TALLINN UNIVERSITY OF TECHNOLOGY Faculty of Information Technology Institute of Informatics Chair of Information Systems

# E-Residency – Attracting Foreign Entrepreneurs to Open Businesses in Estonia

Master's thesis

Student:Terje TampereStudent code:1325921IVGMSupervisor:Regina Sirendi

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# Author's declaration

I confirm that I have constructed this Master's thesis individually and that the current paper has not been presented by anyone before. All resources, viewpoints, citations, and other materials from other authors that have been used in this thesis have been referred to.

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# Abstract

The purpose of this Master's thesis is to introduce Estonian government initiative of E-residency and show how it could help to bring foreign entrepreneurs to open businesses in Estonia. Eresidency is a new innovative initiative launched by the Estonian government, which gives access to foreigners to use e-services that are offered by Estonian public and private sector. E-residency concept and the most important parts of the project are examined in the thesis. To understand the reasons and opportunities why foreign entrepreneurs would come to Estonia, the results of conducted interviews with e-residents are analysed. As E-residency is a relatively new initiative then the Singapore case study, as one of the most important business hub's in the world, is looked at in the literature review as well as in the analysis part. The current Master's thesis makes a contribution to the understanding of government's role in attracting foreign businesses to the country. In addition, from e-governance perspective this paper helps to understand how can different e-services help to change the business environment more attractive and what should be considered while providing different e-services for businesses.

The thesis is written in English and contains of 72 pages, including 4 appendices and one figure on page 18.

Key words: e-Estonia, E-residency, e-resident, hassle free, e-services, international business hub, e-Government, ID card

# Abbrevations and concepts

- BlockchainA cryptographically secured public ledger distributed amongst all oftechnologyits users.
- **Digital nomad** Digital nomad is a person who is location independent and uses technology to perform his/her job. Digital nomad works remotely, which is now economically possible due to cheap internet Access, smartphones and voice over internet protocol to keep in contact with clients and employers.
- e-governance e-governance is the application of information and communication technology for delivering government services, the exchange of information communication transactions, integration of various standalone systems and services between government-to-customer, government-to-business, government-to-government as well as backoffice processes and interactions within the entire government framework.
- e-Government Refers to the simplification and the transaction of business processes by the use of information and communication technology in the context of governance and public administration.
- e-Estonia Name for Estonia which has developed with many years and refers to Estonian success and reputation as a strong e-state, with high level e-Government solutions.

E-residency is a status by which non-residents can gain a secure digital identity issued by Estonia, similar to those that are provided to permanent residents and citizens of Estonia by their ID card. This

#### **E-residency**

enables them to use services provided by Estonian state agencies and private sector connected usually to the ID card.

e-resident	E-resident is a physical person who has received the e-resident's digital
	identity (smart ID-card) from the Republic of Estonia.
Hassle free	Problem free
Hub	The central or main part of something, where there is most activity.
	For example: Singapore is one of the world's best known business
	hubs.
ICT	Information and communications technology

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# Introduction

We live in the era where digital world has started to strongly influence the physical world. New technologies and ICT developments create opportunities, which were not there decades ago (McDonald, 2013). Physical borders of the states have less and less importance (The Economist, 2008) because Internet allows us to live location independent life-style - do our work, run businesses and spend free time everywhere in the world. "Home is where the cell is and not the heart" (Gibbins, 2000, 667).

Estonia is known to be as one of the most successful countries in the world in terms of egovernance and public e-services the government offers for citizens as well as to the businesses (Kalvet, 2012). Estonian e-Government success is well-known all over the world. Estonia, being unique in the world by its wide usage of electronic ID card and the popularity of i-voting, likes to call itself e-Estonia (Raudsepp, 2014). Because of digital ID card and digital signing of documents, Estonia is moving towards paperless everyday management. For example, you can start a business through the Internet within less than 20 minutes regardless of your location. The success story of Estonian e-Government is a good example that for implementation and development of ICT infrastructure it does not matter how small a country is or how is it geographically located (Forsgård, 2015).

On 21st of October 2014 Estonian Parliament passed a law that allows the issuing of electronic identification cards to foreigners living abroad, starting from 1st of December 2014 (Kotka et al, 2014).

There is a big opportunity for Estonia in E-residency: it is seen as a big prospect for Estonian economy by getting new investments and businesses to the country. It is seen to be especially useful for entrepreneurs and others who already have some relationship to Estonia: who do business, work, visit or study here, but have not become a resident. However, as the initiative is relatively new and goals are rather ambitious -10 million e-residents by year 2025 (Korjus, 2015a), there are also flaws to pay attention to.

One of the key goals of E-residency is to make Estonia the most attractive business environment in the world. E-residency will open Estonian e-services to foreign entrepreneurs and make it considerably easier for them to make business in Estonia. It is about increased business opportunities in services: establishing a company in Estonia and carrying out all related actions online; filing corporate documents, reports and tax returns online, so it would be possible to own and manage a company online; online participation at shareholders' and board meetings; and signing of documents using a digital signature. The objectives of this thesis are to briefly examine the development of the Estonian ICT sector and e-Government, analyse the case study of Singapore as one of the world's most attractive business hubs, and analyse the E-residency project itself. Through analysis the aim is to find out if E-residency is the key to open up Estonian business environment for rest of the world and will help to bring foreign entrepreneurs to Estonia. Based on the analysis some concrete proposals and recommendations for the future research will be made. Furthermore, the thesis seeks to find out whether E-residency can become the key factor why entrepreneurs all over the world would want to move their business activities to Estonia in the future or not. The Singapore case study provides a point of comparison to the Estonian E-residency initiative to help to answer to the research questions.

The main research question asked in this paper is how to attract foreign entrepreneurs to Estonia through the E-residency project? To answer the main research question the following subquestions are asked: what are the main pros and cons of E-residency project, what measures can be used to attract new businesses to Estonia, through E-residency project and how does existing eservices have to be developed for businesses?

Through interviewing first e-residents who have started their businesses in Estonia, and analysing the case study of Singapore, this thesis gives a valuable input in order to develop the E-residency project further. At the same time current paper can also become a case study of how one state can become borderless by opening its public e-services to the rest of the world.

The current dissertation has eight chapters that, in turn, are divided into subsections. In the first chapter a brief overview about Estonian historical background and e-Estonia is given to better understand the environment in where E-residency operates. Subsequently, the author gives a comprehensive overview about the E-residency project: what are the concept and the technological base of the project, which are the main target groups, and what are the main objectives of the project. In the third chapter, also central problems of the topic will be looked at. In the fourth chapter, a brief overview of the literature is given about Singapore as an international business hub and the role of ICT in Singapore's success story. The related subsections in literature review are talking about the diminishing value of physical states and the concept of digital nomads. The fifth chapter provides an overview of the theoretical approaches chosen for this thesis – sociotechnical systems approach and service logic approach are examined. Sixth chapter will give more detailed overview about the research questions and methodology. First, the motivation and reasons behind choosing the questions is explained. The further methodology of the current thesis is described and author explains why the given methods – case study research and action design research were chosen for the paper. The seventh section contains empirical data and analysis of case study

research and analysis of the conducted questionnaires with e-residents, business requests by eresidents, and short interviews of legal and customer support employees who work on a daily basis with the foreigners who want to start businesses in Estonia. The last chapter includes author's discussion based on the analysis done in the previous chapters and answers to the research questions. The conclusion will shortly summarise the research and brings out the main findings of the paper. In the end of the chapter eight, recommendations for future research are proposed.

# 1 Historic backround

The following chapter discusses the historic background of Estonia from the perspective of Estonian e-Government and ICT sector development and explains the term "e-Estonia" by showing Estonian progress towards becoming an e-state.

Estonia, as a small nation of 1,3 million citizens, regained its independence from the Soviet Union in 1991. Being named as one of the most successful of Eastern European transition economies (Kalvet, 2012) Estonia had to face many challenges in the beginning of its re-independence - like adopting new economic strategies, changing its political standpoints and coping with the general consequences, including social and economic aspects, of the collapse of Soviet Union, just to name few (Sirendi, 2012).

After nearly 50 years under the Soviet power, the country had to build up its economy and there was a visible need for many reforms (Sirendi, 2012). Estonia did not only need to reform its public agencies but there was a need to change the entire system of public administration (Randma-Liiv, 2005) and all the reforms had to be made with little financial resources available (Petersoo, 2012). A favorable aspect for Estonia's further development was the fact that from its mindset Estonia had always been closer to Western countries (Liebert et al, 2013).

This thought is supported by the fact that "in one of his 1992 speeches, president at the time, Lennart Meri called on his compatriots to become Europeans while preserving their Estonian roots and continued that we have always considered ourselves Europeans and Estonia as a state in Europe" (Berg et al, 2000, 619).

More than that, Estonia can be seen as one of the few ex-Soviet countries "that has been efficient in implementing generally accepted, democratic Western practices and has an outstanding reputation in information technologies" (Sirendi, 2012, 6).

Within last 20 years Estonia has been moving towards digital society (Kotka, 2014a) and managed to achieve rapid growth in information society development (Kalvet, 2007) through building up its e-Government, internet banking and other technical solutions which led the country to the high position in international indexes and gained global recognition (Nixon et al, 2007). As a result Estonia has become one of the most digital and best connected governments in the world with variety of e-services available for the citizens as well as for businesses (Petersoo, 2012).

One of the reasons why Estonia has been so successful in its ICT sector development can be seen in forward-looking and innovative government who has been willing to invest and adopt new technologies, improvements made in legal framework (Nixon et al, 2007), and peoples' willingness to use IT in their everyday lives (Petersoo, 2012).Soviet Estonia started to invest to the IT sector in 1960s when the Institute of Cybernetics was opened as a part of Academy of Sciences. Unlike other similar institutes in the area, the Institute of Cybernetics was focused to the computer programming (Kitsing, 2011) but also to other related fields (Sirendi, 2012) such as mathematics and mechanics (Inseneeria, 2010). During this time local IT community started to grow in Estonia (Kitsing, 2011) and the period can be seen as start for Estonian e-Government development (Sirendi, 2012).

From the beginning of 1990's stable government funding was provided for the development of ICT sector (Kitsing, 2011) which remained at around 1% of the total state budget (Kalvet, 2012). Since then the adoption of new technologies started to pave the way for Estonian internationalisation (Charles, 2009). In 1994, the IT community in Estonia published the first ICT strategy paper where the main pillars of state information systems were brought out. It was called The Estonian Way to the Information Society (Kalvet, 2007). During the time when strategy paper was published there was still not many actions taken by government, which would have directly contributed to the development of the ICT sector in the country (Kitsing, 2011).

The most remarkable initiative by the government was the support to Tiger Leap program in 1996, which aim was to support as many schools as possible in IT solutions (Kitsing, 2011). It was the first more vigorous attempt by the Estonian government to position itself as a "modern and competitive e-state" (Charles, 2009, 102). Before the Tiger Leap program was launched, Estonian private sector had already started to take more innovative steps by adopting new technologies. Hence, in 1996 the banking sector became an influential innovator in IT by introducing Internet banking (Kerem, 2003). From the rise of Internet banking Estonia started to move towards a hassle free business environment. Internet banking was becoming widely used because it made peoples' lives easier – instead of going to the bank office to make your everyday transactions; it was possible to do everything from home. Estonia had a favorable environment for Internet banking because of the high user rate of the Internet in the society (Kalvet, 2007).

In the beginning of 21st century 43% of Estonians in age 15-74 were using Internet (Luštšik, 2003). As the implementation of Internet banking was done in high-level, peoples' trust towards ICT started to rise. Currently, 99% of bank transactions are carried out online and only 1% is carried out in the physical bank offices (Financial Services, 2015). The high quality of the online banking systems convinced also the public sector organisations "to use the identification verification system in Internet banking" (Sirendi, 2012, 9). Now, Internet bank is not used only for bank services like paying bills, viewing account balance and using different loan calculators, but also as a point of access to many public e-services (Kalvet, 2012). From the beginning of millennium,

ICT sector started to boom (Petersoo, 2012). Many new e-services and products were created, which had not be seen anywhere else before. This included services such as filing taxes, buying bus tickets, mobile parking, and many other everyday activities that have been carried out online since then (Kitsing, 2011). Citizens, as well as companies, adopted Internet relatively fast compared to many other European countries (Kerem, 2003)

## 1.1 e-Estonia

Estonia has become more digital than ever before within the last decade (Mansfield-Devine, 2012). "The nation's size has worked to its advantage in terms of the adoption and development of information technologies. As Estonia is a small country, it has been much easier for its local companies and organisations to change their IT systems than it is for older multinational organisations" (Charles, 2009, 103). Government, citizens and private companies see information technology and the opportunities it offers as the key for wealthier economy and improved living standards (Kotka et al, 2014).

E-governance and e-services development has happened relatively fast and most of the administrative activities are becoming progressively more paperless. With those developments, Estonia has globally gained a reputation as an "excellent e-state" (Kotka et al, 2014). Estonia itself takes advantage of its e-state reputation and has started to use a term e-Estonia. E-Estonia as a term explains the unique success story of Estonia "in becoming one of the most digital societies in the world" (The Digital Society, 2015). It refers to the life in digital society – i-voting, filing income tax returns online, signing documents digitally, and registering businesses online without depending on your physical location (The Digital Society, 2015).

In 2013, the number of users who used Internet was about 80% of the population in age 16-74 years old (Ministry of Economic Affairs and Communications, 2013). Furthermore, Estonia ranks among the top countries in international e-governance indexes. In Freedom House reports, Estonia has been ranking to the highest places since year 2010 (Ministry of Economic Affairs and Communications, 2013). In United Nations E-Government survey Estonia ranked 15th among countries with very high E-Government Development Index in year 2014, which was five place higher than in the previous index two years earlier (United Nations, 2014).

One of the strongest elements of Estonia's e-Government is its provision of electronic services to the public. The causal explanation for understanding the evolution of these services needs to incorporate a third set of agents: the private sector. The main objectives for the government in developing different e-services and new technologies in Estonia have been the transparency and access to the public sector services, but also to give better access to social services for citizens and

have attractive business environment for entrepreneurs (The Digital Society, 2015). Those developments have resulted in Estonia having a reputation of an innovative country with an openminded government and well developed ICT sector that is constantly trying out new technologies and can be seen as pioneer among other countries (The Mythical Reality of e-Estonia, 2015). Country delegations all over the world are interested in Estonian e-solutions. In 2014, the e-Governance Academy in Estonia introduced e-solutions used in Estonia to 26 countries from different parts of the world (Vahtra-Hellat, 2015).

The basis of Estonian e-Government lay in two big developments - X-Road and national ID-card. "The X-road is often called the backbone of Estonian e-Governance and public services. The Xroad operating since 2001 is a technical and organizational environment, which enables secure Internet based data exchange between the state's information systems. Public and private sector enterprises and institutions can connect their information system with the X-road. This enables them to use X-road services in their own electronic environment or offer their services via the Xroad" (Kotka et al, 2014). X-Road links different e-service databases and information systems by different government agencies as well as from private sector through Internet (Sirendi, 2012).

State portal eesti.ee, which is an access point for Estonian public e-services for citizens as well as for businesses, was launched in year 2000 (Facts about e-Estonia, 2006). More than 900 organisations and 50% inhabitants use over 2000 services through X-road on daily basis (X-Road, 2011). Though X-road is largely in the centre of Estonian e-governance success story, national ID card introduction in year 2002 was the outstanding innovation, which made e-Government solutions widely used both, by businesses and citizens. As the ID card became the main identification document in Estonia, it was made mandatory for the citizens. While being an identification document from one hand, ID card also gives access to numerous online services, including digital signing and online banking. With the number of opportunities it offers, it has changed life easier and more hassle free for businesses as well as for the individuals (Kalvet, 2012).

Estonian ID card, its electronic usage and digital signing are unique in the world. Since the ID card came into use, Estonian citizens and businesses have been able to enjoy hassle free government solutions (Kotka et al, 2014). The majority of Estonians use digital signatures on a daily basis for signing contracts, making transactions in the Internet bank, opening businesses in the business register and much more (Kalvet, 2012). The ID card allows Estonians to use all public services offered online and access those services from anywhere in the world.

"Estonia is also one of the world's leaders in e-filing of tax returns and other declarations (Kalvet, 2012, 143)" there are only 5% of Estonians who do not file taxes online (Schnurer, 2015). The

success story of Estonian e-Government proves that for implementation and development of ICT infrastructure, it does not matter how small a country is or where is it geographically located.

The development of Estonian e-Government and development and implementation of public eservices, as well as the acceptance of those services by citizens as well as by businesses has been remarkable (Ministry of Economic Affairs and Communications, 2013) in Estonia and this has also taken Estonia to the centre of international interest. It is said that Estonia is constantly looking for new ideas, which would help the country to achieve economic wealth and become globally recognised (Tambur, 2014). However, even if Estonia has managed to show its expertise and consult governments all over the world about their e-solutions, so far it has not successfully managed to export its e-services.

# 2 E-residency

Positive experience with the ID card among Estonians and its uniqueness in the world inspired the Estonian government to come out with the idea of E-residency in 2014. E-residency is a unique solution in the world and possibly a good example, which shows how e-Government solutions can help to raise the attractiveness of business environment. The following chapter gives an overview about the E-residency concept and about the most important aspects of the project such as the main objectives, technological base, main target groups, services offered to e-residents and the main problems with the topic.

## 2.1 Concept of E-residency

E-residency was first mentioned in the Estonian Digital Agenda 2020, where it is stated that Estonia will start offering its well-advanced e-services globally (Ministry of Economic Affairs and Communications, 2013). In Spring 2014 Estonian Development Fund organised a business idea contest to find innovative ideas, which would not be attractive only in Estonia but also on a global scale. The winning idea of the contest was "10 million e-Estonians by 2025 presented by government officials Taavi Kotka, Ruth Annus and Siim Sikkut" (Estonian Development Fund, 2014). The main objective of the proposal was to make Estonia bigger than it actually is, by inviting 10 million people in the world to become the e-residents of Estonia and give to them Estonian digital identity (Tambur, 2014). E-residency don't give any citizen rights (Kotka et al, 2014) but it will allow anyone in the world to become e-resident of Estonia and use the e-services offered in the country without needing to move to Estonia or apply for the citizenship (Parliament of Estonia, 2014).

On 21st of October 2014 Estonian Parliament passed a law that allows the issuing of electronic identification cards to foreigners living abroad starting from 1st of December 2014 (Kotka et al, 2014). During the first three months in pre-registration phase, over 12 000 applicants from 140 different countries signed up to test the program (Kotka, 2014b). A questionnaire was sent out to pre-applicants to ask why they signed up for E-residency. Out of 8000 questionnaires sent, 1100 answers came back with the 60% of respondents answering that they want to start business in Estonia (Korjus, 2014). As the initiative itself was new, possibly many of the first applicants had applied to be among the early-adopters to be the first ones being part of another innovative and tech-savvy initiative by e-Estonia (Krimmer, 2014).

On 1st of December 2014, the first e-resident card was handed out to the British journalist Edward Lucas. By May 2015, Estonia had over 1500 e-residents from 73 countries (Life in Estonia, 2015). "E-residency gives secure access to Estonian digital services and an opportunity to give digital signatures in an electronic environment. Such digital identification and signing is legally fully equal to face-to-face identification and handwritten signatures in the European Union"(Become an Estonian e-Resident, 2014).

The project was launched in the beta phase, which means that the initiative is ready for testing by the users (Ahmed et al, 2012) and through the feedback and input of the first e-residents, the project team plans to improve the product (Korjus, 2015b). E-residency, as a product, has to be finalized and ready to sell by the year 2017 (Life in Estonia, 2015). In the beta phase the main aspect what should attract entrepreneurs to Estonia are the 0% Company income tax, the possibility for business owner to manage his business from distance without needing any middleman, access to European Union market, hassle free public sector services, effectiveness from digital signing and open but private digital environment (Korjus, 2014). E-residency is a unique solution in the world and possibly an appropriate example, which shows how e-Government solutions can help to raise the attractiveness of business environments.

Estonia attempts to show with E-residency project that governments can act as businesses and competition between the states for the people and talent can become as intensive in the future as it is in the private sector (Schnurer, 2015). Estonia saw a remarkable advantage – if it wants to enlarge its market of 1,3 million people they can do so, if not physically then virtually (Schnurer, 2015). In the bigger picture, E-residency can be seen as an attempt to move towards a borderless world, where physical borders of states do not have any importance. E-residency is a move towards the world where your online identity matters just as much as your offline identity. It is becoming more important where your data is located than where your documents are located (Hodson, 2014).

#### 2.2 Objectives of E-residency initiative

The main goal of the E-residency initiative is to boost Estonian economy and to contribute to the internationalisation of Estonian research and development together with education (Parliament of Estonia, 2014). The main benefit of E-residency is seen as the potential income to Estonian economy brought by the possible businesses established by e-residents, but also through the increased client base for Estonian companies (Kotka, 2014b). E-residency is also seen as an effective tool for increasing the market for different e-services and would possibly make Estonia more attractive as an target market for multinational companies as well as for international investors (Postimees Majandus, 2014). With the use of Digital ID, the communication and everyday business between Estonian public and private sector organisations and non-residents will presumably become easier and more hassle free. Because of that, it is hoped that Estonian business environment will become more attractive as well for the foreigners who want to do business in Estonia (Korjus, 2015b). As e-residents may possibly have different needs than Estonian citizens,

it also creates the opportunity for online service providers to design and develop services meant especially for the e-residents (Parliament of Estonia, 2014).

Estonian Ministry of Internal Affairs opens the context of e-residents digital ID where it is explained what opportunities the e-resident status gives to the foreigners. It is also brought out, that companies where at least one of the shareholders is a non-resident gives 60% of whole export in Estonia, 36% of employment, 35% of R&D expenses and 45% of extra value for the economy (Kotka, 2015).

Virtually, it seems a huge attempt for Estonia to try to attract foreign investors to do more of their investment activities in Estonia as well as to attract businesses, specifically small and mediumsized enterprises (SME's), to bring their activities to Estonia. E-residency could be both - attractive for IT companies as well as freelancers as in IT the location of an employee is not important because work can be done remotely from anywhere in the world (e-estonia.com, 2015). At the same time companies owned by e-residents, and taxes what they pay, can possibly bring more money to the state budget. In addition, new companies potentially create new jobs and help Estonia to increase its reputation as an innovator (Paron, 2014a).



Figure 1 Possibilities for e-residents (Estonian e-Residency, 2015).

# 2.3 Technological base for E-residency

The key for the digital identity is a smart ID card with a microchip, which has authentication and digital signatures certificates on it (Kotka, 2014b). After applying for the E-residency, every applicant will go through background control based on the applicant's biometrical data (Become an Estonian e-Resident, 2014). Certificates added to the digital ID allow to authenticate person in digital environment and digitally sign documents in the same way as it is possible with Estonian national ID card. While receiving the card, a person will also get two pin codes with it, one for authentication and one for digital signing (Estonian E-residency, 2015). To use the card one needs to download the software to the computer and connect the ID card reader. Because of the microchip, it is possible to make a difference between an e-resident ID and Estonian citizen ID, which is important for legal grounds (Kotka, 2014b). As the Estonian ID-card system is one of the most secure digital identification systems in the world (Electronic ID Card, 2015) the digital ID

will increase cyber security and decrease the rate of cybercrimes happening through unsecure identification systems (Parliament of Estonia, 2014). What makes the digital ID so secure besides the technology behind it, is the fact that it is provided by the government, not by private institutions. It means that the person is identified in the highest possible level and can be assumed that government creates higher trust than any private service provider, especially for other governments.

## 2.4 Services offered to e-residents

For Estonians, it is part of everyday life that the communication with the state has become close to hassle free with majority of services being offered online but it is not normal in many other societies (Kotka, 2014a). Hassle free business environment is also one of the main promises to e-residents. With variety of e-services available, it is possible to carry out many processes with less time and effort.

Currently most mature services to offer for e-residents are digital signature, Electronic Business register, filing taxes in Tax and Customs Board and online banking (Paron, 2014a). For foreign business owners it is promised, that E-residency will make it easier for them to do business in Estonia and with Estonians. For example - they can participate in the board meetings through Skype and give their vote electronically by using their e-resident card. It means that E-residency actually makes it easier for foreigners to manage their Estonian companies from distance and the possibility to register a company and declare taxes online, as well as conducting secure bank transfers will make doing business much more convenient and less time consuming for them (Paron, 2014b).

During the development of the project, the existing services will be developed and new services will be added. Eventually different options will become accessible for the e-residents like access to the global payment solutions PayPal and Stripe for example. Meaning that E-residency will not only give access to Estonian e-services but also to global e-services for those people who are from countries, which are lacking behind in their e-solutions (Life in Estonia, 2015).

# 3 Central problem with the topic

E-residency is innovative initiative that creates many opportunities and may become one of the strongest competitive advantages for Estonia. However, as the project was launched in the beta phase, there are also constraints, which have to be paid attention at. On one hand, it was probably a wise move to launch the project in beta phase because in the testing phase many shortcomings can be excusable. Feedback can then, be taken into account to improve the situation. On the other

hand, from the users' perspective, that kind of excuses may not be acceptable. For instance, if user has a negative experience when trying to digitally sign contracts for the first time, then the next time he or she would try to find a way, which would actually work. More than that, negative experiences almost always tend to reach faster to the masses than the positive ones. It is more unlikely that a customer, who has once had a negative service experience, will recommend it to his friends or business partners. In the following chapter, most important constraints of Eresidency project from this thesis perspective will be analysed.

## 3.1 Limitations in services offered to e-residents

One of the main problems with the E-residency project can be seen in the local nature and general level of Estonian e-services as they might be rather easy to use for Estonians but their export potential is rather small (Kalvet et al, 2013). Some of the e-services that potential e-residents have brought out what they would want to use are following: opening bank accounts remotely; e-notary; the opportunity to establish business and authorize representatives in the business portal, open bank account and choose the applications needed for the business from one portal, were only some of the procedures named (Korjus, 2015b). In all of those services, the common character for entrepreneurs seems to be the wish to simplify business procedures.

As an e-resident, one could assume that it is possible to open a bank account remotely, but currently Estonian banks have not given up their know-your-client policy yet. As an exception, banks can identify customers electronically but in reality, electronically identified customers cannot fully use the services offered by the bank. Those customers can make transactions only to Estonian banks, they cannot make transactions for more than 2000 euros per month and they cannot buy products from merchants who do not use Estonian banks for their transactions. Before the law will change, banks are not ready to open accounts remotely for e-residents (Veskioja, 2014).

After establishing a company, one of the common actions is applying for a VAT number. Though the application for the number can be done online, it has become rather common policy of the Estonian Tax and Customs Board that board members will be invited to the Tax and Customs Board office in order to answer additional questions about intended business activity. Often, only a short notice is given, approximately one week, which can be a problem for e-residents, as they have to plan another visit to Estonia if they are not permanently located here (Veskioja, 2014)

To serve e-residents it is first important to identify the level of e-services offered and to understand which services are actually ready to be offered for the e-residents. As users' demands are rising then technology companies all over the world are investing more and more to the user experience. Good user-experience and simplicity of the services are the areas where Estonia is lacking behind (Simson, 2014). Currently in terms of business, starting a company and signing contracts digitally are the most visible benefits for e-residents, but as most countries are still used to giving signatures on paper, there are not many countries with whom our e-residents could exchange digital signatures with (Kimmer, 2014). More than that, it cannot be said that Estonian ID card system would work flawlessly. The practice has shown that ID card readers may be sometimes quite unreliable and not work properly with some browsers (Kitsing, 2011).

#### 3.2 Level of Estonian e-services

United Nations E-Government surveys are dividing e-services into four stages: emerging presence, which means that government is offering basic information online; enhanced presence, which means greater sources of information, and e-tools and e-services; transactional presence which means two-way interactive applications to provide citizens with opportunities for online, financial and non-financial transactions and connected presence which means that there is better coherence, integration and coordination of processes and systems within and across government agencies. Government transforms itself into a connected entity (United Nations, 2014). The 2014 survey evaluated online service index and its components in different countries. Estonia scored hundred points in stage 1 as did also Australia, Finland, France, Netherlands, Singapore, Spain and United Kingdom for example but only 59 points in stage 4, which was less than in other countries named (United Nations, 2014). More than that, Estonia and Finland ranked exactly the same score in online service index (United Nations, 2014) though Finland is currently in the phase of trying to take over Estonian X-road solution and other e-services (Information System Authority, 2013). It raises questions if the development of Estonian e-services is stopped when countries, which are using Estonian experience, to build up their e-governance solutions, are being ranked in the same level in international indexes?

In European Union 5 point scale is used for evaluating the services. Academics, at the Tallinn University of Technology made statistics in evaluating e-services offered through eesti.ee portal. The result was that 73 services offered through the portal scored only 1-2 points, most of the services were in level 3 – which means that there is two side communication through electronic channels and only 12 services were in level 4, where the forms are prefilled by the service supplier (Taveter, 2014).

According to the EU, level 5 is given to the services, which are almost invisible. All the information needed, is taken from different databases and service provider is able to offer right service at the right time. Estonia has very few level 5 services, the most well-known is the prefilled tax declaration (Taveter, 2014). From those evaluations, it can be concluded that Estonia has very few proactive e-services. Estonian problem is, that many of the e-services tend to use the same

logic as the offline services but to design high-level e-services, there should be more aspects taken into account than just the time saved from electronic services (Rozov, 2014). The analysis shows, that different state agencies are more focused on the needs of their own organisation while designing different e-services than on seeing the bigger picture where the services offered may be just a small part of entire system (Rozov, 2014).

While designing e-services the focus has to be on the content and quality of the services (Taveter, 2014). Use of the service is important for the users of e-services, especially the functionality of a service – it has to be stable and trustworthy without bigger errors (Verdegem et al, 2008). To be able to offer relevant content and quality for the users it has to be understood what are clients' expectations for the specific service because excellent user experience can be created only when service is easy to use and understandable for the customer (Simson, 2014).

# 4 Literature review

The following chapter is divided into two main subsections. First of all, a case study of Singapore as a best practice in attracting businesses to the country is analysed. For decades the country has been successful in attracting businesses all over the world, to bring their activities to Singapore. In the second part, the idea of borderless world, digital nomads and Bitnation as an collaborative platform for do it yourself governance and an alternative concept for physical state are looked at.

## 4.1 Singapore as international business hub

Though entrepreneurs are seen as the ones who create the innovation and bring it to life it has to be kept in mind that businesses themselves are not the innovators (Kalvet, 2012). Government's role in the creation of new companies cannot be undervalued. More regulation free and business friendly the business environment and law in a certain country, the more start-ups rise there as well (World Bank, 2014). For any idea, project or readymade product to be an innovation it has to be implemented to the market first. Because of that, public sector is often the real innovator because they are the ones who have to implement the products and processes to the market what private sector has come out with (Kalvet, 2012).

Singapore is one of the most successful countries in the world in attracting foreign entrepreneurs to the country. In the World Bank report, Doing Business 2015, Singapore was ranked number 1 in ease of doing business (World Bank, 2014). That high ranking makes Singapore attractive business environment for many entrepreneurs who come from countries, which lack behind in terms of ease of doing business, like India for example (Khan, 2013). Government plays an important role in Singapore's role in becoming a world famous business hub. Among Singapore youth it is popular to become entrepreneurs (EgovAsia Editors, 2009). When Chinese-American entrepreneur Bowie Gai was doing research for "World Startup Report", he visited many startup ecosystems around the world and said about Singapore that it is world's most tightly packed entrepreneurial ecosystem" where it can be seen how "government policy can make a big difference" (The Economist, 2014).

There are several reasons why Singapore has been as successful: favourable geographic position, well developed infrastructure, qualified workforce, stable political environment, western legal system and good tax environment are just some of the success factors to name (Yue et al, 2003) but a central role is played by the government who has put large effort to change their business environment as start-up friendly as possible. Without government's help it is unlikely that there would be that kind of start-up community in Singapore (The Economist, 2014).

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Singapore has through history emphasised the importance of external trade and investment in their economy at the same time making business-friendly policies and investing states money to the emerging businesses (Wong et al, 2005). State has been working since independence on becoming technologically competitive and their technological capability has helped them to become one of the most advanced countries in the region as well as in the world. They have done so through developing national system of Innovation (NSI) through what they have attracted many multinational corporations to do business in Singapore. Big corporations have trusted their most complicated technological operations to be carried out in Singapore, which have resulted in new technologies and innovations to arise from the island state already from 1980s (Wong et al, 2005).

Unlike any other nations Singapore's government has been proactive in discovering and implementing new market opportunities. Government has not been expecting private sector to take the lead but rather has been taking initiative by themselves and through that being involved actively to business developments. Government's attitude has been that "government should invest directly in new businesses" (Mahizhnan, 1999, 16).

Singapore's aim to be Intelligent Island and Smart Nation is strategy behind their success. It means that their ambitions are helping them forward. To become a Smart Nation they understand the necessity not to only involve Singaporeans but also attract international tech community to the country. Virtually, it seems that government, while being opened to the innovation and changes, is aware of that being a small nation they need to bring in global talent who would bring in the skills and know-how which will help to develop the country further by using Singapore "as their living lab to pilot their innovations" (MarketWired, 2015).

#### 4.1.1 The role of ICT in the success story of Singapore

As mentioned, Singapore's key strategic goal is to be an "intelligent island" and have highly developed digital society where information technology has important part in nation's economic as well as social development to play. This vision has to be achieved with the government taking the lead in developing e-Government in the country and coming out with right initiatives (Choo, 1997).

Singapore's competitive edge has not been seen in natural resources but rather in the ability to embrace information and communication technologies. In 1990s Singapore started to get its entire population to Internet (Keshvani, 2000). In 1992 with IT2000 report Singapore's future strategy in its ICT sector dynamics was published and vision as an intelligent island was set (Choo, 1997). The report was analysing different aspects of how the IT will contribute to Singapore's competitiveness and living standards and how Singapore can maintain its central position as key

economic player in the region (Mahiznan, 1999, 14). To achieve those goals, 3 main pillars of country's information technology oriented strategy were named: people, world-class infrastructure, and as the end result - to become a major hub city of the world (Mahizhnan, 1999). In order to stay competitive, a country has to have a highly developed ICT industry. By now, electronic goods industry has become main industrial sector in the country. Many multinational corporations, mostly from America, Europe and Japan, have placed their production units in Singapore. Electronics is stated as "key cluster for nurturing" in Singapore's Industry 21 Masterplan (Yue et al, 2003, 278). To achieve its goal to become one of the top electronics hubs in the world Singapore puts effort in bringing top talent to the country from different fields. Singapore was ranked 2nd after Switzerland in Global Talent Competitiveness Index 2014 (Evans et al, 2015) and 1st in the index of World's Most Tech Ready Countries 2015 (Lanvin et al, 2015). It seems that Singapore has understood from early on, that to be truly successful, a state has to think globally. It has done so by keeping the international community in mind in its economic as well as IT strategies, which means that their business environment has been ready for non-residents as well (Mahizhnan, 1999).

Authors Weiling and Kwok have looked in their article "Successful e-Government in Singapore" how Singapore managed to get most of its public services deliverable online. Already by the end of year 2001 Singapore managed to get 92% of all public services deliverable online and by now Singapore's e-Government portal is thought to be one of the most advanced ones in the world by saving 14,5 million dollars every year for the government (Weiling et al, 2004).

### 4.2 Diminishing value of physical state

"The cyberstate is the new world order; it is the supremacy of the commercial syndrome over the guardian; it is the reorganization of human society into a commercial rather than political modality. It is the constellation of commercial 'adhocracies' within a global 'object-oriented' economy. It is what comes after the end of the nation-state" (Mooney, 1996, 294).

A big shift is happening in the world. Technology is developing faster than ever before, the line between physical and digital world is getting smaller day by day, individuals as well as businesses can move easily and local governments are losing their importance. With the creation of personal computers and with the development in telecommunications sector and new technologies it has brought along, has led us to the era of Information Revolution (Mooney, 1996). It is argued, that digital age has changed the ways we live in and the ways we do business. ICTs have made it possible to question the importance of physical territoriality and more than that, human interaction

in general. It is likely, that technology will split national identities and create new communities who are not dependent on the physical territory (Gibbins, 2000).

With Information Revolution, the size of company started to change and the number of small companies started to grow all over the world, since then it has also become harder to decide over the nationality of an international company - your owners can be from Europe, thousands of your employees from Asia but your company registered to America (Kotka, 2014c). There are several examples in history where a certain area or small state has with right decisions and better environment managed to attract big amounts of foreign investments to the country. Switzerland, Luxembourg and Lichtenstein are some examples of small nationalities, which have managed to attract foreign investors and businesses, increased the well-being of their own citizens and at the same time been able to maintain their own culture (Kotka, 2014c).

All over the world there are international start-up communities arising where entrepreneurs from different parts of the world are moving to. One of the most famous one of those ecosystems is Silicon Valley where many of the best technology companies are located at. Silicon Valley has become the "cloud capital of technology" with 64% of the scientists and engineers working there coming outside from U.S and 43% of companies in Silicon Valley are established by aliens (Srinivasan, 2013). Historically engineers were moving there because of the better climate of the area for the production of semiconductors but in today's world the main argument what makes technologists to move are other people and in Silicon Valley the concentration of highly mobile professionals, "whose true existence is in the cloud," is relatively high (Srinivasan, 2013).

There are even nations being created in the cloud nowadays like Bitnation for example, which is a collaborative platform for do-it-yourself governance, also known as governance 2.0. The idea is to create borderless world, which operates in geographically unbound and decentralised way (Bitnation Governance 2.0, 2014; see also APPENDIX 1). Bitnation works on blockchain technology and aims to offer many of the services what traditional governments offer like secure ID systems, land registries, education, insurance, security and more – all of it through blockchain technology (Van Eyk, 2014). "Though blockchain technology was first created for digital currency exchange, the blockchain's core concept of a decentralised, free-to-access, unchangeable public record can be adapted for a whole host of other services" (Faife, 2015). According to Bitnation's CEO Susanne Tarkowski Tempelhof, people may want to use their platform for ideological or practical reasons. It can be so because of the lack of trust to traditional governments or it seems to be more efficient and financially more reasonable to integrate Bitnation into their lives. For example, if to look markets, which are not that well developed, it can be the wish to gain access to

the services which because of the bureaucracy or poor developments in IT infrastructure are otherwise not accessible in their home markets (Van Eyk, 2014).

With more and more people moving from physical world to the cloud, virtual world has started to become a reality. One can do business in the cloud, choose entertainment, which seems most interesting in a given moment, chat, spend time with friends, and get education from the cloud. Leaving home is not compulsory anymore to meet the outside world (Srinivasan, 2013).

## 4.3 Digital Nomads

It can be assumed, that in the near future there are changes happening in the world, which most likely will change the politics and economy around us (Anderson et al, 2014). National products and technologies, national corporations and industries are starting to disappear. "There will no longer be national economies. All that will remain rooted within national borders are people who comprise a nation." (Garten, 1991). Geographical location has become less important in digital age, what really matter are the infrastructure and supporting systems. In April 2008, The Economist published an article "Nomads at last," where closer look is given to the wireless world. As wireless data is getting better, cellular networks become faster and one can hardly find a place without WIFI hotspot, it does not matter anymore from where you do your work (The Economist, 2008).

The number of people globally, who prefer borderless life-style and do not want to be limited by physical borders, increases year by year. These people are also known as digital nomads. "This is the creation of new category of entrepreneurship, those who are called digital nomads, those who move to areas where there is more fertile terrain, though moving is not always necessarily a must" (Guerrini, 2014). They are using ICT for doing their work and it allows them to live location-independent lifestyle (Guppta, 2015). As Bedouins back in the days did not need to take water with them because they knew were the oases are located, nomads nowadays do not need to take any paper with them because they can access the documents from computers and mobile devices (Fiore et al, 2014).

Not only people but also companies nowadays may act like nomads – they move to new countries when some factors for doing business are more favourable than in current location. One of the main arguments, what can drive transnational companies (TNC's) to change the location, are costs, specially costs for production and labour. Other than that, resources available, like qualified workforce, technology and facilities for production, are as important. This means that companies can as easily as people move to the countries where different aspects of business environment are most favourable for their business (Start-Ups. Start a Business in Ireland, 2015). Do start-ups

nowadays even need to settle to one specific country? It seems to be more adequate to talk about specific characteristics of different ecosystems or countries rather than to talk about one concrete start-up hub. One of the founders of Skype and now owner of a start-up, called Teleport, Sten Tamkivi has said: "I am choosing my physical and regulatory locations depending on particular needs. There are places with good weather, great talent, available funding, great schooling for kids, enjoying the beach – and it is very unlikely you will find one single perfect place for everything" (Tamkivi, 2015).

Only countries and companies, who are open minded and free of out dated dogmas, are the ones who will "attract the talent" and "be successful in the future" (Evans et al, 2015). For doing business, it is not important anymore to be located in one specific country. Today's people and businesses are moving. E-residency does not give only access to Estonian e-services but it can actually give access to whole EU. For some parts of the world, E-residency opens the door to entrepreneurship career to those, who cannot do so in their home countries because of the restricted or missing access to digital services or unsecure identities. E-ID gives those people secure online identity and access to online services all over the world. E-residency shows that "government e-services can be secure, can be private and they can be working. Estonia is about smart solutions – you don't have to be huge to be great" (Forsgård, 2015).

# 5 Theoretical approaches

The following chapter will describe the theoretical approaches used in this thesis. As with Eresidency there are technical as well as sociological aspects, what have to be looked at then one of the main approaches used for this thesis is the concept of sociotechnical systems, as an approach, which recognises the interaction between people and technology. As in the core of the E-residency project are e-services from the one side and foreign entrepreneurs as the end-users of these services from the other side, then this approach suits for the thesis as it evaluates the interaction between complex technologies and human behaviour. Humans act, because they have some urge; same can be said also about businesses – as behind every business is a human who makes a decision.

Marketing approach was used because of the ambitious goal of E-residency -10 million eresidents by year 2025 cannot be achieved without strong marketing strategy and team to carry out the strategy. As marketing theory itself is moving towards "service perspective" and in the focus of E-residency initiative are Estonian e-services then a service logic approach will be used, where the main idea is that value is created by customers (Gummerus, 2010).

## 5.1 Sociotechnical systems approach

In today's world, people are becoming more dependent on technology. Technology has become so normal part of our lives that it is hard to imagine life without it. Sociotechnical systems approach looks at the interaction between people and technology. It also refers to the interaction between complex infrastructures and human behavior. This is also the reason why the users also better accept such systems, which have been created while keeping socio-technical approach in mind, as those systems tend to create more value for them. Sociotechnical approach recognises that social and technical factors are involved and dependent on each other (Baxter, 2011). "New technological regimes replace old ones" (Davis et al, 2013, 195). Information society will free people from many bureaucratic tasks, which require routine mechanical work (Priisalu, 2014).

ICTs enable governments to offer services to the users, which are unique and truly integrated while involving different user groups. Information technology (IT) has made it possible for governments but also for private companies to deliver services and communicate with the citizens or customers through different channels (United Nations, 2014). In United Nations e-Government survey 2014 it was stated, that 46% of the people in EU use e-Government services for filing taxes, searching for jobs, registering for passport and in various other reasons. If people get more used to different e-services and trust towards different IT systems will increase then, in some years the number of people who will use e-Government services will presumably rise as well (United Nations, 2014).

It means, that people start to communicate more often with different technologies in their everyday life, which help to make their lives easier.

Changes tend to be difficult for the society and it might not be easy to accept those. It mainly depends of the people, but also of the cultural background of the society if new technologies will be taken into use or not. "In the period following World War II the information technologies of the second industrial revolution were already beginning to make themselves felt. It seemed not unlikely that there would be as big cultural shift associated with them as with the energy technologies of the first industrial revolution" (Trist, 1981, 13).

In today's world, people are highly dependent on the technologies and different IT systems have become part of our everyday lives. Modern technologies have already made it possible to create programs and technologies smart enough to make it possible to automate many routine and time-consuming tasks, which are currently carried out by humans (Taveter, 2014).

Smart machines will change the world – people are already giving more and more tasks to technology to save time. In Estonia, smart machines have already slowly started to reduce bureaucracy. More than 400 000 people and 1000 institutions and companies are carrying out different procedures through smart machine, without printing out any paper (Priisalu, 2014).

## 5.2 Service logic approach

While designing services for e-residents the focus should not be on the services but on the people to whom those services are designed for. With technologies taking over our everyday lives people expectations are also growing. "It is not about technology anymore, it is about new customer relationship" (Belleghem, 2015). E-services should not be designed by taking offline services and just try to deliver those online (Rozov, 2014). To develop excellent e-services, technology is important but much more attention should be given to the user. Truly successful will be those service providers, who use customer centric approach while creating new services (Verdegem et al, 2008).

Users have become highly conscious about their needs for e-services and tend to adopt only the services, which are able to satisfy their demands (Gummerus, 2010). This means that if users are not happy with the services offered to them they most probably will find a way to replace those with better functioning service providers. In service design customers' needs should be in the centre of the process (Belleghem, 2015).

"In terms of service logic approach, service is support for an individual's or organisation's everyday processes in a way that facilitates this individual's or organisation's value creation. Provider in service logic approach is meant as service providers, through all their actions and interactions with users, firms strive to support users' everyday processes in a way that facilitates user's value creation." (Grönroos et al, 2014, 208).

As said before, in service logic approach, value is created by the customer. As value is created when customers actually use the offered service, it could be the easiest, if customers are involved to the service creation process from the beginning to be sure that their needs are taken into account. For value creation in service logic approach the following aspects are considered: customers' feedback to the service process, content, and configuration (Gummerus, 2010).

Service process in the given context means the way how service is supplied. It is best to describe it with an example of a webpage. In the case of a web site service process influences directly how much time and effort customers have to spend in searching the information or using some service in the web site. With "poor functionality" customers may decide not to use the web site and it means that the site do not create any value to them either (Gummerus, 2010).

Some of the most important aspects about a service for today's users are the opportunity to serve themselves as much as possible, means that there has to be relevant technologies in use but the feeling that you get services by a human being has to remain and there has to be emotional touch involved. "Humans have become digital, now it's time for digital to become human" (Belleghem, 2015).

"In addition to emerging digital channels, counter (in-person), paper-based and phone (voice) services will remain as fundamental channels. Individuals who are not comfortable with new technologies may prefer to speak to someone in person or over the phone to resolve an issue while certain public services, such as issuance of birth and marriage certificates, still warrant some form of personal interaction for identity authentication and authorisation among other reasons. Researches in China shows, that digital and traditional channel supplement each other, particularly among disadvantaged and vulnerable populations in rural areas. Therefore, governments must provide multiple channels for different constituents, at times allowing them a choice of service access online, over the counter, over the phone, at a kiosk, or via mobile phone" (United Nations, 2014).

## 5.3 How do theoretical concepts relate to data

The next subsection tries to show how the theoretical approaches are related to the data brought out in the analysis later on. Socio-technical approach, which watches interactions between people and technology, was one of the theoretical approaches used in this thesis. As this approach says that social and technical factors are dependent on each other, it was accurate approach to use for E-residency research as well. The further analysis and questionnaires done with the e-residents show, that technological as well as social factors play important role in this project. While most of the e-residents are satisfied with the high service level by Estonian public servants in the Police and Border Guard's Office it is also brought out that there would be better guiding needed in terms of the usage of e-ID. As in Estonia it has become part of everyday life that we use ID card for most of the business processes and know how to use it, it has to be kept in mind that for people coming outside of Estonia the usage of the technology we use in here might not be as obvious. In that reason there should be much better guiding done for e-residents so, that it would be easier for them to adopt Estonian e-solutions.

The second approach used was service-logic approach, which brought out, that value is created by the customer. Therefore, it would be wise to design services together with the customer to answer to their requirements. Singapore case study shows, that one of the reason why Singapore has been so successful in their e-Government solutions has been the fact, that they have always used the user centric approach and try to offer the services, which would create highest value for the users. Also one of the reasons why E-residency project was launched in the beta phase was the reasoning behind it that the services could be improved with the feedback given by e-residents themselves. Though it was also stated in this paper that one of the problems with the E-residency project was the fact that it was launched in the beta phase, from the perspective of service logic approach it was rather right decision. From the questionnaires it comes out as well that even though e-residents have currently very little experience in using the e-services offered to them they have already some further expectations and ideas about the services what they would like to use in the future and general expectations for Estonian Government what to change in Estonian business environment.

Though, e-residents are rather satisfied with the friendliness of Estonian public servants who they have met during the application procedure, it is also brought out in the questionnaire responses that the English level of people serving the e-residents could be improved. From the perspective of service logic approach for e-residents service level in different public institutions in Estonia has to improve. Public servants are used to serve Estonian citizens with whom they speak same language and they have the same cultural background. Now, all the people who are directly communicating with the customers in different channels have to be ready to do so in fluent English as well to offer the best customer experience possible to e-residents.

Though e-residents will use most of the services via online channels, Estonia also have to be ready that part of those new type of residents want to physically use our ministries or other public sector agencies. From the service perspective, it is important to offer people the opportunity to do business in the channels, which are most comfortable for them. Entrepreneurs, who are used to do business in ways that are more traditional – give physical signatures or get customer support in

face-to-face meetings for example has to have the possibility to do so. Those entrepreneurs are also the ones, who might not get that easily attracted by e-identity but they would be interested in applying for E-residency if there would some actual benefits rising for their business from the e-resident status.

# 6 Methodology

It was mentioned that the majority of pre-registrants signed up for E-residency for doing business in Estonia. As foreign entrepreneurs are one of the main target groups for the E-residency project, this thesis concentrates on the subject of attracting foreign businesses to Estonia. In addition, as the author herself is working in an organisation, which is helping non-residents establish their businesses in Estonia on a daily basis, and is also helping them with supporting activities through offering accounting and legal address in Estonia, it was also the personal interest of the author to understand if E-residency could help bring more foreign entrepreneurs to do business in Estonia.

To form the research questions, the author used the Trivium method – the elementary three - general grammar, formal logic and classical rhetoric (The Trivium method, 2009). As according to the Trivium method the "how" question itself is too complicated to answer at first, the supporting sub-questions were asked.

The main research question asked in this thesis is: How to attract foreign entrepreneurs to Estonia through the E-residency project? Sub-questions asked are following:

1. What are the main pros and cons of E-residency project?

2. What measures can be used to attract new businesses to Estonia through E-residency project?

3. Which way do existing e-services have to be developed for businesses?

The methodology of this paper consists of case study research and action design research. Case study research contains two parts: extensive literature based research and in-depth interviews with three members from Singapore e-Government Leadership Centre at the National University of Singapore.

As the author herself is working in an organisation, which helps foreigners establish businesses in Estonia, and also offers supporting services like accounting, legal advice and virtual office, then action design research is used as well. This part of the thesis consists the analysis of questionnaires made with the e-residents and business requests made by them to the Company where the author is working at.

## 6.1 Case study research

As E-residency is relatively new concept with a lacking body of literature and data available, Singapore was chosen as a case study for this thesis because it can give considerable contribution for the outcome of the current dissertation and help to draw parallels later with the possible outcomes of E-residency project and therefore answer to the research questions. Singapore was chosen as a unique success story in attracting foreign businesses to the country - being one of the biggest business hubs in the world with close to 9000 European companies (European Commission, 2012) and about 3600 American companies (Bureau of East Asian and Pacific Affairs, 2015) being presented in the country. Singapore's government initiatives and consistent work in improving their business environment are remarkable (Choo, 1997; Mahizhnan, 1999). When in e-Government solutions Estonia has been usually the one who consults and helps other nations, then in e-Government solutions for businesses Estonia could learn from Singapore's case.

In the case study research, direct (interview) and independent methods (documentation analysis) were used. Extensive literature based research was done to set the background for the case study, to analyse how has Singapore business environment been developing throughout the history and to learn about different initiatives and government measures taken in Singapore what has got them to the position where they are today in the business world. To support the body of knowledge from the literature research, interview with members of National University of Singapore, e-Government Leadership Centre, was carried out. As interview contained several links when interviewees referred to external sources, then some of the answers are complemented by the author with the information gathered from the named links.

Six questions (see APPENDIX 1) were asked from the interviewees to better understand the reasons why entrepreneurs all over the world want to start business in Singapore. Case study research helps to answer to the research questions asked in this paper to make relevant conclusions later.

### 6.2 Action design research

As author herself is working in an organisation, which on a daily basis offers services to those, who want to open businesses in Estonia, and the current thesis is directly related with the practical work, action design research will be used. "The method conceptualises the research process as containing the inseparable and inherently interwoven activities of building the IT artefact, intervening in the organisation, and evaluating it concurrently "(Sein et al, 2011, 37). Action design research is based on e-resident questionnaires with the clients of the Company where author is currently working at. Approximately 80% out of 434 clients of the Company are foreigners who have established their business in Estonia. This means, that in the client portfolio there are more than 300 potential e-residents and after E-residency was launched in December 2014, many of the current and potential customers, who have made requests to the Company about opening business in Estonia, have shown interest about E-residency as well.

## 6.3 Collection of the data

To answer to the research questions asked, questionnaire was sent to the e-residents who have started their businesses in Estonia. As e-residents are not located in Estonia, questionnaires were sent out via e-mail in the period from 25th of February to 14th of March 2015. Questionnaire was designed in the SurveyMonkey environment and together with explaining e-mail the link was sent to the potential e-residents. Last answers were received from the interviewees on 1st of April 2015. 21 questionnaires were sent out with 15 people from 8 different countries answering back to the questionnaire. Those countries were Poland, Italy, Hungary, Great Britain, Pakistan, Finland, France and Spain. Same questions were asked from all the people (see APPENDIX 3): how did they hear about E-residency and why did they decide to apply Estonian E-residency; when did they apply for E-residency and how was the satisfaction with the applying procedure; why does a person thinks that having E-residency would make doing business in Estonia easier; what are the services and e-resident have used so far and how is the satisfaction with the services; what services would be liked to use in the future as an e-resident; what are the expectations of an e-resident to Estonian government what would make doing business in Estonia easier; does the respondent think that E-residency will attract more entrepreneurs to start their business activity in Estonia and would they recommend E-residency to their business partners. As the questions asked from each respondent were the same, text based analysis were done based on the author's conclusions made from the responses.

Six people answered back to the e-mail sent to them that they have not applied for E-residency yet but are still planning to do so. Though, it can be argued that there could have been more people to whom to send the questionnaire, the goal was to interview those who had applied for E-residency by themselves without customer support of the Company influencing them in the procedure. The other factor that has to be taken into account is the fact that e-residents are not located in Estonia, which meant that after sending the questionnaires, several e-mails had to be changed before getting the answers to the questionnaires and it made whole process longer than it would have been with carrying out face-to-face interviews. Besides the questionnaires, also the client requests (see APPENDIX 4) of e-residents and potential e-residents were analysed, who had turned to the Company from 14th of December 2014 to 1st of April 2015 to get help in starting their business activities in Estonia. 8 different requests, which can be seen in Appendix 4, were analysed to better understand the needs of e-residents. In addition to the information collected from e-residents, short interviews were carried out with the sales manager and the lawyer of the Company to better understand the problems with what e-residents have turned to the external service providers to solve those problems.
## 7 Empirical data and analysis

This chapter brings out the main findings of the paper and answers to the research questions asked. The chapter contains analysis of Singapore case study based on literature research and interviews with members from National University of Singapore e-Government Leadership Centre (see APPENDIX 2). Second subsection of the analysis brings out the findings from the interviews with e-residents (see also APPENDIX 3) and from business requests made by potential e-residents (see APPENDIX 4).

#### 7.1 Intenational business hub Singapore

In the 1960s when multinational corporations (MNCs) were seeking for new opportunities and moving to the new markets, Singapore government unlike other states in the region saw an opportunity to get new businesses to the country. Singaporeans saw an opportunity in MNCs to bring capital to the country and create new technologies and jobs. Through the years, Singapore managed to keep its competitive edge by investing into technology, innovative ideas and people and becoming an information economy (Mahizhnan, 1999). It was in 1980s when Singapore started to become a highly "important business, financial, transport and communications services hub" in the area of Asia-Pacific and has been able to prosper its economy ever since (Wong et al, 2005, 3).

Already in the early on the city state concentrated on its foreign direct investment (FDI) strategy to electronics sector. In the beginning of 1980s, when personal-computer business started to grow, Singapore saw a possibility for economic growth in there and they managed to "attract the major PC-related manufacturing firms to Singapore"(Wong et al, 2005, 88). Even though, the expenses were getting higher during the years, Singapore's position for foreign electronics MNCs remained strong and new companies continued to move their activities to Singapore, which pushed companies, who were already there, to produce "higher-technology-intensity products". Government did not only support companies through tax reduction and investment credits but also contributed through "logistics infrastructure such as airport and seaport facilities" (Wong et al, 2005, 89).

Today, Singapore has become an important service and headquarters logistics hub in the region of Southeast Asia. Many American, Japanese and European Multinational Corporations have based their headquarters in Singapore. Singapore's vision is not to be only a regional "hub city" but it wants to be a globally recognised hub city, which connects the Southeast Asia with the rest of the world. Singapore vision is to be an intelligent island. Singapore, as an innovative and forward-thinking country, has always believed in the new technologies and this belief can also be seen as central factor in their success (Sim et al, 2003). Besides the concrete measures taken and initiatives by the government, which will be discussed further on, it has also been the result of strong marketing activities carried out by the Trade Development Board and Economic and Development Board why foreign businesses have discovered Singapore as an option for carrying out their business activities (Sim et al, 2003).

In many other locations, like Delaware or Ireland for example, companies register themselves because of tax benefits but seldom carry out real business activities in there. In Singapore, more than fifty percent of the international businesses who have registered themselves to Singapore also carry out "regional operations" in there and Singapore as a return has managed to create highly secure and productive business environment, which keeps attracting entrepreneurs from all over the world (Sim et al, 2003).

If to only name some of the benefits why to choose Singapore for doing business then different sources have brought out their geography with being located in the East Asia, together with a well-developed logistics sector, it is easy to use Singapore as a starting point to start business in Asia. More than that, Singapore's telecommunication and financial sectors are named to be among the strongest ones in the world and they use Western legal and accounting system, which make it easier for entrepreneurs outside of Asia to set up their business in there (Yue et al, 2003). Singapore can be seen as a good example of how government can be the role model for innovation and adoption of new technologies. It has been the government who through the years has been the reformer of the business environment and adopter of different technologies, especially in ICT sector (Wong et al, 2005). Singapore being one of the most attractive business environment in the world and being listed in the first place in terms of ease of doing business in World Bank Doing Business 2015 Going Beyond Efficiency report while Estonia ranked 17th (World Bank, 2014). Because of that Singapore is appropriate for research to make relevant comparisons and proposals about the E-residency project as well.

#### 7.2 Reasons behind Singapore's success

Singapore is a multicultural nation with one fourth of the population being foreigners. Government has kept this in mind also in policy-making and talented foreign work force, has been seen as a competitive edge for country's business climate (Sim et al, 2003). Singapore's government has put huge effort to attract foreign companies to the country.

Singapore vision is to become a Smart Nation. It means also involvement of global technology companies and attracting the top talent to the country. By bringing talented people and innovative start-ups to the country many challenges can be faced by innovation and new technologies, what international community will bring to the country (Evans et al, 2015).

An example of Singapore government thinking beyond borders in attracting foreign businesses to the country is Infocomm Development Authority of Singapore (IDA). They cooperate with world leading IT companies and find ways to develop constantly "excellent information technology and telecommunications infrastructure, policies and capabilities for Singapore" (MarketWired, 2015). Lately IDA established a strategic cooperation with General Assembly of USA and "launched Global Data Challenge", to bring American tech businesses to the country. Tech businesses are important for Singapore to realise their vision to become Smart Nation (MarketWired, 2015).

"Singapore is seen as a safe and secure business location. The secure and stable business environment would not be possible without a sound and good legal setup. Following things are important to create a decent legal setup for businesses adequacy of laws, the legal process and the consistency of the judiciary. Also transparency and efficiency of legal process cannot be undervalued because it allows firms to evaluate the legal implications of any business venture"(Sim et al, 2003, 122).

#### 7.3 E-Government's role in Singapore

Through the years Singapore with its different initiatives – from Civil Service Computerisation Programme to iGov 2010 Master Plan has become a frontrunner in e-Government development and innovation. Singapore has done a remarkable job with developing its e-Government and ranked in 3rd place in United Nations E-Government survey 2014, being outraced only by the Republic of Korea and Australia (United Nations, 2014).

There are many e-services offered to the businesses depending on which industry the entity belongs to. The aim of the current Master Plan, eGov2015 besides continuing improvement of the existing services is to encourage businesses and citizens to co-create new online services together with the government (E-Government Masterplan 2011-2015). Being the frontier in e-Governance in the region, Singapore offers high quality e-services for the companies through its one-stop business services portal Bizfile, which currently gives access to about 300 e-services for businesses. To help new users to start to use Bizfile detailed e-guides are available for use. There is also list of template documents available to help businesses to fill required forms correctly and meet the standards (Singapore Government, 2015). Bizfile is fully in English, which makes it easy to understand also for foreign entrepreneurs. There is also list of e-services available together with

a price list. Services in the list are categorised into following categories: business firm, limited partnership, local company, foreign company, limited liability partnership, professional firms, public accountant related service and others, which makes it easier for companies to find information about services offered according to their needs (ACRA, 2015).

The EnterpriseOne portal consists all the information about different government programs, regulations and e-services for companies from 52 partners involved. Portal offers interactive tools, which allow start-ups and other businesses easily find the information and services needed. EnterpriseOne has 20 sections, which cover content about hiring work force, investing, loans, taxes and regulations. As portal has collected the information together from different ministries and government agencies there is no need for entrepreneurs to spend time by looking for the information from different websites (SingaporeGovernment, 2015).

#### 7.4 Interview with the members of e-Government Leadership Centre

As the people interviewed, are members of the e-Government Leadership Centre in National University of Singapore, it is important to understand the role of the named Centre itself in development of Singapore's e-Government:

"Singapore e-Government Leadership Centre (eGL) leverages on Singapore's rich experience and accomplishments to share and build capabilities in the Government to transform their governance and services to better serve their citizens and enterprises through e-Government initiatives. Over the years, eGL has established a good track record of working with government officials from many countries; as at 2014, we have conducted training for over 3,200 government officials from 133 countries."

To support the information found from the literature and better understand the success factors of Singapore's business environment it was asked from interviewees what do they think are the strongest benefits of Singapore's business environment, that entrepreneurs all over the world want to open their business in there. 4 main reasons were brought out as ease of doing business, government grants for Start Ups and SME's, highly skilled work-force and Innovative Technology and Government. All those factors came also out earlier from the literature research.

It came out from the interview that Singapore has understood the importance of being ahead from other countries in implementing new technologies.

"In today's knowledge economy, being in the frontier of innovative technology could provide a first-mover advantage; IP protection regime is thus an important consideration for technopreneurs. In this regard, international surveys consistently rank Singapore's IP regime as one of the best in the world." As it came out also from the research earlier, it was also brought out in the interview that Singapore's government has emphasised the importance of ICT in the general well-being of the nation and has used ICT to be more productive and efficient as a country.

"Recognizing that ICT is a key enabler in driving growth and development, the Singapore Government has successfully harnessed ICT to achieve greater efficiency and productivity in the country. Our efforts have been recognised internationally, with Singapore consistently ranking top among countries in the world in various e-Government surveys. "

The level of Estonian e-services and services offered to e-residents was discussed before. For comparison it was important to understand which e-services are offered in Singapore for businesses and what is the role of those services for businesses. Interviewees said that there are many services but services used depend on the needs of specific industry.

"There are many e-services offered to the businesses depending on which industry the entity belongs to. Just to name some of the e-services what Singapore Government offers to the businesses one could read about the e-Government programs for Business from Singapore's e-Government webpage and look at BizFile portal which is one-stop business services portal. As different entrepreneurs have varying needs/requirements and some eservices are mandatory while others may be optional, we do not think it is feasible to suggest "popular" e-services."

One of the main services offered to e-Residents through the digital ID card is the possibility to establish business online. It was also asked from the members of e-Government Leadership Centre if it is possible for non-residents to open business online in Singapore.

"Yes, it is possible to register a business for non-residents online. As indicated in the website, if the business needs approval from other Singapore Government agencies, it will take at least 14 days."

The interviewees referred to the EnterPriseOne website where it can be seen that if pre requirements are fulfilled then opening a business in online takes about 15 minutes and there is brought out checklist which pre requirements a foreigner has to fulfil when he/she wants to establish a business in Singapore.

As it came out also from the earlier research that e-Government has paid relatively important role in the business environment development in Singapore, it was asked for conclusion what has been the reason that government has put so much effort to different e-Government initiatives for the businesses. Interviewees emphasised on the importance of e-Government initiatives for keeping up with the ever-changing business environment. "Different businesses have varying needs. As such, new e-gov initiatives are necessary to be churned out over times to meet the requirements of the ever-changing business environment."

The interview with the members from e-Governance Leadership Centre, supported the findings from the literature based research. Literature based research, as well as interview showed, that Singapore Government initiatives have played a relatively important role in Singapore's development to one of the world's leading business hubs. Singapore's government has emphasised the importance of e-Governance and services offered to the businesses. to keep up with the rapidly changing technologies and environment around them.

#### 7.5 Questionnaires and business requests analysis of E-residency

As brought out earlier, the E-residency project itself is relatively new and not all of the foreigners coming to do business in Estonia know about the opportunity to apply for E-residency. All the questionnaires were carried out before April 2015, which means that it was not possible to apply for E-residency in the embassies and neither online during this period, which made applying for the E-residency card more complicated. From April 2015 it is possible to apply for E-residency in 38 Estonian embassies and consulates general all over the world (How to apply for E-residency, 2015) and from May 2015 it is possible to apply E-residency online (Life in Estonia, 2015).

The questions asked in the questionnaires were same to all the respondents but in addition experts from the Singapore University e-Government Leadership Centre (see also APPENDIX 2) and Bitnation CEO Susanne Tarkowski Tempelhof (see also APPENDIX 1) were also asked about the E-residency initiative to understand what the experts from other fields think about the initiative. In the current chapter the author has analysed the answers of the questionnaires and brought some examples of the answers, which give the most accurate overview of the opinions and experience of e-residents questioned.

With marketing and communication playing important role in achieving the goals of E-residency, it was asked from e-residents where did they get information about the project. Though most of the respondents had get information from different media channels there were also people who had heard it from their friends.

A respondent answering to the question of where did he hear about E-residency:

"A good Estonian Friend, lives in Tallinn, share this information with me in November 2014 that Estonian government is going to launch some sort of E-residency program. So, I travelled to Estonia and applied on December 8, 2014. "

Service logic approach was one of the main approaches used in this thesis. From the service perspective it was important to understand how were the respondents satisfied with the application procedure (as the questionnaires were carried out before the 1st of April 2015 all the people who answered had to apply for the E-residency in Estonian Police and Border Guard Office and had to visit Estonia twice during the process). Even though at the time it required two visits to Estonia, it came out with the questionnaires that e-residents have been satisfied with the application procedure and find it rather easy.

"I was very satisfied. I believe that in the future the E-residency can also be applied in the Estonian Embassy abroad, which I think is good. I think it is good that the procedure has an official taste – all the officials I met were most kind and polite."

The only downside, which was brought out was the fact, that not always the servants involved to the process were talking sufficient level of English.

"Yes, off-course, there is no hassle at all. A bit more English speaking staffs would be an addition. Especially for foreigners."

It was also brought out that process could have been even easier when some of the information could have been provided earlier via online application.

"Much of the information that was collected could have been completed online prior to my visit. Essentially my visit could have then been quicker, only requiring me to take a photo to use with my application, the team confirming that my id details matched my application and making payment. I think the process could be shortened to 10 minutes if I had filled in the details prior to my visit."

Considering that my application status will be confirmed by email, it might make sense that my application details are also emailed to me, confirming that the application has been received."

Will E-residency ease doing business for foreigners?

Singapore's case study showed that ease of doing business is important factor why companies are choosing one or another location for doing business. E-residents were asked how do they see that E-residency will ease doing business for them. Though the experience in using e-ID had been relatively small so far, the respondents mostly believed that with E-residency doing business in Estonia will become easier for them.

"The fact that I can digitally sign document would be helpful. And I think that managing a company would be easier with it. It looks like there is less paperwork."

As time is important factor for the entrepreneurs, also the fact that E-residency will save time spent for different business processes was emphasised. "It saves time, banking operation, logistic management. No need to have a physical presence in Estonia."

Even when the person does not have personal experience yet in using e-ID it is believed that opening bank account and establishing business in Estonia will become easier with E-residency.

"I believe the possibility for official identification in Estonia makes it easier to open a bank account, establish a company and do other official things, perhaps something such as hiring/buying business premises. Honestly, I have not yet had the opportunity to put the card in any kind of test, but will do so in the future. "

Respondents were also asked about their personal opinion if they think that E-residency will help to attract more entrepreneurs to Estonia to start their business activity in here. In here respondents had different opinions. Some respondents were really positive and saw E-residency as a good initiative to attract entrepreneurs to Estonia, especially those entrepreneurs and companies who operate in ICT sector and can work remotely.

"Yes, I think so. I'm a software developer and work for a company that's fully remote. So we do not have offices, the company is based in Canada because the CEO is from Vancouver and having the company in Canada gives him some tax advantages and other bonuses, like the fact that tech start-ups receive some money from the government. Now I'm thinking about opening a company. Italy is out of the question, opening a company doesn't cost money, but you have 50% of taxes and nothing from the government. I consider Estonia as a good candidate because with E-residency it seems that it's trying to address the problem of opening and running a company in a different nation, without being in that nation. More and more companies are going remote, the company thus can be located anywhere. Anything that make managing a remote company easier will be obviously a plus."

It is believed that Estonia is a dynamic business environment and there are entrepreneurs who want to be part of Estonian digital society.

"Yes I believe so as the processes become simpler. Also it should be an advantage to be a part of the Estonian digital citizens community. E-residency is an initiative that also gives Estonia an advantage of being creative and brave i coming up with an original idea. For entrepreneurs it is important to know that they are involved in dynamic business environment. "

Others were more skeptical, with bringing out the fact that currently it is still not very well understood how can foreigners use the smart ID card and why would E-residency be beneficial for them. "Well, to be honest, I have been sharing this information with many of my fellow business clients, partners and entrepreneurs, so far only one agreed and applied, but he is not willing to use it. A lot more detail description is required, because the website shows a lot of details which are mixed up information of EU resident and non- EU resident. Talking about China, because I live and work here, language is a barrier and not really internet friendly for such online services. People hesitate for cyber fraud etc. It may attract people, but takes time, I guess Estonian government need more advertisement and seminars in different countries to bring awareness. A short example of consideration, When I applied , I recommended more than 50 business partners to do so , they all waited for me to get first, On Government website the Digital ID card shows photo , name , ID number etc. When I received the card in February, there was no Photo on the card, which creates a little confusion to those business partners that what sort is this card. I did explained that it's for electronic use only. But it was contrary to the one showed on the website, so some people has doubt about it."

Members of e-Government Leadership Centre in Singapore were asked if they think that Eresidency type of project will help to bring more foreigners to start their business activities in Estonia. They also brought out that E-residency will possibly change doing business in Estonia easier and through that bring also foreign investors to the country.

"Generally, we think that the E-residency project will likely improve the business environment and ease of doing business in Estonia, by way of e.g. (1) streamlining the business processes and thus reducing the time and cost for execution, (2) attracting more FDIs who want to benefit from the low Estonian corporate tax rates & lesser government red tape. On the technology front, this initiative will definitely add a new milestone to Estonian digital society development. "

Central problem with the topic

Further on it was important to understand what are currently main loopholes of E-residency in opinion of e-residents themselves. Currently it is not that well understood yet what the concrete benefits of E-residency are for the entrepreneurs.

"The concrete benefits are not so clear. There could be some examples of the ways one could start using the card. (Or have I missed it).-Also there could be an e-residents community to network and share ideas. "

It was mentioned earlier that opening bank account remotely is important for foreign entrepreneurs and it is something what they are expecting after becoming e-residents. Also from the questionnaires it came out that while applying for E-residency the respondent did not understand that it does not give the right to open bank account remotely. "When getting E-residency I thought that it is now possible to open bank account remotely. I had come back to UK when I realized that my presence in the bank office is still needed and I have to come back to Estonia to open bank account. "

Also business requests made by e-residents (see APPENDIX 3) showed that even after applying for the E-residency and doing all the procedure through an e-resident is not fully aware of what he can do and what he cannot do as being an e-resident.

"I have Estonian E-residency. Can you open a company bank account or shelf company with bank account through power of attorney that I sign only using my E-residency? Or will I need to go to a notary or even back to Estonia? Can I open a company bank account through you with just my E-residency online? I am British so I won't need an EU contact person. What is the process exactly for getting a company in Estonia and working bank account without coming back to Estonia, or is this even possible?"

To understand more precisely the legal environment where e-residents have to operate it was also asked from the lawyer working with e-residents what are currently biggest problems for eresidents. It was brought out that many procedures still need the person being presented in the Notary's office which may make doing business for e-residents more complicated than they may think in the beginning.

"While helping foreign entrepreneurs every day to open businesses in Estonia and giving legal advice to them I see that processes are slowing down in the moment we need to go to the Notary with the client because our clients are usually not in Estonia. Currently the only alternative is that a client send's power of attorney to us with regular post and we can represent him after receiving the document. "

Services offered to e-residents

As e-services offered are in the centre of E-residency project it was also asked in the questionnaire which e-services the respondents have used so far. As by the time when questionnaires were carried out the people asked had been e-residents just 1-2 months the experience in using e-services had been rather poor but those who had been using services digital signing was the most commonly used service.

"Digital signing, giving access to my Estonian accountant to the online Tax and Customs Board, banking, logistic for our goods from China and Germany to Estonia, Latvia, Lithuania, Finland etc."

It was discussed previously that user experience becomes more and more important while designing different services and Singapore case showed also that government should consider designing services together with the users. Though e-residents have not had possibility to test the

existing services offered to them for a long time, they have already some expectations for Estonian government for the future.

Currently Estonian companies are required to have legal address also in Estonia. E-residents would find it more convenient if they would not need Estonian legal address for their company.

"I think that the possibility to open a company without requiring a legal address and less starting capital would be nice."

It was brought out that currently it is hard to understand how does e-ID works because there is no manual given to e-residents and they hope that in the future the activation of e-ID would become easier and more convenient for e-residents.

"The guideline for use of E-card and activation of E-card is quite hard process, make it easy and convenient to access."

It is also hoped that with E-residency it becomes easier to open bank account in Estonia for non-EU residents.

"To open a bank account in Estonia would be an additional benefit for a non-EU resident, using this E-residency."

Though e-residents have currently little experience in using their E-residency status and services offered to them, they have certain expectations already to the services and Estonian business environment in general. If Estonia wants to keep its e-residents satisfied in longer run, the feedback by first e-residents should be taken into account and their expectations be fulfilled.

### 8 Discussion

In the final part of this thesis author will explain the results of the research and based on analysis gives the answers to the research questions raised in the beginning of this paper. In the end of this chapter some recommendations will be done for the future research. The main research question asked in this paper was how can foreign entrepreneurs be attracted to Estonia through E-residency project? To answer the main research question the following sub questions were asked: what are the main pros and cons of E-residency project and what measures can be used to attract new businesses to Estonia through E-residency project?

The main purpose of the paper was to introduce E-residency concept to the readers and motivation behind the project. More closely to see if E-residency project can attract foreigners to open businesses in Estonia and how should the project itself and environment around it to be developed in order for E-residency really to succeed in achieving its goals and specially for attracting new businesses to Estonia. The topic was chosen, because E-residency is relatively new concept and there is no research papers published previously about the topic. In addition, as author herself is working in an organisation which is concentrated in helping foreigners to start and run their businesses in Estonia it was the personal interest to understand if E-residency would help to attract more entrepreneurs to establish their businesses in Estonia and what needs to be done for that. Until now, articles about E-residency have been rather general in talking about the initiative itself and opportunities it could create for Estonia but there has been no public discussion about how those goals should be achieved. Because E-residency itself is relatively new concept and there is not much literature available about it, Singapore was used as a case-study to make more accurate conclusions and understand better the opportunities of E-residency project as well.

As there were several important topics in the paper, which need to be separately discussed current chapter is divided into several subsections to give better comprehensive overview about the findings of the dissertation.

#### 8.1 E-residency and diminishing value of physical state

Possible success of E-residency project can be supported by the fact that the importance of physical state is diminishing and more and more people and businesses prefer to work and do their business while not being dependent on their location. Luxembourg, Lichtenstein and Switzerland are examples of the small countries who have managed to show in the history that through right decisions made in the country also small states can become attractive for the foreign investors.

Estonian reputation as a well advanced digital society may attract those who have chosen digital nomad life-style to do business in Estonia. With the E-residency initiative, Estonia have from one hand understood the trends of remote working and from the other hand understood the opportunity what digital age offers to the small states to increase its population virtually when it is not possible to do so physically. With giving the access to foreigners to its e-services through giving out Estonian e-identity, Estonia has shown globally that you do not need to be a physical resident or citizen of a country anymore to use its public services and to do business in a country. At the same time, digital age has also led us to the situation where not only traditional states are competing with each other anymore but there are also cyberstates to look at like Bitnation for example. Cyberstates are first of all attractive to those people who do not trust central governments in some reason and get attracted by the idea of do it yourself governance (see also APPENDIX 1). From one side, E-residency might not be as attractive to this target group because though it gives digital identity to a person, it is identity given out by central government of Estonia. On the other hand, it is beneficial that it is identity proved by the governmental level – it means that Estonian government trusts this person and so can do other states as well. Digital nomad concept supports E-residency goals – possibility to do business any time anywhere via online because physical borders are not holding us back anymore. People but also companies in 21st century want to move freely. Physical borders and traditional offices cannot restrict their movement. Openness on every level – by governments, by companies and by individuals has become the key word in defining modern professional relationships.

#### 8.2 Singapore's experience

Singapore's development into a world's best business hub what it has become now is a result of consistent ambition and hard work by the government. Singapore case study shows that the attractiveness of a country's business environment starts from the government. If government manages to create transparent and opened business environment then most likely it will attract businesses from all over the world. The factors what were brought out as main reasons for businesses to go to Singapore were ease of doing business, highly skilled workforce, innovative technology, specially the use of ICT and different e-Government initiatives, are the result of consistent efforts by the government.

Singapore's case shows that when government manages to create attractive business environment for local as well as for international companies it will also make them competitive among other states. Singapore has always kept global perspective in mind while designing different services and coming out with new initiatives which means that the economy has been opened to the international community from the early on. From Singapore government's initiatives it can be seen that they have always tried to use customer centric approach, thinking about the users first – to maintain their attractiveness in eyes of entrepreneurs, they constantly become out with new solutions like scholarships for businesses or new e-services which would make doing business easier.

#### 8.3 Pros and cons of E-residency

E-residency definitely is an innovative initiative that creates many opportunities and competitive advantage for Estonia. With E-residency, Estonia became first country in the world who gives out e-identities to the foreigners to give them access to Estonian e-services. Estonian government showed with E-residency initiative that it is continuously open for innovation and more than that, it has shown that government can also act as a private company through exporting its public services and selling them in the foreign markets. There cannot be drawn a thick line between government and businesses anymore.

It was later on supported by the questionnaire results as well that majority of the people asked, had applied for E-residency because of the innovative idea and hope that it will make doing business in Estonia as well as countries nearby easier than it was before. Among the first applicants are probably also many early-adopters who want to be part of a new innovative initiative by one of the world's best e-states. In addition, the fact that in the pre-registration phase more than 50% of the people said that they want to apply for E-residency in business reasons supports the idea that E-residency would help to bring new businesses to the country.

Besides many positive aspects, the research also brought out that Estonian e-services are currently not ready for global users and the level of our e-services can become the biggest barrier for the E-residency project. Though there have been opinions that e-residents do not need more than a few well-working services, the current research is not sharing this viewpoint. The Singapore case study shows that their government has consistently improved the business environment by creating new initiatives and services to make Singapore's business environment more attractive for local as well as for foreign entrepreneurs. In Singapore, it has been understood that in order to answer to the needs of ever changing business environment government constantly has to come out with new initiatives and services offered to the businesses. Singapore's government has not been waiting until there is demand by the users for one or another service but government has been proactive in creating those services beforehand.

It also came out from the questionnaires with e-residents that it is not quite clear for them for what E-residency status can be used for and better guiding in the application process as well as on the usage of e-ID would be needed. Even though all e-residents said, that they would recommend E-

residency for their business partners it was also mentioned that some of the people they have recommended E-residency have not been applied yet because of the lack of understanding of the benefits offered and actual usage of the E-residency card.

Estonian vision to become a truly digital and global society while simultaneously increasing the state budget from the activities of e-residents, does not match with partly outdated policies and procedures in different institutions. The minimum goal for e-services offered should be what happens online, stays online. Meaning that there is no such thing as in the middle of some process started in online one has to continue offline in order to finish the process.

Often it seems that Estonia has been relatively good in creating and implementing new e-services but the willingness to keep innovating and ambition to get immediate fame has resulted in being too superficial with little attention given to the details and user-perspective. As a result, this may become the biggest stumbling block for the success of the E-residency project. Hassle free should mean that services offered to e-residents are easy to find and easy to use. As long as there is need to physically go to the bank to open account for your business, to notary to change your share capital, to tax and customs board to give explanations about your business activities and a need look for a translator who could translate documents sent from different institutions from Estonian into English, it cannot be said that hassle free business environment is currently offered to eresidents.

#### 8.4 Findings from questionnaires

In the questionnaire e-residents were asked about several aspects of the E-residency project and their status as an e-resident to find out what have been their motivation behind applying for E-residency and what has been their first impression as being an e-resident. As by the time of carrying out the questionnaires the people asked had been e-residents from two months to few weeks, the experience was rather poor. At the same time it was appropriate from this thesis perspective as it was also brought out earlier that first customers experience can influence the final outcome of the project. Customers who have positive experience are more likely to recommend the initiative to the new potential users than those who have had negative user experience. From the questionnaires with e-residents and interviews with the experts in related fields several conclusions can be made, which help to answer to the research questions raised in the dissertation. In general, e-residents as well as experts see E-residency as a good opportunity in attracting foreign businesses to the country. The initiative will improve the business environment and ease of doing business in Estonia with fewer bureaucracy and reduced time from different business processes, which will make managing the company from distance much easier than it was before. E-residency is also seen as another great example of Estonian well advanced digital society.

However, besides the positive aspects of E-residency project several concerns were brought out as well. Compared to the alternative concepts like Bitnation, which is fully virtual state, E-residency is a centralised system controlled by the government which makes it still dependent on the physical location as many of the services offered will probably remain available only for actual residents. E-residents themselves see as one of the biggest flaws the aspect that it is still not clear enough how can E-residency be used and which benefits it brings to the users, meaning that till there is no better description available about the opportunities what it creates it can keep many potential users away from applying it.

The personal opinion of the author is, after analysing the questionnaire results and after daily conversations with foreign entrepreneurs, the ones who have applied for E-residency in the beta phase are the ones who are more interested in new technologies and eager to adopt innovative solutions available in the market. More conservative entrepreneurs on the other hand are probably not willing to embrace the idea before they see the real benefits what E-residency can create for their businesses. However, if they see actual benefits arising for their businesses through E-residency it is also more likely that they bring more of their business activities to Estonia.

From the requests made to the Company by e-residents (see APPENDIX 4) it came out that Eresidency has not lost the need for local partner for foreign business men who would help taking care for the everyday business activities in Estonia. The reason why foreign companies operating in Estonia choose Estonian partner for supporting business activities is that they want someone who knows Estonian law and business culture.

Even though those companies are small, besides technology they need high level service from locals. Cloud services would be important for them – they can access their data from anywhere and no information would be lost for them.

E-residency will lose its attractiveness when public as well as private sector are not able to offer new innovative services, which would make doing business in Estonia easier. Though private sector can take the leading role here, public sector should take the initiative and support private sector in this. Singapore's business environment is as attractive as it is because public sector has taken the lead and working out necessary initiatives to make life easier for entrepreneurs. If there are start-ups who come out with new e-services, which would benefit foreign entrepreneurs in Estonia, government should support them financially as well as with their know-how. It is not clear for the target group yet how could they benefit from E-residency. Though private sector can build new e-services, which would attract more entrepreneurs to Estonia, then government is the one who should come out with new initiatives, which would change Estonian business environment more attractive. However, though there were several negative aspects what e-residents themselves brought out – which need to be improved in order to make doing business for them easier in Estonia, the questionnaires also showed that when the idea itself is innovative enough then users are more likely to recommend it to the new users as well even when they have had some negative experiences by themselves.

#### 8.5 Research questions

To answer to the main research question how to attract foreign entrepreneurs to Estonia through the E-residency project he following sub questions were asked: what are the main pros and cons of E-residency project; what measures can be used to attract new businesses to Estonia through Eresidency project and which way do existing e-services have to be developed for businesses.

It can be concluded from the analysis that the most positive side of E-residency project is the fact that it is a unique and innovative solution in the world. Through giving access to a Government's e-services to anyone in the world it would make doing business in Estonia easier but not only in Estonia. It is planned to start offering international e-services as well through E-residency. Thereby the initiative gives access to the global market also to those entrepreneurs whose home countries do not provide that kind of opportunities because of the high bureaucracy or low level of ICT in the country.

The main concerns that were brought out about the E-residency project were the fact that it was launched in the beta phase and the general level of Estonian e-services. In beta phase there are not many services offered to e-residents and services, which are currently accessible, do not always work flawlessly. More than that, Estonian e-services are currently not designed for international users. Furthermore, Estonia has very little proactive e-services – to attract e-residents, the level of the e-services should improve in the future.

E-residency is definitely an opportunity for Estonia to bring more foreign entrepreneurs to do business in here. Like that, it would also raise the investments into Estonian economy. However, it should be considered what kind of entrepreneurs and businesses Estonia wants. For example if to concentrate more to IT entrepreneurs and telecommunication sector Estonia would also get more international know-how to the country to develop different e-services and Estonian e-state would be even more competitive than it is now.

E-residency slogans are promising: world's best business environment, hassle free business environment, location independent business. To attract new businesses to Estonia good marketing strategy is important part of it.

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E-residency, being an innovative and unique concept in the world, has gained high media attention in Estonian as well as in international media channels. More than that, analysis showed that most likely there was a group of people who wanted to be early adopters of E-residency as a unique and innovative solution by e-Estonia. It was easy in the beginning to get the attention of international community and publicity in international media.

Author's recommendation for the E-residency project is to focus first to the e-services offered to e-residents and the level of those services. Instead of taking the approach that some well-working services offered to e-residents is enough, Estonia could rather offer numerous amount of services in the same level as they offer to their own citizens to the e-residents as well and while designing new e-services should think about international users as well, as Singapore has been doing.

#### 8.6 Future research

As said already earlier, E-residency is a relatively new project about what there is currently lacking research material and outcomes are currently unpredictable. In the current dissertation only some of the aspects were brought out and mostly only from business user perspective. Even though the experiences of some of the e-residents were mapped, it is still in the early phase of the project and e-residents themselves have still little user experience in using their e-resident status and trying out different services offered to them. Future research could focus more on actual user experience and services offered to e-residents, also about the economic aspects of the project – whether E-residency has actually boosted Estonian economy or not. As E-residency is about digital identity given by the state there should also be separate research done about the legal framework and changes needed in the legislation to answer to the needs of e-residents and be able to design new innovative services for them. Though in the current paper the legal side of the project was not analysed, it has to be noted that for the future developments in E-residency project changes in the existing laws and legal framework are needed.

#### 9 Conclusions

The current paper, E-residency – attracting foreign entrepreneurs to Estonia, was about the newest initiative of e-Estonia through what Estonia decided to start to give their government approved digital identity to people all over the world – no matter what their actual nationality is. As the project was launched in 1st of December 2014 there is no academic papers published about this initiative so far.

The main objectives of the thesis were to examine the development of Estonian ICT sector and e-Government to understand what were the developments that led Estonia to come out with the Eresidency initiative. Further on to analyse the case study of Singapore as one of the world's most attractive business hub's and compare Singapore's success story in attracting foreign companies to the country with the opportunities of E-residency project. Finally, based on the questionnaires and business requests made by the e-residents to analyse the initiative itself to find out if Eresidency is the key to open up Estonian business environment for rest of the world and will help to bring foreign entrepreneurs to Estonia. The aim of this thesis was to find out whether Eresidency can become the key factor why entrepreneurs all over the world would want to move their business activities to Estonia in the future or not. The thesis was mainly focused on the entrepreneurs and new business opportunities what could come to Estonia with the E-residency project. However, based on the assumption that there may not be much general knowledge about the topic, in the theoretical part of the thesis author gave precise overview about the E-residency concept including main objectives and motivation for the initiative, technological base of the Eresidency and main target groups to give the general understanding of the topic to the readers and set the background for the further analysis. After the general explanation about the E-residency as such the analysis about the central problem of the topic followed where author argued that even though E-residency is an innovative initiative which may create many opportunities for Estonia, there are also flaws which have to be paid attention at. Main problem what author sees as the biggest loophole for the success of E-residency project was the level of Estonian e-services. Based on international indexes, it was said that there are very little proactive and invisible e-services in Estonia. While in the first levels of the e-services evaluation scales Estonia scores rather high points together with many other states then in levels four and five (depending on the evaluation scales watched) Estonia is already left behind by Singapore, France and Netherlands for example.

The literature review gave brief overview about Singapore as one of the most popular business hubs in the world and explained the role of ICT in Singapore's success story. It was brought out that in Singapore it was understood from early on that their competitive edge lies in the ICT sector and that was the reason why electronic goods industry became one of the priority sectors for the country. Further on the diminishing value of physical state and concept of digital nomads were looked at. In this regards E-residency is a forward looking initiative following global trends, because digital age has given us the opportunity to work remotely through computers and mobile devices without being dependent on the physical location. The amount of people and companies preferring to work remotely is growing year by year and it is not important anymore to be located into one certain country. You can choose one place for working, one place for living and third country for your education. Only those countries that are able to keep up with those trends in the future will be successful. At the same time there are cyberstates being created already and most famous of those, Bitnation, is also wrote about in the literature review. Interview with the Bitnation's CEO Susanne Tarkowski Tempelhof is brought out in the APPENDIX 1. Digital age has given the opportunity for the people to be less dependent on their national governments and there are people who have lost trust to the central governments. For those people cyberstate like Bitnation is an alternative to choose.

Theoretical approaches chosen for this thesis were sociotechnical systems approach and service logic approach. As for E-residency project technical as well as sociological aspects are equally important, then sociotechnical systems as an approach was chosen because it recognises the interaction between people and technology. As in the core of the E-residency project are e-services from the one side and foreign entrepreneurs as the end-users of these services from the other side, then this approach suits for the thesis as it evaluates the interaction between complex technologies and human behavior. It was brought out in the analysis that even though the first e-residents are rather positively minded about the E-residency initiative, many of them don't understand in full extent how is the smart-ID working and for what can they actually use their E-residency card, which means that much better guiding and preferably some manuals are needed for them.

As E-residency opened up the possibility for foreigners to use Estonian e-services then with possibility to digitally sign documents and open businesses online it has already become easier for foreigners to do business in Estonia. Digital signing is especially helpful for foreign board members of Estonian companies who do not live in Estonia – possibility to use Estonian e-ID makes it easier for them to manage company from distance. E-residency project makes Estonian market bigger than it actually is – with giving the access to foreigners to use Estonian e-services it gives also the opportunity for Estonian companies to create new e-services with keeping the global users in mind.

Till now most of the articles and interviews about E-residency have concentrated more on general aspects of the project and talked about the attractiveness of the initiative and opportunities it offers.

As the paper concentrated on the entrepreneurs it was assumed that this is the target group who besides the attractive and innovative idea expects also more from actual content – services that E-residency offers and benefits it creates for their businesses. So far there had been no research papers published about the content of E-residency project and the importance of the level of e-services we offer to e-residents. This paper aimed to show not only the positive sides of the E-residency project but brought out the flaws as well which need to be pay attention at in order to bring more foreign entrepreneurs to Estonia.

The research showed that E-residency is unique and innovative initiative which creates interest in international community and as an attractive concept has already brought foreign entrepreneurs to Estonia. However, it was concluded from the analysis that though marketing is important for the success of E-residency project not less important are the e-services offered to the e-residents. If Estonia uses its competitive advantage as an e-state and offer better services to entrepreneurs than any other physical or virtual country could offer to them it may become biggest competitive advantage for Estonia and together with the right marketing strategy be the reason why foreign entrepreneurs want to bring their businesses to Estonia.

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## Appendices

## APPENDIX 1: Interview with Bitnation's CEO Susanne Tarkowski Tempelhof

Question: Can you explain shortly, what is Bitnation and where did the idea come from? "Bitnation is the world's first cryptonation - a collaborative platform for do-it-yourself governance, powered by the Bitcoin blockchain technology - a decentralized public ledger distributed amongst its user, and secured through cryptography. The platform provides an ID and reputation system, a dispute resolution part, a public notary, encrypted messaging, and a do-it-yourself governance app library, where there will be both Bitnation as well as 3rd Party developer apps for everything from blockchain powered marriage, to land titles, birth certificates, basic income, health insurance, education, security, and much more. Bitnation is a geographically distributed organization with an Ambassador network spanning all continents."

Question: Who is the main target group of Bitnation?

"Initially we're targeting frontier and emerging markets in Latin America, Africa and Asia, because they often either totally lack these basic governance services, or it's too bureaucratic and corrupt to be able to use them. 'System D' - the grey markets - is a 10 trillion dollar economy, and there are about 2 billion unbanked adults in the world who are leapfrogging to Bitcoin, those are the ones who will benefit the most from our services. Later on, we hope to expand to North America and Europe as well."

Question: Why is Bitnation better than physical state?

"A physical state doesn't compete on a free market, it uses its geographical monopoly on governance to force people to pay for and use their services, regardless if they want to or not. With Bitnation you only pay for the services you use, and you choose what services you want. You can even choose what code of law, arbitrators and etc you want. All interactions are 100% voluntary. Comparing Bitnation with a nation state is like comparing an email service with the U.S. Postal Office. Besides, through leveraging the blockchain technology, we're able to offer the same services as governments do, but for a fraction of the price, much faster, and more secure."

Question: What are the main services/activities what Bitnation offers to its members?

"We offer all the services traditional governments offer, from legal services, to insurance services, social services, security services and diplomatic services."

Question: Why should you want to become member of Bitnation? Are there any extra benefits for entrepreneurs/businesses as well?

"You can incorporate your company on the Bitcoin blockchain, using our Bitcorp app (still in development, will be released 2015 Q2 this year). It's more time and cost efficient than incorporating in any country, and you can immediately trade your cryptoequity online to raise funds for your organization. In addition, it's backed up by the whole identity and reputation system, dispute resolution, and the rest of the Bitnation ecosystem, which allows to immediately integrate a range of functions from the start to automatize your business."

Question: What (if any) are the security risks of Bitnation compared to the physical state or otherwayaroundintermsofbusinessactivity?"It can be difficult to integrate with traditional institutions like banks, governments, etc."

Question: Have you heard about Estonia's E-residency project? What are main pros and cons in your opinion for those who would like to become e-resident to start their business?

"I'm well aware of it. I think it's remarkable that Estonia is thinking in the right direction - e.g. to offer its governance services on a global and competitive market. However, the downside is that it's still a centralized system, it's not blockchain powered, and it's still rather geographical in the sense that most governance services are only available for actual residents."

APPENDIX 2: Interview questions for the members of National University of Singapore e-Government Leadership Centre

NR	QUESTION
	What do you think are the strongest benefits of Singapore's business environment
1.	that entrepreneurs all over the world want to open their business in there?
	What kind of e-services does Singapore government offer to the businesses? Do you
2.	know which of those are the most popular ones among entrepreneurs?
	Is it possible in Singapore for non-residents to open business online? If yes, how
3.	long does it take approximately?
	Does Singapore's Government has some special e-services/initiatives to attract
4.	foreigners to open businesses in Singapore?
	Why has Singapore's Government put so much effort to different e-gov initiatives
5.	for businesses?
	What have you heard about Estonian E-residency project? Do you think that that
	kind of project will help to bring more foreigners to start their business activities in
6.	Estonia and why do you think so?
L	

# APPENDIX 3: Questionnaire for the e-residents

NR	QUESTION	
1.	How did you hear about E-residency?	
2.	Why did you decide to apply Estonian E-residency?	
3.	When did you apply for E-residency and when did you receive your card?	
4.	Were you satisfied with the applying procedure? How could it be improved in the future?	
5.	Why do you think that having E-residency will make it easier for you to make business in Estonia?	
6.	What are the main services that you have used so far as e-resident? Are you satisfied with the quality of those services?	
7.	What services you would like to use in the future as an e-resident?	
8.	What are your expectations as Estonian e-resident to our government (what would make doing business easier for you?	
9.	Do you think that E-residency will attract more entrepreneurs to start their business activity in Estonia? Why do you think so?	
10.	Would you recommend E-residency to your business partners who would be interested to do business in Estonia?	

APPENDIX 4: Examples of requests made by foreigners who want to start their business in Estonia and have applied or are planning to apply for Eresidency

NR	COUNTRY	REQUEST
1.	India	I am about to visit Estonia to establish an E-residency, I will need an address and mail forwarding service. I believe both are services you can provide. Once I have the E-residency can we finish this online or do I have to visit your offices ? If so please let me know appropriate times so I can pre-plan. I am visiting Estonia on Thursday to apply for the E-residency. I had one concern which has been holding me back. I am not sure if you have any info about this. But on the site https://e- estonia.com/e-residents/apply-2/ it says Pick up your e- Resident card after you have been notified it's ready I am not sure if it means it will be sent to me or whether I have to pick it up in person. I was thinking if it can be sent to a local address in Estonia, I do establish a local address with you guys before I even go there so I can use it as a retrun address for the e-resident card and you mail forward it to me "at the needed costs of course". I did drop these guys an email like 10 days ago but
	Germany	never heard back though. Any idea about that?
3.	Libanon	I have made use of the recent E-residency program and registered a company. Now I need to open a bank account for that company, as per my understanding I need to be physically present to do so. I am a Lebanese citizen residing in Denmark at the moment. I need assistance in getting the proper paperwork ready and an appointment with a bank apart from what else is needed.

I am a Hungarian entrepreneur living in Germany now. I consider to have the Estonian -residency in the future and establish a company there in Tallinn. My plan is to establish my own company and employ only myself. I have several questions: what is the average salary/wages in Estonia for an IT expert? Usually what kind of fees/taxes need to pay and what are rates? Can you please demonstrate what fees/taxes the 4. Hungary Company needs to pay, if it receives 2000 EUR/month from its business partner and need to pay 700/EUR month for its employee as a salary? What are the taxes an employee needs to pay? Will the employee have social security? As you know an EU citizen need to pay only in 1EU state the social security. How much is it in Estonia per month? Running a business like this in Estonia will it entitle the employee for Estonian pension?

I want to buy a shelf company with a working bank account without coming to Estonia. I have estonian E-residency. Can you open a company bank account or shelf companyu with bank account through power of attorney that I sign only using my E-United residency? Or will I need to go to a notary or even back to Kingdom Estonia? Can I open a company bank account through you with just my E-residency online? I am british so I wont need an EU contact person. What is the process exactly for getting a company in Estonia and working bank account without coming back to Estonia, or is this even possible?

5.

Me and my partner are from Moscow. We have recently cofounded a software technology startup and plan to incorporate our business in Estonia. We have just applied for Estonian E-residency last week and are visiting Tallinn in person in the end of April in order to pick up our digi-ID cards and settle legal matters around company foundation. We are looking for a range of services related to creating a new business in Estonica, including virtual office address, drafting legal contracts including shareholder agreements, registerring for VAT, accounting services, etc. We would like to know about how 10ffice could potentially help us what fees would be associated with these services.

 I am Pakistani National, Working in China as Director Operation with a trade and manufacturing company. I do have some amount of share with a sister concern of this company. In addition I have also registered a partnership GmbH company in Germany end of last year. Keeping in view our business in Northern Europe, we are planning to establish a trade unit in Estonia, which will help us to support our customers of Baltic and other regions. I have recently visited Estonia and obtained an e-resident digital ID card but now we realized that we actually need our presence in Estonia. Kindly let me know what are the detailed process, what sort of document are needed and how much time does it take.

I am considering establishing an e-Business registered in Estonia/Tallinn and I would appreciate further information on the options for purchasing a ready made PLC and the names available. In addition I am interest in a virtual office address, accounting and book-keeping, and filing an E-residency application.

8.