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E-RESIDENCY AS A NATION BRANDING CASE

Master thesis

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E-RESIDENTSUS KUI RAHVUSLIK KAUBAMÄRK

Magistritöö

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Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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10.05.2017

Abstract

E-residency is a recent and innovative initiative of Estonian state that gained a lot of international attention. E-residency is a program that gives foreigners access to use e-services that are provided by Estonian public and private sectors. That helped Estonia to promote itself as developed digital society, though the program was criticised as not having clear value for the users. The purpose of this thesis is to introduce the program through nation branding perspective. The thesis examines nation branding concepts, e-residency initiatives and the most important parts of the project and discusses the opportunities for developing the program considering the changing global environment. The thesis also studies the case of internationally admitted successful nation branding initiatives of Singapore to find out the key success matters. The thesis proposes to develop more targeted approach for developing and promoting the program.

This thesis is written in English and is 73 pages long, including eight chapters, two figures and 8 tables in appendices.

Annotatsioon E-Residentsus kui rahvuslik kaubamärk

E-residentsus on Eesti riigi uuenduslik algatus, mis sai märkimisväärset rahvusvahelist tähelepanu. E-residentsus on programm, mis annab välismaalastele juurdepääsu Eesti avaliku ja erasektori e-teenustele. Programm aitab Eestil end reklaamida arenenud digitaalse ühiskonnana, ja seda vaatamata kriitikale, et programmil puudub selge väärtus kasutajate jaoks. Käesoleva väitekirja eesmärgiks on tutvustada programmi riigi brändingu seisukohast. Väitekiri uurib riigi brändingu kontseptsiooni, e-residentsuse programmi ja projekti tähtsamaid osi ning arutleb programmi arendamise võimaluste üle Väitekirjas arvestades muutuvat globaalset keskkonda. samuti uuristakse rahvusvaheliselt edukaks tunnistatud riigi brändingu programmi Singapuri näitel, et välja selgitada selle fenomeni edu võtmed. Väitekirja ettepanekuks on kujundada sihipärasemat lähenemist e-residentsuse programmi arendamisel ja edendamisel.

Lõputöö on kirjutatud inglise keeles ning sisaldab teksti 73 leheküljel, 8 peatükki, 2 joonist, 8 tabelit.

List of abbreviations and terms

Brexit	The United Kingdom European Union membership referendum took place on 23rd of June, 2016 and resulted in 51.9% of voters voting for leaving the European Union. The UK government has started the official EU withdrawal process on 29th of March, 2017 to complete the process by 30th of March, 2019.
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 stand-alone systems and services between government-to-customer, government-to-business, government-to-government as well as back-office processes and interactions within the entire government framework
E-residency	a status allowing non-residents to be issued a secure digital identity (in a form of smart ID card). This enables them to use Estonian e-governance services.
EU	European Union
GEPU	The Global Economy Policy Uncertainty Index
Hassle free	Problem free
ICT	Information and Communication Technology
INSEAD	"Institut Européen d'Administration des Affaires" or European Institute of Business Administration
ITCI	International Tax Competitiveness Index
OECD	Organisation for Economic Co-operation and Development
TTU	Tallinn University of Technology

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1 Introduction

Today most researches and marketing practitioners tend to refer to and market regions, countries and cities, as they were products. Branding places has become important for national and regional officials in the recent decades. Countries, regions and cities are trying to differentiate from others using marketing branding tools to become more powerful brands in the eyes of their target audiences. Nation branding is earning its popularity with more and more countries worldwide putting efforts into nation branding strategy development and execution.

In todays globalized world, where role of nations is diminishing and environment is becoming more homogeneous, countries are facing increasing competition both in their domestic and external markets. Countries are competing for tourism, foreign investment, aid, membership in international unions and groups, customers for their products and services and for talents. A successful and positive country brand is able to ensure crucial competitive advantage politically and economically. Countries engage in the nation branding to meet the three major targets: to attract tourists, to attract investments and to stimulate exports. Talent attraction, which includes skilled workforce and university students, is another target for many countries. Country branding is also aimed to increase currency stability, strengthen international credibility and investor confidence, international political influence, and stimulate international partnerships. Nation branding helps to fight with misconceptions and stereotypes about the country and reposition itself. Besides targets aimed externally, nation branding may be directed to increase stability and loyalty inside the country.

Nation branding is often seen as a soft power tool. Strong nation brands may help a county to increase its influence in an international area and attract other states interest and sympathy. The concept of soft power implies that country having intangible resources and characteristics can become powerful enough to influence other states and make them act the way this country wishes. A country can achieve the desired outcomes in the international politics by attracting other states to follow its success, its values, its examples, its prosperity and its openness.

A strong nation brand and ability to utilize it as a soft power tool of influence and attraction is extremely important especially for small states, such as Estonia. A strong brand must represent country's values and strong sites to be believable. Thus, a country first should develop its competence to be able to create a successful brand out of it.

Estonia is known for its advancement in establishing successful e-governance practices and services for citizens as well as to the businesses. Estonian e-government competences, well-known around the world, including uniquely wide usage of electronic ID cards and services connected to it, such as e-voting, are clearly the country's outstanding competitive advantage. Digital ID card and wide usage of digital signature leading Estonia towards paperless management. The success story of Estonian egovernment allows e-Estonia to be a successful country brand.

Thus, e-residency programme seems to be a successful continuation of Estonian egovernance development, moving its services internationally, increasing worldwide awareness of Estonia success in the field and attracting businesses and investments to the country. With no doubt, the unique programme has attracted international attention and promoted Estonia as an innovative developed country and digital society.

1.1 Motivation for the Research

E-residency was often criticized for not fulfilling its aims and not bringing the real value to its users or not boosting Estonian economy significantly. The author then decided to take a look at the program through a different perspective and study it as a nation branding initiative, as it had the consequences that nation branding aims for – increasing awareness of the country and promoting its unique characteristics. The author wanted to explore the data in order to propose and discuss the possibilities of future progress of the program, as it is a unique idea that worth developing.

E-residency aims to make Estonia one of the most attractive environment for business worldwide. E-residency opens Estonian e-services to international entrepreneurs and makes managing a business way easier with an opportunity to establishing a company in Estonia and administrating related actions online. However, several issues are still unresolved and stopping e-residency from achieving its ambitious goals. The issues include a necessity of travelling to Estonia to open a bank account, inability to use digital

signature with those who do not have an Estonian digital identity card, a requirement of having a physical address in Estonia to register a company, lack of services designed for e-residents. These issues limit the activities that an e-resident can conduct. People applying for e-residency now either were related to Estonia beforehand or are just digital enthusiasts. Very few e-residents were actually establishing and running new businesses.

1.2 Research Questions

The objective of this thesis is to examine the concept of nation branding, analyse the case study of Singapore as a successful nation brand, Estonian nation branding strategy and eresidency as a nation branding case and discuss the opportunities for the project development considering the global trends. Based on the analysis some concrete proposals and recommendations for the future research will be made.

The research questions for the thesis are as following:

How government and nation benefit from successful nation branding?

In the environment getting more global and homogenous, does nation branding help to create unique image of a country and why countries are interested in that? The author studies the literature to define branding and nation branding concepts and explore the motivation for the countries to get involved into nation branding activities. In order to explore the topic, the following sub questions have been asked:

- What is successful nation branding?

The author explores the case of Singapore, which success in building strong nation brand is emphasized in global nation brands rankings.

- How e-residency became a successful country-branding case?

E-residency has attracted a lot of attention to Estonia and promoted unique countries' capabilities in ICT and e-governance. With a lack of academic works on the topic, the author studies a quantity of publication in online media and interviews e-residency team members.

How to scale e-residency programme worldwide?

E-residency has not fulfilled its aims yet. The author studies the following questions to propose the development solutions for the future:

- What are the obstacles in the e-residency programme?

With a lack of academic works on the topic, the author studies a quantity of publication in online media and interviews e-residency team members. The author also applies to the previous research by Terje Tampere on e-residency obstacles.

- How they can be solved?

The author analyses the data gathered on the program and global trends, proposes topic for a discussion and some possible action points to develop the program.

1.3 Thesis Structure

The thesis is written in eight chapters. In the first chapter the author introduces the research questions, motivation for the research. The second chapter is devoted to methodology to be used and the third one gives literature overview. In the fourth chapter, the author introduces nation branding concepts, importance of nation branding as a soft power tool, allowing countries to influence other international players' perceptions and decisions, and studies nation branding rankings and their findings. To provide better understanding, the author studies a case of Brand Singapore. In the fifth chapter, the author studies Estonia positioning as a developed digital society and e-Estonia concept, success of country e-governance system behind that and the recent initiative of eresidency. In the sixth chapter the author introduces global trends of rising uncertainty and decreasing trust in government worldwide, arguing them to be the reasons pushing people to find the ways to hedge their risks with digital solutions like cryptocurrencies and e-residency. The author brings an argument about the increasing interest towards cryptocurrencies and studies the case of bitcoin rising value worldwide. The seventh chapter initiates the discussion based on the findings of the thesis and proposes topics for the further research. The author then summarizes the thesis studies and findings in the eighth chapter and provides a list of references and appendices.

2 Methodology

The methodology of this paper is exploratory case study research. The case study in the research includes extensive literature and media research and interview of the e-residency team members. The author of the paper attempts to answer the research questions through analyzing existing concepts of nation branding, data available on e-residency from media and statistics and several academic papers and interviewing e-residency team members. In order to provide a better understanding of nation branding success factors, Singapore branding case is analyzed. The author analyses the global trends that have an influence on people applying for e-residency and discusses the opportunities to develop the program based on that.

A case study research let us understand a complex issue or phenomenon and is often used to widen the experience or strengthen the results of a previous research. A case study provides circumstantial contextual analysis of a limited amount of events or conditions and links between those. Case study research method has been used in different academic disciplines for many years. Many scientists have widely applied the qualitative research method to evaluate contemporary events and provide the basis for ideas application and methods extensions. [90]

The characteristics of a case study include several variables that must be linked with each other in a consecutive way to summarize different perspectives leading to a comprehensive narrative. A case study is an empirical research that studies a present-day phenomenon in depth and details within its real-world context. [90]

There are three different types of case studies: exploratory, descriptive, and explanatory. Exploratory case study usually involves analysis of the contemporary event and designing a hypothesis, which is examined in the research. Descriptive case studies are based on observational survey or archival research in order to answer the questions 'how' and 'why'. The explanatory case study research usually implies complex stories or events to gather the data. Various types of sources can be used in the case study research, such as documents, artefacts, participant observations, and archival. [90]

Critics of the case study method argue that the study of a limited amount of cases is not enough to offer solid grounds and provide reliability and generality of findings. Others believe that the intense exposure to case study influences the research findings. Some confirm case study method as useful only as an exploratory tool. However, many researchers keep on using the case study research method with success in carefully designed researches of current situations, issues, and problems. [73]

As e-residency is a relatively new concept, there is not enough of academic research on the topic. The author uses the exploratory case study research to study the works and publications on the topic that are already available, generalize the materials and design recommendations for future development of e-residency.

3 Literature Review

The thesis covers the following main subtopics: nation branding, e-residency and Estonian e-governance system, level of uncertainty and cryptocurrencies.

In the first chapter the author studies the concept of branding generally and specifics of nation branding. The nation branding as a term is known for couple of decades and is covered in academic research and media. Branding, a term that being known for longer time, has been studied in marketing related works. In the thesis the author provides more general definitions of branding from business sources, and relates to the authors like Kotler, Bureau, Macrae, Parkinson, Sheerman, Murphy, Knapp and their marketing and branding studies. [54] [14] [56] [65] [60]

The author appeals to Twitchell and "Branded Nation" study [79], pays attention to the work by Same and Solarte-Vasquez, "Country branding and country image: insights, challenges and prospects. The case of Estonia" [68] published in the Baltic journal of European studies and the paper by Dinnie, "Nation branding. Concepts, Issues, Practice" [23].

The author then draws a parallel between nation branding and soft power, as both concepts imply the ability of nations to influence other countries opinions and decisions with creating attractive image of themselves and promoting own values. The author appeals to the soft power concept, that was introduced by Nye in 1990 in the work "Bound to Lead: The Changing Nature of American Power"[63]. The author also makes a reference to Papadopoulos' "Place branding: evolution, meaning and implications" [65], and a study on nation branding of Qatar by Peterson [66]. The story of Qatar is considered important by the author as a case of a small state, with Estonia being a small state as well.

The author then studies the recent nation branding rankings, where methodology is created by international consulting and analytical agencies Brand Finance [13] and Future Brand [36].

Having analysed the literature and data, the author argues that the nation branding is more than just a graphical brand image or campaign, but the promotion of a country values that are aimed to increase its influence. Therefore, the successful nation branding should reflect the values that are definitely relevant and real for a country. Those values should be in place before starting to promote them. The nation brand is not what a country of branding believes it is, but what the recipients of branding message perceive about it.

Having studied the approaches to nation branding, the author then analyses brands Estonia is known for - E-Estonia and the recent initiative, which attracted a lot of international attention, e-residency.

Estonia has named itself as E-Estonia in order to attract international attention and promote own success in developing and successfully implementing e-governance solutions and services. The success story of the country has been studied by academics, mostly residing in Estonia. The author makes references to governmental projects aimed to promote Estonia, such as e-estonia.com, Estonian Information System Authority [32], programs like InvestInEstonia, StudyInEstonia, WorkInEstonia, and authors like Kotka [53], Krimmer [55]. The author concludes that the main idea the national media is translating to different target groups – the Country of Estonia being an effective digital society and therefore attractive destinations for investors and professionals, is reflected in the high international rankings such as Ease of doing business by World Bank [21], Freedom House index [35], International Tax Competitiveness Index by OECD [46][47].

E-residency is a new initiative introduced by Estonia being in its beta-version has not been studied enough yet and still evolving. The author sees it a nation branding case first, as it has attracted a lot of international attention to Estonia and promoted the country as digital society. The author then analyses the way the program is presented and discussed in media, evaluating the statistics provided by E-residency program in their dashboard and appeals to the master thesis study by Terje Tampere in 2015 [75]. E-residency mostly positively evaluated worldwide, but the author also put attention to the critique of the program, being found in online media and works by Krimmer [55], Farivar [34], Veskioja [81], Simson [74]. Tampere in her thesis and also e-residents in media state that there is no great value from which they could clearly benefit from right now and many obstacles to use the program opportunities fully remotely. The author agrees with the previous research, that there is not enough of political will to develop the program and develop its value in a long run.

The author then conduct a case study of Singapore nation branding. As it has been shown in the nation brands rankings, Singapore has been successful in building its own nation brand and delivering a message of being a IT developed and attractive destination for tourists, investors and international talents. The author analyses the initiatives behind Singapore success, studying the works by Morgan, Pritchard, Pride "Destination Brands" [61], Henderson "Uniquely Singapore? A case study in destination branding" [44], papers by Khan [52], Yue [91], Wong [87], Choo [16], Mahizhnan [57] and publication by The World Bank, The Economist, INSEAD. The case study of Singapore clearly shows the importance of governmental will and initiatives in developing key country industries and promoting its values worldwide.

The author then studies the rising value of cryptocurrencies as a global trend, analyzing the case of bitcoin. The author addresses the US Congressional Research Service, "Bitcoin: Questions, Answers, and Analysis of Legal Issues" [11], a paper by the CFA Institute "Crypto-Currencies. Intellectual Curiosity or the Future of Finance?" [19] and a research by PwC's Financial Services "Money is no object: Understanding the evolving cryptocurrency market" [59]. Based on the analysed studies, the author comes to a conclusion that the cryptocurrency has a great potential as a meaning of exchange and that the interest to the cryptocurrency is rising not only due to increasing digitalization.

In the next chapter, the author states the rising interest to the cryptocurrency is backed up with increasing global level of uncertainty and declining trust to the governmental institution. Individuals start to see a digital currency and decentralized system to manage the assets as a way to hedge their risks in the given circumstances. The author analyzed Economic Policy Uncertainty Index [27], the research by the World Bank "Global Economy in 2017: Hope and Uncertainty" [39] and their report on Global Economic prospects [4]. The data in decreasing trust in government around the globe is proved by the research by the WPP consultancy and their The Government and Public Sector Practice [88].

The trends of increasing interest towards bitcoin and therefore its exchange rates against world currencies amid the rising global uncertainty level is clearly seen. Recent academic research by Bouri, Elie, Rangan Gupta, Aviral Kumar Tiwari, and David Roubaud named "Does Bitcoin Hedge Global Uncertainty? Evidence from Wavelet-Based Quantile-in-Quantile Regressions" [15] concludes that bitcoin can be used as short term mean of reducing individual financial risks. Many media sources argues that there is a clear evidence between rising value of bitcoins and international events causing uncertainty, but there is no academic research proving that.

The author continues with drawing a parallel between increased level of uncertainty and increased number of applications for e-residency by analyzing the case of the United Kingdom after the Brexit vote. The statistical data provided by the e-residency program shows that more than a half of application from the UK arrived post-referendum. The high uncertainty level in an own country is named as one of the reason for applying for e-residency by Alex Wellman, e-residency Head of Marketing in an interview with the author.

4 Nation Branding

In the following chapter the author is giving overview of nation branding, defines the terms of nation branding and soft power, discusses the importance of those for small states and reviews the existing tools for measuring nation branding success. The following chapter also includes a case study of Brand Singapore.

4.1 Definition of Nation Branding

In the current realities, most researches and marketing practitioners tend to refer to and market regions, countries and cities, as they were products. Branding places has become important for national and regional officials in the recent decades. Countries have to compete for tourism, foreign investment, aid, membership in international unions and groups, customers for their products and services and for talents as corporations are competing for the customers. Countries, regions and cities are trying to differentiate from others using marketing branding tools to become more powerful brands in the eyes of their target audiences.

The target audiences may include tourists as well as own citizens and also investors, governments and the media. In general, the success of the place branding process determines by tourists' will to visit the place over again, and their ability to recommend to the others that they also visit the place. As for own citizens, the value is in loyalty to the place or place attachment. The concept of place attachment implies the emotional connection to the place and refers to the citizen' choice to live in one place over others. In the international political area, the successful country branding results in the more influence and support from the community and other political players. [37]

According to a business dictionary, "brand - unique design, sign, symbol, words, or a combination of these, employed in creating an image that identifies a product and differentiates it from its competitors. Over time, this image becomes associated with a level of credibility, quality, and satisfaction in the consumer's mind. Thus, brands help harried consumers in crowded and complex marketplace, by standing benefits and value". [82]

Macrae, Parkinson and Sheerman claim a brand to represent "a unique combination of characteristics and added values, both functional and non-functional, which have taken on a relevant meaning that is inextricably linked to the brand, awareness of which might be conscious or intuitive." [56]

Murphy states, that producers of goods have been using branding tools since the beginning of civilization to distinguish their products from others. Brand or mark, on the one hand, represented pride in the products, but more importantly, it was a mean of recognizing and specifying the product, so it can be repurchased and recommended to others. [60]

A brand must be distinctive, and the issue is in how to make it distinctive, standing out in the consumer's mind. It is not the brand owner who decides if their brand is distinctive. A brand is only distinctive if the consumer believes that it is. [26] "Since there is often little difference between products and brands in the same category, the only thing that differs is the story. Branding therefore is the application of a story to a product or a service. It is the story that makes one identify or desire a brand, more so than the product or service itself."[79] A brand is bonding together many different values, tangible and intangible, that together make it distinctive.

Nation branding is even a more complex phenomenon, uniting multiple disciplines other that regular brand strategy.

"The nation-brand is the unique, multi-dimensional blend of elements that provide the nation with culturally grounded differentiation and relevance for all of its target audiences. This definition acknowledges the multi-faceted nature of the nation-brand, together with the need to integrate national identity dimensions." [14]

A brand consists of brand identity and image. The country brand identity represents how a country should be perceived by the audience, a country's definition of itself. The country brand image is how a country is perceived by the audience. The brand image may not match the reality and brand identity due the individual perceptions. Therefore country branding is aimed to reduce the gap between the identity and image and is considered successful when country image matches with country identity. [69] In recent decades, brands expanded from consumerism to cultural beliefs and values. The expansion of branding from consumerism to cultural values and beliefs is seen, particularly in education, healthcare, culture and politics. This institutions use branding not just to state their ideological views and create cultural capital, but as well as consumer branding, to make themselves distinctive and therefore more desirable than the competitors. International relations and country branding is driven by the same principles. [79]

Nation branding is earning its popularity with more and more countries worldwide putting efforts into nation branding strategy development and execution. A successful and positive country brand is able to ensure crucial competitive advantage politically and economically. Countries engage in the nation branding to meet the three major targets: to attract tourists, to attract investments and to stimulate exports. Talent attraction, which includes skilled workforce and university students, is another target for many countries. Country branding is also aimed to increase currency stability, strengthen international credibility and investor confidence, international political influence, stimulate international partnerships. Nation branding helps to fight with misconceptions and stereotypes about the country and reposition itself. Besides targets aimed externally, nation branding may be directed to increase stability and loyalty inside the country. [23]

4.2 Nation Branding as a Soft Power Tool

Nation branding is often seen as a soft power tool. Soft power is a term brought by Nye to describe the alternative mean of influence in international relations rather that hard power such as military activities. [63]

Nye defines soft power in a various ways, such as 1) the ability to shape the preferences of others; 2) the ability to attract, and attraction often leads to acquiescence; 3) the ability to get others to want the outcome you want because of your cultural or ideological appeal; 3) a key element of leadership; 4) the power to attract – to get others to want what you want, to frame the issues, to set the agenda. [64]

The concept of soft power implies that a country having intangible resources and characteristics can become powerful enough to influence other states and make them act like this country wishes. A country can achieve the desired outcomes in the international politics by attracting other states to follow its values, its examples, its prosperity and its openness. [66]

Nation branding, on its turn, is a relatively new field of interest in marketing that studies and develops a nation's communication with the other states and their citizens. Both concepts of soft power and nation branding are devoted to international influence and image of a country in the people's minds.

The ability to formulate positive and attractive image of itself is especially important for smaller states, as they are more dependent on the international environment.

Peterson argues that smaller states are considered to be more vulnerable in their stability. The limited resources are seen as a crucial aspect in foreign policy actions and decisionmaking process of small states. The focus of a small state is narrowed to issues more directly affecting their independence and self-interests, and drives them to put more emphasis on parrying the interest of greater powers. On the other hand, it is argued that small nations are less resistant to external pressure, having less range of actions, and are more sensitive to external economic environment because foreign trade plays a great role in their economies. [66]

Peterson states that "small states are held to be particularly vulnerable to external forces. Their small size and strategic locations may embroil them in international politics. This increases security concerns for both the small states and the international system as a whole. Larger regional or great world powers may force a small state to acquiesce in an unequal bilateral relationship. This may include adherence to foreign-policy lines, participation in a collective security arrangement or defence pact with a major power, granting military facilities, purchasing arms, or even agreeing to support freer trade, which generally benefits the larger power more." [66]

As mentioned, smaller states are usually more limited in their resources, though they have to compete in the international area with the bigger states. Small states usually have small volumes of export and less exposed internationally, thus having light global political weight and being less in the minds of consumers. Small states then need to focus on very specific for them, niche aspect of their expertise to make a difference and stand out from other countries. [65] Estonia, focusing on promoting and exporting its developed egovernance solutions is a good example of this concept implementation. The advantages of nation branding and soft power development seem to be reasonably obvious for a small state. Effective nation branding helps to increase awareness of a small country and increase its prestige. The most important advantage, however, is that it assures the legitimacy of a small state, and increased awareness of and legitimacy accruing to a small state enhances the prospects of a state's survival. The unbranded state will struggle attracting economic and political attention. Image and reputation are thus becoming strategic values in the state's foreign policy. [66]

4.3 Nation Branding Indexes

In this work, two indexes measuring Nation brands success are studied. The first one calculated by a consultancy Brand Finance and the second one – by Future Brand.

It is known that brand recognition depends heavily on consumers' perception and their decision when buying a products. The same logic applies when companies are choosing a destination for further expansion. Of course, managers consider many different factors and data when deciding where to invest. However, there is also a less rational factor playing an important role: the perception of a thing and direct associations with its name. A study by Brand Finance suggests the connection between the countries with the most valuable brands and those that attract the most volumes of foreign investments, even though it might be complicated to evaluate the level of influence that those perceptions have on decisions about investments. [13]

In the latest Brand Finance's review US is ranked as the "world's most valuable country brand". The US is also defined as the most attractive destination for greenfield foreign direct investments in the period when values were estimated (October 2015 to the end of September 2016), based on greenfield investment monitor statistics. Most of the countries included in top 20 most valuable brands, were also in top 20 FDI destinations, like United Kingdom and China. However, there were exemptions as well, such as Sweden – despite being ranked 16th most valuable brand, the country was only 43rd for inbound FDI projects. Same is indicated with to Denmark and Italy.

Brand Finance produced different rankings to evaluate "brand value" and "brand strength". Brand strength is examined based on a country's branding campaigns, and considers a country performance across three key "pillars": goods and services,

investment, and society. Brand value is calculated by applying a country's brand strength to a "royalty rate" and to "brand revenues" based on GDP. [33]

These two rankings vary in results. Countries like Finland, Norway, Switzerland, Singapore, Hong Kong, and New Zealand have the top ten strongest brands, but out of top places in brand value ranking. It is understandable that the smaller size of the countries means that their brand simply cannot be applied that extensively to generate the same economic values as the bigger ones, such as the US. Still, these countries are far above their weight. For sure, Switzerland, Hong Kong and Singapore are among FDI Markets' top 35 investment destinations. [33] While New Zealand, Norway and Finland are not top-ranked as FDI destinations, meaning they are not fulfilling their potential as "strong brands" and have not reached the high inward investment rate. [13]

Another index reflecting success of countries efforts in its branding is the one by Future Brand.

The Country Brand Index by Future Brand studies how people perceive other countries around the world, using the same way as corporate brands are measured. The countries are ranked according to strength of respondents' perception. FutureBrand explores the hypothesis that nations can be studied as the combination of their identity and reputation. Strength or weakness of country perception influences decision that people make, whether to travel, live or invest in a country, according to the researchers. [36]

The results of the latest research by the agency show that only 22 out of 75 counties evaluated were qualify as "country brands". The Future Brand researches qualify a country as a country brand if the respondents express the perception that is stronger than average among the other states. The researches are evaluating the perception of a country though six dimensions: quality of life, values and business, culture, history, tourism and production expertise.

According to the research, people tend to travel, recommend, do business or invest more in the countries that they perceive as country brands. This implies that being perceived as a country brand is a competitive advantage for a country. The respondents feel more confidence and connection to country brands compared to other destinations in the study. Perception of products manufactured in a country as quality made, as well as a will to live, move or study in a country are the crucial force of a country brand.

Future Brand collects quantitative and qualitative data from opinion leaders and frequent travellers in USA, Canada, UK, Australia, Brazil, Argentina, Mexico, Germany, France, Russia, Turkey, South Africa, UAE, India, China, Thailand, Japan in order to form the ranking. The questionnaire was designed to understand how strongly audiences perceive countries, in the rank between Awareness to Advocacy. [36]

Japan is leading in the The Future Brand research for the first time. South Korea and Singapore are other Asian countries joining the top ranking. Nonetheless, the top twenty ranking is mostly filled with European countries, with Switzerland and Germany on top and followed by Scandinavia. Estonia is ranked 23rd among European country brands and 47th in the world ranking (see appendix 2).

The Future Brand researchers state that being well known for a country does not always mean bringing strong positive associations and creating strong country brand. For example, Italy is 5% more well known than Japan , but 17 positions lower in the overall ranking, while Finland, Singapore, Iceland and South Korea lead the ranking with awareness level below 70%. The researches see the correlation between the global events hosted by a country and strengthening a country brand. Another factor that strengthen a country brand is consumer brand this country is known for in multiple consumer categories. Top country brands, the study shows, are seen to have the most momentum in innovation, technology and sustainability.

The researchers conclude that the countries with the strongest country brands have them as a competitive advantage. People are more likely to visit those countries and to recommend others the destinations. Respondents have more confidence in countries perceived as country brands, they are more likely to make businesses with those countries and more likely to buy products produced in there.

In conclusion, nation branding is relatively a new concept, combining the experience in the fields of in marketing, branding and public relations. More and more countries are engaging into nation branding activities to stand out from the others and state their uniqueness in the globalized world. Nation branding activities are meant to create a positive image of a country, fight the stereotypes and to attract tourist, investors, professional workforce and increase loyalty internally. Nation branding is often seen as a soft power tool, an ability to influence other international players perception and opinion towards a country. Soft power is stated to be of crucial importance for smaller states, as they are seen more dependent on greater forces economically and politically. The nation branding rankings reflect that the countries with stronger brands are seen as more reliable and attractive, for business, investments, visits and consuming the produced products and services. The smaller countries, often limited in resources, need to stand out with very specific, niche products and services to attract attention and interest and strengthen the perception of themselves by others and increase their nation brands value.

4.4 Case Study: Brand Singapore

Singapore is a sovereign city-state in Southeast Asia, strategically located at the Malay peninsular between the Pacific and Indian Ocean. The territory of Singapore consists of one main island and 62 other islets with total area of 719.1 square kilometres and population of 5,6 million people. [21] Even lacking any natural resources, Singapore is one of the most abundant and stable Asian state. Singapore successfully uses its strategical marine position, playing the role of the gateway to South-East Asia with its seaport being one of the world's largest and busiest. Singapore is a country of multicultural backgrounds united by the use of the English language. Singapore's belief and efforts put into technology development, education and enterprise advancement resulted in Singapore being an education hub, and an attraction of medical tourism and foreign investment. [12] Singapore is considered to be on of the strongest country brands by Future brand, the strongest one by the fDintellegence and the most tech-savvy country. [85]

Singapore is a young country starting its history as an independent state since 1965, when it gained independence from Malaysia. Before that, Singapore was known as the Lion City as it was named by the prince Sang Nila Utama. In 1963, the former Prime Minister Lee Kuan Yew branded the country "Green Singapore" to attract foreign investors. The government allocated resources to building and developing a natural environment, trees planting and natural recreation areas for the city during the sixties and seventies of the twentieth century. [85] The Prime Minister Lee Kuan Yew has then developed a brand Singapore into a "Garden City". The aim of the this country branding attempt was to attract foreign investors and also raise the spirits of Singapore governors and citizens. The Prime Minister Lee Kuan Yew is considered to play an important role in building Singapore image and its road to modern success: a country with strong infrastructure that is modern, and politically safe. He saw the potential of incorporate "green and clean" concept into the environment while building up independent Singapore. Singapore became a first world country from a third world one in just about 30 years. [61]

The Singapore brand name has changed many times after that. In between sixties and seventies, it was "Instant Asia". In the 1985, the brand was "Surprising Singapore". In 1996 and for the following seven years, the "New Asia – Singapore" campaign was adopted. The focus of the Singapore branding campaigns was to promote Singapore as a tourism destination for the Far East and Australasian region. The Singapore Tourism Board also named Singapore as the tourism capital of South East Asia. The Singapore Tourism Board made a significant effort in creating a new marketing strategy for the country. The authorities wanted Singapore to become a regional hub and wanted the world to see Singapore as a New Asia. The authorities wanted Singapore as a New Asia. In 1997, over 1200 tourists were questioned when leaving Singapore about their preference of Singapore alternate brands. This concept received a lot of criticism as the nature of country branding is represent a country own values rather that visitors' perception. [61]

The recent brand "Uniquely Singapore" highlights Singapore's distinctive mix of splendid culture and the modern attributes that could attract the visitors by offering unique and diverse experiences. The target audience for the branding campaing is not only the tourists, but also business partners and Singaporeans. The Singapore Tourism Board want Singapore citizens to become the ambassadors of the country. According to an the Tourism Board employee, "Uniquely Singapore speaks of a destination that offers a unique blend of the best of the modern world and rich cultures to deliver enriching experience. The brand position differentiates Singapore as a premier destination, offering a unique array of enriching experiences from traditional cultural experience to innovative modern arts performances, all delivered with a high level of service quality, reliability and efficiency." [87]

The tagline of the campaign "Uniquely Singapore" was placed on the Singapore public transport to bee seen around the city and on guiding materials for tourists from all over the world. Yet, many locals argued that they do not see the word "unique" as related essentially Singapore because every country is unique in its own way. Henderson claimed that "unique" is bland, regular, and over generalized term and applies to every destination". Henderson says that sending marketing message of Singapore "uniqueness" through normal media channels would not reach its goal. Henderson also states that in the past Singapore was known as "staid, restrictive, boring, conservative, too strict with nothing much to do on a tiny Island." [57] The features that we brought up by the Singapore Tourism Board in the "Uniquely Singapore" campaign existed can be found in other countries such as Hong Kong or Malaysia. The "Uniquely Singapore" tagline itself did not highlight any competitive advantage of Singapore over the neighbouring countries or other competing countries in the global market. [44]

The country branding is often considered as a tourism area activity, but there are other target groups to address as well. Even though the tourist attraction strategy plays an important role in country development and creating its image worldwide as an attractive travel destination, there are other tools that are important for attracting investors, professional expats and creating a country brand. As country branding represents country own values, it is important to let the media and the world know about country internal successes and ambitions plans.

One of the things that makes Singapore known as one of the most technologically advanced countries and an "intelligent island" is a Smart Nation initiative. Smart Nation is administrated by the Smart Nation Programme Office in the Prime Minister's Office and supported by other governmental agencies. Singapore "strives to become a Smart Nation to support better living, stronger communities, and create more opportunities, for all." Following the programme strategy, "smartness" reflects how citizens and businesses use the technology to address their daily problems, rather then the complexity of the technology. "Citizens are ultimately at the heart of our Smart Nation vision, not technology!" [2]

There are five key elements identified as having important impact of the citizens and society and which can be improved with technology and Smart Nation initiative. The initiatives are transport; home & environment; business productivity; health and enabled

ageing; and public sector services. The Smart Nation activities themselves are not a marketing campaign, but development program, though with proper marketing of those initiatives, Singapore government addresses own citizens and attracts international professionals, international businesses and investors and reinforces brand Singapore. [2]

Singapore is considered to be one of the most successful states in attracting foreign entrepreneurs to the country. The World Bank ranked Singapore number two after New Zealand in its Ease of Doing Business report, 2016. [21]

The high ranking shows Singapore as an attractive business environment for many international business persons from the countries lacking ease of doing business. The key to success in becoming international business hub is considered to be the Singaporean government and its initiatives. [52] Of course, factors like strategical geographic location, developed infrastructure, stable political environment, western legal system, favourable tax environment, qualified workforce are playing their role in creating attractive business environment. But the development of those are the results of strategic governmental decisions and political will to make Singapore an attractive place for own citizens, international business. [91]

Singapore's government has been proactive in discovering and implementing new market opportunities and investing in promising new businesses. Many other governments around the world expect country's private sector to lead and develop the new opportunities, but in Singapore the public sector has taken this role. [57]

The Singaporean government emphasized the importance of external trade and foreign investments as well as creating business-friendly environment and policies. The National System of Innovation in Singapore has been created to develop and strengthen technology expertise that helped Singapore to become one of the most countries worldwide. The advanced level of technologies in Singapore helped to attract many international businesses to the country. [87]

Singapore, a small state, lacking natural resources, saw its competitive edge in the ability to intensify its information and communication technologies usage and expertise. Singapore started to promote the Internet to its population in 1990. [51] ICT sector development strategy and vision of Singapore as an Intelligent Island were introduced and set in 1992. [16] To ensure country development as the top electronic hub, Singapore

attracts international talents to the country. Global Talent Competitiveness Index 2017 reflects Singapore success, as the country is ranked number two after Switzerland. [40]

Thus, Singapore is interested in attracting tourists, international talents, investors and businesses and building loyalty and inspire Singaporeans. The Singapore Tourism Board develops destination branding to keep tourists coming and visit again and to inspire own citizens to become country's ambassadors. The Prime Minister office along with the other governmental agencies are responsible for country internal development, which results in fortifying its attractiveness as a business and educational hub for international investors and professionals and building citizen's loyalty to the own country. The government of Singapore developed a strategy to success based on a vision to become an Intelligent Island and Smart Nation. The government of a small nation of Singapore understands that in order to become recognizable on the international arena, they need to develop unique competences, address and attract international enthusiasts, professionals and talents to the country. Singapore success is reflected in many international rankings, such as number 1 country brand by fDIntellegence, number 2 in Ease of Doing Business by World Bank, number two in Global Talent Competitiveness Index. The key role in country success and attractive image worldwide is played by the government and is achieved due to the government dedication to its goals, proactive initiatives and a political will.

5 E-Estonia and E-residency in the Nation Branding Perspective

In the following chapter, the author provides the historic background of current Estonian success in e-governance, evaluates factors that helped Estonia to succeed in the field, introduces the case study of e-residency programme, its current success as a nation brand.

5.1 Historic Background

Estonia is known as a one of the most successful examples of implementing e-solutions on governmental and daily levels.

Estonia gained its independence from the Soviet Union in 1990 and since then made significant achievements in becoming active player in the world economy and attractive destination for businesses. Estonia is an active member of the European Union, United Nations, NATO, Organization for Security and Cooperation in Europe, Organization for Economic Co-operation and Development, Council of the Baltic Sea States, Nordic Investment Bank. Many international organizations rate Estonia quite high when it comes to the business environment.

Estonia leads many of the international charts, indicating efficiency of the country operations. In the globalized economy, where money, people and business are moving quite easily, countries compete for attracting international businesses and investments. Estonia has joined the race not that long ago, when gained its independence 27 years ago. Estonia had to undergo transformation and reforms and now according to the world rankings is doing well in becoming one of the most attractive destinations for business.

Estonia is rated number of in the OECD International Tax Competitiveness Index 2014, 2015 and 2016. The ITCI is calculated based on 40 tax policy variables, including corporate income taxes, individual income and payroll taxes, consumption taxes, property taxes, and the treatment of foreign earnings. [46]

For countries with open economy, tax system is a crucial competitiveness component. Being able to operate internationally, businesses are free to decide where and how much to invest and which places are the most suitable for particular type of operation, based on many factors and tax system transparency and easiness is one of the most important points.

Estonia gains such impressive results, being called the country with the most competitive tax systems, thanks to four crucial components. "First, it has a 20 per cent tax rate on corporate income that is only applied to distributed profits. Second, it has a flat 20 per cent tax on individual income that does not apply to personal dividend income. Third, its property tax applies only to the value of land rather than taxing the value of real property or capital. Finally, it has a territorial tax system that exempts 100 per cent of the foreign profits earned by domestic corporations from domestic taxation, with few restrictions," the Tax Foundation says in its 2016 report. [47]

The World Bank's Doing Business 2016 report rates Estonia number 16. Estonia is one of the nine European countries included in the report. This rank on economic performance is one of the most well-respected in the world, and the competition for the upper places is quite fierce. [86] The rank is based on the distance to frontier score. The score

measures the distance of each country's economy to the "frontier," where "frontier" is the best performance rate observed on each of the indicators among all the countries in the World Bank Doing Business rank since 2005. Estonia gains the highest rates in Registering Property, Dealing with Construction Permits, Starting a Business and Enforcing Contracts. [25]

The Freedom House Freedom of the Net report ranks Estonia number two third year in a row. The report names Estonia "a model for free and open internet access as a development engine for society". With the Internet becoming more and more important in people's life and often a very strong and for many – the main source of information, freedom of the net becomes equal to the freedom of the world and information overall. [35]

All of the above-mentioned facts not only make Estonia an appealing place for international business, but also provide its citizens with an opportunity to use and enjoy its effective digital services every day. Estonia now is known as one of the most technologically advanced countries in the world and often called "e-Estonia". In e-Estonia its citizens file their tax declarations, sign documents, get prescriptions and receipts digitally, and even vote online using a state-issued ID-cared as a secure way of online authentication.

How did Estonia achieved such good results in building up a digital society and increasing its attractiveness internationally?

In 1996, the Estonian government initiated a "Tiger Leap" project, which aim was to concentrate and prioritize the development of the Information Technologies infrastructure and provide all the public schools with personal computers students may use and study with. The next step was intended to link governmental institutions together. One of the very significant result of the digitalization project successful implementation was a possibility to vote online on the presidential elections in 2005. Estonia was the first country in the world that hold the nation-wide internet elections. Two main initiatives helped the idea to succeed. [72]

The first one is the X-Road. The X-Road is "the backbone of e-Estonia. It's the invisible yet crucial environment that allows the nation's various e-services databases, both in the public and private sector, to link up and operate in harmony." Estonian databases are

decentralized, it has no single owner, every institution is using the database that is correct for them and the new services can be added one at a time, when they are ready. The X-Road connect these databases, allowing them work together with maximum efficiency. E-solutions that require information from different databases use X-Road. The outgoing data is protected with digital signatures and encryption and incoming data is authenticated and logged. Now X-Road will connect Estonia and Finland, which are already closely connected geographically and culturally and many people often move between these two countries. [89]

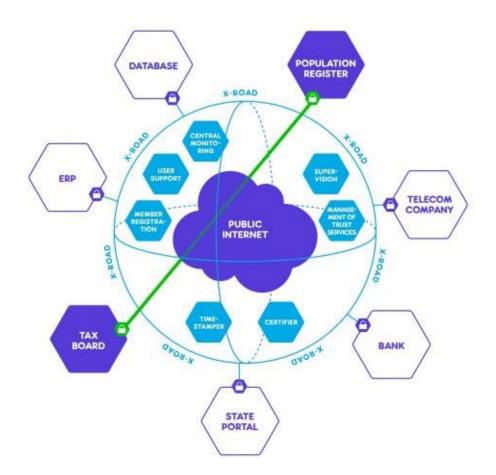


Figure 1 – X-Road [89].

The second crucial initiative that ensures digital services effectiveness and security is a national ID-card. The ID-cards were introduced nation-wide in 2001. The ID-card is a main identification document for Estonian citizens, not only in physical, but also in a digital environment. The ID-card is an obligatory document for Estonian citizens. The digital signature is affixed to the ID-card and with a help of special software it is possible to digitally sign the document. Digital signature is equal to handwritten one and can be used in business, governmental or private relation. Since spring 2007, it is also possible

to use mobile ID-card for online authentication and signing documents. Each card has an electronic processor chip, which contains a personal data file, an authentication certificate and a digital signature certificate. The security of digital authentication and digital signing is ensured by the Public Key Infrastructure. The infrastructure also allows secure exchange of the documents with an encrypting key pair: a public encryption key and a private decryption key. The state of Estonia assures a public key infrastructure operations. A significant part of the services associated with PKI is provided by and purchased from the private sector, e.g. the certification, the infrastructure for making enquiries about the validity of the certificate, the infrastructure for distributing the public key (LDAP service), the key creation environment (e.g. ID card chip). [32]

As we can see, the governmental will and initiatives played a crucial role in resolving the post-soviet crisis in Estonia with the help of e-governmental tools. Estonia has become one of the most digitally developed nations in the world. It was discussed in the first chapter, that nation branding activities become successful when they promote the real and existing values and achievements of a nation, which are informational technology advancement, e-governance and freedom for Estonia.

5.2 E-Estonia

Estonia has gained a reputation of an "excellent e-state" [53], thanks to well developed egovernance system and services, that are keep progressing with more and more administrative activities becoming paperless. Estonia is promoting own progress using a term e-Estonia when introducing the country to the world.

"E-Estonia is a term commonly used to describe Estonia's emergence as one of the most advanced e-societies in the world – an incredible success story that grew out of a partnership between a forward-thinking government, a pro-active ICT sector and a switched-on, tech-savvy population." The term refers to the digital society activities, common in Estonia, such as possibilities to vote online, registering business, filling tax declarations online and signing documents digitally. [1]

Estonian e-governance system is especially strong in providing its services to public, including private sector as well as physical persons. Many services are developed and maintained with the public-private partnership. Development of e-governance in Estonia

is driven by the aim to provide transparent and easy-to-access pubic sector services to its citizens and also to ensure attractive business environment for entrepreneurs. Estonia'a success in the field has attracted international attention and many other countries are willing to learn and implement Estonia experience. E-governance academy has introduced e-governance solutions, based in Estonian expertise in the field, in 26 countries in 2015. [28]

We can see that Estonia is addressing other countries governments and citizens, promoting its e-governance solutions and spreading the knowledge of implementing those with consulting the other governments.

Estonia addresses the investors though the Estonian Investment agency. The advantages of the country for the investors are considered to be the location, ease of doing business, well educated people and high level of ICT environment development. [31]

Estonia is working on attracting international students and new talents to the country with a program "Study in Estonia". The program is actively using the arguments of e-society development in the country, when answering the question "Why Estonia?" Estonia is addressing the international students and graduates, providing tuition wavers for many programs, with focus on ICT, and possibilities to stay and work in Estonia after graduation. [80]

The web portal "Work in Estonia" is designed to consolidate attractive job offers from Estonian companies for professional foreign employees. The portal promotes Estonia as an attractive working destination, using e-Estonia term, calling the environment in the country dynamic and hassle-free. Well-known Estonian ICT companies such as Pipedrive, Playtech, Tieto were searching for employees through this program. [80]

"Estonia is not interested in being an outstanding state for its cheap labor force, but a state which stands out because of its smart production. Our aim is to increase added value in industry by creating smarter jobs, and it is our ambitious plan to retrain people according to the requirements and needs of the new market." [80]

The government of Estonia and private sector are actively cooperating in creating smarter jobs in the market. The ICT sector of Estonia is investing in and cooperating with universities to promote technological education starting from school age. The Estonian ICT sector players show great interest and initiative in bringing international know-how and experience to the country. [80]

The advanced level of Estonian e-governance, the prevalence and acceptance of the services helped the country to gain international interest. The success in the ICT field allows Estonia to confidently use the argument of own expertise when addressing the other countries government, attracting foreign investors and talents. Estonia has managed to export own knowledge about developing e-services through consultations, but did not export the e-services so far.

5.3 Case study: E-residency

With a national ID Card being popular and useful tool to optimize daily operations and communication between citizens, businesses and the government, the idea of offering the analogical services to the foreigners has appeared. Starting from 2014, Estonia opens the ability to become e-Residents to people all around the globe. Estonia has become the first country to offer every world citizen a government-issued transnational digital identity, that allows to register and administrate a company online effectively and securely.

E-Residents are able to digitally sign documents and contracts, verify the authenticity of signed documents, encrypt and transmit documents securely, establish and administer a company in Estonia online, conduct e-banking and remote money transfers, access online payment service providers, declare Estonian taxes online. [1]

As the program is still in its beta-version, there are some difficulties that an e-recidency applicant might face. They include a requirement of having a physical address in Estonia to register a company, though it night be solved with an external service provider. Then, e-residency does not automatically imply tax-residency, so cases of double taxation may happen and an additional consultation of taxation specialist is needed.

All of these services, that has been available for Estonians for over a decade with use of a digital ID card, are now becoming obtainable for all the others. E-Residents receive a smart ID card, similar to one that Estonian citizens and residents have. The not being a prove of physical identification, is a prove of a person's digital identity. Important that digital signatures and authentication, that are available with a smart ID card, are legitimate equivalents of handwritten signatures and physical identification in Estonia and anywhere around the world by an agreement between parties. Digital signature that e-Residents are using is qualified as an e-signature according to EU Directive 1999/93/EC and E-SIGN law (15 USC 96). Both the European Union and the United States recognize e-Residents' digital signatures as having legal status. The e-resident smart ID card and services provided are built on state-of-the-art technological solutions, including 2048-bit public key encryption. Security of a smart ID card usage is ensured with a microchip it contains and two security certificates: PIN1 for authentication and PIN2 for digital signing. PIN1 contains 4-digit number for authorization and PIN2 contains 5-digit number for digital signing. [1]

The e-resident smart ID card is not a physical identification or a travel document, it does not display a photo and not equal to citizenship, tax residency, residence or right to entry to Estonia or European Union.

The e-residency program has received a lot of positive feedback and a lot of interest from many, including opinion and political leaders like Edward Lucas, Senior Editor of the Economist, Shinzo Abe, Prime Minister of Japan, Peter Kentie, Dutch marketing expert, Angela Merkel, Chancellor of Germany, Jean-Jacques Dordain, former Director General of the European Space Agency, Prince Andrew, The Duke of York and others. [76]

In order to apply for e-residency, a person need to fill in personal data on e-residency web page, attach a scan of an ID-document, being a card or a passport, and a document-format photo. The application fee is 100 euros. Then, the application is processed by the Estonian Police and Border Guard Board. Once application is approved, an applicant is notified via e-mail. When the smart ID card is issued, an applicant has to pick it up in the Police and Border Guard Board office in Estonia or an Estonian embassy or consulate where one can be identified physically. [3]

Over 19,000 people have already applied to become e-Residents according to E-residency dashboard. Applications have been sent from 137 countries, the majority being from Finland, Russia, the United States, Ukraine, and United Kingdom. [20]

The goal for 2016-2017 is to have 60,000 e-residents and the goals for the future are even higher. The very ambitious goal is to attract 10 million e-residents by 2025. [83]

With 1.3 million citizens Estonia is a small country. Only 650,000 citizens out of 1.3 million are of working age, and a number is expected to decline in the next decade due to an ageing population and emigration. [58]

Taavi Kotka, who used to be a chief information officer in the government of Estonia, explans: "Attracting immigrants is just not an option for us. People would rather choose Sweden or Norway. Physically, we're not able to improve our population. So why not do it online?" [8]

Even though the e-residents are not citizens, the government believes they still can contribute to the state economy by using Estonian banks and establishing companies in the country. The users of the program will also help to promote the country's reputation as a digital pioneer and digital society.

5.3.1 Critique of E-residency

As any new and growing project, e-residency program faces critics.

Some of them address the use of digital signature outside of Estonia. One needs to find a partner or partners who either reside in Estonia or are e-residents as well to use digital signature as there are not many countries with whom our e-residents could exchange digital signatures with. Thus, the operations and parties that might be involved are limited. [55]

Then, there is still a need of physical presence on some stages of applying for e-residency, e.g. you need to come to the Estonian Police and Border Guard Board, consulate or embassy to be identified. On one hand, it ensures security, on the other hand, it creates barriers for applicants, who live in countries without Estonian embassy or consulate or outside of the county capitals, where embassies or consulates are usually located. [3]

The same as abovementioned issue, the need of physical presence in an Estonian bank when opening an account creates barriers for applicant. The possible solution of the issue might be in identification though video connection, which several of the Estonian banks are now testing with their existing clients among Estonian residents. The e-residency team hopes that the issue will be solved in the year 2017. However, for e-residents requirement are still the same so far and physical presence is a must to open a bank account. [34]

When a company is established in Estonia, the owner has to apply for a VAT number. Application is usually fulfilled online, but the Estonian Tax and Customs Board has a right and actively implementing the practice to invite the board members to answer additional questions. With a short notice given, e-residents face a problem of making another trip to Estonia. [81]

Another discussion, being it critical or positive – depends on the point of view, is devoted to e-residency as an alternative to offshores schemes, that are traditionally are not warmly welcomed by the governments of not-offshore countries. Representatives of e-residency program and Estonian Police and Boarder Guard Board claim that all suspicious applications with unknown money supply will be denied. So far, the number and activities of e-residents have not been that big to decide if there is a real potential of financial or taxation violation. [84]

Another problem is lack of services designed especially for e-residents. General level of e-services are high and they are actively used by Estonians, but do not have enough export potential. [50]

In order to meet the increasing demand for more user friendly e-services and offer the best services to e-residents, the state needs to invest more into user experience. Estonian e-services environment is considered lacking user-experience design and simplicity. [74]

Terje Tampere in her thesis from 2015 argues that e-residency is not a fully virtual system and is it centralized an provided by a state, it is quite dependent on location, which creates limitations for e-residents. Many services are likely to be remained only for the actual residents of Estonia. Tampere in her research has found that the main weakness of eresidency as seen by the e-residents themselves is in uncertainty of benefits that it brings to the users. Tampere states that e-residency will loose the attractiveness if no new innovative services are provided to e-residents. Creating new e-services for e-residents requires cooperation between private and public sector. Private sector is able to develop the technical side of the services, but only with government will the e-residents issues can be solved. [75]

6 Increasing Level of Uncertainty

According to Global Economy Policy Uncertainty Index, the highest levels of uncertainty since the start of observation in 1997 were reached in 2016 – followed by Brexit, European Union immigration crisis, elections in the United States, polemics in France and United Kingdom.

The Global Economy Policy Uncertainty Index (GEPU) is a "GDP-weighted average of national EPU indexes for 18 countries: Australia, Brazil, Canada, Chile, China, France, Germany, India, Ireland, Italy, Japan, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States. Each national EPU index reflects the relative frequency of national newspaper articles that mention a trio of terms related to the economy, policy and uncertainty." Each monthly national EPU index value is proportional to the share of own-country newspaper articles that discuss economic policy uncertainty in that month. [27]

The biggest increase in uncertainty was observed in United Kingdom – 169%, China – 83,2%, Spain – 53,5%, Japan – 50,6%, Germany – 44,7%, Australia – 44,6%, France – 28%, Brazil – 22,6%, United States – 19,8%.

According to the researchers, the newspaper indexes are not the single source reflecting growing global uncertainty. The concept was proved by comparing the newspaper data to similar methodologies using the Fed's Beige Book reports, the risk factors listed in company earnings reports and the CBOE Volatility Index. Other sources reflected the similar situation as newspaper GEPU index. The newspapers do reflect the worries of the current times, but also influence people's thinking and perception of the events. [41]

According to the World Bank, 2016 can be summed up as following:

"Stalling global trade, weak investment, and heightened policy uncertainty have depressed world economic activity. Global growth is estimated to have fallen to 2.3 percent in 2016 - the weakest performance since the global financial crisis and 0.1 percentage point below June 2016 Global Economic Prospects forecasts. Global growth is expected to rise to 2.7 percent in 2017, mainly reflecting a recovery in emerging market and developing economies." [4]

The World Bank researches state that in 2017 advanced economies will continue to be characterized by weak growth and low inflation rate, amid increasing uncertainty about future policy direction. After slowing in growth to 1.6 percent in year 2016, growth is seen to recover slowly in 2017-19, but the variety of possible outcomes has significantly widened after the United States elections and the United Kingdom's referendum to leave the European Union. [4]

Economy policy uncertainty affects the decisions that investors, businesses and private individuals make, leading to underinvestment, reduced hiring and lower consumer spending. In the recent five years, the average global uncertainty index is estimated to about 60 percent higher than in previous years, even higher than during housing crisis and recession in 2008. Most of the recent increases have been caused by occurrences in other counties — including the Brexit voting results, elections in the United States, crisis in Brazil, military conflicts in Turkey, war in Syria. Economic uncertainties lie those can influence short-term business decisions like hiring, as well as long-term plans for factory construction or international expansion. The indexes are designed as a measurement to be used to when studying how uncertainty affects long-term changes in the economy. Hedge fund managers and other market participants use the timely information they provide when making strategic decisions. [22]

According to The World Bank, "uncertainty surrounding global growth projections has increased and risks continue to be tilted to the downside. This reflects the possibility of a prolonged period of heightened policy uncertainty following recent electoral outcomes in key major economies, mounting protectionist tendencies, and potential financial market disruptions associated with sharp changes in borrowing costs or exchange rate movements."[4]

Rising global level of uncertainty is also reflected in lower trust to the government as a worldwide trend. Many believe that weakened and distrusted central governments around the globe have been incapable of responding to the way the internet and social media have empowered populist but previously unpopular groups. [38]

The research by WPP and The Government & Public Sector Practice shows that the respondents to The Leaders' Report share a global feeling that trust in government has decreased drastically. Worldwide, only 40% of citizens trust their government. Even in

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countries with the highest levels of public trust, like the United Arab Emirates or Singapore, one citizen out of four claims to distrust the government. [88]

6.1 Rising Value of Cryptocurrency: Bitcoin

A cryptocurrency is a medium of exchange such as other currencies, including the US dollar and euro. The first cryptocurrency - Bitcoin, the creation of a computer programmer Satoshi Nakamoto, was introduced in January 2009. [11]

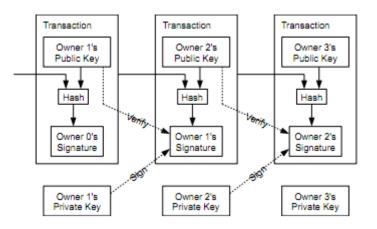


Figure 2 – Diagram of a Bitcoin by Satoshi Nakamoto [10]

Cryptocurrency does not have any physical form, unlike other currencies and is not ensured by any government or a legal entity. All transaction in the decentralized currency network are performed by the users of the system, and the supply of the currency is not dependent on any central bank. Cryptocurrency term implies that the technology is based on cryptography, which is public key cryptography. The technology implies that the communication in the system is secure from the third parties. [11]

The Bitcoin protocol includes the transaction tracks of the whole bitcoin money supply. It is a widely distributed digital ledger, a technology known as blockchain. Each bitcoin transaction history can be followed through to the initial release, which is not possible with regular cash. Cryptography techniques united with the "distributed digital ledger" qualify Bitcoin as a medium of exchange, as it has two compulsory characteristics of of an exchange medium. It has proof of ownership and proof that the it has not been doublespent. The digital signature, based on a cryptographic combination of a public alphanumeric key, proves an ownership. The technology allows miners to look at the transactions history of the user in the blockchain and verify that the payer owns the assets that has been transferred. [19]

To assure that the funds are not double-spent, transactions are recognised as complete only when they are visible in the "master ledger" of the system. Transactions appear in the "master ledger" in blocks every 10 minutes. Usually, at least six miners must confirm the appeared transactions for the system. When a block of transactions is accepted, they move to the next block of transactions. The miner who was the first to verify the block of transactions, gets a reward of newly created bitcoins. That is how new bitcoins are mined and added to the system. The transaction fees may be volunteered to a transaction, then the node get that as well. This technology let the participants make transfers across the Web without having a centralized system. [19]

A significant amount of consumers, merchants, entrepreneurs, technologists, investors, and regulators, who accepted the technology, allowed cryptocurrency earn its sense as an an alternative method of assets storage and exchange. Clearly, the cryptocurrency is already bigger than a fashionable phenomenon. Cryptocurrency represents the start of a new phase of the markets, driven by technology. These may disrupt traditional market strategies, conservative business operations and practices and macroeconomic efficiency overall. Cryptocurrencies carry innovative potential, allowing users access to the global payment system from anywhere. Participation is limited only by access to the technology. "The question is no longer whether cryptocurrency will survive, but rather how it will evolve, and when it will reach maturity". [59]

A lot of talented technologists devoted their activities to cryptocurrency mining, developing exchanges and wallet services. The cryptocurrency market has only began attracting talents that could bring the technology and industry to the new level. In order to earn acceptance of the wider public, cryptocurrency needs to be seen as user-friendly solution to their daily transactions. It also creates huge potential for the developers to enter the market with own new applications based on the technology. [59]

Government attitude towards cryptocurrencies varies widely worlwide. Different governments are inconsistent about classification, treatment and legal status of cryptocurrencies. For example, Australia, Canada and Singapore have either already released or are about to release tax guidelines cryptocurrencies treatment. The UK government is focusing on developing financial crime regulations for companies operating digital currency. [59]

PwC forecasts that cryptocurrency growth over the next years will remain solid, pointing out that this growth has started from a very low point. Usage frequency is forecasted to stay relatively low. Experts believe that the highest potential for cryptocurrency technologies is in the developing economies. Just like appearance of mobile phones made it unnecessary to develop telephone lines in African countries, cryptocurrency may stimulate development of next level financial ecosystems without classical large infrastructures. The cryptocurrencies greatest legacy and achievement may come from the ability to offer lower cost solutions for economically disadvantaged nations. [59]

6.1.1 Global Uncertainty behind Bitcoin's Growth

A recent study on the bonding between growth of bitcoin and increasing global uncertainty, conducted by the researchers from the University of Pretoria, South Africa, found out that there is a positive connection between the cryptocurrency and level of uncertainty. The study analysed the period from the beginning of March, 2011 to the beginning of October, 2016 in the 14 counties using the VIX index, a key market risk indicator, that identifies investors' expectations and sentiment. The researchers examined Brazil, Canada, China, France, Germany, India, Japan, Mexico, Russia, South Africa, Sweden, Switzerland, the UK and the US, and concluded, that:

"Bitcoin is shown to serve as a hedge against uncertainty at the extreme ends of the Bitcoin market and global uncertainty, but at shorter investment horizons. Therefore, short-horizon investment in Bitcoin can help investors hedge global equity market uncertainty, especially when the market is functioning in bear and bull regimes and also when uncertainty is either low or high." [15]

The role of bitcoin as an instrument to manage risks and uncertainty has been widely discussed in recent times.. Bitcoin's perspectives accelerated since with a number of monetary miscalculations by authorities in different countries as China, India, Brazil, Venezuela, Nigeria and others, increasing interest in bitcoin according to internet searches, pushing the price higher and higher. [70]

The confirmation of bitcoin role in hedging against uncertainty may provoke increase in interest in cryptocurrency as an asset, increasing its popularity as payment method and pushing more market players to use it.

In the circumstances of rising global uncertainty, interest to cryptocurrency as a back-up asset and risk minimizer increases. More and more countries understand the increasing value of cryptocurrency and embrace the technology, developing new regulations allowing to deal with it.

"Political troubles in the US and Europe have clearly shown market players that old models are no longer reliable predictors. When rules go out the window and established systems tremble, Bitcoin, despite its spotty history of costly glitches, scams and criminal uses, looks like a suitable safe haven. Its decentralized nature means it's not part of any system: the number of bitcoins in circulation is driven entirely by mathematics. That makes it Trump-safe, Brexit-safe, oil-safe -- whatever danger you fear, Bitcoin has no direct exposure to it, unlike, for example, gold. The virtual currency's value rests, in the final analysis, on nothing but the faith of the community that supports it." [90]

The observers note that the exchange rate of Bitcoins is only rising amid the growing uncertainty. Experts and media confirm the relation between the rising level of uncertainty in major economies and increasing interest, meaning increasing rate, of bitcoin.

After the Brexit vote, with the British pound crumbling, bitcoin has hit its highest level in two years. [5] Trust to the government in the UK is reported to drop by 10% in 2017 from already being as low as 36% in 2016. [42]

On the 3rd of June 2016, the price of a bitcoin increased by 20%, following the changes in the Chinese market and the devaluation of the Yuan. The weakening of the Chinese currency has brought uncertainty to the bitcoin community and caused the sharp 20% increase in the value of cryptocurrency. [6]

"Considering the complicated task that Trump faces, from Mexico to China, Europe, Russia and Arabia, bitcoin may continue to attract attention as an easier means of wealth storage and transportation", - cryptocurrency experts commenting on bitcoin rate increase after president Trump was elected. [68] At the same time, trust to the government in the United States is reported to be historically low. [30]

In the third week of April Bitcoin price raised from \$1,175 to \$1,257, accompanied by an increased demand of around 1.47%, expressed by Bitcoin exchanges in Japan. This can be explained with increasing level of uncertainty in Japanese economy and falling level of investment yields. [24] A the same time Japanese yen is already the fourth biggest currency after US dollar, euro and Chinese yuan in exchange operations. [10]

China is considered to be the biggest bitcoin trade market. Bitcoin trading volumes increased as China's foreign reserves shrank by about 8% in 2016. At the same time, the yuan weakened against the dollar, pushing money out of the country and increasing interest in bitcoin. [64]

6.2 E-residency Applicants from Countries with High Uncertainty Level

The top ten countries, from where individuals apply for e-residency are as follows – Finland (15,11%), Russia (7,53%), the United States of America (5,83%), Ukraine (5,79%), the United Kingdom (5,34%), Germany (5,08%), Italy (4,42%), Latvia (3,39%), India (3,22%), France (3,05%). [20]

An interest from neighbouring countries like Finland, Latvia and partially Russia can be explained with their geographically short distance, where many people already have business and personal connections to Estonia. Interest from countries outside of the European Union can be attracted with a possibility to develop own business in the EU with e-residency. Besides the possibilities of just having a legal entity in the European Union, Alex Wellman, e-residency Head of Marketing, names bureaucracy and instability in their own countries as a factors attracting people to apply for e-residency, giving an example of Ukraine (see appendix 3).

The United States of America – the third country, from where e-residents are coming, is reported to have historically low trust to the government and rising level of uncertainty. [29]

Another recent example, revealing the role of rising uncertainty in the motivation to apply for e-residency is the United Kingdom. The volume of applications for e-residency has increased significantly since the Brexit vote, reflecting the interest in finding stability for own business in the changing political and economic environment.

6.2.1 E-residency Applicants from the United Kingdom

The United Kingdom European Union membership referendum took place on 23rd of June, 2016 and resulted in 51.9% of voters voting for leaving the European Union. The UK government has started the official EU withdrawal process on 29th of March, 2017 to complete the process by 30th of March, 2019. The Brexit vote has already resulted in limiting the short-term cross-border financial market spill overs, partially reflecting the course for following policy changes of major central banks. Resolving the uncertainty around the future relationship between the United Kingdom and the European Union will take time, considering the nature of the negotiations for international trade agreements, and the unique complexity of the issues in this case. [4]

Since post-referendum, the amount of e-Residency applications from the United Kingdom has risen significantly. It can be seen that the applicants from United Kingdom have applied to remain in the European Union – at least digitally. [43]

E-Residency provides an opportunity to entrepreneurs to administrate and conduct business online, ensuring a secure remote access to the public services from anywhere around the globe. This opportunity to keep business running in European Union after the Brexit has been widely discussed in the UK media sources, after the referendum.

The Guardian referred to Estonian e-residency as 'Brexit bolthole':

"Estonia's e-residency initiative - offering foreigners the chance to base their business and finances digitally in the tiny Baltic state - is proving as easy as it is popular...In the uncertainty in the two weeks that followed the vote to leave the EU, applications for residency from the UK grew tenfold." [71] The Independent reported that e-Residency offers "salvation" to entrepreneurs from United Kingdom:

"The scheme has boomed in popularity, and offers entrepreneurs the opportunity to remain within the EU's legal framework...Estonia has seen an additional 1,000 businesses based in the country in addition to the 60,000 that were already there." [17]

The e-Residency programme has establish a web portal addressing specially Unite Kingdom individuals and startups with a name "howtostayin.eu". There the Estonian membership in the European Union is highlighted: "Estonia is an EU member state and incorporating in the EU can help your business maximise the benefits of the EU Single Market's harmonized rules."

The United Kingdom entrepreneurs responded with a significant rise in the amount of the applications. The amount of applications increased from 3 to 51 per week after the referendum. Now UK is the 5th country on the list from where applications to e-Residency are coming from with 1,045 applicants, making 5,34% of total applications volume. [20] Applications from the United Kingdom are now coming two times as frequent as it was before the vote. More than half of all applications from the United Kingdom have been sent after the vote. [67]

When applying for e-residency, an individual specifies a reason behind their interest. Mostly applicants say they are willing to sign up because they are attracted by the idea of building a digital nation, that has no borders. Meanwhile applicants from the United Kingdom more often state that they want to use the e-residency as a platform to start and develop their international business. E-residents from the UK currently use the programme possibilities for very different range of business interests, including digital applications development and consulting services. [67]

The president of Estonia Kersti Kaljulaid addressed the Estonians in her recent speech and spoke about the importance of support of the e-Residency program and its international users. She referred to the United Kingdom applicants as the following: "the English entrepreneur afraid of Brexit can find shelter from the storm here". [7]

Important, that most of the e-residents from the United Kingdom will continue living and paying taxes in the UK, as e-residency does not imply citizenship, physical residency or tax residency. [7]

Managing Director of the e-Residency program Kaspar Korjus notes: "The UK may have chosen to leave the EU, but its entrepreneurs can still choose to remain inside the EU's business environment. The UK is a great friend to Estonia so we're proud to help businesses there succeed with this smart and transparent solution...There will be plenty of discussions about national boundaries in the years ahead, but the internet is already transforming the very concept of nationhood. E-Residency can reunite entrepreneurs between the UK and the rest of Europe, at least digitally." [7]

7 Discussions and Recommendations

In the final part of the thesis the author concludes the results of the research and based on the examination of data gathered provides answers to the research questions, which were stated in the introductory part of the work. The author as well recommends topics for the future research in this chapter.

The objective of this thesis was to examine the concept of nation branding, analyze the case study of Singapore as a successful nation brand, Estonian nation branding strategy and e-residency as a nation branding case and discuss the opportunities for the project development considering the global trends.

The topic was chosen because e-residency is a relatively new and unique project, which attracted a lot of international attention to Estonia. At the same time, the program was criticized for not having solid value and developed services to offer for e-residents to operate fully online. Publications about e-residency are often quite general describing the initiative itself and opportunities it potentially could provide for Estonia but there was no wide discussion the way to achieve the ambitious goals of the program.

7.1 E-residency as a Nation Branding Campaign

E-residency program has been criticized for not bringing clear value for its users – as services with the remote access are not designed well enough and can be particularly difficult to use for the foreigners, who never dealt with them before. Also there is still a need for physical presence in some cases like opening a bank account, some notary operations and issues with public services providers. That is especially difficult for e-residents from countries that are far away from Estonia and need a visa to travel. Even though the e-residence was aimed to create a borderless digital state, it does not function this way yet. The problems were stated in the research by Terje Tampere in 2015, but at the time of the present research in 2017 the issues were not solved. The reason behind that might be in the lack political will to support the program.

The author then decided to take a look at e-residency program through a different perspective. The program has definitely attracted a lot of international attention and promoted Estonian developed e-government system that allows its citizens to reach many public services remotely. The program continued to strengthen Estonia image as a developed digital nation under the name of E-Estonia. Many international media sources has reported on the new unique initiative. After the prime-time TV show in the United States, which hosted Estonian ex-prime minister Taavi Rõivas talking about Estonian e-services and e-residence, the number of searches for Estonia increased by twenty times. Special attention was given by the British media, discussing the opportunities of e-residency could provide to run a business in the European Union after the United Kingdom voted to leave the Union.

In the interview with the author, the Head of Marketing of e-residency program has mentioned the survey they ordered, that showed that e-residency is the most discussed topic related to Estonian in the web.

Estonia, being a small state, is dependent in many ways in trade, tourism and defense, on the bigger international players, being it countries or different unions. Thus, the state needs to develop its soft power and strengthen awareness of itself worldwide. That can be achieved with thoroughly planned nation branding campaign to promote own unique developments. For small countries such as Estonia, which are often lacking natural resources for sale, it is important to find and promote very unique and niche products, services or specializations. Estonia has definitely found own niche in ICT and egovernance. Estonia spreads the message of being a country with well developed ICT sector and e-governance system through international media and own resources addressing international investors and business, other countries governments, international students and professionals.

Thus, the e-residency program may not fulfill its potential in creating a borderless digital nation yet, but it can be seen as successful in promoting Estonian values in creating hassle-free public services and developing ICT in the country. However, the program is now still in its beta version and may be developed further to achieve the ambitious goal of 10 million e-residents by 2025. So far, the goal that was set for 2017 – to attract 60,000 of e-residents is not achieved, with the amount of applicants being a bit higher than 19,000.

7.2 The Rising Level of Global Uncertainty as a Motivation behind Applications for E-residency

The author pays attention to the rising level of global uncertainty in economy policy, reported to be record high in 10 years of observation. At the same time, researches are observing the trend of decreasing level of trust in government worldwide. Significant decrease in level of public trust is noted in the United Stated and the United Kingdom in the recent year.

Amid the increasing feeling of uncertainty worldwide, interest towards digital solutions such as cryptocurrencies is growing. The growing interest towards bitcoin and its potential to develop further is proved by the banks, institutions and globally known consulting and researching agencies like PriceWaterHouse Coopers, World Bank and others. The recent research by University of Pretoria concludes that bitcoin is seen as a way to hedge the financial risks in the short term. Individuals looking for solutions to keep their assets safe and find them in decentralized non-governmental systems.

Another case that is worth attention in the author' opinion is the increased amount of applications for e-residency from the United Kingdom after the Brexit vote. More and more people from the United Kingdom are starting to see the program as a way to keep their businesses away from risks related to Brexit. Worth noting, that the United Stated

of America, where level of uncertainty and distrust to the government are reported to be record high, is in top three countries, which citizens are applying for e-residency.

As one of the main and widely discussed obstacles with e-residency is a need of physical presence when opening a bank account and possibly lack of the governmental will to push the resolution for the issue, one of the solution for the program to develop further might be partnering with bitcoin wallets providers and integration into the community of bitcoin users.

The users of the cryptocurrency are known to be technicians and with the value provided by e-residency safe authentication opportunities, they could push the development of the infrastructure around the tool, which program is lacking now.

Considering the link between increased volume of applications from the United Kingdom post-referendum, it is worth developing an e-residency promotion campaign, addressing people's feeling of uncertainty in other big markets, targeting the countries with changing political and economical environment. Combining that with the integration into bitcoin users community and blockchain techology, the program may succeed in building borderless digital nation.

According to the e-residency Head of Marketing, Alex Wellman, e-residency for long time did not have clearly defined marketing campaign and the information has been spread by a word of mouth or occasional publications in the blogs or media. Now the team has started a promotion campaign with own blog, spreading information about eresidency and targeted online advertisement. The targets are entrepreneurs looking for opportunities to internationalize their business. In authors opinion, the advertisement and promotion should be more focused on specific countries higher levels of uncertainty and among the bitcoin users community.

7.3 Answers to the Research Questions

Answering the research questions, the government benefit from nation branding as it is a soft power tool, helping to increase awareness and influence of the country worldwide, attracting sympathy from other international players, and increasing numbers of visiting tourists, investments, business persons, international professionals and students. The key success factor here is to promote the unique niche specifications and values of a country,

development of which is highly dependent on the political will. In that perspective, eresidency succeeded in promoting Estonian success in ICT and e-governance worldwide.

However, the program might not ne fulfilling its potential due to lack of cooperation with the public sector and not enough political will to resolve the issues with the program and develop it. Thus, the program may focus more on creating independent digital nation, using e-residency as a tool for safe authentication, partnering with bitcoin users community, embracing and integrating the bitcoin and blockchain systems and technologies.

7.4 Future research

E-residency, being a new and unique project is not widely covered in researches. The possible outcomes of the program are hypothetical.

The future research can focus on developing the environment around e-residency using user experience practices, which is currently missing. Another topic to look deeper into is the connection between global uncertainty and development of decentralized digital infrastructure to manage the risks. The promotion of e-residency as a risk reducing environment is a topic to be developed.

8 Summary

In modern globalized world, where role of nations is diminishing and environment is becoming more homogeneous, countries are facing increasing competition both in their domestic and external markets. Countries are competing for tourism, foreign investments, aid, membership in international unions and groups, customers for their products and services and for talents. A successful and positive country brand is able to ensure crucial competitive advantage politically and economically. The success in increasing awareness and strengthen the ability to influence other international players decisions is especially important for small nations such as Estonia, being significantly dependent on international trade, tourism and needing support in providing own defence. Countries lacking significant volumes of natural resources need to develop own unique capabilities to increase own visibility, influence and brand value worldwide.

Estonia has developed its ICT infrastructure and has developed successful e-governance system, making the country one of the most advanced in proving public services online. Having succeeded in building e-governance services environment in the country, Estonia started to promote own capabilities worldwide, naming itself E-Estonia to highlight the expertise in digital solutions. The recent governmental initiative – e-residency has succeeded in attracting international attention to Estonian e-services advancement, causing many publications in different media means and wide social media discussions. However, the program might not fulfil its aim on attracting the great amount of e-residents as many do not see real value behind the initiative and a needed infrastructure around eresidency is lacking. The goal that was set for 2017 in amount of e-residents is three times lower at the current moment. One of the biggest issues is a necessity of physical presence in several cases, which does not correspond to the idea of e-residency to run a business fully remotely and can be especially difficult for e-residents living outside of the European Union. The reason behind the inability of solving the problem might be in lack of political will to push the program. However, case study of Singapore success shows the key role of the government to develop and promote country's unique capabilities.

In the global environment of rising uncertainty and decreasing trust in government, many people are looking for opportunities in hedging their risks with help of digital solutions. Observers note the link between rising uncertainty reflected in concrete political and economic events and rising interest and therefore strengthening value of cryptocurrencies, such as bitcoin. The creators of e-residency program also note the increased number of applications from the United Kingdom following the Brexit vote, when people started to look for the opportunities to reduce the possible risked caused. Therefore, the author suggested targeting e-residency campaign considering the global trend of rising uncertainty and people's need to hedge their risks. Collaborating with bitcoin users' community and bitcoin wallets operators may attract attention of the new groups, some of them being technically advanced, and push the creation of infrastructure around e-residency. Such a solution might also be an alternative to usage of the traditional banking system, which now causing e-residency program to stuck with not allowing foreigners to open bank accounts remotely.

References

- 1. About E-Estonia. (2016). [https://e-estonia.com/e-residents/about/ Last accessed 29.10.2016]
- 2. About Smart Nation Enablers: [https://www.smartnation.sg/about-smartnation/enablers – Last accessed 10.04.2017].
- 3. Apply E-Estonia.[https://e-estonia.com/e-residents/apply/ Last accessed 10.10.2016]
- A World Bank Group Flagship Report. Global Economic Prospects. (2017).[http://www.worldbank.org/en/publication/global-economic-prospects - Last accessed 10.04.2017]
- Barrett, B. (2016). Security News This Week: Brexit Edition. WIRED: [April 30, 2017. https://www.wired.com/2016/06/security-news-week-brexit-edition-hey-least-bitcoin-ok/ Last accessed 10.04.2017]
- Barwick, D. (2017). Uncertainties Ahead For Bitcoin: Brexit, Trump, China & More. Federally Regulated Debt Relief Program: [http://federallyregulateddebtreliefprogram.com/2017/03/09/uncertainties-aheadfor-bitcoin-brexit-trump-china-more/ - Last accesses 01.04.2017]
- 7. Beat Brexit: 4 Ways It's Easier to Run an Estonian Business inside the UK.(2016). LeapIN Blog: [https://blog.leapin.eu/beat-brexit-4-ways-its-easier-to-run-anestonian-business-inside-the-uk-d6033a7bf01e – Last accessed 10.04.2017]
- 8. Becoming an Estonian E-Resident. (2016): [http://cxcglobalemea.com/becomingan-estonian-e-resident/ - Last accessed 10.03.2017]
- Bershidsky, L. (2017). Bitcoin Is an Escapist Safe Haven. Bloomberg View: [https://www.bloomberg.com/view/articles/2017-01-04/bitcoin-is-an-escapist-safe-haven – Last accessed 01.04.2017]
- 10. Bitcoincharts : [https://bitcoincharts.com/charts/volumepie/ Last accessed 20.04.2017]
- 11. Bitcoin: Questions, Answers, and Analysis of Legal Issues. (2015). US Congressional Research Service.
- 12. Boniface, B., Cooper, C. (2005). Worldwide destinations; The geography of travel and tourism. Italy: Elsevier Butterworth-Heinemann.
- 13. Brand Finance Nation Brands 2016. (2016). [http://brandfinance.com/knowledge-centre/reports/brand-finance-nation-brands-2016/ - Last accessed 2.02.2017]
- 14. Bureau, J.R. (1998). The Westburn Dictionary of Marketing. Westburn Publishers Ltd.: [http://www.themarketingdictionary.com – Last accessed 2.02.2017]
- 15. Bouri, E., Gupta, R., Tiwari, A., Roubaud D. (2016). Does Bitcoin Hedge Global Uncertainty? Evidence from Wavelet-Based Quantile-in-Quantile Regressions. Working Paper. University of Pretoria, Department of Economics: [https://ideas.repec.org/p/pre/wpaper/201690.html – Last accessed 2.02.2017]
- 16. Choo, C. W. (1997). IT 2000: Singapore's Vision of an Intelligent Island.
- 17. Cockburn, H. (2016). Brexit: The EU Country Where You Can Become an E-Resident for €100. The Independent: [http://www.independent.co.uk/news/world/europe/brexit-eu-country-estonia-e-resident-100-business-a7310146.html Last accessed 3.03.2017]
- 18. CountryBrandIndex.(2016).FutureBrand:[http://www.futurebrand.com/country-brand-index Last accessed10.02.2017].

- 19. Crypto-Currencies. Intellectual Curiosity or the Future of Finance? (2014). CFA Institute.
- 20. Dashboard. E-residency: [https://app.cyfe.com/dashboards/195223/5587fe4e52036102283711615553 – Last accessed 24.04.2017]
- 21. Data The World Bank: [http://data.worldbank.org/. Last accessed 20.03.2017]
- 22. Davis, S. J. (2016). An Index of Global Economic Policy Uncertainty. Working Paper. National Bureau of Economic Research.
- 23. Dinnie, K. (2008). Nation branding. Concepts, Issues, Practice. Oxford: Elsevier Ltd.
- 24. Dob, D. (2017). Japanese Economic Uncertainty Can Prove Benefit for Bitcoin: [https://www.crypto-news.net/japanese-economic-uncertainty-can-provebenefit-for-bitcoin/ -Last accessed 4.05.2017]
- 25. Doing Business in Estonia World Bank Group. (2016). [http://www.doingbusiness.org/data/exploreeconomies/Estonia - Last accessed 29.12.2016]
- 26. Duane, E. (2000). The Brandmindset[™]. New York: McGraw-Hill.
- 27. Economic Policy Uncertainty Index. (2016). [http://www.policyuncertainty.com/global_monthly.html. – Last accessed 19.04.2017].
- 28. E-Governance Academy Yearbook. (2015). [http://www.ega.ee/publication/e-governance-academy-yearbook-2015/ Last accessed 20.04.2017]
- 29. Erlanger, S. (2017). As Trump Era Arrives, a Sense of Uncertainty Grips the World. The New York Times: [https://www.nytimes.com/2017/01/16/world/europe/trump-eu-nato-merkelbrexit-russia-germany-china.html?_r=0 – Last accessed 20.04.2017]
- 30. Estepa, J. (2017). Survey: American Public's Trust in Government near Historic Low. USA TODAY: [https://www.usatoday.com/story/news/politics/onpolitics/2017/05/03/surveyamerican-publics-trust-government-near-historic-low/101239808/ - Last accessed 20.04.2017]
- 31. Estonia's Advantages. Invest in Estonia. (2016). [https://www.investinestonia.com/en/about-estonia/estonia-s-advantages – Last accessed 10.04.2017]
- 32. Estonian Information System Authority. [https://www.ria.ee/en/about-estonianinformation-system-authority.html – Last accessed 10.10.2016]
- 33. Explore the Regional and Country Level FDI Data with fDi Markets.(2016). [https://www.fdimarkets.com/explore/ Last accessed 10.04.2017]
- 34. Farivar, C. (2015). I'm Now an Estonian E-Resident, but I Still Don't Know What to Do with It. Ars Technica: [https://arstechnica.com/business/2015/08/im-nowan-estonian-e-resident-but-i-still-dont-know-what-to-do-with-it/ - Last accessed 2.02.2017]
- 35. Freedom House. (2015). [https://freedomhouse.org/report/freedom-net/freedomnet-2015 – Last accessed 10.10.2016]
- 36. Futurebrand: The Creative Future Company. [http://www.futurebrand.com/ Last accessed 10.10.2016]
- 37. Gilboa, S., Herstein, R. (2012). Place status, place loyalty and well being: an exploratory investigation of Israeli residents. Place Management and Development, Vol. 5, No. 2, pp. 141-157.

- 38. Governments Struggling to Retain Trust of Citizens, Global Survey Finds.(2017). The Guardian: [https://www.theguardian.com/technology/2017/jan/17/governments-strugglingto-retain-trust-of-citizens-global-survey-finds – Last accessed 20.04.2017].
- 39. Global Economy in 2017: Hope and Uncertainty.(2017). The World Bank: [http://www.worldbank.org/en/news/opinion/2017/02/15/global-economy-in-2017-hope-and-uncertainty Last accessed 20.04.2017].
- 40. Global Talent Competitiveness Index.(2017). INSEAD: [https://www.insead.edu/news/2017-global-talent-competitiveness-index-davos – Last accessed 10.02.2017].
- 41. Global Uncertainty about Economic Policy Is at Record Highs. [http://www.cnbc.com/2016/10/26/global-uncertainty-about-economic-policy-isat-record-highs.html – Last accessed 20.03.2017].
- 42. Grierson, J. (2017). Britons' Trust in Government, Media and Business Falls Sharply. The Guardian: [https://www.theguardian.com/politics/2017/jan/16/britons-trust-in-governmentmedia-business-falls-sharply – Last accessed 20.04.2017]
- 43. Hammersley, B. (2016). Concerned about Brexit? Why Not Become an E-Resident of Estonia. WIRED UK: [http://www.wired.co.uk/article/estonia-eresident – Last accessed 02.02.2017]
- 44. Henderson, J.C. (2006). Uniquely Singapore? A case study in destination branding. Journal of Vacation Marketing, 13 (3), 261-274.
- 45. Herstein, R. (2012) 'The thin line between country, city and region branding', JoHma/ of Vacation Marketing, Vo\. 18, No. 2, pp. 147-155.
- 46. International Tax Competitiveness Index. (2015). [http://taxfoundation.org/article/2015-international-tax-competitiveness-index – Last accessed 10.10.2016]
- 47. International Tax Competitiveness Index. (2016). [http://taxfoundation.org/article/2015-international-tax-competitiveness-index – Last accessed 10.10.2016]
- 48. Kalvet, T. (2007). The Estonian Information Society Developments since the 1990s. [http://www.praxis.ee/wp-content/uploads/2014/03/2007-Estonianinformation-society-developments.pdf Last accessed 18.09.2016]
- 49. Kalvet, T. (2012). Innovation: a factor explaining e-Government success In Estonia. Electronic Government, an International Journal, 142-158.
- 50. Kalvet, T., Tiits, M., & Hinsberg, H. (2013). The outcome and impact of using eservices. Tallinn. Baltic Research Institute and PRAXIS Center for Policy Studies.
- 51. Keshvani, N. (2000). Internet Trends: A digital snapshot of Singapore's Communications and Information Technology climate and Straits Times Interactive. [http://www.academia.edu/4802089/Internet Trends A digital snapshot of Si

ngapores_Communications_and_Information_Technology_climate_and_Straits_ Times_Interactive - Last accessed 08.04.2017]

- 52. Khan, T. (2013). Business Today. [http://businesstoday.intoday.in/story/whymany-indian-start-ups-are-moeving-to-singapore/1/193222.html - Last accessed 20.01.2015]
- 53. Kotka, T. Rozov, J.& Karpištšenko, L. (2014). E-residency in e-Estonia. [http://purl.pt/26107/1/DLM2014_PDF/30%20-%20E-residency%20in%20e-Estonia.pdf Last accessed: 26.04.2017]

- 54. Kotler, P. and Gertner, D. (2002) 'Country as brand, product, and beyond: A place marketing and brand management perspective', Journal of Brand Management, Vol 9, No. 4-5, pp. 249-261
- 55. Krimmer, R. (2014). 10 Million e-Estonians a technological, or a political project? [ttu.ee: http://www.ttu.ee/faculty-of-social-sciences/ragnar-nurkse-school-of-innovation-and-governance/red-box-7/prof-krimmer-estonian-E-residency-and-10-million-e-estonians/- Last accessed 14.01.2017]
- 56. Macrae, C., Parkinson, S. and Sheerman, J. (1995) Managing marketing's DNA: The role of branding. Irish Marketing Review, 18, 13–20.
- 57. Mahizhnan, A. (1999). Smart cities: The Singapore case. Cities, Vol.16, No.1, 13-18.
- 58. Meerits, H. (2016). An Ageing Population. Estonica.org: [http://www.estonica.org/en/Subcontracting_in_the_big,_wide_world/An_ageing_population/ - Last accessed 10.10.2016]
- 59. Money is no object: Understanding the evolving cryptocurrency market.(2015). PwC's Financial Services Institute, 2015, p5
- 60. Murphy, J. (1987). A Key Marketing Tool. New York: McGraw-Hill.
- 61. Niegel, M., Pritchard, A., Pride, R. (2011). Destination Brands: Managing Place Reputation. Routledge.
- 62. Nye, J. S. (2004a). Soft Power: the means to success in world politics, p7-8, Public Affairs, NY.
- 63. Nye, J.S. (1990) Bound to Lead: The Changing Nature of American Power, Basic Books, NY.
- 64. Oyedele, A. (2017). Bitcoin Is Mostly Traded in China. Business Insider: [http://www.businessinsider.com/bitcoin-trading-china-yuan-remnibi-2017-1 – Last accessed 20.04.2017]
- 65. Papadopoulos, N. (2004). Place branding: evolution, meaning and implications. Place branding. Binghamton, NY: The Haworth Press.
- 66. Peterson, J.E. (2006). Qatar and the World: Branding for a Micro-State. The Middle East Journal №4.
- 67. Rang, A. (2017). E-Residency Applications from the UK Are Arriving Twice as Fast Post-Referendum: [https://medium.com/e-residency-blog/e-residencyapplications-from-the-uk-are-arriving-twice-as-fast-post-referendumaa40ab062d02 – Last accessed 10.04.2017]
- Quentson, A. (2017). Bitcoin Rises as Trump's Actions Increases Uncertainty. CryptoCoinsNews: [https://www.cryptocoinsnews.com/bitcoin-rises-trumpsactions-increases-uncertainty/ - Last accessed 20.04.2017].
- 69. Same, S., Solarte-Vasquez, M. (2014). Country branding and country image insights, challenges and prospects. The case of Estonia, Baltic journal of European studies, Vol. 4, No. 1, pp137-165.
- 70. Sameeh, T. (2017). Can Bitcoin Be Used As a Hedge Against Uncertainty Towards the World's Fiat Economy? Deep Dot Web: [https://www.deepdotweb.com/2017/01/24/can-bitcoin-used-hedge-uncertaintytowards-worlds-fiat-economy/ - Last accessed 10.04. 2017]
- 71. Shearlaw, M. (2016). A Brexit Bolthole? For €100 You Can Become an E-Resident of an EU Country You've Never Visited. The Guardian: [https://www.theguardian.com/world/2016/sep/15/estonia-e-residency-european-union-brexit-eu-referendum Last accessed 10.04.2017]

- 72. Solvak, M. Vassil, K. (2016). Book on Estonia's 10 Years of Experience with E-Voting. University of Tartu.
- 73. Simson, M. (2014). E-teenuste areng on Eestis seiskunud. (Translation: The development of e-services has stopped in Estonia) [Available in Estonian: http://epl.delfi.ee/news/arvamus/margus-simson-e-teenuste-areng-on-eestis-seiskunud?id=67968115–Last accessed 10.04.2017]
- 74. Soy, S.K. (1997). The Case Study as a Research Method. University of Texas at Austin.
- 75. Tampere, T., 2015, E-Residency Attracting Foreign Entrepreneurs to Open Businesses in Estonia, Master Thesis, Tallinn University or Technology.
- 76. Ten Notable People Who Are E-Residents of Estonia. (2016) LeapIN Blog: [https://blog.leapin.eu/10-notable-people-who-are-e-residents-of-estoniac3b7dcd3c7d6 – Last accessed 20.02.2017].
- 77. The Economist. (2014). What entrepreneurial ecosystems need to flourish. [http://www.economist.com/node/21593582/comments10950394 Last accessed 18.03.2015]
- 78. The 10 Most Digitally Savvy Countries in the World. (2016). MarketWatch: [http://www.marketwatch.com/story/the-10-most-digitally-savvy-countries-in-the-world-2016-07-19?page=2 Last accessed 3.03.2017]
- 79. Twitchell, J. (2004). Branded Nation: The Marketing of Megachurch, College, Inc., and Museum World. New York: Simon and Schuster.
- 80. Tubalkain, M. (2016). Estonia's Next Big Challenge: The Transition from E-State to E-Industry: [http://www.investinestonia.com/en/aboutestonia/news/article/1110-estonia-s-next-big-challenge-the-transition-from-estate-to-e-industry – Last accessed 10.10.2016]
- 81. Veskioja, I. (2014). What do we offer to e-residents? [http://www.aripaev.ee/arvamused/2014/11/24/mida-me-e-residentidele-pakume Last accessed 10.10.2016].
- 82. What Is Brand? Definition and Meaning BusinessDictionary.com. [http://www.businessdictionary.com/definition/brand.html –Last accessed 2.02.2017]
- 83. What Is Estonian E-Residency and How to Take Advantage of It? (2016). LeapIN: [https://www.leapin.eu/articles/e-residency Last accessed 29.04.2017]
- 84. What E-Residency in Estonia Is, and How to Get It. (2016). International Man: [http://www.internationalman.com/articles/what-e-residency-in-estonia-is-and-how-to-get-it Last accessed 10.02.2016].
- 85. Wirtz, J., Kuan S. Lawrence, T., Sulaeman J. (2015). Brand Singapore: Defining the Nation, Opinion News & Top Stories. The Straits Times: [http://www.straitstimes.com/opinion/brand-singapore-defining-the-nation Last accessed 1.03.2017].
- 86. World Bank Doing Business, Top Country Rankings (2016). Business Insider: [http://uk.businessinsider.com/world-bank-doing-business-2016-top-country-rankings-2015-10. – Last accessed 10.02.2017]
- 87. Wong, P. K., Singh, A. (2005). From technology adopter to innovator: Singapore.[http://www.academia.edu/172527/From_technology_adopter_to_inn ovator_Singapore - Last accessed 18.02.2017]
- 88. Wintour, P. (2016). Trust. WPP: [https://www.wpp.com/govtpractice/leaders-report/findings/trust/ Last accessed 19.04.2017].
- 89. X-Road E-Estonia.[https://e-estonia.com/component/x-road/ Last accessed 10.02.2017].

- 90. Yin, R. K. (2013). Case Study Research: Design and Methods (5 edition). Los Angeles: SAGE Publications, Inc.
- 91. Yue, C. Lim, J. (2003). Towards a Knowledge-based Economy; East Asia's Changing Industrial Geography. Institute of Southeast Asian Studies and Nomura Research Institute.

Appendix 1 – Nation Brands 2016 according to Brand Finance

TOP 10 BRAND STRENGTH INDEX 2016 – OVERALL		TOP 10 BRAND STRENGTH INDEX 2016: SUB-PILLARS – SOCIETY			
Rank	Country	Rating	Rank	Country	Rating
1	Singapore	AAA	1	Norway	AAA+
2	Switzerland	AAA	2	Switzerland	AAA+
3	Hong Kong	AAA	3	Hong Kong	AAA+
4	Norway	AAA	4	New Zealand	AAA+
5	UK	AAA	5	Luxembourg	AAA+
6	New Zealand	AAA	6	Finland	AAA
7	Luxembourg	AAA	7	Singapore	AAA
8	Finland	AAA	8	Canada	AAA
9	Netherlands	AAA	9	Netherlands	AAA
10	Japan	AAA	10	Denmark	AAA

TOP 10 BRAND STRENGTH INDEX 2016: SUB-PILLARS – INVESTMENT			TOP 10 BRAND STRENGTH INDEX 2016: SUB-PILLARS – GOODS AND SERVICES		
Rank	Country	Rating	Rank	Country	Rating
1	Singapore	AAA+	1	US	AAA
2	Switzerland	AAA+	2	Japan	AAA
3	Hong Kong	AAA	3	UK	AAA
4	Qatar	AAA	4	Singapore	AAA
5	UAE	AAA	5	Malaysia	AAA
6	Malaysia	AAA	6	Germany	AAA
7	UK	AAA	7	Netherlands	AAA
8	US	AAA	8	Hong Kong	AAA
9	New Zealand	AAA	9	UAE	AAA
10	Finland	AAA	10	Luxembourg	AAA

TOP 50 MOST VALUABLE BRANDS – 2016			
Rank 2016	Rank 2015	Country	
1	1	US	
2	2	China	
3	3	Germany	
4	5	Japan	
5	4	UK	
6	6	France	
7	7	India	
8	8	Canada	
9	9	Italy	
10	10	Australia	
11	15	Netherlands	
12	14	Switzerland	
13	16	Spain	
14	13	Mexico	
15	11	Brazil	
16	17	Sweden	
17	18	Russia	
18	21	Indonesia	
19	23	Belgium	
20	20	Poland	
21	25	Austria	
22	22	Saudi Arabia	
23	30	Norway	
24	29	United Arab Emirates	
25	19	Turkey	
26	26	Singapore	
27	24	Taiwan	

28	27	Denmark	
29	28	Malaysia	
30	31	Thailand	
31	34	Ireland	
32	35	Philippines	
33	32	Hong Kong	
34	33	Finland	
35	36	Qatar	
36	42	Czech Republic	
37	39	Argentina	
38	38	Chile	
39	37	South Africa	
40	43	Israel	
41	45	Colombia	
42	41	Nigeria	
43	40	New Zealand	
44	47	Bangladesh	
45	48	Romania	
46	50	Portugal	
47	44	Kazakhstan	
48	49	Vietnam	
49	51	Kuwait	
50	52	Peru	

BRAND RATING				
Brand Index	Brand rating	Category		
0	D	Failing		
5	D			
10	DD			
15	DDD	Weak		
20	С			
25	CC			
30	CCC	Average		
35	В			
40	BB			
45	BBB			
50	A-	Strong		
55	А			
60	A+			
65	AA-	Very strong		
70	АА			
75	AA+			
80	AAA-	Extremely strong		
85	AAA			
90	AAA+			
95	AAA+			
100	AAA+			

Appendix 2 – Country brand index by Future Brand, 2015

TOP 20 Countries				
Rank	Country			
1	Japan			
2	Switzerland			
3	Germany			
4	Sweden			
5	Canada			
6	Norway			
7	United States			
8	Australia			
9	Denmark			
10	Austria			
11	New Zealand			
12	United Kingdom			
13	Finland			
14	Singapore			
15	Iceland			
16	Netherlands			
17	France			
18	Italy			
19	United Arab Emirates			
20	South Korea			

REG	INAL RANKINGS - EURO	OPE
Ranking in Europe	Country	Overall ranking
1	Switzerland	2
2	Germany	3
3	Sweden	4
4	Norway	6
5	Denmark	9
6	Austria	10
7	United Kingdom	12
8	Finland	13
9	Iceland	15
10	Netherlands	16
11	France	17
12	Italy	18
13	Ireland	21
14	Belgium	22
15	Spain	23
16	Portugal	27
17	Czech Republic	29
18	Greece	30
19	Russia	31
20	Malta	35
21	Croatia	44
22	Poland	45
23	Estonia	47
24	Turkey	53
25	Hungary	56
26	Slovakia	59

27	Romania	62
28	Bulgaria	67
29	Ukraine	74

Appendix 3 – Interview with Alex Wellman, e-Residency Head of Marketing

Question: Could you please tell a little bit more about your role in the project?

"I am working on a marketing side of things for e-Residency. What I basically do is I am trying to tell the stories of e-residents around the world, who are finding starting business in EU and finding a program useful in their everyday lives. Primarily our marketing is working with blog. We have an official blog of e-Residency. We have just started that a few months ago. Then we do working with media too. We do some advertising, some targeted advertising. Mainly targeting people who are looking for starting a business in EU. And the main value there is for many people, especially in the developing world, that they can start a business 100% remotely. And then they can just take their computer up and run their business, no matter where they have to be in the world.

Question: Was the role of marketing manager in the project from the beginning or is it a new position?

"No, actually it is new. E-residency program has grown greatly from a start-up to a very special project for Estonia and now we have full staff of seven people in our team. In the beginning, most of the marketing was, or how people found out about e-residency was through word of mouth or through blogs or through news articles, journalists were writing stories about e-residency. But now we are actually, as the program grows bigger, try to outreach and try to tell more people about the benefits of e-residency. Not just hoping that an article would have been published, but actually working on promoting Estonia as the best place to do business for location independent entrepreneurs."

Question: You mentioned target audience as those who are willing to start a business remotely in EU. But are there any particular countries that you are targeting for? Or is it global?

"Well, I cannot really talk a lot about it. I will just say that, of course there are countries like Ukraine, Ukraine is a very good example of a country where e-residency would be very useful. These are people who are close to Europe, they have many connections here, but due to the circumstances with their own government and what is going on there, it is very difficult to access the tools they need to run their businesses. So when they can become e-residents, start their business here, it is hugely beneficial to them. That is one country in which we definitely see a lot of value and trying to actively work to show more people there how they can use e-residency to empower their businesses online.

Question: So you define some countries that might be more interested than others?

"Certainly. And we are doing a research, you can see our public dashboard. You can see there that there are definitely some countries on top, these are the countries that we continue to look at. They have sort of self-selected. Other one of course is Finland, due to the close proximity there, a lot of familiarities with Estonia, so they are comfortable and many have existing businesses here. And many of them also find it easier to run a business here than in their home country. So that is another good example."

Question: One of the biggest issues for e-residents, that have been discussed a lot, is a need to present physically to open a bank account. There is some progress, but how likely is it going to be resolved in near future?

"Right now we hope that definitely soon. We do hope by the second part of the year we will have a solid solution in place to solve this problem to provide all the financial tools for e-residents, who are looking for them, so they can access these tools and run their business. We hope by the second half of the year, definitely. "

Question: You have quite ambitious goals for attracting e-residents. How happy the team with the results? How is it progressing?

"We think of ourselves as a start-up and we are in a beta-phase of the start-up. We are happy and we are meeting our targets and our goals. Obviously, the ten million goal that we set by 2025 is ambitious, but we do think that when all the solutions are in place to entrepreneurs to access all the tools that they need to run their businesses remotely from anywhere, then there really the full value of e-residency will come out. I do not see a problem of us meeting our goals only because the value there is so high for these people."

Question: Do you measure somehow the success of marketing activities of the program?

"Sure. Definitely when I do advertising, we do all the calculations and best practices in digital marketing. I look at my return on investment, where I spend money, especially because we are publicly funded organization. We are making sure that the costs of

activities are worth that at the end. There is also an intangible benefit of e-residency to the country, as you mentioned, as a brand. It is difficult to calculate always, the value of that. We did have one social media agency here in Estonia, they did a short study on branding. They found that basically, that e-residency is a brand of Estonia right now. That is what everyone is talking about, more than anything or anyone else."