

# Success and Success Factors of the Estonian E-Residency from the State and Entrepreneur Perspective

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Abstract. Estonia has created an effective, stable and transparent digital society, where most government services are accessible online. As the first country in the world, Estonia launched in 2014 an e-residency program that can be considered as an extension of its digital society. Estonia provides digital identity card (digiID) for third country nationals enabling electronic authentication, digital signature and encryption functionalities. After seven years, the e-residency program has achieved a level of maturity that presumes a revised approach to the strategy. Therefore, we decided to research the topic more in-depth with a particular emphasis on the assessment of the project strategic goals. We conducted 12 semistructured interviews with public and private sector representatives to evaluate the current e-residency strategy and propose future directions. The research approach is oriented towards the case study methodology and bases on qualitative data collection. We identified three main strategic areas: communication, support and engagement that need further investigation and development.

**Keywords:** Electronic identity · e-residency · Identity management

# 1 Introduction

Estonia was able to handle effectively the COVID-19 crisis thanks to its current electronic identity (eID) infrastructure and well-developed e-service platforms. As a result, it is fair to say that Estonia was digitally ready to face those challenges. This makes Estonia an interesting and unique case from the e-governance research perspective.

Estonia also provides its digital infrastructure to third-country nationals through a pioneering "e-residency" program. Estonia was the first state to provide the completely functioning eIDs to third-country nationals in addition to its residents, allowing the development of new enterprises and providing digital resources for freelancers, developers and investors [1].

The e-residency digital identity card (also known as digiID) allows users to authenticate themselves in a variety of online service platforms and environments and provides them access to Estonian e-services equally to residents.

Users may digitally sign documents (the signature is legally binding in every EU Member State), execute internet-banking transfers, encrypt documents and declare taxes online among other items [2]. However, it is important to mention that digiID does not guarantee access to the physical entrance to the country<sup>1</sup>. The project has received a lot of positive attention on the international level and even considered a tool of soft power [3]. However, the project has encountered several obstacles, some internal and others external that have influenced the state to overlook the program strategic goals.

The aim of the research is to investigate the Estonian e-residency program and improve it by evaluating the achievement of the strategic goals of the project from the public sector and entrepreneur's perspective. Those two viewpoints play the most significant role in the e-residency program context by shaping its development directions. We believe that by re-designing some of the aspects of the program it is possible to turn Estonia into an appealing business environment by using the e-residency. General economic impact assessment of the e-residency program is not in the scope of this research.

Based on the previously described situation, we formed main research question: in how far (and in how far not) and why is the Estonian e-residency initiative successful from the state and the entrepreneur perspective?

To answer this research question we identified the main strategic goals, how they have developed and how these goals were met. We also identified the expectations of the e-resident entrepreneurs and how they are met. We analyzed different available official documents and conducted semi-structured in-depth interviews with the state representatives and e-resident entrepreneurs.

Moreover, based on the research results, it is possible to identify the entrepreneur's expectations and the companies that are the most promising to succeed later (in service of approaching them as leads in the sense of CRM in selling the e-residency program).

# 2 Background

### 2.1 E-Residency Related Literature

E-residency related literature focuses mostly on the project evaluation and analysis from different perspectives starting from the marketing point of view to the business and economical perspective.

The key purpose of the e-residency project was to enhance Estonia as a competitive e-state, raise revenue and investments and support the country's economy [4]. The e-residency has an impact on smart rural development as well as the entrepreneurs. It facilitates the development of the country's business environment. The e-residency concept eases the development and the implementation of industry 4.0, additionally offering more opportunities to the business models as well as the logistics solution and supply chain and product distribution [5].

On the other hand, the e-residency enhances the opportunities for running location-independents businesses that can run within the EU legal framework. The e-residency is

<sup>&</sup>lt;sup>1</sup> Identity Documents Act, 2000. Available: https://www.riigiteataja.ee/akt/108072021002?lei aKehtiv.

the option that tackles the shortage of the local policies or infrastructure, furthermore, develops the integration with the world trade [6].

From the applicants' point of view, individual socio-demographic characteristics and macro-level characteristics assessing digital and economic growth in the applicant's country of origin influence individual motivations to apply for the e-residency [7].

Some sources see the Estonian e-residency program as a marketing project or a national branding case and focus on this aspect. Estonia's e-residency program is a communication tool through which national branding is directly linked to the country's ICT policy [8].

The Estonian e-residency program has been also investigated as a soft power that develops the state position. The program as a digital tool can be considered as a tool that enhances the political capital of the state [3].

Some papers focus more on the philosophical aspects of the e-residency. The e-residency does not change the characterization of the state. One paper mentions that the Estonian e-residency provides the model to create the European e-resident model [9].

# 2.2 E-Residency Project and Product Overview

On December 1, 2014, entered into force the changes of the Identity Documents Act that enabled the implementation of the e-residency concept. Based on this legal act it is possible to issue a digital identity card for e-residents.

The first strategic goals of the e-residency program were ambitious. The goal was to have 10 million e-residents by 2025. Soon it was clear that initial plan needs revision. According to the former director of the e-residency program, the original goal of the project was to establish a digital community of 10 million e-Estonians by 2025.

In 2018, new vision document e-residency 2.0 white paper was created with a focus on the quality aspects of the program followed by the action plan approved by the government of Estonia. Currently, Estonia has more than 70 000 e-residency digital cardholders from 165 countries. Digital identity card enables electronic authentication, eIDAS compliant electronic signature and data encryption [10].

DigiID is a part of the Estonian eID ecosystem – a complex public key infrastructure (PKI)-based e-governance system managed by the public sector and operated in cooperation with public and private sector authorities. Starting from December 2018, Estonia issues the fourth generation of eID documents, including digiID's for e-residents with a new layout [11].

#### 2.3 Profile of E-Residents

According to the public e-residency statistical dashboard, Estonia has over 79,588 e-residents<sup>2</sup>. Over 14 200 companies have been licensed in Estonia because of the involvement of 20% of these e-residents. In 2018, more than 20 500 people became e-residents. Every month about 1,700 people apply for e-residency. In 2019, the number of new e-residents was about three-quarters of that, with an average of 1,300 people per month. Estonian e-residents come from 173 different countries. Most of the e-resident come

<sup>&</sup>lt;sup>2</sup> e-Residency dashboard. Available: https://e-resident.gov.ee/dashboard/.

from Finland, Russia, Ukraine and Germany. However, China, the United Kingdom, India, the United States, Japan and France are also in the top ten.

Companies of the e-residents focus mostly on three types of business activities. At the time of registration, 39% worked in information and communication technology field, 24% in technical, academic and technological projects and 17% worked in wholesale and retail trade area. The top three economic activities have been consistent over time and their share of the economy has risen. Whereas these three economic operations accounted for 70% of all new businesses in 2015, they now account for 82% of new businesses this year. Two-third of licensed information and communication companies established by e-residents offer data engineering, consulting and similar services.

### 2.4 E-Residency Strategy

Before it is possible to evaluate meeting the strategical goals, it is important to see how the strategical goals have developed over time. There is not much literature available about this topic. Therefore, we had to use expert interviews with public sector representatives to fill this gap. Based on the interviews, it is possible to say that the understanding of the strategical goals varies depending on the interviewee's field of expertise. Therefore, it is important to clarify the strategic scope of the e-residency program.

The first strategic goals can be found from the very early stage of the program from the "10-Million E-Estonian" concept developed by a small group of people from the Ministry of Economic Affairs and Communication and Ministry of the Interior [1]. This was rather a vision and a dream where this program could develop in future. The aim was to enable as many people as possible from third countries to benefit from the Estonian eID ecosystem. The interviewees also mentioned that in the beginning the residency program was quite similar to the private sector start-up initiatives. It means that there was lot of uncertainty and the strategic perspective of the project was not completely clear. Therefore, it is understandable that after four years of the program implementation, the necessity for more concrete strategical directions raised.

In 2018, Enterprise Estonia initiated a process engaging different public and private sector authorities to improve the e-residency program and to overlook the strategic directions of the program. According to the interviewees, the following authorities were engaged in the e-residency 2.0 white paper building process:

- The Office of the President of the Republic of Estonia.
- The Ministry of the Interior.
- Ministry of Foreign Affairs.
- Enterprise Estonia (EAS).
- The e-Residency Council.
- Police and Border Guard Board (PBGB).
- Tax and Customs Board.
- Ministry of Economic Affairs and Communications.
- The Chamber of Service Economy.

The work was organized in different working streams/groups and every working group had a leader who was driving the discussion. After several meetings and based on the conclusions of the working groups e-residency 2.0 white paper was formed<sup>3</sup>.

By issuing the e-Residency 2.0 white paper Estonia aimed to improve the efficiency of e-residency. Action plan was created that will mitigate the security risks related to the applicants while issuing the eID for the e-residents. It also aimed to increase the value created by the e-residents for the public sector. The white paper 2.0 e-residency action plan supports local businesses and the Estonian state by generating more value for the state<sup>4</sup>.

In August 2019, the Estonian government approved the e-residency 2.0 action plan. Agreed directions gave the input to the yearly work plans for authorities involved in the management and development of the e-residency program (e.g., EAS, PBGB etc.). Previously mentioned documents express the latest strategical approach of the e-residency program.

# 3 Methodology

E-residency is a complex phenomenon comprising different aspects starting from the organizational view to the technological framework. E-Residency is not a separate phenomenon but a part of other nationally important systems (e.g. eID ecosystem). Therefore, we rely on the institutional design for complex technological systems designed by Koppenjan and Groenewegen to understand the e-residency phenomenon in a more systematic way [12]. The model bases on the institutional framework proposed by Oliver Williamson [13].

Following figure presents the relation between the e-residency technological, institutional, and process design.

During this research, we focus mainly on the institutional design part and the development of the e-residency strategical goals. To improve the e-residency process, it is important to describe and analyze both - the technological and institutional aspects.

This research follows the case study methodology; more specifically, we have chosen the explanatory case study as a research strategy [14]. Throughout the research, we link together different data sources like qualitative interviews with public and private sector entities, documentary sources etc. to answer the main research question [15] (Fig. 1).

We identified the research need and set the focus on this particular case based on the existing documentation, especially on the Estonian National Audit Office Report "Effectiveness of the e-Residency program". <sup>5</sup> Based on the first findings, we organized an additional meeting with EAS to clarify research related details. After the meeting, we formed the research strategy and started planning the data collection activities.

To understand if the strategic goals of e-residency were met, it is important to cover the public and private sector (entrepreneurs) perspective and analyze different statistical,

<sup>&</sup>lt;sup>3</sup> E-residency 2.0 White Paper. Available: https://bit.ly/3B9j04F.

<sup>&</sup>lt;sup>4</sup> The new e-Residency action plan helps to create more added value for local entrepreneurs and the Estonian state. Available: https://www.mkm.ee/en/news/new-e-residency-action-plan-helps-create-more-added-value-local-entrepreneurs-and-estonia.

<sup>&</sup>lt;sup>5</sup> Report is available: https://bit.ly/3vF2W9P.

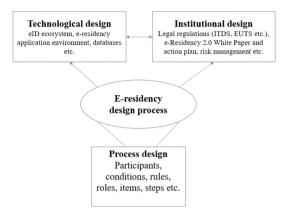


Fig. 1. Institutional design of the e-residency program.

documented and legal sources. We used qualitative research approach and prepared two different semi-structured interviews to understand the public and private sector views [16].

We choose the qualitative research approach mainly because it enables to research more deeply the relations between the strategic goals and expectations between different sectors. Therefore, we conducted five semi-structured interviews with the public sector representatives who were involved in the e-residency strategy-building process.

We conducted seven interviews with the e-resident entrepreneurs to research their initial expectations towards e-residency and to find out how the program met their expectations.

Due to the data protection rules, it was challenging to reach e-resident entrepreneurs. All contacted authorities refused to give out company names established by e-residents referring to different legal and data protection constraints. Finally, we decided to use publicly available sources to schedule the interviews (e-Residency Facebook groups and other publicly available sources).

We conducted all interviews in English using online communication channels (Teams or Skype for Business), recorded based on the interviewees' prior consent and later transcribed. The duration of the interviews remained between 45 min up to one hour. We transcribed the interviews and used thematic data analysis method [17].

We identified the most relevant themes and mapped all interesting characteristics into different codes. In the next stage, we conducted in-depth analysis of the transcribed material [17].

# 4 Research Findings

This chapter presents the research findings relevant from the e-residency white paper building process perspective. We analyze the expert interview results and presents in detail the most interesting and significant research findings from the public sector and entrepreneurs' point of view.

#### 4.1 Public Sector

The semi-structured interviews with the public sector aimed to identify the strategic goals and the development as well as meeting the goals. We conducted five in-depth expert interviews with Estonian public sector representatives. Table 1 presents the profile of the public sector interview participants and their relation to the e-residency strategy development. We divided the interview into three logical sections: introduction, development of strategical goals and meeting strategical goals.

The first section focused on the years of experience and relation to the Estonian eresidency area as well as the performed tasks. All interviewees provided an approximate number of years they work in this field. The public sector had a median experience of 7,2 years. Maximum years of experience was twenty-four years and the minimum years of experience was two years. All interviewees were actively involved to the e-residency strategy development process.

Organization	Position	Relation to the Strategy
Enterprise Estonia	Head of Legal, Risk and Compliance	Involved expert
Police and Border Guard Board	Chief Expert	Involved expert
SITA (previous PBGB official)	Senior Business Development Manager	Involved expert
Ministry of the Interior	Head of Citizenship and Migration Policy Department	Conceptual founder of e-residency program
Enterprise Estonia	Marketing and Communications Team Lead	Involved expert

Table 1. Interview participants - public sector.

The second part of the interview focused in-depth on the development of the strategic goals. Firstly, we asked interviewees what was in their opinion the most important areas while building the strategy from the state and their own perspective.

One interesting finding was that all public sector representatives brought out the importance of the economic development and profitability of the program. They all mentioned that there is a need to increase the financial benefits for the national income as well as reduce the costs. Interviewees considered these three aspects as the most important topics for the state while developing the strategy.

From the economic side, they also emphasized positive contribution to the Estonian economic environment while helping e-residents to set up companies in Estonia.

The other benefit that interviewees mentioned was the market expansion. Public sector authorities constantly try to find ways how to increase the number of established companies. Furthermore, the focus is on customer acquisition channels and wider coverage of e-residency in different markets.

However, interviewees mentioned several other important strategic topics during the interviews but not by all interviewees. For example, reputation of the advanced Estonian digital society was one of these strategic topics in addition to the number of pick-up locations mentioned by the interviewees while discussing the strategy development.

During the interviews, participants mentioned that during the e-residency 2.0 white paper discussion process the overall need and they evaluated continuity of the program. It was important to understand whether the e-residency is something that the state has to pursue and is the program beneficial for the country.

We asked interviewees to name e-residency top strategic goals. Interviewees had different vision regarding previously mentioned question. Interviewees pointed out the following important strategic issues:

- Making Estonia more visible in the world.
- Cybersecurity and digital identity issues.
- Giving people a chance to have a better life.
- Risk management and risk mitigation.
- Legal compliance correspondence to the legal acts.
- Getting more e-residents with an interest to establish a company and increasing the economic impact.

Interviewees found difficult to evaluate the success of the program. For example, PBGB was not able to evaluate the achieved value of the program. At the same time, EAS found the program valuable. According to EAS, the program generates indirect revenue by promoting the e-residency. PBGB found challenging to assess the risks, as it is not possible to ask from applicant about their business activity and background. Therefore, this aspect should have received more attention during the e-residency white paper discussions.

Additionally, interviewees found important to identify the correct target groups. It is important to understand the types of entrepreneurs who benefit the most from the program.

The top strategic goals mentioned in the context of the e-residency white paper 2.0 varied from one expert to another. Interviewees brought out following main strategic goals:

- The impact on the national economy.
- Increasing the number of e-residents.
- Increasing the convenience.
- Making Estonia more visible.
- Enhancing the economic side.
- Having a secure identity in the Internet.
- Digital identification of the applicants.
- Risk-based pre-and after control checks of the applicants.

Increasing convenience means increasing the pick-up locations and helping eresidents to understand their taxation more by developing things like a business guide or knowledge base and providing more tax-related information in other countries. The last part of the interview focused on the meeting of the strategic goals. Firstly, we asked from the interviewees to evaluate the achievement of the e-residency 2.0 strategical goals on a 10-point scale, where one meant that the strategical goals were not met and 10 that the strategical goals were fully met. The average of the overall assessment points for the achievement score was 5.4 points.

The interviewees think that there are no fully unmet strategical goals. However, taxation and bank issues need still more attention. The most important factor that influenced the achievement of the goals was political support.

Evaluation of the sufficiency of the current e-residency 2.0 strategy, three out of five interviewees found it sufficient. One could not evaluate all aspects. The other interviewee mentioned that there are still issues that need improvement. For example, the banking, taxation and pick-up locations.

The last question focused on the elements in the e-residency program/strategy that still need improvement. All interviewees believe that several elements of the program need improvement. One interviewee brought out that there is no specific implementation plan. The other believed that when the program grows the more important comes risk management and the question of how to combine different ecosystems and different digital identities. Two of the interviewees agreed that the pick-up locations and the market expansion are the top elements that require further development together with banking and taxation areas.

#### 4.2 Private Sector

The main goal of the semi-structured interviews with the e-residents was to clarify their expectations towards the program and if the program meets their expectations. We divided the interview with the private sector into two parts: the warm-up part and motivation and evaluation part.

The first part was introductory part and aimed to identify the interviewees, their company profession area, position in the company etc.

The second section aimed to clarify the expectations of the e-resident entrepreneurs towards the program. We tried to find out how the Estonian state has met the entrepreneurs' expectations and what factors affect it. Furthermore, we assess the entrepreneurs' knowledge regarding the state strategy and its impact on their business. We examine the level of participation of the e-resident entrepreneurs in the strategy building and their interest in this process. Finally, we collect proposals to improve the current e-residency program.

On average, the interviewees have been e-residents of Estonia for approximately 3,2 years. Four of the interviewees had been e-residents for more than 4 years. The interviewees were mostly founders or co-founders of the company and having different responsibilities in their organization.

The business area of the selected companies varied from education and research field to the information technology sector and digital marketing, digital consultation and real estate services.

Most of these companies use outsourcing while performing their projects. Meaning, that in most cases they do not have employees until they have a project. They hire employees on a need basis and prefer to pay for actual working hours. However, some

of these companies have a fixed number of employees. They use the same method and employ additional specialists on need basis. This supports the idea of cost reduction and gaining profit. The companies mostly outsource the expertise outside of Estonia, as it is cheaper.

The second part of the interview focused on the motivation and evaluation. It started with the question regarding the motivation that encouraged them to become an e-resident of Estonia. Answers of the interviewees varied. However, they all agreed that the most important motivator was the independence from the work location. Additionally, interviewees named different motivators that encouraged them to join the program, such as tax residency and possibility to run the company between different countries more easily. In one case, the key driver was Brexit [18].

Interviewees found the whole e-residency package quite appealing. Probably there will be a new piece of business on boarded via holding a European company with an EU VAT number. It is a European bank account and European business address. Having a company in Europe and legally secured infrastructure offered by Estonia, in addition to the Estonian reputation on digital initiatives on the international level, is motivating. Especially for countries with less digital security. Furthermore, interviewees found that the digital environment of Estonia eases the establishment of companies and encourages transparent atmosphere.

In addition to the work location, independence, the accessibility and easy use of public services were the expectations that the interviewees had before applying for the e-residency. Interviewees brought out that the security of the digiID cards guaranteeing access to the services is important for running a business besides the digital signing functionality. Entrepreneurs considered the possibility to do things remotely in a fast and secure way important. One interviewee added networking and community, where e-resident entrepreneurs can market and support their business and offer their services to other companies, to the list of their expectations.

When it comes to the evaluation of the program and how it meets the entrepreneurs expectations on the 10-point scale (where 1 meant that the expectations were not met and 10 that the expectations were fully met), three out of four e-residents gave 7 points out of 10 to meeting the expectations. The other four interviewees evaluated the program up to 4 points out of 10. The average score in total was 7,4 points. Those interviewees, who evaluated the program more than 7 points mentioned that everything the program promised was granted.

Some interviewees were critical due to the transparency laws and security that creates additional legal work and legal complexities requiring much time and money in their origin.

When we asked the question regarding the non-met expectations, interviewees' answers were different according to their regions.

Some of them had issues regarding to the tax register and taxation in general. It seems that in some cases local laws affect the salary payments from their Estonian companies.

One remarkable observation was that entrepreneurs are all satisfied with the provided services. However, they expected a bit more support for their business from the Estonian state.

They expected direct communication with the program representatives to increase their networking. Interviewees believe that the state should be closer to them, on one hand, to listen to them and understand their needs and on the other hand enhance the efficiency of the program.

This answer explains the gap between the e-residents and the state vision. Since not all e-residents have this simple expectation towards the program. The author asked from the interviewees to whom they recommend becoming an e-resident.

Interviewees recommend the status of an e-resident to the freelancers and selfemployees as well as small businesses. Especially if the partners are from different countries, the e-residency program will be suitable and beneficial for them.

Additionally, the interviewees believe that the e-residency program is beneficial for entrepreneurs, especially when the company has grown and expanded its work on an international scale. However, the state support for the entrepreneurs is still the point that needs improvement from their point of view.

There was a remarkable observation concerning the Estonian e-residency 2.0 initiative or Estonian e-residency strategy. Only two out of seven interviewees knew about it. Those, who have read the e-residency 2.0 white paper initiative, mentioned that this strategy was just reflecting the interests of Estonia, not focusing the business or entrepreneurs perspective. Although, it shows the government plans regarding the program it would be good to take into account the expectations of the end-users of the e-residency program.

One of the elements in the e-residency program/strategy that still needs improvement to meet the entrepreneur's expectations was the cross-border salary payments. In addition, the program coordinators should pay more attention to the legal compatibility between countries. It is important to have more connection with the program delegates. The growth strategy is one of the elements that the interviewees believe that needs improvement by more financial solution and marketing support as well as the networking support within the e-residency community.

All interviewees found that state should involve e-residents more in the development of the strategic goals of the e-residency program. Interviewees mentioned that involvement could be achieved for example through the Estonian e-Residents International Chamber Association (EERICA). This association has elected board discussing with e-residents all topics regarding the program and e-residency status. Furthermore, the organization enhances their networking. Based on the interviews e-resident entrepreneurs want to connect more to the program through direct connection and shape their future as e-residents.

### 5 Discussion

We identified the gap between the e-residents and the state vision. Both parties have slightly different expectations. As the initial expectation of the e-residents was just to create a company in the EU. However, not all e-residents have this simple expectation towards the program since they are expecting further support to their business.

To evaluate the strategic goals, it is important to look at the most important strategic directions from both perspectives. Table 2 summarizes the main strategic goals of the

e-residency white paper 2.0 as the latest document reflecting the public sector strategic view.

Based on the entrepreneurs' feedback, we identified positive aspects of the program and factors that need improvement. Table 3 presents the summary of the factors affecting the achievement of the strategic goals. The research results show that e-residents consider positive that they can establish their business and obtain the business independent location, besides they can save time and work in a transparent environment. However, they are facing some challenges that may affect their future business plan in their Estonian companies.

Secure	Beneficial	Convenience
Improved information exchange	More opportunities to connect	Advances in technology
Better use of data	More opportunities to grow companies	More user-friendly
Greater oversight and control	More opportunities to share Estonian culture	

**Table 2.** The main goals of the e-residency white paper.

**Table 3.** Feedback and expectations of the entrepreneurs.

Positive comments	Expectations
Establishing company	Tax confliction and the complying with their regions' tax regulations
Business location independent	Tax advisors
Transparent	Direct connection
Saves time	Engagement in the discussion for the future of the program
Clear process	Support the community through the business advisors Platform interface and available languages

After a comparison of public and private sector strategic goals and expectations, it is possible to say that there are no contradictory aspects. However, both sectors accent different topics. For example, communication is a common strategical goal, but technological development is more on the public sector focus. During the research, we identified three main areas that are important for the e-residents and what public sector should consider while setting strategic goals. These areas are communication, support and engagement.

The results of interviews with the e-residents show that they have some challenges with the networking and marketing solutions because of the lack of support from the program side. There is not many events or direct connection to them to enhance the communication element, which affected to the growth of their business. E-residents

would like to benefit from the existing e-residency network from the communication perspective. There are existing social media channels where it is possible to communicate (e.g. Facebook groups etc.). However, the state should approach more systematically to the different available communication channels.

The platform and the lack of advisors were marked as a challenge that the e-residents most commonly face. E-residents expect support from the legal and taxation point of view. Moreover, the government on-boarding platform needs improvement with better interfaces and different available languages. Based on this information, the public sector should focus on the improvement of different support programs and services. It does not mean that the state should offer all support by itself or without fees. It is more about developing the enabler services infrastructure that supports the businesses of the e-residents.

Engagement was one of the most mentioned topics during the interviews. One of the e-residency 2.0 initiative goals was to offer more opportunities to share the Estonian culture, which is one of the e-resident goals. However, the program authority does not invite them to participate while setting the program strategic goals. They were not involved to the discussions regarding the e-residency strategy and the future development of the program.

The research team was aware that EAS has launched different questionnaires and surveys to map the e-residents view. However, the responses from the interviews show that there is still enough room for improvement. For example, considering how to engage e-residents through the EERICA to the strategy shaping process.

# 6 Conclusion

Based on the conducted research it is possible to say that Estonian e-residency program has reached the maturity level where it is necessary to revise the followed approach of the strategy.

We assessed from the public sector and e-residents perspective, whether the strategic objectives were met based on the e-residency white paper 2.0, which was the only publicly available source that contained e-residency program strategic goals. Research results provided valuable feedback for re-designing certain elements of the program.

The findings of the study indicate that e-residents are positive about their ability to start a company and run their businesses remotely, as well as the ability to save time and operate in a transparent atmosphere. However, they confront with certain obstacles that influence their potential market plans in Estonian businesses. We gathered the best practices, made recommendations for the future process and mapped further possible research topics.

It is important to note that there are no conflicting factors after comparing the policy priorities and aspirations of those two sectors. Both sectors clearly emphasize and focus on different issues. Based on the research results communication, for example, is a general strategic aim, but technical development is mostly a public-sector concern.

Based on the research, it is possible to say that communication, support and participation are the three key areas that e-residents and the public sector should address when setting strategic targets. Strategy development is collaborative process that needs

the engagement of all stakeholders. Meaning that the state achieves its strategic goals as far and as successfully as the state can meet the goals of e-residents. We believe that despite the fact that the e-residency program has faced some criticism; the program still has many potential and success opportunities.

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