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**BUILDING ORGANIZATIONAL CUSTOMER PROFILES FOR THE BALTIC SEA
UNDERGROUND INNOVATION NETWORK (BSUIN) PROJECT – A PART OF
SERVICE DESIGN**

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Thesis
Spring 2019
International Business
Oulu University of Applied Sciences

ABSTRACT

Oulu University of Applied Sciences
Degree program in International Business

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Title of Bachelor's thesis: Building organizational customer profiles for Baltic sea underground innovation network (BSUIN) project- a part of Service design

Supervisor(s): Helena Ahola

Term and year of completion: Spring 2019

Number of pages: 68

This research work has been conducted for the Baltic Sea Underground Innovation Network (BSUIN) project for bachelor's thesis. Project's members are from OAMK and the BSUIN project. The background and the topic of this thesis was chosen in order to create organizational customer profiles for the BSUIN project, based on the request of the assignor.

The objective of the thesis is to build a proper customer profile of industrial companies which will be later used in designing services for project participants. The outcomes of this thesis would contribute to industrial Service design which support to the project partners and the research team. As a part of the project, this thesis helps to describe the customer's portrait, motives to use the service as well as how the service brings value to the customer, etc.

Due to the nature of the topic, which is getting to know and understanding customers' insights, experiences and opinions to design a better service through developing customer profiles, the research method applied is qualitative research. In this thesis, both primary data and secondary data were used. Secondary data was gathered through organizations' own data archive, prior research studies, publish documents, books, special catalogues and electronic indices. On the other hand, questionnaire was used as a primary data collection technique for gathering data in qualitative methodology, with the responses of six organizations' representatives.

The establishment of customer profiles is the result of collecting and analyzing all the data, which is also the leading target of the research. After resolving the data, five distinct customer profiles were made with six buyer personas. However, due to the confidential issue of the organizations' representatives, these profiles will be hidden from the public readers. (In case anyone needs access to these profiles, please contact the authors or related parties). Nevertheless, two suggested customer profiles will be provided as example models for the UL customer profiles. The profiles not only include the existing understanding of the organizational customers, but also provide the characteristics of the clients through research data.

For further research, the knowledge about clients' behavior could be developed to achieve further understanding. The underground laboratories could generate individual-designed-marketing materials for each customer group with the help of the knowledge of clients' behavior to attain more effective marketing activities.

Keywords:

Organizational customer profile, Service design, B2B marketing, Buyer personas

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1 INTRODUCTION

In recent years, with the constantly changing world, business environment has also been evolving fast. It has been a long time ago since companies and organizations only focused on improving their products. Successful businesses nowadays are the ones that also concentrate on customers and provide them the service as good as possible. Furthermore, to bring customer experience to higher levels in practice, a stagnant and organization-centric mindset is not adequate anymore. In exchange, broadening the role of customer and acquire a dynamic, multi-actor-centric perspective can bring many more successes to organizations (McColl-Kennedy et al. 2015, 431). Due to that nature, service design was introduced and implemented by not only private sector as extending product into services but also public sector as a reorganization of public services. In Finland, service design thinking can be found at the Myyrmanni shopping mall in Vantaa, conducted by Kone Elevator Company (Stickdorn & Schneider 2011, 63–64).

Although service design is very important for businesses in the modern world, it is still a new concept to many people and has not been taught yet popularly at school. As a result, service design caught the curiosity and interest of the authors of this thesis. By building customer profiles for the BSUIN project, the authors of this thesis took part in the very first step of its service design progress and helped service designers develop a service that suits with their customers and customers' needs the most.

1.1 Research topic and objective

The research topic of this thesis is to create customer profiles of industrial companies for the Baltic Sea Underground Innovation Network project (BSUIN). The topic was come up when the authors of this thesis got to know the problems, which research team wanted to address at Service design stage of the project.

The thesis aims to build a proper customer profile of industrial companies which will be later used in designing services for project participants. The outcomes of this thesis

would contribute to industrial Service design which support to the project partners and the research team. As a part of the project, this thesis helps to describe the customer's portrait, motives to use the service as well as how the service brings value to the customer, etc.

To fit with the objective of the thesis, qualitative research will be conducted, in which primary data and secondary data should be understood thoroughly. Further information about these would be discussed in chapter 2 of this thesis.

1.2 The BSUIN project

The Baltic Sea Underground Innovation Network (BSUIN) project is EU supported and funded by Interreg Baltic Sea funding cooperation. The duration of this project is 36 months starts from October 2017 until December 2020 with a total budget of 3,4 million Euros. The BSUIN project contains 14 members from 8 Baltic sea countries, including 6 underground laboratories (ULs). The project's objective is to develop the capability of the Underground laboratories (ULs) in order to offer technology transfer utilizing the facilities and research infrastructures of the ULs for business development. In additions, the BSUIN project aims to develop the accessibility of the ULs for innovation, business development and science by improving the information about the ULs, the operation, user experiences and safety (Baltic Sea Underground Innovation Network, 2019).

Besides scientific research, the ULs in BSUIN project can provide unique environments for various businesses, such as developing technology for mining and tunnel construction equipment or radiation shielding systems or for geophysical examination, radiation detection, and other measurement instruments. The ULs can be situated for production, which is a new and developing field especially in the production of thermal energy and facilitating food production. (BSUIN Basics, 2019)

The main outcome of the project is a sustainable network organization, which will disseminate the technical, marketing, operational quality, training and other information about the BSR ULs created during the project. The web-based tool and the network organization will be created so, that they will provide an open innovation

platform for further quality development and innovation and share the best practices for service concepts, facility improvement and methodology recommendations from piloting activities (Results & Outcomes, 2019).

One of the BSUIN project's outcome is Service design of methodologies and new service concepts which will let the outside users utilize the ULs and the facilities as a capacity for innovation better (Baltic Sea Underground Innovation Network BSUIN, 2019).

1.3 The Concept and Thesis structure

There are some main concepts that need to be perceived before doing this thesis.

First concept is Service design which could be understood as the activity of planning and organizing people, infrastructure, communication and material components of a service to improve its quality and the interaction between the service provider and its customers. Because of the limitation of this thesis and the target of its topic, the industrial service design has been chosen as the main focus, which will be discussed further in Chapter Three.

The second concept is Business-to-Business (B2B) Marketing. The acknowledgement about B2B business is large and wide-ranged. Because of its limitation, this thesis would stay focus on the B2B buyers and their characteristics to support building customer profile section in chapter 6. In general, the marketing for goods and services between organizations or in B2B market is not applied on the same way as Business-to-Consumer (B2C) marketing. Because of the large number of fundamental different characteristics, diverse marketing strategies and operations which need to be executed to meet the needs of business customers. Literally, B2B marketing is differentiated from B2C marketing by two main ideas: the target customer which is an organization, and the intended use of products to support organizational objectives. This concept would be discussed further in Chapter Four of this thesis.

The third concept is Customer profile which is belonged to the field of customer analytics. Customer profile refers to a description of the customer(s) that includes

demographic, geographic, and psychographic characteristics, as well as buying patterns, creditworthiness, and purchase history, etc. However, for an organizational customer profile, characteristics such as industry, size, purchase history, etc. should be mentioned as well. Besides, buyer persona is also an irreplaceable section in a B2B customer profile. This is because the buyer personas provide real life background to customer profiles which helps marketers see the insight, connect all the dots and acknowledge the circumstances and challenges customers experience. This matter will be discussed thoroughly in Chapter Five.

2 RESEARCH

In fact, an irreplaceable part of a thesis is to conduct a research about a practical or theoretical problem that as a result, provides a new insight to its author(s) as well as the readers and a solution to the matter. Discovering the hidden truth is the major purpose of any research (Kothari 2004, 2). Those are also the reasons why a research is a fundamental core of a thesis. Depending on the topic and the aim of the thesis that the research questions were formed and the research methodology is determined. In this thesis, the research questions and the research methodology are described as below:

2.1 Research problem and research questions

One of the most difficult parts of any research is its first and foremost step, when the researcher(s) has to define a research problem needed to be addressed. Typically, a research problem is a difficult issue in a theoretical or practical circumstance which a researcher wishes to acquire a solution (Kothari 2004, 24). The research problem in this thesis is about identifying benefits the customers have thought the underground facilities could bring to them compared to operating at the surface. The problem was come up when the underground labs expect to get more customers and the marketing team of the BSUIN project wants to design a service that fits most of the needs and wants of the underground labs' potential customers. Therefore, as a part of getting more information to understand customers better, the underground labs also want to know the benefits they can provide to their customers, which labs on the surface do not acquire.

According to Researchrundowns.com, research question concentrates on the study, rules the methodology and directs all the relevant stages of a research; as a result, research question plays a critical role in a research project. It can be considered that research problem relates to a specific area while research question(s) is narrowed down from the research problem, which helps to clarify the reason the problem exists. To fit

with the objectives of the thesis and to narrow down the research problem above, this thesis aims to answer the following research questions:

- How to profile a B2B customer?
- Which features are needed to build a customer profile to assist the service design process?
- Why would the customers choose the underground facilities?

The underground labs have been established for several decades, with a strong and long customer base. However, the business world has changed so rapidly and to adapt with the current environment, the labs need to change their marketing way and improve their services to get more customers as well as satisfy those. In order to address the mentioned research problem and answer the mentioned research questions, the result of the research will reveal a new understanding of their existed customers and the relationship the labs have with their clients. It is also attainable to get more information about issues such as why customers chose the lab, how they found it and how much they were satisfied with the services there. More importantly, analyzing the collected data will provide suggested customer profile models and an insight about demographic and psychographic information of the clients, which can help to build the best possible future marketing plan.

Besides, the research questions are also the base for this thesis's literature review.

2.2 Research methodology

Due to the nature of the topic, which is getting to know and understanding customers' insights, experiences and opinions to design a better service through developing customer profiles, the research method used in this thesis is qualitative research. According to Carson et al., qualitative research method can be appropriately used in any case which the research pays main attention on in-depth comprehension of how, why and in what situation such phenomena may happen and what may affect it (2001, 67). Besides developing customer profiles, the study also aims to understand the reasons

why laboratory clients' have chosen to use the underground facilities rather than surface ones.

In this thesis, both primary data and secondary data were used. Specifically, secondary data refers to data collected and readily available from other sources. The authors of the thesis gathered secondary data through organizations' own data archive, prior research studies, publish documents, books, special catalogues and electronic indices. The theoretical background of the study was built on a wide range of scientific articles and books written by recognized scholars, to name a few: Satu Miettinen, Philip Kotler, etc. Valuable information about firms was retrieved from companies' website, email communication with their key persons and various web portals linked with the companies' products and activities.

On the other hand, primary data means original data collected by the researcher according to his/her own purpose. The authors of this thesis used questionnaire as a primary data collection technique for gathering data in qualitative methodology. The questionnaire was created by the discussion through e-mail between the authors of the thesis and their thesis instructor – Ms. Helena Ahola and two BSUIN project researchers – Mr. Andrus Paat and Mr. Jari Joutsenvaara. Then, it was tested and approved by Dr. Marcus Laaksoharju – Customer representative at Äspö Hardrock Lab. The list of organizations and their representatives was provided by the managers of the underground labs, with the first important criteria is that the organization representatives can understand and write in English. Due to the fact that organization representatives are leader of a company, professor of a university, etc., they are very busy and have very little free time. Besides, the thesis' authors and the organization representatives are coming from different countries, language is also a big barrier for both parties to understand and communicate well with each other. As a result, instead of interviewing each of them, the questionnaire was sent individually to the company representatives through email and if the answers were not received as wanted or not enough data to analyze, interview then will be conducted. Luckily, the responses were all good and well-cooperated, it was unnecessary for an interview. Besides, the questionnaire was designed with open questions, multiple choices and in scale, depending on the purpose of the question and mainly, for the organization

representatives to answer in the most convenient and time-saving way. Assuredly, all the responses and the organization representatives' personal information were confidential when analyzing and reporting the results. The motivation letter and the questionnaire that were sent to organization's representatives through email, can be found in appendix 1 and appendix 2.

The results of the study are analyzed and discussed in Chapter Six; answers, suggestions and recommendations will be given in Conclusion and Discussion chapters.

3 SERVICE DESIGN

Service design is a new approach in services development and is an emerging subject in the early twenty-first century. In this following chapter, the thesis explains and defines service design as a term; provides general understanding about principles and process of service design and some tools which are usually used in service design.

3.1 Service design as a term

3.1.1 Definition of Service

In the simple terms, Services could be considered as Activities, Experiences, Deeds, Performances and Processes.

“A service is an activity which typically has some element of intangibility associated with it. It involves some interaction with customers or property in their possession and does not result in a transfer of ownership” (McDonald, Payne & Frow 2011, chapter 2).

According to Philips Kotler and Kevin Keller (2016, 422) “A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything”.

Thus, service are those activities which satisfy wants. Some services are offered individually while some others are offered as a supplement to a product purchased or a major service consumed by the customer. Besides, the production of a service may not be tied to a physical product.

3.1.2 Definition of Design

There is various understanding about the term ‘Design’ because it is one of the most basic and unique activities that only appears with human races. According to Heskett, “Design is one of the basic characteristics of what it is to be human, and an essential

determinant of the quality of human life.” (2005, chapter 1). From this point of view, Design could be considered as a popular term in human life that affects everyone in everything of what they do in every day.

For example, one of the most popular and famous images of ‘Design’ in life is ‘Fashion design’. Mostly everyone could imagine what is Fashion design, what does it do, how people do it, etc. From a point of view of a customer, a fashion design is acceptable when it fits their body types well and makes them feel confident. From a fashion designer’s perspective, a good design is more than acceptable. Sometimes, a design is an impressive introduction of his/her personal ‘taste’ in fashion.

“Design is to design a design to produce a design.” (Heskett 2005, chapter 1). The term ‘Design’ has various level of meaning that it is itself a source of confusions. In a different way to approach, the term ‘Design’ is rather like the verb ‘Love’ which contains various meaning depending on who is using it, to whom it is applied, and in what context.

In the real life, Design has a wide range of practice which could be listed with some popular examples such as: fashion design, industrial design, graphic design, product design, service design, hair design, floral design, and so on. However, there were opposite questions about the usage of the term ‘Design’. For example, people usually use ‘hair design’ instead of ‘hair engineering’. Why? First, it provides the ‘feel right’ and ‘feel good’ feeling for people when they’re using it instead of ‘hair engineering’ or ‘hair development’. Simply, people get used to that way of use and accept it. Second, the term ‘Design’ is chosen because of its universal usage. It is accepted by many people so it would be unnatural if someone tries to call ‘hair engineering’ or ‘hair developing’ instead of its general term ‘hair design’.

3.1.3 Service design as a term

As manufacturing economies in the 1990s started to be replaced by service economies - - service design has become prominent in creating value for customers. The reason is the transition in focus, from aesthetics and product-orientation to understanding why customers buy a particular service solution (i.e. a focus on value creation). (Andreassen et al. 2016, 22)

According to Stickdorn and Schneider, “If you would ask ten people what service design is, you would end up with eleven different answers – at least.” (2011, 22). From this point of view, service design is an interdisciplinary approach that combines different methods and tools from various disciplines. It is a new understanding as opposed to a new academic branch of learning.

Service design is a new method to improve services and an evolving approach so basically there is no common definition of it. In the other hand, there are various way of approach in describing Service Design as a term. The main goals of service design are to improve and develop services in businesses.

“A single definition of service design might constrain this evolving approach, whereas a shared language is undoubtedly important for the further growth and development of service design thinking.” (Stickdorn & Schneider 2011, 22).

Service Design can be explained, for example, as follows:

The UK Design Council defined that “Service design is all about making the service you deliver useful, usable, efficient, effective and desirable.” (ibid, 24).

In another point of view, “Service design is a multidisciplinary, human-centered, participatory approach - - that brings new service ideas to life - - Service Design explores customer activities and identifies opportunities to orchestrate for orchestrating new service processes and service interfaces” (Costa et al. 2017, 5).

“Service Design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable for clients and efficient as well as effective for organizations. It is a new holistic, multi-disciplinary, integrative field.” (Stefan 2005, 6).

The agency’s approaches for Service Design definitions:

According to Engine Service Design agency, “Service design is a design specialism that helps develop and deliver great services. Service design projects improve factors like ease of use, satisfaction, loyalty and efficiency right across areas such as environments,

communications and products – and not forgetting the people who deliver the service.” (ibid, 24).

From another point of view, LiveWork studio explained that “Service Design is the application of established design process and skills to the development of services. It is a creative and practical way to improve existing services and innovate new ones.” (ibid, 25).

The idea that services can and should be designed as thoughtfully and elegantly as products are is about two generations old, but it has gathered steam only in the last half dozen years. The pull has come from several directions: First is the steady emergence of a management literature for services. Second is the pull from complex service industries– tertiary-care hospitals, for example–that realized that design thinking addressed their management challenges better than anything else. Third is the role of technology: Many services that used to be performed by a front-line employee– cashing a check, checking in for a flight, filling a gas tank, buying a book–now require a user interface that must be designed. (Leavy 2017, 18)

According to Reason, Løvlie & Flu, in the early twenty-first century, Service Design has emerged because of a number of reasons (2016, 10). Some of the reasons are three driving global trends that lead to Service Design today are: Economic, Social and Technical.

- Economic reason: The trend toward value in Services.

In the development of an economy, the economic activities move from agriculture to raw materials to manufacturing to services. This trend is a macro one and has already taken place in much of the world. In a developed economy, Services sector usually stands for 70-80 percent of its value and it is growing rapidly. For example, the Service sector’s proportion in the U.S economy is estimated as 79,6%, according to the U.S International trade administration (Ward 2017).

Unlike in many industries, where the differentiation of products will reduce along with the development of the sector, Services has been proved to be the area where there is higher potential during its growing timeline.

- Social: Customers are having more and more expectation.

In the market, consumers' demand and expectation are non-stop or growing continuously. The consumers' expectation would develop more and higher when their demand has been met. This happens because market economies have trained people to expect more and from that point, it will encourage the whole market to grow.

In a market that has a lot of services providers, when the demand is higher, the understanding of customer needs and expectation will be highly required and needs to be developed further. Thus, Service design is a productive way to improve and develop services without interfering the current situation of the business.

- Technical: Digital revolution.

In the twenty-first century, the digital revolution has driven fundamental change and disruption in the service sector. Services that were basically delivered by humans only can now be partly delivered by technologies.

For example, one of the most recognizable change in services delivering methods is banking. Several years ago, banking services were mainly delivered by expertise staff or face-to-face. However, with the impact of digital revolution, nowadays, banking services are getting more and more online and self-serve.

However, technology is definitely not human, and it is developed and operated by human. In some situations, technology can make things more difficult to understand and navigate for customers. It is also lack of flexibility – which is human's unique point. Thus, along with the impact of digital technologies, there will be high demand for domesticating and humanizing technology and service design is a solution.

3.2 Principles of Service design

According to Stickdorn and Schneider, there are 5 principles of Service Design (2011, 26):

- User-centered: Service should be experienced through the customer's eyes.

- Co-creative: All stakeholders should be included in the service design process.
- Sequencing: The service should be visualized as a sequence of interrelated actions.
- Evidencing: Intangible services should be visualized in terms of physical artefacts.
- Holistic: The entire environment of a service should be considered.

User-centered

To deliver services, a certain degree of customer participation is necessary. For example, any service which is offered by public transport operators such as Expressing bus to the airport, etc. The participation of the customers is important and necessary for them to finish the service's providing process and get benefits at the end. It is a fact that services are not tangible goods which can be stored away in an inventory. It is generated and needs to be consumed through interaction between service providers and customers. The main purpose of a service is to meet the customer's needs to be used frequently in as long as possible time. In addition, a service would generate more benefits when it is used by more customers. It needs to provide its users the best service's quality to be recommended heartily afterwards.

Co-creative

Services is not tangible; therefore, to provide it successfully to the end-customers, the participation from many parties is required. Providing services requires various stakeholders, such as staffs from both front and back sides, managers in all level, and non-human factors such as websites, vending machines, e-mails, etc. So, it is important to make these different stakeholders and the customers to involve in a service design process, because all of these participant groups do have their important roles in the success of a service.

By making co-creation in service design process, the stakeholders and the customers would have smooth interaction in between. This ensures the satisfaction for both customers and employees and leads to a sustainable situation for service provider in the future.

Besides, by involving the customers to service design process, the service provider would gain more loyalty and long-term engagement from them.

Sequencing

Human is the center in service design process. The more satisfaction is generated, the more effective a service is. However, the service timeline is important to be considered during the design process because the mood of customers is affected by service's rhythm. If the rhythm of a service is too slow, there's higher chance of getting bored from customers. In another hand, more stresses would have been generated to customers if everything goes too fast. For example, the passengers will get bored and feel angry when their plane keeps parking at the airport without letting them go on board on time. In this case, the rhythm of boarding service is too slow and not effective.

Evidencing

Services often take place in the background unnoticedly. Some specified services are intentionally designed to be unnoticed such as housekeeping service in a hotel, chef in a restaurant, etc. However, the result of a service usually is noticeable to its customers such as when paying a bill. This situation could generate a gap between customer's expectation and actual experiences with the service.

So, providing the customers evidences to remind them about the good experiences they have had is a good way to gain their loyalty and recommendation. Service evidence can extend service experiences beyond the service period further into the post-service period.

Holistic

Despite of being intangible, the service itself usually happens in a physical environment. It uses physical artifacts and generates some forms of physical outcome. The customers themselves are a factor inside that environment. They connect and interact with the services by their senses such as seeing, hearing, smelling, tasting, touching, etc. So, every aspect should be considered to create a detailed illusion when designing a service. By

creating an obvious illusion, the intention would be more apparent for service designers when designing a service.

3.3 Process

The main purpose of service design is finding solution for problems a company is having or the potential one in the future. However, every business is different from each other; therefore, having a universal process for service design which can be applied broadly is difficult. As a result, the Service Design process has to be embedded into existing company's structures and processes and then needs to be adjusted for specified company's situation. Negotiating and initiating service design within these structures and seeking spaces where service design thinking could be applied, are the main responsibility of a service designer.

Service design process and its four main steps have various versions in different publications but mainly the idea remains the same at last. According to Stickdorn (Koivisto & Miettinen 2009, 255), the service delivery process could be divided into 4 main steps as follows: discovering, concept design, prototyping and implementation.



Figure 1: The Service delivery process (Koivisto & Miettinen 2009, 256)

3.4 Tools

“Service Design provides methods and tools for orchestrating and materializing interactions between people, institutions, and technological systems in innovative ways - -” (Costa et al. 2017, 5). Therefore, tools are one of the important parts of service design.

There are many tools for Service Design that depends on the purpose and requirements of a project. The list of tools using in Service Design could be flexible and adjustable.

There is no fixed list for it. As similar as an idiom “All roads lead to Rome”, “there is no real right or wrong way to employ these tools. A successful project simply involves finding a workable combination, that can conceptualize, develop, and prototype ideas through an iterative process of gradual improvement.” (Stickdorn & Schneider 2011, 140).

There are some popular tools that are usually used in Service Design (Reason, Løvlie & Flu 2016, 128) such as:

- Customer profile:

It's a tool enables insights into customer experience which could be shared with more audiences. It helps designers in capturing and describing their customer rich in image when designing a service.

- Customer insight:

Understanding the customers is a key to all service design. A customer insight is an enlightening understanding of specific customers' points of view. It contains important and useful knowledge for service design such as customer's needs, experiences, behaviors, motivations. Customer insight could be collected from prior experience, data about customer behavior, customer observation and testimony. A good customer insight could help driving both improvement and innovation in service design.

- Customer journeys:

It's a tool which could generate the focus on customer experience as a movement through stages which can be understood and improved on. It's used to describe experience from the point of view of customers. Customer journey helps bringing an outside-in focus on either new scenarios or analysis of the specific issues that are preventing a journey from being as effective as possible.

- Service scenarios:

This is a helpful tool for service designers in developing a clear picture of future options and future targets. Service scenarios focus on defining the future experience of customers and on the way that it will affect business and operations. Service scenarios provides the information about how customers will move through all steps or parts of a service. This tool is useful when designers need to explore a range of options for their future service.

4 B2B MARKETING

B2B marketing is primarily different from consumer goods or services marketing because buyers in this market do not actually consume the products or services for themselves but for the other buyers or the final consumers. However, these two markets – B2B and B2C – both share two key factors in common:

- Both of them have a customer orientation and work backwards from an understanding of customer needs. (Fill & McKee 2012, 6)
- Both need the ability to gather, process, and use information about customers and competitors to achieve their final objectives. (ibid)

4.1 The Characteristics of Business Markets

There are several factors that characterize the business. The main ones are the nature of demand, the buying processes, international dimensions, and the relationships.

The Nature of demand

According to Gummerrsson and Polsee, demand is derived from consumers (ibid) and is derived in business markets. For example, with Boeing – an aircraft manufacturer, consumers and travelers help them in determining the number of aircraft that airlines make available through the number of flights they have made and what they are prepared to pay. Besides, an aircraft is not produced and manufactured by Boeing itself but is made by hundreds of organizations interacting with each other in a production chain or supply chain. In this example, air passengers increase demand.

“Demand is variable in business markets.” (ibid). One of the reasons is because the demand itself is arisen from changes in consumer behavior and preferences.

Demand has limited elasticity, or it is sensitive to prices in another word, in business markets. The fluctuation of prices will affect the demand of customers. Once a company

has incorporated a product into its processes, the supplier's price increases have to be absorbed and checked carefully to maintain the customer's demand and satisfaction.

Buying process

In consumer markets, the level of risk is usually low in compare with B2B markets. Because of that, the customer's purchasing decisions are often made in a short time and the focus is primarily on the emotional aspects which is connected to a purchase.

In contrast, B2B markets often have higher level of potential risk so decision making period literally takes much longer and involves more participants. In B2B markets, purchasing is fundamentally a group activity, with the structure and size of the group changing according to the significance of the item being purchased. The group is referred to buying center or Decision-Making Unit – DMU (ibid, 7).

International aspects

Nowadays, growing B2B organizations are engaging in international markets, with the help of technological advances such as the Internet, telecommunications, etc. In B2B markets, organizations have less concerns and issues than in B2C international markets by having a lower diversity in product and performance.

Relationships

This is the key characteristics of business markets. In B2B markets, relationships are literally vital for organizations to be successful in business. "Collaboration and partnership over the development, supply and support of products and services is considered a core element of B2B marketing" (ibid, 8).

4.2 Types of Organizational customers

There are many ways to determine the types of organizational customers. In this thesis, an approach which characterizes organizations into three different types based on their roles within marketing channels, has been chosen. They are commercial, government and institutional organizations which have been differentiated on the figure below.



Figure 2: Types of B2B organizations (ibid, 9)

Commercial Organizations

Based on the usage of products and services, commercial organizations are divided into 2 main groups: Intermediaries and Non-intermediaries, which contain 4 different types: distributors, original equipment manufacturers, users and retailers.

In group intermediaries, there are distributors and retailers. Both of these types are technically similar to each other. However, the main difference between these types is their business roles. Distributors' role is to assist and smooth the transfer of products through the marketing channel and to add value-creation opportunities through their activities. In another hand, retailers' role is slightly different when their customers are mainly end-consumers. Retailers usually purchase products and services to offer them to consumers.

In group of non-intermediaries, there are original equipment manufacturers and users. Original equipment manufacturers (OEMs) purchase materials to build into the products that their customers demand. According to Fill & McKee (2012, 11), "users are

organizations that purchase goods and services to support their production and manufacturing processes.”

Government organizations

There are many types of government organization, but they have one characteristic in common, which is the responsibility when making decision for huge volume and massive value of business purchases. Government organizations are categorized into six different types based on their purchasing purposes. They are health, environmental protection, education, policing, transport, and national defense and security.

Institutional organizations

When an organization is neither completely governmental nor “private and commercial in nature” (ibid, 15), it will be categorized as institutions. There are a large number of examples for institutional organizations in reality such as: schools, universities, libraries, museums, hospitals, etc. Institutional organizations have two main types based on their original relation and characteristic. They are not-for-profit or non-profit, which usually are government-related and community-based organizations.

4.3 B2B marketing characteristics

Literally, the marketing for goods and services between organizations is not applied on the same way as consumer goods marketing. It is because of the large number of fundamental different characteristics, diverse marketing strategies and operations which need to be executed to meet the needs of business customers.

Business marketing is distinguished from consumer marketing by two main ideas: the intended customer which is an organization, and the intended use of products to support organizational objectives (ibid, 18).

4.4 The Importance of B2B marketing relationships

In B2B markets, “organizations interact with other organizations to provide superior value-creation opportunities for their customers” (ibid, 25). However, the quality, duration and level of interdependence between organizations in a supply chain does fluctuate or vary significantly. There are a huge number of reasons for that variance but the most important one is perceptions of value which is shared by both parties who are motivated mostly by self-interest. Because of that, in B2B business, marketing is characterized by a portfolio of relationships which need to be well-managed. Some relationships are price-oriented, and some are fully cooperative while the majority often fall somewhere in between these two.

5 ORGANIZATIONAL CUSTOMER PROFILE

The main aim of this thesis is to develop organizational customer profiles for two underground laboratories in the BSUIN project. However, due to the fact that there are difficulties in finding books or articles writing about organizational customer profile, in this chapter, the authors of the thesis had no choice but using references mainly from blogs and websites.

Literally, a customer profile should show the customer's description, characteristics and insights so that customers can be classified and grouped suitably, no matter what kind of customer profile it is. For organizational customer profile, the authors of this thesis also want to mention about organizational buying behavior because all decisions about any purchases from an organization are affected by the need and behavior of that organization; therefore, it should be emphasized in the customer profile as well.

5.1 Customer profile, buyer profile and buyer persona

First and foremost, it is essential for readers to understand what a customer profile is, although the term may be rather familiar to everyone. A customer profile is an approach of describing a customer categorically and later they are grouped for marketing and sales purposes. By profiling customers, marketers can understand customer insights which helps the marketing and sales team increase the efficiency in using budget for marketing and sales. On the other hand, through customer profiles, marketers can know better who the customers are, what similarity they share and what to learn about them in order to retain the loyal customers and reach new alike ones more efficiently. (D&B 2013, 1).

Additionally, customer profiles have also been needed for segmenting marketing lists, with the purpose of focusing on the right type of customers and sending suitable marketing messages to those. By understanding the demographic characteristics of the best customers, such as geography, industry, employee size, etc., marketers can use

these criteria to look for their targeted mailing and telemarketing lists. Besides, information from customer profiles is also crucial for improving customer service. With that information, communications between a company and its customers can be adapted to suit with the specific customer segments, for example communication with new customers should be different from the loyal ones (ibid, 3-5).

In fact, the term 'Customer profile' is usually used as a 'consumer profile' in the consumer market rather than in the business-to-business market. Although behind every company is a person in charge of buying, all decisions about any purchases from an organization are affected by the need and behavior of that organization, the organization then becomes a buying entity; therefore, a customer profile between the consumer market and the business-to-business market basically is different and has dissimilar characteristics. For business-to-business market, the terms 'buyer profile' and 'buyer personas' are more suitably used. Nevertheless, the two terms refer to two different things and many people have misunderstanding that they are the same.

Buyer profile is a precise description of a customer- in this case a company, provides general information about the customer such as industry, size, location, purchase history, etc. The data can be gathered from client data or/and during the sales process (Haitsuka 2016). By identifying an ideal buyer profile, companies that may become a potential customer in the future can be easily determined and targeted. For example, from data about company industry in a buyer profile, marketing and sales team can limit their search to only those companies that ideally fit for their services.

Whereas, within the ideal buyer profile, buyer persona provides an insight about the person who is in charge of purchasing for his/her company. For instance, an ideal buyer profile can be a mining company located in the south of Finland. Within that buyer profile, there can be many buyer personas, such as head of marketing department and head of operation, who involve in the buying decision at the mining company (Hintz 2017). When creating buyer personas, criteria such as title in the company, buying behavior, personal values, customer's characteristics, motivation, etc., should be considered. Knowing the buyer persona helps the business-to-business organization tailor and deliver their marketing message to fit with the expectation of the buyer and

the needs and wants of their organization more successfully. Jeff Ogden, president of the B2B lead generation consultancy- Find New Customers, defined Buyer Persona and its role as following: " Buyer persona is a detailed analysis of the PEOPLE who buy from you. It is all about people - pains, motivations, process, trusted sources and more. It also covers how they buy and why they would or would not buy from your company. Buyer personas gather invaluable information to feed content marketing and sales enablement. They are critical in deciding what messaging to use in your content - for instance 'What do you say to a person in an early Untroubled/Unaware buying phase?'. Without good personas, you'll struggle to create relevant content to engage prospective buyers." (Ogden 2013).

All in all, although the three marketing concepts customer profile, buyer profile and buyer persona are commonly misunderstood and confused, their roles are undeniable in providing objectives and development to the marketing project as a whole and helping to reach the target audiences effectively.

5.2 How to create a buyer persona

Due to the fact that buyer persona is still a new marketing concept to many people, this section will provide more knowledge about buyer persona in general and how to create a buyer persona in particular.

The first step in the progress is to conduct a research about data points and trends. It is obvious that every company has customer contacts database. Through the database, trends on how customers and leads find and consume the company's marketing content can be discovered. This also helps to find out problems that customers may have and how a company's services and products can address those. Nowadays, with the fast growth of technology, there are many online tools that can help organizations recognize these trends. Popularly, Facebook and Twitter are two social media channels that have a huge number of users, including companies and organizations. To satisfy the need of having a tool to analyze visitors from business accounts, both Facebook and Twitter provide analytics tool that shows topics and demographic information most relevant to

each business. Besides, Google Analytics is worldwide used for getting the facts about who visits the website and related keywords that are being searched. Additionally, customer data can also be gathered from sales teams, who directly interact with customers every day and therefore, get their feedbacks and may know what kind of people buy from the company, what customers like or not and how to attract them with the company's services and products. (Duran, 2018)

Secondly, company can get new customers more productively by knowing relevant industry problems. By acknowledging the new laws, regulation and industry-specific issues, company can prove to their potential clients that their products or services can solve the upcoming obstacle. For example, a new employment law for fair work week can create instant agreement problems and inquiry for the retail and restaurant industries in certain places; this may occur multiple new buyer personas around these needs, industries and certain locations. (Duran, 2018)

Next, conducting a survey or interview customers and prospective buyers is among the most important step. Only applying this step that companies can know why customers choose their products or services, what their problems, needs and goals were and how the products or services were a solution for them. The interview should also include customers who refunded or cancelled soon after the purchase. They are the ones that tell companies why their product did not fit them, which helps companies to segment better their target audiences or improve their product better. (Duran, 2018). Besides, interview leads, or prospects helps the company to select better who might be suitable as their target personas (Vaughan, 2018). When interviewing, questions about customer's goals, topics, preferences and value should be exploited. Knowing customer's goals helps company understand the insight that drives customer's action to achieve them. About the topics, prospective buyers usually check out carefully a product before purchasing; therefore, it is crucial to know what their questions are and where they plan to find answers. For preferences, it is also important to know what answers influence their decision the most. Essentially, understanding personal value that make customers connect with the product can help to convey the marketing message to them better. (Haitsuka 2016).

The final step is to create the buyer personas, after getting all the needed information. The buyer personas should be descriptive and detailed. The personas should show the kind of companies those people work for and their position there. Understanding each persona's goals and challenges will help marketers illustrate how they can address their customers' obstacles. After having the buyer personas, it is critical to keep updating and modifying them; as the world is constantly changing and people change their goals and needs often, also even their job. (Duran, 2018). When buyer personas are created, combining them with appropriate buyer profile into a 'data' that can be called B2B customer profile.

5.3 Buyer persona in marketing and service design

Creating a buyer persona is important, but it is meaningless if not being used in the marketing process. Personas provide real life background to customer profiles which helps marketers see the insight they need, to connect all the dots and acknowledge the circumstances and challenges customers experience. This sub chapter mentions about buyer persona specifically; however, it is also about B2B customer profile generally.

Buyer persona is crucial to a business because it helps companies understand their customers or potential customers better. Knowing customers from every possible aspect makes it easier to design suitable marketing content, messages, product development and services to fit with the specific needs, interests, behaviors and responsibility of different segments of customers. It is worthy to keep in mind that the most powerful buyer personas should be built from market research and insights gathered from actual customer base (Vaughan, 2018). This type of information helps companies convince their clients how an offering can assist their company and especially them in their daily role.

Besides, with the fast changing of technology, business environment, life, buying behavior is also affected in a similar direction. Helping many B2B organizations from struggling with this situation, buyer personas direct marketing and sales strategies by showing them who their buyers are, the problems their customers are facing, goals they

strive to achieve. According to multiple studies, B2B organizations who have become customer and buyer focus have surpassed their competitors. In their exertion, buyer personas were a critical element of an overall strategies that led their company towards customer centricity (Zambito 2013). In a video recorded his speech at London Business Forum about marketing strategy, Philip Kotler mentioned that for companies, customer management nowadays should be about meeting customers and knowing them beyond the database. In that way, customers indirectly help to create and develop products and advertising (London Business Forum 2008). This is a strong point for buyer persona as it is exactly getting information about clients that is 'beyond the data base', which companies should notice and create.

For marketing strategy, first of all, buyer persona helps marketers define what marketing channels suitable to their customers the most. For example, personas can tell marketers whether their targets usually spend time online or on newspapers and from that, the marketers can decide to spend more time and money on social media or vice versa (Simpson 2017). Furthermore, buyer personas reveal to companies what their business should do to assist their customers and prospects. Without buyer personas, marketers may not be able to know what content to invent, which information to share, how to guide their marketing attempts and where to increase their presence (Gamble, 2018).

Additionally, it is important for marketers to remember one of the main purposes of creating buyer personas is to know precisely who to attract, who they want to satisfy with their good content and insight and ultimately get involved with their business. Buyer personas helps marketers target their audience and contacts more exactly, which is beneficial for them in conveying appealing and accurate marketing content and message. The more individualized and precise marketers can be with their marketing and content, the smoother it is to win against the chaos of information online and engage with their audience. If marketers cannot 'win the heart' of their potential customers in a related and contextual manner, they will lose the customers' faith and interest (Gamble, 2018). As importantly, buyer personas also help marketers concentrate and personalize their marketing strategy to suit with different segments of their audience. For example, instead of sending the same message to every client in the

database, marketers can categorize them by buyer persona and design their message based on the information of each persona group (Vaughan, 2018).

Organizational customer profile is important to service design as it is among the first steps in the progress, when it assists designers to know and understand customers in all possible aspects so that they can design a service that suits with their customers and customers' needs the most. B2B customer profile also helps service designers in a similar way that it helps marketers as mentioned above.

5.4 Organizational buying behavior

In fact, business organizations do not sell only, and individual consumers are not the only buyers in a market. Companies and organizations also need raw materials, components, supplies, goods, and services to operate their business or manufacture the products for the need of other businesses or their consumers (Kotler & Keller 2016, 211). Understanding the characteristics of decision-making process and buying process of organizations helps marketers build a proper organizational customer profile, design efficient marketing for B2B customers and target segments.

Organizational buying behavior is a complex process (rather than a single, instantaneous act) and involves many persons, multiple goals, and potentially conflicting decision criteria. Organizational buying behavior includes all activities of organizational members as they define a buying situation and identify, evaluate and choose among alternative brands and suppliers. (Webster & Wind 1972, 13-14)

Organizational behavior can be understood that it is the buying behavior of organizations that purchase products for the use of its own business, resell or to make other products. Organizations here include businesses, industries, government and non-government organizations and retailers. (Turka, Sasan 2015, 1)

Furthermore, according to John Burnett, the organizational buying process has 5 main characteristics. The first one is that, dissimilar to the consumer buying process, various individuals are usually in concern with making B2B buying decisions. Next, the organizational buyer is affected by both rational and quantitative criteria when making organizational decisions, although the decision makers are normal people affected by

emotional criteria when they decide for their personal purchases. The third characteristic is that organizational buying decisions usually relate to a range of complicated technical requirements as well. For instance, the purchasing department for a car manufacture company has to consider multiple technical factors before ordering a tire to go into the new model such as durability, size, etc. Then, the organizational decision process usually takes a long time which may occur changes between the purchasing department's initial contact with the supplier and the purchasing decision; therefore, it is critical for the person in charge of buying to monitor and adjust to these changes. Finally, it is important to remember that organizations should not be grouped into exact categories as each organization has its own characteristics and way of functioning.

In fact, organizational buying is a newer concept compared to the consumer buying. However, many of the characteristics which are associated with consumer decision making processes can be noticed and studied in the organizational context. The differences can be seen from numerous aspects. Negotiation is the first one, which is a crucial part in organizational buying, though it is also used in consumer buying in some situations. The list price can be considered as the starting point for negotiation. The second aspect is the importance of relationship in organizational buying. In industrial buying, long term relationships are highly valued by both seller and purchaser and the chance for switching brand from the buyer is less. The next one is that, there is a smaller number of organizational buyers than in consumer market. In consumer marketing, the greater number of buyers, the more chances of brand recognition and preference. Whereas, in organizational buying, the number of buyers is not much but enough to bring success to the selling organization. Fourth, there is more rationality related to buying for the organization, organizational buyers make their decisions which finally contribute to the achievement of corporate, not personal intentions. The last aspect is the nature of participants. While consumer buying many times are performed by people who do not have deep understanding of the product, organizational buying has members mainly with professional background and belong to various departments such as manufacturing, finance, etc. (Turka, Sasan 2015, 2). From Figure 3 below, readers can see more clearly the differences between consumer buying and organizational buying.

	Consumer buying	Organisational buying
Number of buyers	Many	Few
Purchase initiation	Self	Others
Evaluative criteria	Social, ego and level of utility	Price, value and level of utility
Information search	Normally short	Normally long
Range of suppliers used	Small number of suppliers considered	Can be extensive
Importance of supplier choice	Normally limited	Can be critical
Size of orders	Small	Large
Frequency of orders	High	Low
Value of orders placed	Low	High
Complexity of decision making	Low to medium	Medium
Range of information inputs	Limited	Moderate to extensive

Figure 3: A comparison of buying characteristics in organizational and consumer markets (Fill & McKee 2012, 64)

6 RESULTS

This recognition was based on the participants list which was provided by the related parties in the BSUIN project and therefore, has limitation in representing the overall picture of all customers using the ULs. All the participants have had experiences in using the underground laboratories from the BSUIN project. In addition, the confidentiality of the participants was assured and therefore no direct information of them were revealed.

The results below were withdrawn from the questionnaire that can be found in appendix 1.

The results were collected and analyzed from the questionnaire which was sent to six organizational representatives by e-mail; therefore, the sample size of this research is six (responses). Then, the responses were categorized into four main sections, in corresponding with next four following sub- chapters:

- Organizational information: which contains general information about the organizations of the participants.
- Client's information - Demography: which contains demographic information of the participants.
- Client's information - Behavior and psychography: which contains psychographic and behavioral information of the participants.
- Organization and the UL: which contains information about the relationship between the participants' organization and the UL they're using.

The responses of each question were analyzed by classifying the similarities and differences between them. Then, the responses with similar characteristics were arranged into the same group and the conclusion would be drawn at last. One chart and some responses' photos and quotations are provided to help the readers easily follow and increase the reliability of the results.

6.1 Organizational information

Organization's industry (Appendix 1, Question 19)

As mentioned above, there are total 6 responses for the thesis' questionnaire. Withdrawing from the responses, there are 3 main organization's industries: Education – University, Business organization and Science.

According to the results, there are three responses belonging to the Education - University area.

Following that, there are two participants from Business organization area which include one representative from Engineering/Manufacturing industry and one other representative from Equipment Consulting/Development part.

Additionally, the questionnaire got one participation from Science industry.

By analyzing the industries of participants, it was recognized that most of the current responses are from Education – University industry. Therefore, it could be easily seen that the ULs in this situation often get its customers from University.

Major market (Appendix 1, Question 21)

According to the responses, the major market that clients were doing their business is Research & Education with three representatives from the Education - University industry.

Three following responses orderly show these main markets: Industry & Infrastructure; Engineering, Mechanical workshop & Manufacturing of custom machines; Geoscience.

Based on the outcomes, the ULs have diverse clients coming from many different fields from Business to Researching.

Workforce volume (Appendix 1, Question 22)

In the questionnaire, the workforce volume was divided into three different groups: small (0-100 employees), medium-sized (101-1000 employees) and large (over 1000 employees). There are three participants from large-sized organizations with two of them are from Universities and the other one is from Science field.

Besides, there is one mid-sized organization coming from Education – University area.

The questionnaire has two responses from small-sized organizations coming from Equipment Consulting/Development industry and Engineering/Manufacturing industry.

The ULs have a wide-range of customers from small-sized with less than 100 employees, to large-sized with over 1000 employees. The result shows that the ULs' customers from the area of Education – University and Science are usually large-sized organizations. In contrast, the customers from Business section are usually small-sized organizations.

6.2 Client's information - Demography

Nationality (Appendix 1, Question 2)

There are two groups of nationality from the responses: Swedish and German. The Swedish group is mainly customer of an UL in Sweden and the German group is customer of an UL located in Germany. Therefore, it can be concluded that the customers of the ULs mostly are from the same country where the labs are situated.

Working positions (Appendix 1, Question 3)

There is a wide range of customers' positions in their organization from professors to company's leaders. In Education – University field, the positions at work are diverse as well, with not only professors but also research assistant. Furthermore, in Business section, the customers' positions at work are mainly leaders who play an important role in their company.

Time working for their organization (Appendix 1, Question 4)

As a matter of fact, all the participants of the questionnaire have long time working at their organization. According to the results, three people, which were half of the answers, have spent from five to ten years staying at their current organizations. Besides, the other half of the answers is more than ten years which means that there are three people who have more than ten years of working experiences with their current organizations. This can maybe explain why they have a good position in their organization to make decision and get access to the UL.

6.3 Clients' information - Behavior and Psychography

Social media usage (Appendix 1, Question 5)

The results indicate that most of the clients chose Facebook and Instagram as their most used channels. Besides, LinkedIn is not a popular social media channel among the answers with only two users. Nevertheless, the responses show that the clients who are working in Business section tend to use LinkedIn more than the others because all the answers for LinkedIn were belonged to this group.

There are two participants not using any social media channel and both of them coming from Education – University and Science section.

News sources (Appendix 1, Question 6)

In the questionnaire, the authors of this thesis only asked a question for the news sources which the participants use the most often. Websites are the most common news source among the participants with four answers. In addition, TV and Newspapers, both have only one answer for each. As a result, the traditional news sources such as TV or Newspapers are not common nowadays. People tend to get their news from the internet more and more, showing by the amount of people using websites in the questionnaire.

Life motivations (Appendix 1, Question 7)

This opened question asked the participants about the motivating factors in their life. Due to that nature, the answers were all written in words (see Figure 4). Then, there are a few differences among those participants. Objectives such as development and innovation, especially in technology are quite popular among the answers and are mainly from the Business section. Besides, the other answers are about happiness and the nature.

As a result, it was recognized that the answers about happiness and the nature show more personal inspirations while development and innovation reveal more about achievement-oriented personality.

1	anonymous	Development of people
2	anonymous	In terms of work, it is to produce good and innovative research
3	anonymous	To learn more about life on earth

Figure 4: Some response examples for question 7

Ambitions (Appendix 1, Question 9)

With this question, there were a few answers received, however, there are two main categories: Research and Personal life (see Figure 5). According to the results, there is a connection between the participants’ work and their ambitions. First, the people coming from Business section mostly shared the same ambition about personal life such as balance between work and life, future of themselves and their family. Then, the answer from Education – University section is more focusing on the work such as innovation and achieving good research.

1	anonymous	Build a safe future for myself and my family
2	anonymous	Again, at work, to achieve good and innovative research.

Figure 5: Some response examples for question 9

Challenges at work (Appendix 1, Question 8)

For this kind of question, the received answers were diverse; therefore, it was difficult to find a specific answer about challenges at work. A common answer was about research funding, which comes from two participants in Education – University area. Besides, there was another answer about concentration at work.

About those two participants coming from Business section, their answers were about time management, innovation management and work task management, demonstrating that those people having administrating position in the company usually have more burden on the growth and success of their organization.

“Time - having time to work on our own innovations. How to manage innovations - when to do what, in what order, managing risks, building a company based on early innovations...” – Anonymous response

6.4 Organizations and the ULs

According to the answers, the customers in this questionnaire usually found the ULs through network and relations. The participants coming from Education – University section and Science section discovered the ULs through networking events. In additions, the customers from these sections also got the information from their studies or word-of-mouth. On the other hand, the customers coming from Business section usually got in touch with the ULs through their business relations as a supplier or by participating in building the laboratories.

There are several common methods when the participants made their first contact to the ULs’ representatives, which are using email and calling. Besides, face-to-face meeting was also applied but it was a rare case.

Additionally, according to the answers, the ULs tend to reply their customers within one week. The time duration for receiving replies totally depends on each UL; however, the time of waiting would range from one to two weeks.

The customers in this questionnaire have long time using the ULs’ services while most of the answers are more than 10 years.

Reason of choosing the ULs (Appendix 1, Question 14)

For the question why they chose to use the ULs instead of the surface ones, respondents' answers can be divided into two main categories, which are accessibilities to the underground environment and product testing. The customers from Education – University section and Science section usually get accesses to the underground environment through the ULs. The using purposes of this customer-group are slightly diverse from scientific studying to conducting field test.

“Access to samples from the deep biosphere.” – Anonymous response 1

“To conduct field test in an underground mine.” – Anonymous response 2

“Access to hard rock environment.” – Anonymous response 3

In the Business section, the using purposes are quite similar to the Education – University and Science section. However, business relationship is an additional factor for them when selecting the ULs' service. Their choices are usually based on their own knowledge from long experience working with the ULs and the willingness and helpfulness from existing contacts at the ULs to support their business.

“Our knowledge from long experience working with ... The willingness and helpfulness from existing contacts at ... to support our project ...” – Anonymous response 1

“... for Equipment and testing.” – Anonymous response 2

Benefits of using the ULs (Appendix 1, Question 16)

The responses for this question are quite analogous while stating the main benefits of using services of the ULs are having access to a realistic environment, which has the conditions that are typical of the ULs such as right temperature, moisture, water conditions, etc. The customers need access to the underground environment to support their project, research or studies. Customers coming from Science section and Education – University section used the ULs to be able to get samples from the underground environment which will supporting their researches and studies. Besides, the ULs provide these customers places to do the field tests and help them in achieving more accurate, good and innovative researches.

“Realistic environment.” – Anonymous response 1

“Good and innovative research.” – Anonymous response 2

Additionally, customers coming from Business section needed using the ULs because they want to develop or test their new products in there, to produce a durable, reliable and accurate equipment that is compatible for the underground environment.

Customers' satisfaction (Appendix 1, Question 17)

This question was designed to prevent general answers from the participants and to achieve a more detailed understanding of the customers' satisfaction. Therefore, the answers have been collected and categorized into five different groups: Communications, Accessibility, Services, Infrastructure and Safety.

In general, the customers are quite satisfied with the ULs. In detail, the customers are mostly very satisfied with the safety of the ULs. They are also mostly satisfied with the communication of the ULs. Besides, the satisfaction of accessibility, services and infrastructure are quite fluctuated. About accessibility, services and infrastructure, the answers practically are quite satisfied while accessibility of the ULs has received a dissatisfied feedback (see figure 4).

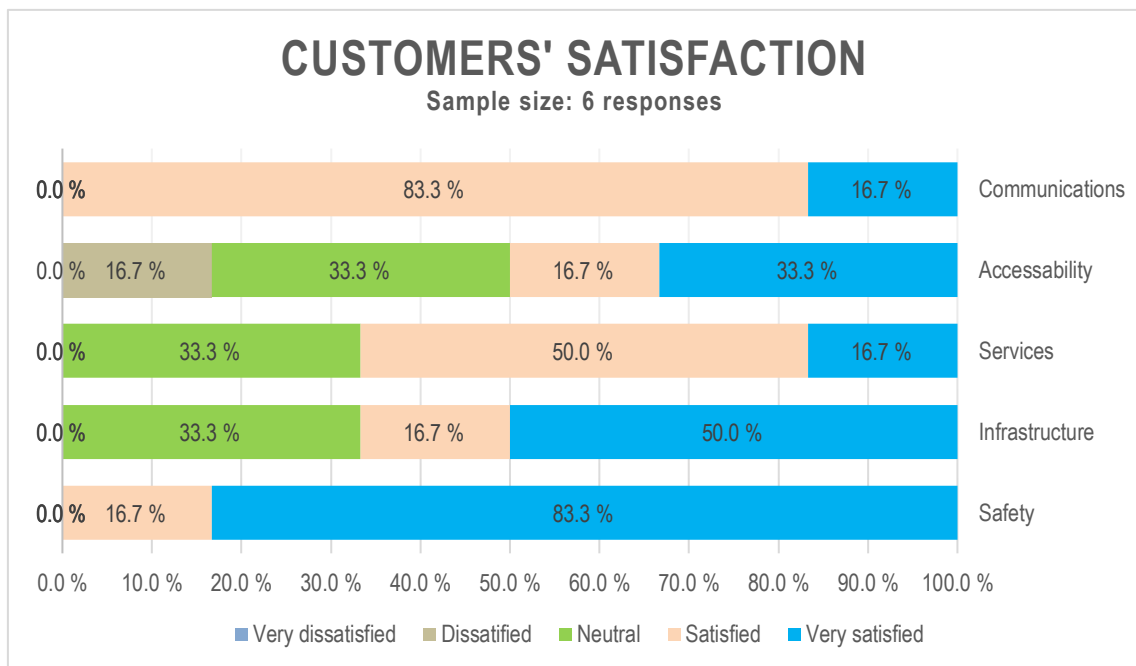


FIGURE 4: Customers' satisfaction

Customers' recommendations for improvements (Appendix 1, Question 18)

Some recommendations were received when asking for the customers' feedbacks in several aspects of the ULs that they think the ULs should improve or adjust to be more attractive to their potential customers. Due to the fact that the recommendations are

numerous and long, they were shortened with main points and put in a table so that the readers can easily follow its content (See table 1).

TABLE 1: Customers' recommendations

ASPECTS	RECOMMENDATIONS
Communications	<ul style="list-style-type: none"> - More information on the website about how to plan a project in the ULs. For examples: a guide - what needs to be done, which permissions are needed, what services are available, what are the costs, expectations on customers/users etc. - Web interface for schedule events.
Marketing	<ul style="list-style-type: none"> - Marketing materials that describe not only the ULs' benefits and environment - but also which services are offered, costs and how to utilize the existing infrastructure. For example: <ul style="list-style-type: none"> - What can be offered in terms of IT infrastructure? - Transport? - Living arrangements? - List of examples from previous projects on the website. - Which stakeholders/partners are tied to the facility? - How can a user benefit from this network? - Experiences from other companies? - Networking activities where previous companies and stakeholders can meet.
Services	<ul style="list-style-type: none"> - The administration and costs to use the underground lab is becoming more and more restrictive. - Better pre-information for the planning phase of a project - Better information about IT infrastructure. - More information about which services are offered and how to access/utilize these services. - YouTube safety training.
Accessibility	<ul style="list-style-type: none"> - The administration and costs to use the ULs makes it difficult to get access and potentially puts people off using the facility.

	- Mine accessibility plan.
Infrastructure	- Better IT infrastructure. (i.e. WiFi, 4G/5G) or fiber. - Bathrooms underground. - Computers underground for report writing etc.
Others	Helpful factors: - Lunch facilities - Possibility to arrange activities related to their project, i.e. conference - Proximity to living arrangements for external stakeholders in their project, preferably closer to the ULs.

6.5 The suggested customer profiles

After analyzing the results, the customer profiles were created based on the responses from the questionnaire. The customer profiles provide the most important and necessary characteristics and aspects, which help demonstrating client bases in detail with basic organizational information, demographic and psychographic factors of the organizations' representatives, and the relationship between the ULs and the organizations.

Originally, four tables were created containing four customer profiles and six personas of the clients. The clients from one organization were grouped together in the same table. However, due to the confidential issue of the organizations' representatives, these tables were listed in appendix 3,4,5,6 will be hidden from the public readers. *(In case anyone needs access to these profiles, please contact the authors or related parties)*. Nevertheless, two suggested customer profiles will be provided in this section as example models for the UL customer profiles.

The Figure 6 and Figure 7 below emphasize the role of organization when outlining organizational customer profiles, with organizational information at top, following by

the information of each organization's representatives, known as personas. It can be easily seen that an organizational customer profile can contain more than one persona, due to the fact that an organization usually have many decision makers. Therefore, in an organizational customer profile, the most essential and irreplaceable part is the organizational information.

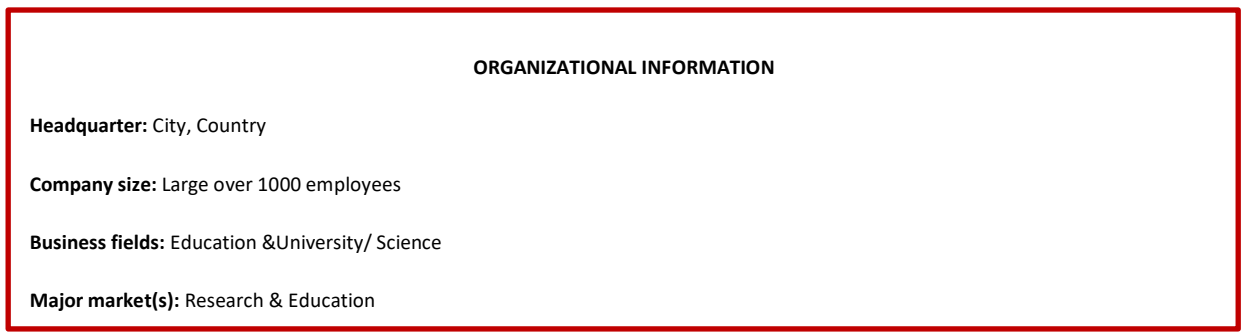


Figure 6: Suggested organizational customer profiles 1

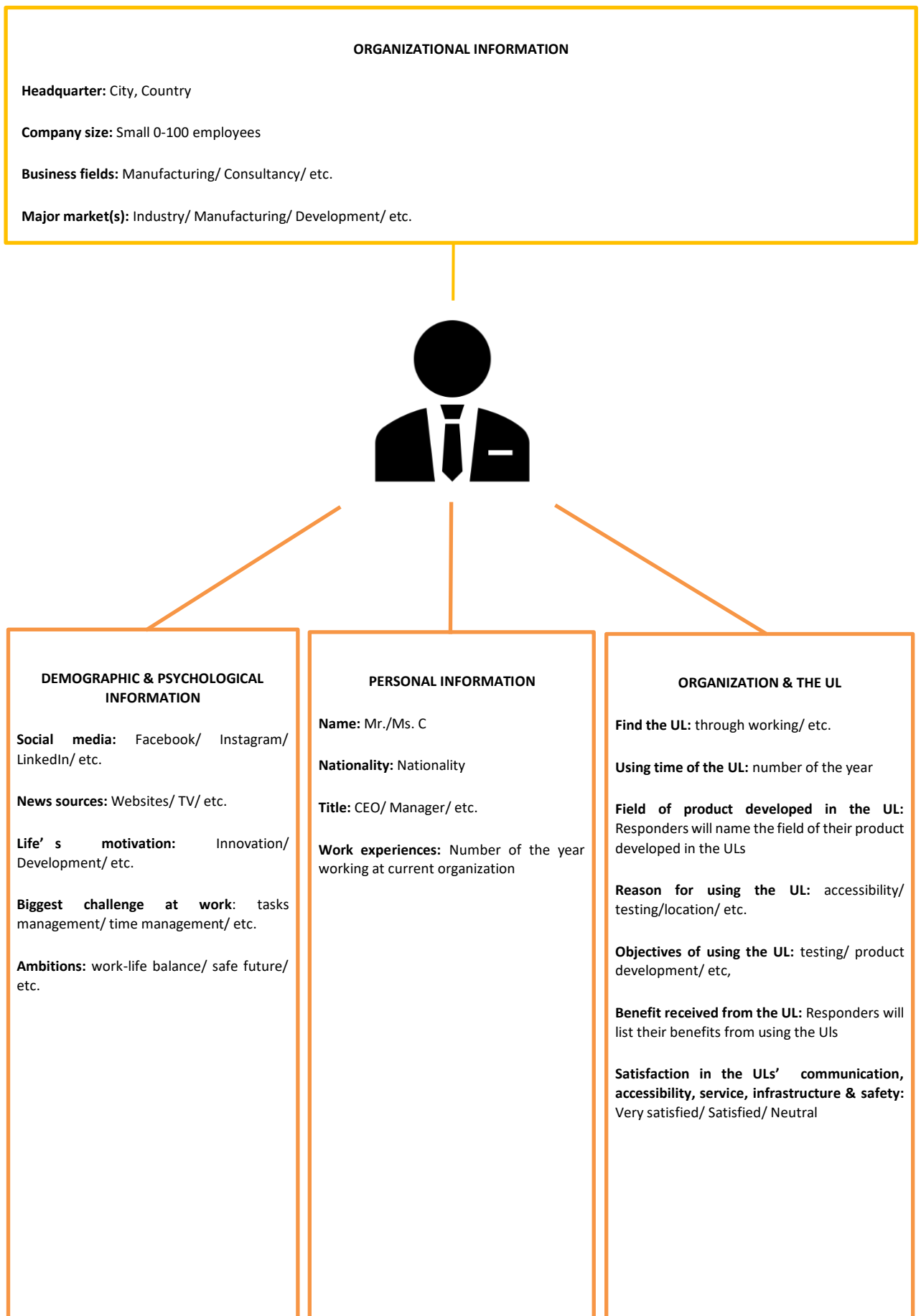


Figure 7: Suggested organizational customer profile 2

7 CONCLUSION

The main and only purpose of this thesis is to find information about the underground labs' clients, which belong to the BSUIN project, in order to establish proper customer profiles based on that information. The thesis topic was come up when the marketing team of the BSUIN project needed customer profiles to start conducting their service design progress, with the aim of understanding their customers better to design a service that suits most of them and also attract more customers in a near future. The research then, indeed, happened because of a real-life situation and is helpful to the BSUIN project team.

Due to above purpose, following research questions were formed to be the base for the thesis' theoretical background and besides, also a guideline for the research, which are: How to profile a b2b customer? Which features are needed to build a customer profile to assist the service design process? Why would the customers choose the underground facilities? These questions are all closely relevant to the customer profile creating process and also connected to each other. **The answers for these research questions** are concluded disorderly as following:

- First of all, to profile a B2B customer, features about demographic and psychographic data needed to be found out. Demographic data can be general information about the company, such as industry, company size, location, etc., or about the client, such as position in the company, working time in the company, etc. This kind of data is a basic feature for any customer profile and can be found and categorized easily. However, behind every purchase from a company has a person(s) in charge; therefore, to truly know a customer, psychographic information about that person should be collected. For example, knowing their fears or challenges at work can help marketing team convey the right marketing message and tell the person how the product can help.

- After getting all the necessary data, a customer profile can be easily built. The example of proper customer profiles can be seen in chapter 6, with the combination of all information about the organizational customer, the demographic and psychographic information of the organization's representatives and the information about the relationship between the organization and the underground lab. Summarily, to profile a B2B customer, the first step is to design a profile model, which includes a suitable design and all the features the company wants to know about its customer. Then, the company just needs to get customer's information to fill in that profile model, by interviewing, doing survey or any other ways that are convenient to the company.
- Next, the question about why customers chose the underground facilities can be asked during the customer survey and the reasons behind that were varied. The most common reason is the unique underground environment that the labs have is suitable for the customers to test their products or conduct their researches. Element such as the relationship between the ULs and the organization also plays an important role in their choice.

The theory chapters of this thesis discussed **three main topics** which are most relevant to the research, including Service design, B2B marketing and Organizational customer profile. The relevance between the theoretical concepts and the research are withdrawn as following:

- In fact, the purpose of creating customer profile in this thesis is for the very first steps in the service design progress; therefore, drawing a big picture about service design as a whole is a way to give readers a glimpse to this pretty new concept. The idea of service design is not only to enhance the quality of service in a company, but mainly also to meet the expectation of customers. Service design places customers in the center and builds the services around their needs and wants, in order to provide customers valuable, suitable, the best possible service experiences. Successful in designing that kind of service will bring benefits to both company and its customers as well as helping the company to differentiate itself from its competitors.

- Due to the fact that the customers of the underground labs are organizations and companies, understanding about B2B marketing and its buying process is essential for readers to acknowledge the reason the customer profiles were made and for the authors to conduct the research in a suitable approach. Additionally, by achieving a general overview, the readers would have basic insight about B2B Market and Marketing, how it works and the importance of customer relationship in this field.
- Besides, it is critical for theoretical background to mention about organizational customer profile with the distinction between customer profile, buyer profile and buyer persona as well as the role of buyer persona in marketing and service design. It can be easily seen that customer profile term is popularly used in the business-to-consumer marketing context; whereas, buyer profiles term can be used for business-to-business context and with buyer personas, they are built to deeply understand the buyers in organizational buying. The empirical research based on all these chapters to create the questionnaire and the result of the research depended on these theories to build the proper customer profiles.

Throughout the thesis, the research questions were answered thanks to the collecting of secondary and primary data. The secondary data was gathered through organizations' own data archive, prior research studies, publish documents, electronic indices, scientific articles and books written by recognized scholars. The secondary data collection can be seen during theory chapters and also answered the first and second research questions, which are How to profile a b2b customer? and Which features are needed to build a customer profile to assist the service design process? On the other hand, the primary data was compiled through questionnaire for gathering data in qualitative methodology. The questionnaire was designed with open questions, multiple choices and also in scale in order for the organization representatives to answer in the most convenient and time-saving way. The questionnaire helped gathering more personal data and the data was used to solve both second and third research questions.

Finally, the establishment of customer profiles is the result of collecting and analyzing all the data, which is also the leading target of the research. After resolving the data, five distinct customer profiles were made with six buyer personas. However, due to the

confidentiality agreement, these profiles are not shown in this thesis. Instead, there are two example models of B2B customer profiles which can help readers figure what a B2B customer profile may look like. The profiles not only include the basic understanding of the organizational customers such as demographic information, but also provide the characteristics of the clients through research data.

8 DISCUSSION

At this point, the thesis has come to its end and it is necessary to evaluate its quality both in thesis' process and results.

Firstly, a thesis has achieved its validity when the research questions were answered or solved with correct data collecting from the thesis' process. This thesis has three main research questions: "How to profile a B2B customer?"; "Which features are needed to build a customer profile to assist the service design process?" and "Why would the customers choose the underground facilities?". The main purpose of this thesis is building organizational customer profiles for the BSUIN project. It was done by gathering both primary and secondary data. The primary data was collected by doing an online survey with confidentiality. The survey was available to all customers of the BSUIN project regardless of their backgrounds, fields, work experiences, etc. The secondary data was gathered through many sources such as organizational own data archive, prior studies or researches, published documents, etc. Because the research questions were aligned with the thesis' purpose and the necessary data was gathered through these methods, the thesis was certainly valid.

Secondly, the information about satisfaction of the ULs' customers has been added to the organizational customer profiles in this research. The approaching idea is providing additional information to marketers when analyzing and managing the customer's profiles. By having small notes about the latest satisfaction of the customers, marketers could be able to use it to help their customer relationships management. Besides, having awareness in customer's satisfaction could also help the marketers generating and adjusting the approaching methods, providing necessary information in marketing communication management. Additionally, the services of the ULs could be adjusted, modified and designed according to both recommendations and satisfaction given by the customers, in order to improve the overall services quality. This idea came from the authors of this research personally and it needs to be examined further in the future.

However, there are a few notes about the research process and results. In the survey, customers' work experience has been asked and it was defined only to the time that the interviewees have spent at their current organizations. This data could be extended by asking about customers' work experience both in general and at their current organization for further understanding. Besides, the survey's questions were sometimes misunderstood by the interviewees because of some obstacles such as language barrier, time, participant's mood, etc. Because the survey was defined to be a qualitative one since the beginning, so the open questions were used most of the time, up to two third of the number of questions. Thus, the answers somehow could turn to other direction than intended. However, the received data was still relevant, especially, in some responses, the interviewees have given more detailed feedbacks and answers than expected.

The limitation of time when doing the thesis was a considerable factor to the quality of thesis' process and results. According to the thesis' purpose, the organizational customers were the main and only target of the survey. There were a few obstacles and difficulties when contacting these customers for survey's participation. However, with more time and more detailed questions, the survey could have achieved further understanding about targeted customer group. In the other hand, time limitation was also affected to the amount of received response in the survey. At the final, there were totally six responses of organizational customers who were the clients of two underground laboratories in the BSUIN project in Sweden and Germany. With more time, efforts and probably supports, the research could have reached a higher number of participants, which means more accurate results.

However, in general, the thesis' process and results have fulfilled the objective: building organizational customer profiles for the BSUIN project.

For further research, the knowledge about clients' behavior could be developed to achieve further understanding. The underground laboratories could generate individual-designed-marketing materials for each customer group with the help of the knowledge of clients' behavior to attain more effective marketing activities. In addition, the thesis has approached an idea of organizational customer profile as an individual customer

because there were some specific personnel who would be in charge of purchasing in their organization. Thus, those personnel's opinions would be considered in their organizations' decision-making process. From that point of view, any marketing effort would be more effective when approaching more corrected targets.

REFERENCES

Andreassen, T. W., Kristensson, P., Lervik-Olsen, L., Parasuraman, A., McColl-Kennedy, J. R., Edvardsson, B. & Colurcio, M. 2016. Linking service design to value creation and service research. *Journal of Service Management*, Vol. 27 Issue: 1, pp. 21-29. Cited 2016, <http://dx.doi.org/10.1108/JOSM-04-2015-0123>

Baltic Sea Underground Innovation Network. Cited 2019, <http://bsuin.eu/>

Baltic Sea Underground Innovation Network BSUIN. Cited 2019, <https://www.gfz-potsdam.de/en/section/geomechanics-and-rheology/projects/high-resolution-seismic-exploration-projects/bsuin-baltic-sea-underground-innovation-network/>

BSUIN Basics. Cited 2019, <http://bsuin.eu/sample-page/bsuin-basics/>

Burnett, J. 2008. *Core Concepts of Marketing*. Cited 2008, <https://resources.saylor.org/wwwresources/archived/site/wp-content/uploads/2012/11/Core-Concepts-of-Marketing.pdf>

Carson, D., Gilmore, A., Perry, C. & Gronhaug, K. 2001. *Qualitative Marketing Research*. London: SAGE Publications Ltd.

Costa, N., Morelli, N. & Magee, C. L. 2017. Bringing Service Design to manufacturing companies: Integrating PSS and Service Design approaches. *Design Studies*. Cited 16.10.2017, <https://doi.org/10.1016/j.destud.2017.09.002>

D&B 2013. *Customer Profiling: Using Your Customer Data to Improve Your Marketing ROI*. White Paper. Cited https://www.dnb.com/content/dam/english/dnb-solutions/sales-and-marketing/customer_profiling_using_your_customer_data_to_improve_your_marketing_roi.pdf

Duran, A. 2018. *Sink Or Swim: How To Create Buyer Personas To Ensure Marketing Success*. Cited 20.03.2018,

<https://www.forbes.com/sites/forbescommunicationscouncil/2018/03/20/sink-or-swim-how-to-create-buyer-personas-to-ensure-marketing-success/#3170ca44f30b>

Fill, C. & McKee, S. 2012. Business Marketing Face to Face: The Theory and Practice of B2B Marketing. Oxford: Goodfellow Publishers Ltd.

Gamble, J. 2018. What is a Buyer Persona - and why is it important?. Cited 09.10.2018, <https://www.b2bmarketinglab.co.uk/blog/what-is-a-buyer-persona>

Haitsuka, J. 2016. Buyer Profiles or Buyer Personas, Quantitative vs. Qualitative Data. Cited 28.01.2016, <https://www.internetmarketinginc.com/blog/buyer-profiles-or-buyer-personas/>

Heskett, J. 2005. Design: A Very Short Introduction. Oxford: Oxford University Press.

Hintz, L. 2018. The Secret Weapon Salespeople Use to Get in Front of the Right Buyers. Cited 30.08.2017, <https://blog.hubspot.com/sales/how-to-define-your-ideal-buyer-profile>

Koivisto, M., Miettinen, S. 2009. Designing Services with Innovative Methods. Kuopio: Kuopio Academy of design.

Kothari, C. R. 2004. Research Methodology: Methods and Techniques. 2nd revised edition. New Delhi: New Age International (P) Ltd., Publishers.

Kotler, P., Keller, K. L. 2016. Marketing management. 15th edition. Harlow: Pearson Education Limited.

Leavy, B. 2017. Thomas Stewart: what leaders need to know about the new design revolution in services. Strategy & Leadership, Vol. 45 Issue: 3, pp.16-22. Cited 2017, <https://doi.org/10.1108/SL-04-2017-0037>

London Business Forum 2008. Philip Kotler: Marketing Strategy. Video. Cited 05.09.2018, <https://www.youtube.com/watch?v=bilOOPuAvTY>

McColl-Kennedy, J. R., Gustafsson, A., Jaakkola, E., Klaus, P., Radnor, Z. J., Perks, H. & Friman, M. 2015. Fresh perspectives on customer experience. Journal of Services

Marketing, Vol. 29 Issue: 6/7, pp. 430-435. Cited 2015, [https:// doi.org/10.1108/JSM-01-2015-0054](https://doi.org/10.1108/JSM-01-2015-0054)

McDonald, M., Payne, A. & Frow, P. 2011. Marketing plans for services: A complete guide. 3rd edition. Chichester: John Wiley & Sons Ltd.

Ogden, J. 2013. An Ideal Customer Profile vs. Buyer Persona. Cited 08.02.2013, <https://www.socialmediatoday.com/content/ideal-customer-profile-vs-buyer-persona>

Reason, B., Løvlie, L. & Flu, M. B. 2016. Service Design for Business: A Practical Guide to Optimizing the Customer Experience. New Jersey: John Wiley & Sons Inc.

Research Rundowns 2018. Writing Research Questions. Cited 2018, <https://researchrundowns.com/intro/writing-research-questions/>

Results & Outcomes. Cited 2019, <http://bsuin.eu/sample-page/results-outcomes/>

Simpson, J. 2017. Finding Your Audience: The Importance of Developing A Buyer Persona. Cited 16.05.2017, <https://www.forbes.com/sites/forbesagencycouncil/2017/05/16/finding-your-audience-the-importance-of-developing-a-buyer-persona/#c8160be47341>

Stefan, M. 2005. Service Design: Practical access to an evolving field. Cited 18.10.2018, <http://www.stefan-moritz.com>

Stickdorn, M. & Schneider, J. 2011. This is Service Design Thinking: Basic – Tools – Cases. Amsterdam: BIS Publishers.

Turka, D., Sasan, S. 2015. Organizational buying behavior. International Journal of Applied Research, 1(11): 391-393. Cited 2015, <http://www.allresearchjournal.com/archives/2015/vol1issue11/PartF/1-10-164.pdf>

Vaughan, P. 2015. How to Create Detailed Buyer Personas for Your Business [Free Persona Template]. Cited 17.05.2018, <https://blog.hubspot.com/marketing/buyer-persona-research>

Ward, J. 2017. The services sector: How best to measure it?. Cited 19.01.2017.
<https://2016.trade.gov/publications/ita-newsletter/1010/services-sector-how-best-to-measure-it.asp>.

Webster, F. E. JR. & Wind, Y. 1972. A General Model for Understanding Organizational Buying Behavior. Journal of Marketing, Vol. 36, No. 2, pp 12-19. Cited
https://www.researchgate.net/profile/Jerry_Wind/publication/260248177_A_General_Model_for_Understanding_Organizational_Buying_Behavior/links/00b7d5305068508699000000.pdf

Zambito, T. 2013. 6 Reasons Why Buyer Personas Are More Important Than Ever.
Cited 20.10.2013, <http://tonyzambito.com/buyer-personas-important/>

APPENDICES

1. What's your name?
2. What is your nationality?
3. What is your position and department in your organization?
4. How long have you worked for your organization?
5. What social media channels do you often use?
6. Which source(s) do you usually get the news from?
7. What motivates you in life? (your inspirations)
8. What's your biggest challenge at work?
9. What's your ambitions to achieve in life? And at work?
10. How did you find the underground lab(s)? (For example: social media, public media, references, etc.)
11. How did you make the first contact to underground lab's representative? How long did it take for the first reply?
12. How long did/have you use/used our underground labs' service?
13. What was the field of product did you develop/produce/test in the underground lab(s)?
14. Why did you choose to use underground lab(s)?
15. What was your objective when using our underground lab's services?
16. What benefit(s) do you think our underground labs bring to your organization? In comparison to the ones on the surface.
17. How is your satisfaction when using the underground labs? (For example: in terms of services, infrastructure, accessibility, safety, environment, etc.)?
18. What improvements would you like to recommend us in preselected fields: Communications, Marketing, Services, Accessibility, Safety, Other(s).
19. What's your organization industry?
20. Where's your organization's headquarters?
21. In which major markets is your organization operating?
22. What's your organizational workforce volume?

Dear Sir/Madame,

Our names are Mai Vo and Anh Luu. We are students from Oulu University of Applied Sciences.

At the present, we are working on a thesis for the Baltic Sea Underground Innovation Network (BSUIN) project and our topic is building organizational customer profile for underground labs (ULs). We got your contact which is provided by Mr. Marcus Laaksoharju at Äspö Hardrock Laboratory, Sweden. As a part of our qualitative research, we need to gather information about the organizations and their representatives that used to or has been a customer of the ULs in order to understand why the companies chose to use the ULs and from that we can build proper customer profiles. As a result, your contribution would be highly appreciated and valuable for our research/thesis.

We attached to this email the link to our questionnaire form. We hope that you could spend a little time to answer it as detailed as possible.

We assure the confidentiality of your answers and information when analyzing and reporting the results.

In case the research requires further information, we would contact you for additional interview. Hopefully, we will receive your acceptance.

We are looking forward to hearing from you soon.

Thank you very much.

Best regards,

Mai Vo & Anh Luu

APPENDIX 3.

The content is hidden due to the confidentiality

APPENDIX 4.

The content is hidden due to confidentiality

APPENDIX 5.

The content is hidden due to confidentiality

APPENDIX 6.

The content is hidden due to confidentiality