be coming from the users willing to use more additional functions and/or commercial free versions of the app.

**Place:** the place for delivering the application to be traditionally over internet, from the suitable application market place, depending on the chosen smartphone market place. The measurement materials can be delivered to the registered users with a regular post to their chosen delivery address.

The fact that the service is consumed over the Internet and mobile phone will help to reach so called “couch potato” customers, who are interested to know what is the environmental situation around their home (existing or new one) or any other place they are visiting or just going to visit (summer cottage, friends’ or relatives’ place).

At the same time, the EcoLeaks is going to reach those customers, who are active and enjoy outdoor activities, as the application offers an opportunities to take the environmental measures by themselves, easily and without any bulky equipment. Anyways, the place and promotion are the correlating areas, especially in the mobile- and e-market.

Thus, using both channels (online and offline) the company will be able to reach as many potential customers as possible. Creating a wide visibility and ease of access for customers is a key to success, especially when the case company is a new comer to the market. Therefore the maximum of different channels should be involved in the strategy.

**Promotion:** to create publicity and visibility through as many different channels as possible. The areas of interest, where target customer can be reached include the following areas:

- Outdoor activities/camping/sports/hiking
- Healthy/sport/bio products/well-being
- Cottages and construction
- Activities for children/playgrounds – where parents are taking kids out, or where children can try measuring water themselves (like science center “Heureka” in Vantaa, Finland)
- Schools and educational centers for children and youngsters
- Bird watching

So, in relation to any of the above mentioned activities, it will be beneficial to place the announcement in related media (newspapers or magazines), related social media (profiles on Facebook, Twitter, Instagram) and participation in related trade fairs and customer events.

However, in the nowadays situation of digitalization and bearing in mind, that the company is aiming at the mobile and e-market, the online value proposition becomes even more important than the offline proposition. Therefore, when planning a web-site for the EcoLeaks it is highly recommended to pay special attention to the following aspects:

- The offering and tagline on the starting page should differentiate EcoLeaks from the other competitive companies; should clearly state what the company is offering
- As stated by Chaffey and Smith (2008: 63), the Online Value Proposition (OVP) is “more than the sum of features, benefits and prices; it should encompass the complete experience of selecting, buying and using the product or service”.
- Thus, according to the same book, the OVP is “a core digital marketing concept” and the company’s web-site should be built paying special attention to the 6Cs: Content, Customization, Community, Convenience, Choice and Cost reduction. The mentioned aspects should be referred as a check-list for a company web-site which target is to satisfy customers

**People:** starting with minimum headcount, monitor skills analysis of current headcount and strive not to increase it during the first year of operations. Strive to retain existing talents and recruit additional workforce only if critical. Accounting and other regular supportive functions can be outsourced, in order to reduce the operational costs.

Of course company’s employees need to be trained and motivated. It is also important to ensure, that the staff has a seamless access to all the necessary data and content of the database, especially for those employees, who are working in contact with the customers.

Investing in the training of continual staff proves to bring the return on investment for the companies, and at the same time increases the employees’ satisfaction in what they are

doing. Another proven method of motivation is to have a system of bonuses for the good performance of employees. Those who are working with sales and customers directly can have their bonuses in relation to the sale numbers and customer satisfaction rates. As reminded by D.Chaffey (2008: 81): “happy staff = happy customers = happy shareholders”.

**Processes:** It is important to ensure, that the service runs efficiently, in order to have a strong advantage over competitor and to retain the customers. Therefore it is important to organize a process so, that all the bugs and technical problems a customer comes across are fixed quickly and software updates are available on time, without bringing any big frustration to the users and not disturbing them from using a service.

The process of sending the testing measurement materials to the customers should also be smooth and on time. Bearing in mind, that postal services are reliable in Finland, where the major starting market is, it is only important to ensure, that the storage of the measurement materials does not go too low, so that the shipping can happen instantly, when a customer requires those.

Since the EcoLeaks Company is a start-up and has no existing process structure at the moment to be analyzed, it is important to evaluate it after the first year of operations, so then it will be clear, if the chosen policy requires some changes and/or corrections. However, it does not mean, that the processes cannot be corrected, before the end of the first year, if something acute comes up.

The extension of the product and enhancing of the value should be seen as a continuous process in the company. The competition and the offers of competitors should be analyzed on the regular basis and the company’s own portfolio should stay up to date and offer the existing customers new features and new services, to prevent them leaving for something new. The data for analysis can be easily collected by monitoring the customers’ activity on the web-site, their comments, reports and feedbacks. So, these type of communication with the customer should be take very seriously and the communication channel for the customers should be accessible in the easiest way.

**Customer service:** as the majority of the mobile apps’ users are nowadays technically savvy and demanding, it is important to pay high attention to customer service and customer satisfaction. Beside good quality of the product and service, another key factor to

the customer satisfaction are a timely and accurate delivery of the supportive materials (testers), accurate invoicing, as well as accurate and prompt follow-up and response times (suggested response time should not exceed 24 hours in ideal situation). It is also recommended to have clear channels for the communication and contact (easy to find e-mail address or online form, if a customer wants to get in touch or needs any help or assistance) and also to inform accurately how long it will take the customer service staff to get back or proceed with the request. So, when a customer knows how long he/she needs to wait and the time promise is being kept – there will be a guaranteed satisfaction.

There should be an automatic crash report for an app, so that the developers see quickly where the fix is needed. Also a feedback/satisfaction surveys for the customers are good to have, however it is suggested to avoid frequent push-up notifications with invitation to rate an app, as they often tend to annoy users.

#### 3.4.3 Alternative Plans and Mixes

**Pricing:** As an option in a case of reasonable downloads and visits to the web-site, but low in-app purchases, as proposed in the pricing model, the strategy may be turned to a fixed payment for the application download and instalment, but keeping the free use of the web-site, so that the customer can visit the site, see the test results of others and comment if willing so. However, he/she would need to pay a fixed one-time fee for the installation of the application for personal use.

#### 3.5 EcoLeaks Service Blueprint

The service blueprint for EcoLeaks is presented in the graph below and elaborated further after. The blueprint includes the physical evidence for the actions (channels and/or means by which the action is happening), customer actions, onstage contact employee actions (meaning those employees who communicate with the customers at some points), backstage employee actions (those who do not communicate with customers, but support the operations inside the company and ensure the processes goes smoothly) and support processes. The orange horizontal lines indicate where the interaction happens (external with the customer and internal) and the line of visibility.

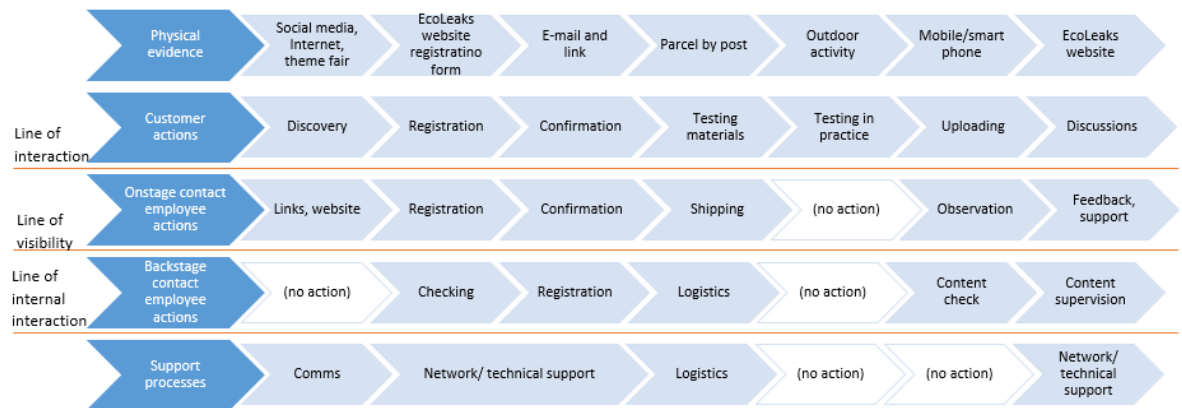


Figure 35. EcoLeaks service blueprint

#### Customer actions:

- Discovery: Finds out about the service
- Registration: Registers to the service and joins the network
- Confirmation: Receives a confirmation along with a link to download and app to the phone
- Testing materials: Receives a set of testing sheets by post to the address (mentioned in registration)
- Testing in practice: Goes outside, collects testing material
- Uploading: Uploads test results to the web portal (incl. result, picture, geo-tag)
- Discussions: Can receive ratings, comments, cheers, etc. from other users

#### Onstage contact employee actions:

- Links, website provided and being visible
- Registration: registration process competed and can be confirmed
- Confirmation: the letter of confirmation is send out and the user is welcomed to the new service
- Shipping: Parcel with the testing materials (sheets) is packed and shipped out
- Observation: Views the website for account updates
- Feedback, support: Receives any requests/questions/feedback from the customer (if any)

#### Backstage contact employee actions:

- Checking: Checking the Social Security number and address details, to ensure the customer is a real case and no fake account

- Registration: Completing the registration
- Logistics: Preparing, packing and sending out the parcel
- Contents check: Approves the submission and publishes on the website
- Contents supervision: Moderate and supervise comments and discussion on the website

Support processes:

- Communication: Creating proper communication and visibility
- Network/technical support: Ensuring server and connection working properly and there is no bugs in the system
- Logistics: Postal services and agreements; ensuring testing materials stock is available
- Network/technical support: Ensuring server and connection working properly and there is no bugs in the system



## 4 Discussion and Conclusion

This Chapter will include the conclusions of the marketing research and overall business recommendations for the EcoLeaks and a marketing plan for it, as well as authors own thoughts about thesis process.

### 4.1 Conclusions

As seen from the conducted research and marketing analysis, there is a good potential for starting up with EcoLeaks project. The favorable facts are that the mobile applications market is still growing and there is an increasing demand for mobile applications. Also the awareness of the environmental issues is growing and people are more and more willing to take some active actions in studying and helping with the situation. Thus, combining environmental issues and mobile technology has a great potential. Another great benefit is that there is no direct supplement for the services and product existing on the market, which EcoLeaks is going to introduce.

However some challenges exist here. The fact that there is no direct supplement, means that EcoLeaks will have to create the customer base from scratch and educate them on the benefits of their application and service. In practice this will mean more efforts in marketing, creating the publicity and communications.

Another challenge is that the company did not have any operation or any other services and applications on the market, meaning that they are not known to the public either, and it will need also efforts to attract the potential customers – both to the company and to the service they are offering. However, the lack of experience can be compensated by high level of enthusiasm and good quality job, which seems to be in place.

To conclude, the author hopes, that the presented marketing research and recommendations will help the EcoLeaks to successfully start up its operations and gain a good base of loyal customers.

## 4.2 Learning outcomes

The learning process from the marketing research has significantly widened author's understanding of the marketing planning processes and can be utilized in the future work. Even though, the author is not an employee of the case company, the area of operations is the same, as author's employment, so the research process also helped to open the horizons and understand better own area of work.

Overall, the author is pleased with the outcome of the research and the marketing plan for case company, even though there were some limitations to the marketing plan (in budgeting and 1<sup>st</sup> year implementation program).

Unfortunately, the process took longer time, than expected, due to some circumstances at work and personal health issues, but it was an exciting journey, which hopefully will become useful both, for the author and for the case company.

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