

Leveraging Digital Tools for Enhancing Investment Promotion in Small OECD Economies

Andero Kaha

Haaga-Helia University of Applied Sciences Strategising in Organisations Master's thesis 2024

Abstract

Author(s)

Andero Kaha

Degree

Master of Business Administration

Report/thesis title

Leveraging Digital Tools for Enhancing Investment Promotion in Small OECD Economies

Number of pages and appendix pages

86 + 6

This thesis focuses on examining the strategies, approaches, and outcomes related to digitalisation efforts within investment promotion agencies (IPAs) operating in small economies that are members of the Organisation for Economic Co-operation and Development (OECD). Specifically, it investigates how these agencies leverage digital tools to enhance their efficiency in attracting foreign direct investment (FDI).

The thesis centres on three distinct cases of national IPAs—Costa Rica's Coalición Costarricense de Iniciativas de Desarrollo (CINDE), the Estonian Investment Agency, and Invest in Finland—all of which demonstrate a higher-than-average utilisation of digital tools for investment promotion. The main research question is "How do digital-oriented investment promotion agencies in the small OECD economies of Costa Rica, Estonia, and Finland use digital tools to promote foreign direct investment?". Several sub-questions supplement it.

Through qualitative document analysis and semi-structured interviews, the thesis describes the factors influencing the investment promotion agencies' digitalisation trajectories and the resulting impacts on their operations. The thesis identifies critical success factors and the effects of employing digital tools, providing insights for creating the Estonian Investment Agency's digital strategy and potentially for other IPAs seeking to optimise their use of digital tools in investment promotion initiatives.

Keywords

investments, foreign investments, digital technology, digitalisation

Table of contents

1	Intro	troduction		
2	Investment promotion and the use of digital tools			
	2.1	Foreign direct investment in small OECD economies	3	
	2.2	National investment promotion agencies in small OECD economies	10	
	2.3	Digital tools at investment promotion agencies	14	
	2.4	Starting points for research	24	
3	Research approach			
	3.1	Research process	28	
	3.2	Selection of cases	30	
	3.3	Methods of data collection and analysis	31	
4	Outcomes			
	4.1	Case 1: digital tool usage at the Estonian Investment Agency	36	
	4.2	Case 2: digital tool usage at Invest in Finland	44	
	4.3	Case 3: digital tool usage at the investment promotion agency of Costa Rica	51	
	4.4	Summary of outcomes	57	
5	Discussion		60	
	5.1	Approaches towards digitalisation	60	
	5.2	Practical implications, limitations, and ethical concerns	64	
	5.3	Suggestions and recommendations	67	
	5.4	Conclusions	68	
References			71	
Appendices			87	
Appendix 1. Interview question plans				

1 Introduction

The purpose of the thesis is to describe, compare, and understand the ways and motivation of national entities promoting foreign direct investment (FDI), known as investment promotion agencies (IPAs), to implement digital tools for investment promotion. Focus is set on IPAs in small economies that belong to the Organisation for Economic Co-operation and Development (OECD), the success factors of digitalisation and the effects of using digital tools.

The thesis centres on three distinct cases of national IPAs: Costa Rica's Coalición Costarricense de Iniciativas de Desarrollo (CINDE), the Estonian Investment Agency, and Invest in Finland. All of these agencies demonstrate a higher-than-average utilisation of digital tools for investment promotion (De Crombrugghe & Moore 2021) and are (together with several other investment promotion agencies) referred to in the thesis as digital-oriented investment promotion agencies.

While there is previous research on digital tool usage, its effects, prerequisites, and success factors at investment promotion agencies (e.g., De Crombrugghe & Moore 2021, Kaha 2020, Raganowicz 2019, Makombe & Kachwamba 2011), this thesis, focusing on three cases of digital-oriented national investment promotion agencies, attempts to contribute further to this regard, setting focus on some of the OECD's most digital investment promotion agencies. Commissioned by the Estonian Investment Agency and written by its Chief Technology Officer, it is an attempt to investigate how and why digital tools are used at those agencies.

The thesis is being realised in the wider context of an ongoing merger between the Estonian Investment Agency's parent organisation Enterprise Estonia and the state-run foundation KredEx, forming the Estonian Innovation Agency. During this process, learning from best practices of other organisations across the globe is seen as one of the priorities within the organisation (Lugna 2022), the thesis also being an attempt to contribute to this regard. It is inspired by a practical need to understand better what the practices in digital tools usage at investment agencies are. The results and suggestions of the thesis will be used within the organisation to make better decisions on digital tools planning and deployment, as well as help the author make better decisions filling the role of Chief Technology Officer at the investment agency. As the first step, the results and conclusions will be used for finalising the Estonian Investment Agency's digital strategy that is being written in parallel to compiling the thesis.

The still wider background of the thesis is the global transformation of investment promotion: investment promotion agencies across the globe are in transition, with increased focus gradually

being set on digitalisation. National and subnational entities aiming at attracting foreign direct investment are trying to achieve increased efficiency by utilising latest digital tools and technologies.

Though focusing on only three cases, the thesis may also provide some insights for other IPAs seeking to optimise their use of digital resources in investment promotion initiatives. It must be acknowledged that the number of cases looked at is not big enough for generalisation.

The main research question of the thesis is:

 How do digital-oriented investment promotion agencies in the small OECD economies of Costa Rica, Estonia, and Finland use digital tools to promote foreign direct investment?

The question is supplemented by the following sub-questions:

- a) Why do the digital-oriented investment promotion agencies of Estonia, Costa Rica, and Finland use digital tools to promote foreign direct investment?
- b) What are the success factors of implementing digital tools to promote foreign direct investment at the investment promotion agencies of Estonia, Costa Rica, and Finland?
- c) What are the effects of implementing digital tools to promote foreign direct investment at the digital-oriented investment promotion agencies of Estonia, Costa Rica, and Finland?

2 Investment promotion and the use of digital tools

The current chapter provides an overview of the key concepts in foreign direct investment, promoting foreign direct investment, and using digital tools to promote foreign direct investment.

2.1 Foreign direct investment in small OECD economies

Foreign direct investment (FDI) can be defined in several different ways, e.g.: as "investment made to acquire lasting interest in enterprises operating outside of the economy of the investor" (Blaine 2009, vii) or as "the establishment or purchase by residents of one country of a substantial ownership and management share of a business in another country" (Wells & Wint 2010, 8).

In some sources, such as the once widely used International Monetary Fund's Balance of Payments Manual from 1993, a threshold of 10 per cent (IMF 2004; with the addition that a smaller percentage may still entail a controlling interest in a company and that a more than 10 per cent share may not signify control in the annotated version) or even 25 per cent (e.g. in Japanese legislation until 1980; Farrell 2002) ownership in a company's capital is used to define an owner as "a direct investor".

One of the internationally recognised definitions, applied by the Organisation of Economic Cooperation and Development (OECD 2008) and the International Monetary Fund (2009), however, sees foreign direct investment simply as "a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy." Since 2014, the OECD has been collecting FDI statistics according to this definition (OECD 2015).

It must be noted, though, that another prominent definition, one by the United Nations (UNCTAD 2019) differs in wording. It conveys a similar meaning, with the addition of the concept of control over and interest in the foreign entity being "lasting": "Foreign direct investment (FDI) is defined as an investment reflecting a lasting interest and control by a foreign direct investor, resident in one economy, in an enterprise resident in another economy."

In the context of the thesis, the latter definition is used as a reference, as it implies the "lasting" or long-term relationships formed by foreign direct investment – while seemingly a minor detail, the existence or lack of long-term nature of relationships with investors may have a major impact on how countries manage relations with both, existing and potential investors. This, in turn, may influence how some of the digital tools (e.g., client relation management systems) are planned and

implemented. Where data provided by the OECD or International Monetary Fund (IMF) is used, however, the respective current or historical definitions apply to the data collected.

The varying effects of foreign direct investment

Foreign direct investment inflow to a country, defined by the United Nations as "capital provided by a foreign direct investor to a foreign affiliate, or capital received by a foreign direct investor from a foreign affiliate" (UNCTAD 2019), has the potential to be an important driver of economic growth and diversification (Echandi, Qiang & Kusek 2017, 5). Whether it just has "a potential" to drive economic growth or there is enough empirical evidence to claim that it does so, however, is another and a more complicated question, widely debated by researchers.

In a literature review, Almfraji and Almsafir (2014, 208) covered a number of research papers (from between 1994 and 2012), examining the relationship between FDI and economic growth. The results showed that some findings considered FDI having a positive effect on economic growth, while others identified negative, weak, or null effects. In addition, several influencing factors were identified in literature, such as:

- 1. Levels of human capital in the host country;
- 2. Financial markets development;
- 3. Dependency on foreign investment;
- 4. The existence or lack of open trade regimes;
- 5. Income level of host country;
- 6. The existence or lack of a technological gap;
- 7. Quality of the political environment.

Research by Carkovic and Levine (2005) suggests that FDI inflows do not independently influence economic growth. Several other authors see the positive effects of FDI appearing only if certain conditions are met. For example, Borenzstein, De Gregorio and Lee (1998, 134) suggest that the higher productivity of FDI holds only when the host country has a minimum threshold stock of human capital – to exploit FDI's spillovers, highly educated workforce is needed. Balasubramanyam, Salisu, and Sapsford (1996) stress that outwardly oriented trade policy – or in other words, openness of the economy – is needed to obtain the growth effects. More complex relations between FDI and economic growth have been described in some studies. Baiashvili and Gattini (2020) have detected a statistically significant inverted U-shaped relationship between countries' income levels and the size of FDI impact on growth: moving from low- to middle-income countries, the effect gets larger, and, on the other hand, it diminishes again transitioning to high-income countries.

Varblane, Varblane, Pulk, Vissak & Lukason (2020) associate the positive effects of foreign direct investment with the ability of local enterprises to adapt and learn; however, results of empirical research on the effects of FDI often depend on what types of effects, what time periods of occurrence of the effects, and which target companies of FDI are in focus. A conclusion is made that analysing the effects of FDI on a target country is extremely difficult: it is possible to attribute effects caused by other phenomena to FDI or attribute the effects of FDI to other phenomena, such as increasing research and development expenses in a country or increasing exports.

According to OECD (2018), there is an array of positive effects of FDI that can materialise if an adequate policy framework is adopted, the framework simultaneously minimising the problems created by (i.e., cost) of FDI:

- 1. Foreign investment often contributes to growth, beyond what domestic investment normally would:
- 2. FDI can support host economies' global trade integration by providing them with improved access to international markets;
- 3. Multinational enterprises often bring new technologies in recipient economies resulting in technology transfers and innovation spillovers;
- 4. FDI creates direct and indirect jobs and can enhance human capital; international investment can support greater competition in host markets; FDI has the potential to bring social and environmental benefits.

Vissak and Roolaht (2005), on the other hand, have gathered a list of possible problems for a host country of FDI, based – at least in part – on the real-life example of Estonia. To name just a few:

- Annual inflows and reinvested earnings by foreign investors are volatile and the irregularities can destabilise a country's economic development especially in small economies where any large business deal can have a considerable influence on the macroeconomic indicators;
- 2. Concentration of foreign capital in certain economic sectors can be problematic;
- 3. Uneven development of different regions and sectors can result from FDI inflows;
- 4. Large FDI inflows can lead to the emergence of a so-called parallel economy foreign-owned companies are stronger, develop quickly, and have considerably higher wage levels than locally owned enterprises.

While this list seemingly contradicts the statements of the OECD (2018), there is necessarily not a contradiction – as one can say that problems occur mostly when the necessary policy framework is not adopted.

Small OECD economies in competition for foreign direct investment

While FDI may have both, positive and negative effects, and evidence of positive effects of FDI on the economic growth of a host country may not always be conclusive on the macro level, it is a fact that countries and regions across the globe compete for foreign direct investment. Metaxas (2010, 228) has even described the competition for inward FDI as "constituting one of the primary aims of regions and cities, globally".

This race for FDI includes the OECD economies. While OECD countries remain the main destination for FDI, they face increasing competition from large emerging economies (OECD 2018, 14). The list of economies involved in this competition, plus in competition with counterparts from within the OECD, includes small OECD economies – the economies that are at focus in this thesis.

Small OECD economies are defined in this context as OECD economies that have a working-age population below the world median (Lederman & Lesniak 2018). In 2021, the median working-age population of economies that the World Bank (2022a) provided data for, was approximately 5.8 million. Out of the OECD countries, countries with a smaller working age population – Costa Rica, Denmark, Estonia, Finland, Iceland, Ireland, Israel, Latvia, Lithuania, Luxembourg, Norway, Slovakia, Slovenia, and Switzerland – are thus considered small economies.

To illustrate the strive for FDI in small OECD economies, the following examples can be brought:

- 1. The Estonian Investment Agency (2022b) sees attracting FDI as an indicator of (economic) success: "Estonia is among the leading countries in Central and Eastern Europe regarding foreign direct investments per capita. [...] A balanced budget, a free trade regime, a fully convertible currency, a competitive banking sector, and an investment-favourable environment have all contributed to the success of the country.";
- 2. Ireland's Department of Enterprise, Trade and Employment (2021) describes the contribution of FDI to the Irish economy as "far reaching"; it estimates that 20% of all private sector employment in the state is directly or indirectly attributable to FDI, while also stressing the significant taxation revenue, FDI supporting other commercial activity and helping research and innovation; and states that "FDI has been, and will continue to be, hugely important to the Irish economy.";
- 3. CINDE (2022a) sees FDI's role for Costa Rica as "to generate employment and greater opportunities for its most valuable asset: people; with the goal of contributing to the social and economic development."

But how successful are the small OECD economies in the race for inward FDI? In absolute numbers of inward investment stock (i.e., the amount of inward investment accumulated; OECD 2022a;

see Figure 1), none of the small OECD countries can compete with the organisation's biggest economy, the United States. However, Ireland, Switzerland and Luxembourg are all among the top 10 OECD countries even in absolute numbers, while Iceland, Slovenia, Latvia, Lithuania, and Estonia occupy the five last places within the OECD (OECD 2022a).

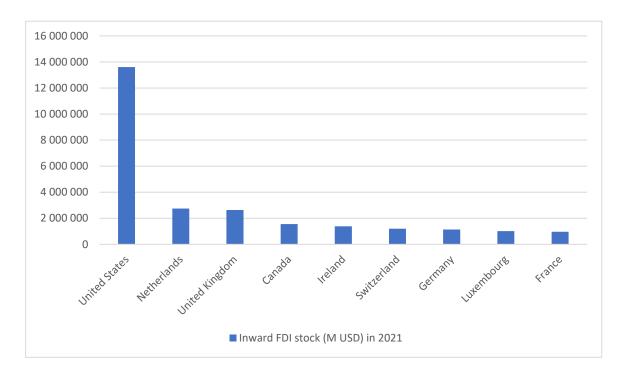


Figure 1. Top 10 OECD countries for inward FDI stock in million U.S dollars in 2021. (OECD 2022a)

Looking at the inward FDI stock as a proportion of the gross domestic product (GDP), however, it can be seen how much above their economic weight some of the small economies punch. As a proportion of GDP, several of the small OECD economies have accumulated a larger amount of foreign direct investment, i.e., their FDI inward stock is larger, compared to bigger counterparts. Here, already half of the top ten consists of small economies.

In 2021, Luxembourg's inward FDI stock formed 1,169 per cent of the country's GDP, followed by Ireland's 277 per cent, the Netherlands' 271 per cent, Switzerland's 147 per cent and Estonia's 93 per cent. This means that four out of five top places in this regard were occupied by small economies (OECD 2022a; see Figure 2, p 8).

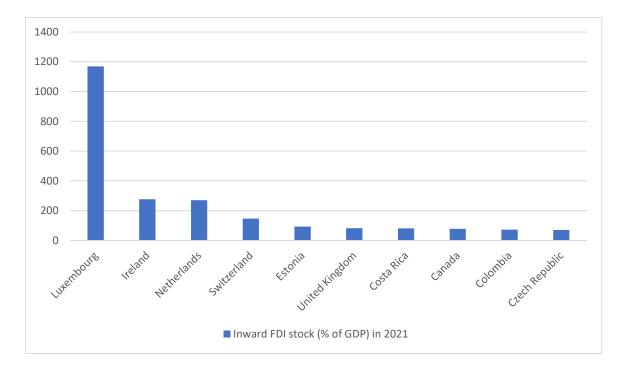


Figure 2. Top 10 OECD countries for inward FDI stock as proportion of GDP in 2021. (OECD 2022a)

Of course, looking at FDI stock as a proportion of GDP has its flaws. For example, while Luxembourg's inflow stock has considerably grown thanks to large inflows in 2020 (paired with similarly large outflows; OECD 2022a), it must be stressed that FDI positions and transactions in and out of Luxembourg are both traditionally very high, largely because of activities linked to the Luxembourg's role as a financial centre, executed through captive financial institutions (Feuvrier 2020). While this can be considered a possible flaw in the transparency of statistics, the role of captive financial institutions does not affect other OECD countries with small economies as much.

Another flaw can be found at the core of measuring FDI stock as percentage of GDP. A low GDP figure combined with equally low inward FDI stock would result in percentages equal to the situation where both figures would be – for example – doubled. On the other hand, Finland's and Iceland's low percentages, 28 and 31 per cent respectively, can in part be attributed to the countries' relatively high GDP.

Baiashvili and Gattini (2020) have described an inverted U-shaped relationship between countries' income levels and the size of FDI impact on economic growth – meaning that absolute wealth may matter when considering how useful the incoming investment worth a certain percentage of a country's GDP is for it. On the other hand, comparing high income countries of the OECD between each other, using this figure still may say something about the possible effect of the attracted inward FDI towards economic growth.

Of the three countries whose digital investment promotion tools are in focus of the current thesis, Estonia's investment stock as a proportion of the GDP, 93 per cent, was the highest, followed by Costa Rica's 81 per cent (OECD 2022a). Finland's inward FDI stock of 98 billion US dollars (UNCTAD 2022a) formed 33 per cent of the country's GDP of 299 billion dollars (World Bank 2022b). In absolute numbers, Finland was at the top of the three, followed by Costa Rica (49.4 billion USD) and Estonia (33.7 billion USD).

Determinants of inward foreign direct investment

It can be said that the amount of foreign direct investment inflow depends on a large array of factors, some of which are easier to influence by the countries competing for FDI than others. There are many determinants of inward FDI, including factors related to market access and demand, risk factors including political and legal stability, the desire from investors to gain access to natural resources, and policy-related variables (Whyman & Baimbridge 2009).

Some determinants, such as the size of an internal market or the availability of natural resources are difficult – if not almost impossible – to effectively influence. On the other hand, there are other determinants that can be influenced if needed. For example, some countries have implemented liberal policies towards FDI, and embraced development strategies based on the accumulation of scientific and technological knowledge (Guimón & Filippov 2012) to be attractive. There are countries that provide grants for (re)location of companies (Huggins 2001), countries that develop the flexibility of their labour market (Whyman & Baimbridge 2009) and those that develop their capacity to provide competitive real estate assets, efficient infrastructure, skilled and productive workforce, clusters of suppliers, effective competitive environment, or support and services for investors (Ciobanu 2015).

It is possible to divide instruments that can be used to influence the inflow of direct investments into three major categories: fiscal incentives, financial incentives, and other incentives (Varblane & al. 2020). Fiscal incentives include ways to positively influence the profitability of the investment, using taxes – such as reducing the corporate income tax rate or the reduction of import tariffs. Financial incentives may include measures, such as direct grants and guarantees for loans. Other incentives include offering lower prices for resources or advantages when participating in tenders.

However, one of the most visible trends in the global economy is the aggressive pursuit of foreign direct investment using investment promotion agencies (Casey 2013, 14). The role of these agencies includes attracting potential investors to invest and, after that, supporting the investments in the destination country through various activities (Varblane & al. 2020).

2.2 National investment promotion agencies in small OECD economies

While the "investment" part of investment promotion was defined in the previous subparagraph, the "promotion" part, specifically in the context of investment activities still needs defining.

According to the Merriam-Webster dictionary, "promotion" can be defined as the act of furthering the growth or development of something, especially the furtherance of the acceptance and sale of merchandise through advertising, publicity, or discounting (Merriam-Webster 2022). Investments, however, are not merchandise and setting the scope for what investment promotion entails and what it does not include, is often difficult.

This is partly due to the changing nature of investment promotion over the years. Some sources, such as UNCTAD (2002), divide investment promotion activities into generations entailing different actions (the first generation of investment promotion policies focuses on market-friendly policies and the second generation on marketing the countries). The latest generation is referred to as Investment Promotion 4.0. While the exact meaning and scope of Investment Promotion 4.0 are still vague and good definitions are difficult to come across in literature, Investment Promotion 4.0 entails data-driven solutions to showcase assets or communities, thus increasing the chances of attracting and retaining investment (Dettoni 2018).

According to the UNCTAD (2001), investment promotion covers a wealth of services, ranging from the provision of market information to the undertaking of feasibility studies and environmental impact assessments. World Association of Investment Promotion Agencies (WAIPA) has listed the core processes of an investment promotion agency (Vogler 2020; see Figure 3), naming investment promotion, facilitation, and aftercare, supported by additional processes, such as market research or economic diplomacy.

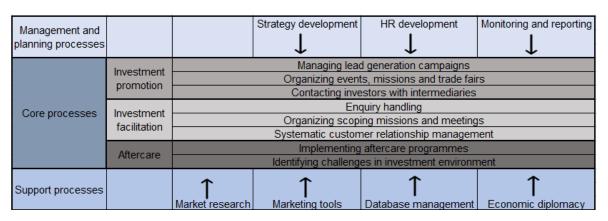


Figure 3. An exemplary overview of the main processes of an investment promotion agency. (Vogler 2020)

Defining investment promotion

Wells and Wint (2000, 4) provide a definition for investment promotion: "activities that disseminate information about or attempt to create an image of the investment site and provide investment services for the prospective investor". The authors list: 1) what types of activity investment promotion entails: advertising, direct mailing, investment seminars, investment missions, participation in trade shows and exhibitions, distribution of literature, one-to-one direct marketing efforts, preparation of itineraries for visits of prospective investors, matching prospective investors with local partners, acquiring permits and approvals from various government departments, preparing project proposals, conducting feasibility studies, and providing services to the investor after projects have become operational; 2) and what types of activities investment promotion excludes: the granting of incentives to foreign investors, the screening of foreign investment, and negotiation with foreign investors, even though many of the organisations responsible for conducting investment promotion activities may also conduct these other activities.

Various other definitions of investment promotion exist. United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP 2017) defines investment promotion as "a series of activities that seeks to market/promote a particular location (country, city, province, region) as an attractive location for foreign direct investment.". It would also be possible to choose a truly marketing-based approach, the definition of "a form of marketing used by national governments to attract foreign investments into their country" (Abamu 2019).

In this thesis, however, the definition by Wells and Wint (2000, 4) is used as a reference, and their explanations are taken into account when setting the scope of the case studies, e.g., when preparing for the semi-structured interviews, described in paragraph 3.

Attracting investment inflows

Countries and regions engage in investment promotion and form investment promotion agencies because this helps increase FDI inflows, attract higher quality FDI and transform the economies of the destination countries of investment (Heilbron & Kronfol 2020, 170). Governments compete fiercely with one another for each investment decision with appealing location value propositions. Forming the value propositions requires efficient and well-coordinated cooperation between institutions and establishing a formal structure to conduct investment promotion activities. Most countries

have chosen to establish an investment promotion agency (IPA) to make all this possible. (OECD 2018, 16)

While investment promotion often does bring investments, it needs to be stressed that in real-life situations where investment promotion activities are carried out, various other effects of investment promotion may occur. Some of these effects are not positive or not solely positive. For example, Drahokoupil (2008) described a real-life case where "over-effective" investment promotion harmed groups whose interests were not in line with those of the investors and violated broader democratic processes – a government promised an investor that it would not expand employment and social protection in a way that would increase a multinational company's production costs.

Reducing information asymmetries

Both, theoretical and empirical literature, suggest that information asymmetries constitute a significant obstacle to capital flows across international borders (Harding & Javorcik 2013, 337). In other words, a serious market failure exists that deters investment in foreign countries: for example, investors may lack knowledge of consumer preferences, suppliers, and other key features of foreign markets (Hayakawa, Lee & Park 2014).

Knowing that lack of information constitutes a barrier to flows of FDI, many governments engage in investment promotion activities, which can be used for influencing direct investment. The purpose of such activities is to reduce transaction costs facing foreign investors by providing information on the host country. One example of this is helping foreign investors deal with bureaucratic procedures. (Harding & Javorcik 2013, 338)

Information provision by investment promotion agencies often takes the form of marketing campaigns, participation in international conferences and fairs, setting up informational websites and actively pursuing investors through phone, mail, or personal contacts. It may also take the form of assisting investors with site visits and introducing them to potential joint venture partners, customers, and suppliers. (Harding & Javorcik 2013, 341)

The first investment promotion agency established was the Irish Industrial Development Agency (IDA), which started as an entity serving a protectionist industrial policy in 1949; in 1970, it became an independent agency responsible for both, indigenous and foreign investments (Bseiso 2013). According to a mapping from 2018, in the OECD, all countries, except for Belgium (with separate sub-national agencies for Wallonia and Flanders), had established national investment promotion agencies (OECD 2018, 16). In addition to the OECD members at the time of conducting the

mapping, later additions of Lithuania (Verslo Žinios 2019; Invest Lithuania 2022), Costa Rica (OECD 2021a; CINDE 2022a) and Colombia (OECD 2020a; Procolombia 2022) have their respective national investment promotion agencies.

While some governments are also using investment promotion agencies for promoting outward investments (with varying effects as proven by the cases of Japan's and Korea's investment promotion activities, thoroughly examined by Hayakawa, Lee & Park 2014), the current thesis focuses solely on inward investment promotion – as determined by the role of investment promotion agencies in the three cases studied.

Achieving better results by increasing efficiency

According to Morrisset and Andrews-Johnsson (2004), in the case of national investment promotion agencies, a positive correlation can often be identified between the amount of resources that the agency can use to promote inward foreign direct investment and the quantitative results it brings. This means that agencies with more resources to promote investments, usually bring in more investments. Besides obvious restrictions, such as the size of the internal market, small economies often have less resources in an absolute sense than large countries and – when fighting for inward FDI – they are thus more faced with a dilemma of priority setting (Van Beers 2004). Put in more simple terms, this means having to choose the right tools for the right goals to be as efficient as possible, employing their limited resources. Making smart decisions in digital investment promotion is one example of this.

Several of the investment promotion agencies in small OECD economies have received international recognition for their efficient work in promoting investments. For example: in 2020, the Estonian Investment Agency was awarded the United Nations Investment Promotion Award for the innovativeness it showed in supporting its stakeholders and investors during the COVID-19 pandemic (UNCTAD 2020a); The Costa Rican Investment Promotion Agency was awarded by the United Nations Conference on Trade and Development (UNCTAD 2021) for its use of digital tools, giving visibility to case studies and news on investments in the health sector; Malta Enterprise, the entity responsible for investment promotion activities in the country, has received an award from the United Nations for promoting investments for jobs and skills (UNCTAD 2016); the Investment and Development Agency of Latvia for promoting export-oriented FDI (UNCTAD 2016).

2.3 Digital tools at investment promotion agencies

One opportunity that investment promotion agencies utilise to become more efficient and improve performance, is undergoing digitalisation (De Crombrugghe & Moore 2021): all OECD IPAs use digital tools in their operations, the majority implementing tools such as social media campaigns, video conferencing and internal e-communication; more sophisticated mechanisms to attract FDI – such as virtual site selection visits, digital customer support service and marketing based on artificial intelligence – being less frequently used.

In the future, the majority of OECD IPAs (De Crombrugghe & Moore 2021) plan to extend the use of digital tools, particularly for promotion activities (investment generation, image building and FDI prioritisation) and to a lesser extent for investment facilitation and aftercare. Several OECD IPAs have stated that digital tools influence the IPAs' strategic decisions, be it through adapting investor targeting or by reducing the number of overseas trips.

While digitalisation can provide opportunities for IPAs to reach more investors and conduct operations more efficiently, adopting digital tools has costs and requires strategy, including deciding where the tools can be most effective (Dayan 2022). At the same time, a part of the digitalisation of procedures helping investment promotion agencies be more effective may lie far beyond the responsibility of IPAs and involve a complex whole-of-government approach (Novik & De Crombrugghe, 2018, 3).

It must be noted that the past transition towards digital tools and processes at agencies has been quick, considering that 23 years ago, UNCTAD (2001) reported that several investment promotion agencies had no internet connection and besides that, there was even an agency without any computers. These facts would be unthinkable in any of today's agencies. However, many of the investment promotion agencies still need to catch up with some of the more progressive organisations in other sectors: for example, Al-based customer service and Al-based marketing are still not wide-spread at investment promotion agencies (De Crombrugghe & Moore 2021, 13).

From "no internet" agencies to digital-oriented investment promotion agencies

According to OECD data, there were several small economies, such as Costa Rica, Estonia, Finland, and Israel, implementing a wider-than-average array of digital tools for investment promotion in 2021 (De Crombrugghe & Moore 2021). Four of the five countries with the widest array of digital tools in the OECD were small economies, with considerably larger Turkey being an exception in this regard.

For conciseness, the investment promotion agencies with a wider than average array of digital tools among the national agencies of OECD countries are referred to as digital-oriented investment promotion agencies in the thesis.

As mentioned, IPAs are not always among the most progressive digital innovators. Still, digitalising processes in investment promotion is not a new phenomenon. Already in 1997, 53 per cent of the investment promotion agencies in the developed countries and 28 per cent in the developing countries surveyed by UNCTAD had computerised investment promotion systems of one kind or another (UNCTAD 1997).

By 2001, most IPAs had recognised the usefulness of websites in their promotional efforts (UNCTAD 2001) with over 125 IPAs operating a website. At the same time, corporate investors had increasingly started to use this medium in collecting data to support their locational decision-making. A digital divide could be clearly noticed between developed and developing countries in 2001 – both, in web presence and the availability of computers. When in OECD countries, 10 staff members shared 8 computers on average, in the least developed countries, the figure was 2 computers per 10 staff, and some of the IPAs in the least developed countries lacked access to the internet. In 2007, a study was carried out to evaluate the tactics and web presence of investment promotion agencies (Lozanda & Krit 2007, 29), concluding that those of countries with higher economic development maintained better web functionality.

Besides websites, other digital tools were in use at some of the agencies already in 2001, such as investor databases, investor monitoring software, financial software, computerised approval systems and investor targeting software (UNCTAD 2001).

By 2018, all OECD IPAs had embraced the use of digital tools to an extent – every single one of them marketing their country through a website and the majority using web services, exemplified by the OECD by Google Ads and social media channels, while 96% of the IPAs used a CRM system (OECD 2018). In addition, the OECD concluded that the absence of some digital tools, such as a website "could potentially send the wrong signal to investors about the investment climate on the ground".

The types of digital tools that IPAs use now are not always technologically complex and high-tech solutions are not necessarily required to support investors (Dayan 2022, 2). For example, Van den Berghe (2021) describes standard software solutions, such as Zoom, Teams and Skype, as effective digital tools for lead generation, while more advanced technology, such as using virtual reality tools, can be utilised in investor servicing.

Various digital toolsets in use at investment promotion agencies

The majority of OECD IPAs use social media campaigns, video-conferencing and internal e-communication in their work, while more sophisticated mechanisms to attract FDI (such as virtual site selection visits, digital customer support service and AI-based marketing) are less frequently used (De Crombrugghe & Moore 2021, 1; see Figure 4, p 16). A number of IPAs are mostly building their customer journeys on existing tools like social media, rather than shifting to online investment promotion tools (De Crombrugghe & Moore 2021, 19). This process is described by Bseiso (2013, 64) as using social media as a hybrid element of investment promotion agencies' promotional mix – it enables the agencies to address new types of investments, gradually becoming "solution providers" instead of "location promoters", while at the same time progressing along their learning curve.

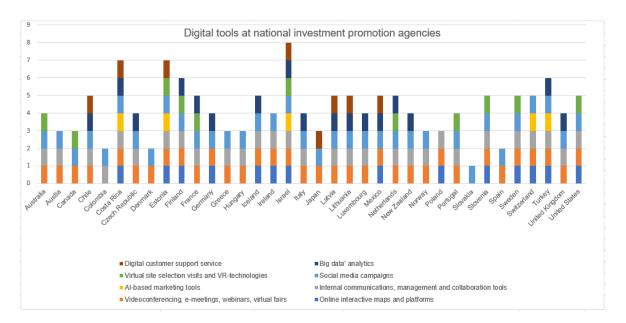


Figure 4. Investment promotion agencies' reply to the question "What digital tools does your IPA use to promote and attract FDI?" in an OECD survey on investment promotion and digitalisation. (De Crombrugghe & Moore 2021, 13)

Though already years ago it was predicted that investment promotion was going to catch up with other sectors in the number and quality of data-driven solutions (Dettoni 2018), it did not seem to be the case at many agencies in 2021 – while a little less than half of the OECD investment promotion agencies used big data analytics, Al-based customer service and Al-based marketing were still not widespread (De Crombrugghe & Moore 2021, 13).

Digital customer relationship management systems were used by almost half of OECD IPAs in their investment facilitation and aftercare efforts (De Crombrugghe & Moore 2021, 2). World Bank's

survey of 74 IPAs reported an even higher number of 62 per cent; two thirds of the users, in turn, having built investor-relationship management systems on top of their CRMs (Sanchiz & Omic 2020, 26). This means that some IPAs use complicated CRM systems: Invest Lithuania utilises a tool that reminds investment advisors to do "health check-ups" on investors (De Crombrugghe & Moore 2021, 16), Invest Estonia has built its system around a sales force automation platform, providing possibilities for standard and non-standard automation and dashboards (Kaha 2020), and the Czech customer management and data visualisation system connects to real-time macroeconomic data (De Crombrugghe & Moore 2021, 16).

Different digital tools and techniques have been used in marketing: Business Finland featured a podcast series of several episodes that covered topics such as digitalisation and innovation (De Crombrugghe & Moore 2021, 13), while Invest Estonia has created Emma, a non-human Al-assisted agent aimed at better internal communication and handling social media posts (IRCAI 2021).

At several IPAs, specialised platforms have been created for facilitating site selection. Business Sweden's interactive online map eases investment attraction and facilitation by finding available sites best suitable for potential businesses; Switzerland Global Enterprise's tool, in addition, provides information on development support to the investors (De Crombrugghe & Moore 2021, 12). To overcome potential information gaps on investment opportunities in Egypt, its Ministry of International Cooperation introduced an Investment Map that provides a comprehensive view of investment opportunities across the country (OECD 2020c).

At a number of IPAs, artificial intelligence (AI) based tools are in use. Costa Rica's CINDE, as part of their investors' services, has created an artificial intelligence based tool to match the supply of knowledge economy jobs with the demand (De Crombrugghe & Moore 2021, 16). The Estonian agency is using Suve, an AI-based chatbot, aiding potential investors with their information needs (IRCAI 2021).

Recently, recommendations on digital advancement and the use of technology at IPAs have reached individual Investment Policy Reviews, country-specific reports conducted by the OECD Secretariat in partnership with the government of the country under review (OECD 2022c). In the case of Bulgaria, for example, recommendations have been given to use the website of German Trade and Invest as reference on how to provide relevant information to potential investors and Invest Estonia's website as a reference on how to implement an artificial intelligence based chatbot (OECD 2022d). In case of Myanmar (OECD 2020d), recommendations have been made to move from paper-based record-keeping to a digital CRM. UkraineInvest was advised (OECD 2021b) to follow the example of the Nigerian Ministry of Power and the Investment Promotion Commission, as these agencies were in the process of establishing a green energy investment platform online.

Benefits of the whole-of-government approach

At the same time, digitalisation of procedures may lie far beyond the responsibility of IPAs and involve a complex whole-of-government approach (Novik & De Crombrugghe, 2018, 3). OECD (2020b), brings the relationship between the Estonian Investment Agency and the government-wide e-Estonia initiative as an example. Digitalisation of the Estonian Investment Agency's services being a part of "living" the wider "e-Estonia dream" by the agency was also stressed by the Head of the agency Joonas Vänto in an instructional video created for the United Nations Conference on Trade and Development (UNCTAD 2022b).

It, however, should be noted that the relationship between the Estonian IPA and the e-Estonia concept is more complex than could be described in a few sentences by the OECD's report or the video clip by the Head of the Estonian agency. Technical and organisational cooperation between the "narrower" e-Estonia initiative and the Estonian Investment Agency has historically been tight, to the extent of the e-Estonia Showroom, or "physical outlet" of e-Estonia being a structural unit of the investment agency during a period in the 2010s (Estonian Investment Agency 2016). There has also been tight technological cooperation in web and digital tools development between e-Estonia showroom / the later e-Estonia Briefing Centre and the Estonian Investment Agency, inevitably resulting in exchange of ideas. This, in turn, means that at least the "narrower" concept of e-Estonia is closer to Invest Estonia than one might think.

Some components of the wider e-Estonia concept, Estonia's e-Residency programme allowing foreign nationals to open a company in Estonia fully online, and the Work in Estonia programme, aimed at attracting foreign talent to Estonia through online and offline services, have also historically been units within the Estonian Investment Agency (Estonian Investment Agency 2022a), before becoming independent departments within the framework of the merger between Enterprise Estonia and Kredex (Kerge 2022).

Another example brought by OECD (2020b) of digitalisation cooperation beyond the direct responsibility of IPAs, is the case of several Nordic investment promotion agencies and their relationship with the concerted and long-term government effort to implement the necessary regulatory adjustments to make public services available online. The importance of this process is illustrated by Antti Aumo's, the Head of Invest in Finland's, public statement stressing that implementing effective electronic business registration is a crucial part of smooth landing of investments (Business Finland 2024).

Online investment and company establishing processes are becoming more and more widespread in OECD countries (see Figure 5, p 19), with all OECD IPAs having a certain extent of digitalisation

in the process to invest and set up a business in their country, nearly half having the majority of procedures online and over 30% having a fully digitalised process (De Crombrugghe & Moore 2021, 2).

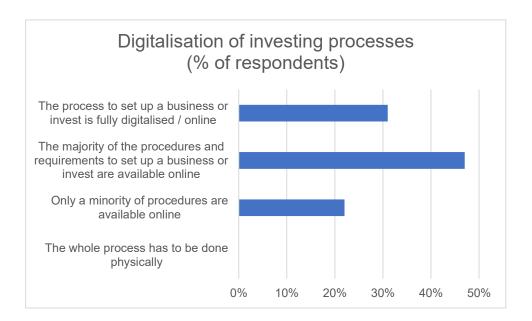


Figure 5. Digitalisation of the process to set up a business and invest. (De Crombrugghe & Moore 2021, 2)

The point about the importance of wider digitalisation of government services has been made by several IPA managers, such as Eyal Eliezer, Head of Strategy and Marketing at (Israel's former IPA) Invest in Israel, stressing that IPAs should focus less on investment promotion and more on creating an attractive digital ecosystem (OECD 2021b, 3) and Ambassador Luiz Cesar Gasser, Director of Services and Industry Promotion Department at the Ministry of Foreign Relations of Brazil who has stressed that for investment promotion, e-government services are essential (OECD 2021b, 4). The relationship between wider digitalisation efforts and the digitalisation work of IPAs in developing countries has been explored by Kachawamba and Sæbø (2011), who suggest e-government having the capability to promote FDI: it can be used by IPAs to reduce information costs and bureaucratic costs facing foreign investors in host countries.

The understanding of a relationship existing between functional e-government solutions and investment promotion, however, is nothing new. To bring an example of early developments from South Africa – already in 2003, the eThinkwini Municipality website allowed its users to pay for services, send queries, browse maps, etc, having created linkages to the Durban Investment Promotion Agency, allowing potential investors to also get answers to their queries (Odendaal 2003).

While the wider e-government framework is often seen as a facilitator for FDI, this does not automatically mean that IPAs have a say in how e-government functions and what services are offered to foreign businesses. Only a few OECD IPAs (Australia, Estonia, Israel, Italy, Mexico, and the United Kingdom among them) were actively participating in the national digitalisation strategy design in 2021 (De Crombrugghe & Moore 2021, 8).

Strong influences of the COVID-19 health crisis

Several researchers see the COVID-19 pandemic as an important influencer of the global shift to-wards digital among investment promotion agencies. With the emergence of COVID-19, IPAs had to switch overnight to remote working arrangements and face various organisational, information technology and management challenges, including cancelling in-person investor visits, events, fairs and missions, plus regularly providing COVID-19-related information via their websites. In addition, new digital tools and solutions had to be implemented. (OECD 2020b)

During the pandemic, investment promotion agencies saw both, a shift in their modus operandi as operations moved online, as well as a renewed urgency to best support firms and promote investment amid an economic crisis that merged in the wake of the COVID-19 pandemic (Dayan 2022, 2).

As a result, at over 90% of OECD IPAs, the pandemic accelerated the use of digital tools (De Crombrugghe & Moore 2021). To bring some examples of accelerated digital transformation at an OECD IPA:

- According to the Senior Director of Invest in Finland Antti Aumo, the digitalisation of the IPA's processes was a priority already before COVID-19 – but the pandemic clearly accelerated the process (OECD 2021b);
- IDA Ireland increased its use of digital tools following the onset of the COVID-19 pandemic, engaging more extensively with investors through various platforms on a one-on-one basis and through online events and webinars. They also created custom tools for investors. (De Crombrugghe & Moore 2021, 11);
- 3. Flavia Santoro Trujillo, the President of Colombia's investment agency, has stated that "in ProColombia we are convinced that technology and the digital platform [...] are a fundamental element in 'new normality'", the time after the emergence of the COVID-19 health crisis (Annual Investment Meeting 2020).

A study by the OECD (2022b) brings some examples of "creative" digital developments at investment promotion agencies during the COVID-19 crisis. Invest Estonia launched an Al-powered chat assistant Suve, while the Polish Investment and Trade Agency and Portugal's investment

promotion agency AICEP Portugal Global started providing virtual site selection visits. Enterprise Greece facilitated e-learning opportunities of its staff, Germay Trade and Invest and Japan's JETRO conducted online surveys to assess the impact of COVID-19 on firms. In addition, New Zealand Trade and Enterprise, as a direct response to COVID-19, launched a free online platform – Live Deals – to connect qualified investors with live investment opportunities in the country (De Crombrugghe & Moore 2021, 12).

Some researchers, such as Kotíková and Čuhlová (2021, 29), however, note that while the provision of online information and digital tools by investment agencies during the crisis grew in general, the volume of provided support and information for the investors varied significantly from country to country. It was more noticeable in the case of investment promotion agencies in Europe that, according to the authors, "lead the development".

OECD (2020b) describes prior digital readiness as a prerequisite of smoother shift towards digital during the health crisis: for those investment promotion agencies that possessed well-designed websites, fully operational customer relationship management (CRM) systems and good access to digital tools and services, the shift was seen as smoother than for others. In case of Invest India, one of the agencies awarded for its response to COVID-19 (UNCTAD 2020a), digital proficiency of its staff has been mentioned as a success factor (Phillips, Helibron & Kher 2021).

The stakes for the agencies during the pandemic could be high. According to the Head of Invest India Deepak Bagla, having a digital portal for Invest India, aligned with various stakeholders, that was made available at the onset of the pandemic, helped the agency take care of 20,000 enterprises in total (OECD 2021b; UNCTAD 2022b).

Prerequisites, success factors and limitations of digital tools usage

It is important to understand that digitalisation of activities at investment promotion agencies has its success factors and limitations.

First, while digitalisation can provide opportunities for IPAs to reach more investors, and conduct operations more efficiently, adopting digital tools has costs, and requires strategy on where tools can be most effective (Dayan 2022, 2).

Though digitalisation can help improve IPA monitoring and evaluation methodologies and support data-driven investment promotion, it is a long-term process requiring a corporate strategy and cooperation between IPAs worldwide to make most of the opportunities (OECD 2021b).

And while digitalisation is important, digital tools alone are not enough and in-person meetings, improvement of internal processes and collaboration with other institutions are still crucial (OECD 2022b). The main challenges to expand IPA digitalisation in the OECD are the cost of technology and the lack of adequate skills and experience (De Crombrugghe & Moore 2021).

According to the CEO of the regional investment promotion agency of Flanders, Claire Tillekaerts, Flanders Investment and Trade started its move towards creating a framework for artificial intelligence in 2018 – with the aim of becoming a more data-driven organisation (Stratejai 2022). First, Al readiness was assessed, and then an Al strategy was created, encompassing non-technical aspects of Al used, such as how the analogue and digital processes fit together and how humans working at the organisation needed to be "upskilled".

The prerequisites and success factors (see Figure 6), as well as effects of digital tools implementation, more precisely – digital automation – at the Estonian Investment Agency have been looked at in detail in the author's recent Master's thesis at Tallinn University (Kaha 2020). Here, the strategic approach towards digitalisation is mentioned as a crucial success factor. Going digital and starting to use digital tools being seen as a part of the organisation's core strategy is stressed as a success factor. This is complemented by the IPA's management understanding of the possibilities and limitations of digitalisation. In addition, it is stressed that digital skills (or, in the case of automation, more precisely – automation skills) are needed for successful digitalisation (or in the case of Invest Estonia – digital automation).

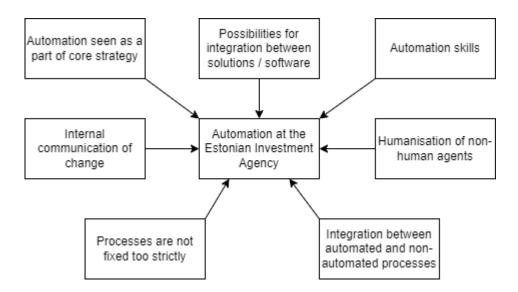


Figure 6. Core prerequisites and success factors of automation at the Estonian Investment Agency. (Kaha 2020)

But where there are costs, benefits may emerge and where there are success factors, success stories may prevail. Most IPAs taking part of the OECD survey on investment promotion and digitalisation in 2021 (De Crombrugghe & Moore 2021, 10) stated that the development of digital tools is prompting them to reduce the number of overseas trips. Over three quarters had adopted new techniques to conduct investor outreach and targeting while half of the IPAs were using monitoring and evaluation tools. On the downside for IPA employees – but not necessarily for the effectiveness of the investment organisations – 6 per cent of the IPAs reduced the number of offices abroad due to increased digitalisation and 3 per cent laid off employees (De Crombrugghe & Moore 2021, 11).

Automation at the Estonian agency is seen as beneficial by the agency's employees (Kaha 2020; see Figure 7), and a clear time savings based cost-benefit model is in place that allows analysing its tangible costs and benefits further. Besides this, digitalisation at the Estonian agency, however, has several perceived effects that are more difficult to measure than direct time saving. For example, digitalisation may result in the standardisation of deliverables created by the agency, such as investment offers or replies to specific information requests, as well as the possibility to use success stories of digitalisation in marketing and public relations.

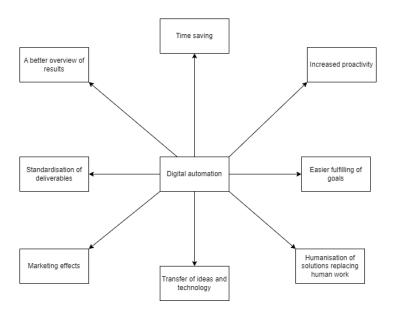


Figure 7. Core perceived effects of digital automation at the Estonian Investment Agency. (Kaha 2020)

In the future, the majority of OECD IPAs plan to extend the use of digital tools, particularly for promotion activities (investment generation, image building and FDI prioritisation) and to a lesser extent for investment facilitation and aftercare (De Crombrugghe & Moore 2021). 56 per cent of the

IPAs surveyed by World Bank and WAIPA in 2019 (Sanchiz & Omic 2020) saw changes in the impact of technology and digitalisation as having the greatest possibility to influence their work in the future.

All IPAs are not equally enthusiastic about digital transformation, though. For example, Grzegorz Slomkowski, member of the management board of Polish Investment and Trade Agency, has said that he does not "really agree with the digitalised investment process" – digital solutions for the initial investment review stage, such as geographic information systems, are gradually being used at the Polish investment agency, but in the decision-making stage, "we should meet face-to-face" (Foreign Direct Investment 2022).

The opinion expressed by Daniel Küng, the CEO of Switzerland Global Enterprise is completely opposite. "Embrace what's happening and don't try to build protective walls when the winds blow, but rather build windmills," he has said, adding that the next, emerging generation of business leaders have to be taken into account when designing investment promotion. "We have to adapt skills, we have to adapt our systems, we have to adapt the tools we use and we have to become much more an orchestrator than a solo player." (International Trade Center 2018)

There is also the possibility to choose a "middle-ground" strategy, as expressed by the CEO of Paris region's subnational investment promotion agency, Lionel Grotto (O'Farrell 2023a). While he has warned about strong limitations in technologies, such as artificial intelligence in investment promotion, he has also stated that the IPA led by him wishes to be neither among the last, nor the first ones in implementing them, in order to enjoy the benefits but ensure trustworthiness and retain caution.

2.4 Starting points for research

Based on the previous sub-chapters, a summary, "starting points for research" was formed, consisting of the following definitions, and starting points.

Core definitions:

- Foreign direct investment (FDI) is defined as an investment reflecting a lasting interest and control by a foreign direct investor, resident in one economy, in an enterprise resident in another economy." (UNCTAD 2019).
- **Investment promotion** is defined as "activities that disseminate information about, or attempt to create an image of the investment site and provide investment services for the prospective investor" (Wells and Wint 2000, 4).

 Small OECD economies are defined as economies of countries belonging to the OECD that have a working age population below the world median (Lederman & Lesniak 2018).

Starting points on foreign direct investment and investment promotion:

- Foreign direct investments have the potential to be an important driver of economic growth and diversification (Echandi, Qiang & Kusek 2017, 5).
- One of the most visible trends in the global economy is the aggressive pursuit of foreign direct investment through the use of **investment promotion agencies** (Casey 2013, 14).
- The reason why countries and regions engage in investment promotion and form investment promotion agencies, is helping to increase FDI inflows, attract higher quality FDI and transform economies of the destination countries of investment (Heilbron & Kronfol 2020, 170).
- In case of national investment promotion agencies, a positive correlation can often be identified between the amount of resources that the agency can use to promote inward foreign direct investment and the quantitative results it brings (Morrisset & Andrews-Johnsson 2004).
- Small economies have less means in an absolute sense than large countries and when fighting for inward FDI and are faced with a dilemma of priority setting (Van Beers 2004).
- One opportunity that IPAs utilise to become more efficient and improve performance, is undergoing digitalisation (De Crombrugghe & Moore 2021).

Starting points on implementing digital tools to promote FDI:

- The array of tools in use at investment promotion agencies varies from agency to agency (De Crombrugghe & Moore 2021, 13).
- Digitalisation of procedures facilitating foreign investments may lie far beyond the responsibility of IPAs and involve a complex whole-of-government approach (Novik & De Crombrugghe, 2018, 3).
- Implementing digital tools to promote FDI may have various success factors, prerequisites and effects (Phillips, Helibron & Kher 2021; Kaha 2020; De Crombrugghe & Moore 2021, 11).
- Implementing digital tools to promote FDI may be influenced by **global events**, such as the emergence of the COVID-19 health crisis in 2020, combined with the economic impacts of the events (OECD 2020b; Dayan 2022, 2).

Most investment promotion agencies see changes in the impact of technology and digitalisation as having the greatest possibility to influence their work in the future (Sanchiz & Omic 2020).

Based on the focal starting points mentioned, a theoretical framework (see Figure 8, p 27) was formed for analysing digital tools implementation at investment promotion agencies, stressing the connections between external influences on digitalisation, the whole-of-government approach and digital tools usage at investment promotion agencies:

- 1. Digital tools and services provided by the government in general, and digital tools and services used at the investment promotion agencies, are influenced by global events, such as the emergence of technologies or the emergence of global crises.
- 2. The lack of, existence, and quality of digital government services influence what tools and services need and can be created by investment promotion agencies.
- 3. The lack of, existence, and quality of tools and services at investment promotion agencies have the potential to influence the implementation of digital government services (e.g., through policy advocacy or by making services available for wider use).

The emergence of external influences, such as the COVID-19 related global health crisis, economic crises, and development in technologies, such as artificial intelligence, may influence both, digital government services and digital tools implemented by investment promotion agencies. The existence, lack and quality of digital government services influences how investment promotion agencies can and have to build up their digitalisation efforts. Investment promotion agencies have a possibility to influence the government digital services e.g., through example, technology transfer, or policy advocacy. (Adapted from De Crombrugghe & Moore 2021; Novik & De Crombrugghe 2018; OECD 2020b; Dayan 2022)

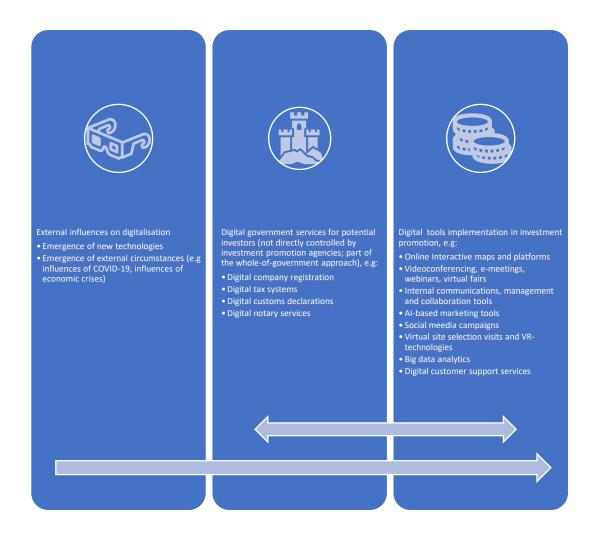


Figure 8. Theoretical framework. Relationship between external influences, government digitalisation and digital tools implementation at investment promotion agencies. (Adapted from De Crombrugghe & Moore 2021; Novik & De Crombrugghe 2018; OECD 2020b; Dayan 2022)

The current chapter provided an overview of key concepts in foreign direct investment, promoting foreign direct investments and using digital tools to promote foreign direct investments.

3 Research approach

The following chapter will give an overview of the case study approach used in the thesis, the research process, and choice of cases.

3.1 Research process

A qualitative approach is used in the research process. The characteristic of all forms of qualitative research designs is that the researcher is the primary instrument for data collection and data analysis (Merriam & Grenier 2002, 5). In the research process, this gives the possibility to clarify and summarise material, check the respondents for accuracy of information and explore unusual or unanticipated responses. Dividing the research process into two separate chronological steps further helps to use the opportunity that this kind of flexibility provides.

It must be acknowledged that the researcher – or the main instrument of research – being an employee at one of the agencies looked at, as is the case in this thesis, may have both, advantages, and disadvantages in the research process. On the one hand, experience of working at an investment promotion agency gives an overview of various investment promotion processes that a researcher without such experience may not have; it may enhance trust and cooperation with interviewees; it may make it easier to know which documents to look for to conduct document analysis; insights gained from the case study research can be directly applicable to the agency's operations, fostering actionable recommendations and potentially enhancing organisational effectiveness. On the other hand, there are possible disadvantages, such as possible bias introduced into the research; potential issues with accessing data that the interviewees find themselves uneasy sharing with a representative of a potentially competing organisation. In addition, results and conclusions may be perceived as lacking independence, potentially casting doubt on the findings.

Transparency is used as the main tool to mitigate the potential disadvantages. The researcher's affiliation is disclosed in the thesis, potential ethical concerns are addressed in a separate subparagraph. During the interviews, the affiliation is made clear to the interviewees and recorded oral agreements are made with them on how the data can and cannot be used.

Though qualitative research can be flexible, research still needs to have a structure, and a clear approach for collecting, analysing and presenting results must be chosen. In this thesis, the case study approach is used, covering the cases of three digital-oriented investment promotion agencies in small OECD economies.

According to Gillham (2000a, 1), a case study "is one which investigates a case to answer specific research questions, and which seeks a range of different kinds of evidence, evidence which is there in the case setting, and which has to be abstracted and collated to get the best possible answers." A case is a unit of human activity embedded in the real world, which can only be studied or understood in context, which exists in the here and now, that merges in with its context so that precise boundaries are difficult to draw (Gillham 2000a, 1).

As none of the evidence collected is likely to be sufficient on its own, a multitude of sources of evidence provides that – as each source of evidence has its weaknesses and strengths – the research questions can be answered. This kind of multitude of evidence is a key characteristic of case study research (Gillham 2000a, 1). This can also be considered one of the main advantages of case study research.

Though it is important to understand the theoretic background and to be able to define key notions within the field, the research, as is a characteristic of case study research (Gillham 2000a, 2), does not start out with any "a priori" theoretical notions – until getting hold of the data, a researcher is simply not able to fully know what theories and which explanations work best.

While case studies provide an in-depth understanding of complex phenomena by examining them within their real-world context, and the case study approach is relatively flexible, this also means that its generalisability is often limited.

This disadvantage, however, is not overlooked. The main goal of the thesis is gaining actionable, practical results for making decisions on digital tools planning and deployment at the Estonian Investment Agency, as well as helping the author make decisions filling the role of Chief Technology Officer at the agency. This explains why the case study approach is preferred – decisions about digitalisation happen, fail or succeed in context, calling for research methods systematically taking this into account.

Chronologically, the research process is divided into several different phases:

- The preparatory phase, focusing on topic, timeline and structure planning, as well as choice of methods;
- 2. Literature review phase, focusing on the results and conclusions of previous research, collecting background information, finding and forming suitable definitions for key concepts to be discussed:
- Data collection phase for document analysis, consisting of looking for and finding documents for thematic document analysis, systemising and preparing them for thematic document analysis;

- 4. First data analysis phase, consisting of thematic document analysis, forming the basis for phase 5;
- 5. Interview data collecting phase, consisting of setting up the interviews and conducting them:
- 6. Second data analysis phase, where data collected during the interviews is analysed and combined with the results of previous phases, compiling case studies;
- 7. The finalising phase, focusing on comparisons, suggestions, concerns and conclusions.

3.2 Selection of cases

The thesis focuses on digital tools usage at the digital-oriented national investment promotion agencies of the small economies belonging to the Organisation for Economic Co-operation and Development (OECD).

Small economies are defined as economies with a working-age population below the world median (Lederman & Lesniak 2018).

Digital-oriented investment promotion agencies are defined as investment promotion agencies possessing a wider than average array of digital tools among the national investment promotion agencies of the OECD countries. The width of the arrays is determined, according to the data presented in OECD's report "Investment Promotion and the Digital Economy: A Comparative Analysis of Investment Promotion Practices Across the OECD" (De Crombrugghe & Moore 2021). The comparative analysis used as the basis for choosing the cases includes the replies of all the national investment promotion agencies of the OECD countries, except those of Belgium, which a) is not a small economy; b) does not have a national investment promotion agency; South Korea, which is not a small economy.

In the context of the thesis: digital-oriented investment promotion agencies in small OECD economies are thus the national investment promotion agencies of Costa Rica, Estonia, Finland, and Israel.

Due to recent structural changes in Israel's investment promotion agency (the agency was reorganised and merged with the Ministry of Economy and Industry), however, the cases of Estonia, Finland and Costa Rica are focused on. The case of Israel is left out, as the agency does not exist in the form it previously existed; thus, now being a completely new entity, there is no evidence that it could currently be considered a digital-oriented agency.

As only three cases are studied, the results should not be applied to similar contexts.

3.3 Methods of data collection and analysis

The main data collection method is semi-structured interviews with managers at the three digital-oriented investment promotion agencies of small OECD economies: Costa Rica (a group interview), Finland, and Estonia.

The interview method is chosen, in part, due to "the richness and vividness of the material it turns up" (Gillham 2000b, 10) – when using different kinds of data, as in the case study approach, the interview material is "almost always the most interesting and, above all, it enables you to see and to understand what is reflected rather more abstractly in other kinds of data".

Gillham (2000b) lists eight criteria to find out if interview as a data collection method is appropriate:

- 1. Small number of people are involved;
- 2. People are accessible;
- 3. Most of the questions are "open" and require extended response with prompts and probes;
- 4. Everyone is "key" and you cannot afford to lose any;
- 5. The material is sensitive in character, so trust is involved;
- 6. Anonymity is not an issue, though confidentiality can be;
- 7. Depth of meaning is central, with only some approximation to typicality;
- 8. Research aims mainly require insight and understanding.

All eight criteria are applicable in the thesis (small number of interviewees; open questions – see Appendix 1; at least one key representative needed for every case; potentially sensitive, business-related material; anonymity not an issue when collecting data, though provided in the next phases; depth of meaning central for describing and analysing the cases; insight and understanding aimed at with the thesis), with limitations in the case of criterium 2 – accessibility of people.

While CINDE's representatives are inaccessible to the author for face-to-face interviews due to geographic distance and potential costs involved, they are accessible online via a video interview. Business Finland's representative is offered a choice between online and face-to-face interviews in an initial email and chooses an online one. Invest in Estonia's representative is accessible offline.

Though Gilham (2000, 13) points out a major disadvantage of long-distance interviews – the interviewee possibly becoming impatient during a long telephone call, this threat is mitigated using more modern technology than described by the author, video-enabled Teams calls that allow the interviewer to react to possible visual clues of impatience. While face-to-face interviews are still preferable, they cannot be conducted in every situation and the interviewees' preferences have to be taken into account as well – as previously described, video calls are a familiar and widely used form of communication at investment promotion agencies.

Preparation: thematic document analysis

Prior to the interviews, thematic document analysis (see Table 1, p 33 for a list of types of documents) is carried out. The results are then used for creating a preliminary structure for interviews, choosing the topics and forming individual interview plans (see Table 2, p 34, for a list of interviews). This includes forming a set of predesigned questions (see Appendix 1).

Whenever possible, sources, such as impact reports, international organisations' published reports, research and opinions, previous research by the author (Kaha 2022) and other researchers mentioned in Chapter 2 are used to form a basis for the interviews. The choice of documents for document analysis is determined by purpose and availability and thus differs from case to case. While choosing documents on the described basis would not prove systematic enough if document analysis was used on its own, using this method as preparation for interviews helps mitigate this possible weakness. Combining methods of data collection helps to reduce possible biases occurring in the search for documents and information and language gaps that the author may have – it is, for example, at times considerably easier to find relevant reports and articles about one's own organisation than others.

The list of types of documents analysed features reports by international institutions that have been chosen due to their availability, expertise, and credibility. Due to being the result of multilateral cooperation, in many cases applying rigorous data collection and analysis methods, as well as offering transparency, these act as trustworthy sources of information and ideas. On the other hand, reports by independent parties, such as the Tax Foundation, offer more niche knowledge and specialised expertise, again combined with transparent methodology. Articles in the professional press can give timely views of issues being looked at; in the case of outlets such as fDi Intelligence, high standards of reporting are followed (fDi Intelligence and its journalism are subject to a self-regulation regime under the Financial Times Editorial Code of Practice; fDi Intelligence 2023). Webpages of investment promotion agencies, impact reports, presentations and scenarios by the organisations and related government actors often offer a less transparent view. Yet, they give more concrete information about the cases, offering possibilities for deeper dives into them.

The results of thematic document analysis (see Table 1, p 33 for a list of types of documents) form the basis for the semi-structured interviews, together with Chapter 2. However, both in document analysis and the interview phase, the main strength of the "human instrument" of research is used when needed: the researcher responding and adapting (Merriam & Grenier 2002, 5). For example, questions that do not provide the needed information in an interview, are changed; documents that seem relevant before analysis but are not in reality, are discarded; in case of one interview, the interview type is changed in cooperation with the representatives of the organisation being looked at.

Table 1. Types of documents used in thematic document analysis.

#	Type of document	Number of documents
1	Reports by international organisations (World Bank, OECD, United Nations, etc)	18
2	Reports by independent/private research groups and organisations (Atomico, Tax Foundation, International Trade Council, Emerging Europe)	5
3	Pages on national e-governance-related websites (e-estonia.com, Business Information System Finland, Team Estonia)	3
4	Pages on national investment agencies' and their mother organisations' websites (eas.ee, businessfinland.com, cinde.org, etc)	16
5	A page on website- of International Association of Invest- ment Agencies (WAIPA)	1
6	Articles in industry press (Site Selection Magazine, Emerging Europe, fDi Intelligence)	8
9	Presentations by investment promotion agencies' employ- ees (CINDE, Estonian Investment Agency)	2
10	Future scenarios by investment promotion agencies (Business Finland)	3
11	Impact and annual reports by investment agencies (CINDE, Business Finland)	3

Conducting interviews, transcribing and analysing

The interviewees are chosen, based on purpose and availability. In case of all three agencies, the Head of the agency is first contacted and asked for the most relevant contact for the interview. In the case of Business Finland, there is initially no reply, and another manager is contacted, that then recommends the- most appropriate employee to be interviewed.

CINDE's interview is conducted as an online group interview – while arrangements for the interview are made, a group of four representatives is involved in the planning by the manager initially contacted. As the interviewer sees a multitude of viewpoints and expertise proposed by the agency as potentially beneficial for the thesis, a decision is made to adapt to and conduct a group interview.

The interviews (see Table 2 for a list of interviews; Appendix 1 for the question plans) are transcribed using automatic transcription tools (Olev & Alumäe 2022 for Estonian audio; Google Cloud 2023 for English audio), then reviewed and corrected manually before thematic analysis.

Table 2. Interviews conducted with managers at investment promotion agencies.

#	Agency	Interview type-	Representative(s)	Duration	Language
1	Estonian Invest- ment Agency	Single person, offline	senior manager (Manager 1)	1 h 29 min	Estonian
2	Invest in Finland	Single person, online video	senior manager, responsible for digital tools across Busi- ness Finland; formerly an employee of Invest in Finland (Manager 2)	1 h 4 min	English
3	CINDE	Group, online video	Group of 4 managers (with general, marketing and strategising responsibilities; Managers 3 – 6)	1 h 3 min	English

Using natural language processing tools for transcription is chosen, based on previous positive experience with the tools (Olev & Alumäe 2022; Google Cloud 2023). The use of smart automation helps mitigate one of the biggest drawbacks of the interview data collection method – transcribing potentially being extremely time-consuming (Gillham 2000b, 9).

Qualitative, thematic analysis of documents and transcriptions of interviews is used to understand how digital tools are implemented in the digital-oriented investment promotion agencies of small OECD economies.

The current chapter gave an overview of the methods used in the current thesis, the research process, and the case selection.

4 Outcomes

The current chapter delivers the outcomes of the thesis. It is the chapter where the three cases at focus in the thesis are described and analysed.

4.1 Case 1: digital tool usage at the Estonian Investment Agency

Estonia is a member of the OECD with a working-age population of 840,000 (World Bank 2022a). In 2021, Estonia's inward FDI stock of 35 billion US dollars (UNCTAD 2022a, 212) formed more than 9/10 of the country's GDP of 37 billion US dollars, the country possessing the highest FDI stock *vs* GDP ratio among the countries whose investment agencies were looked at in the thesis. It also had the lowest GDP among the three countries.

According to Manager 1 (see Table 2, p 34 for list of interviewees) directly responsible for strategic managing of the Estonian Investment Agency, the main selling point of Estonia's investment environment is the digitalisation of its services, as 99 per cent of the state services provided in Estonia are available online (e-Estonia 2023).

In addition, the country's favourable and simple tax system is important. For the ninth year in a row, Tax Foundation ranked the country's tax system as the best one among OECD countries in 2022 (Bunn 2022, 2).

Environmental freedom, together with a flexible, "bureaucracy-free" and simple legal framework, is another point mentioned by Manager 1. World Bank (2020) has ranked Estonia 18th out of 190 countries in its Doing Business Report.

The selling points of Estonia's investment mentioned by Manager 1 also include Estonia's education system, which is one of the world's strongest, resulting in top 5 scores in various recent PISA tests (OECD 2022e).

In addition, Estonia leading Europe in the number of startups, amount of venture capital investments received, as well as producing "unicorn" companies, meaning tech companies valued at 1 billion US dollars or more (Atomico 2022).

The multi-awarded agency

The Estonian Investment Agency, also marketed as Invest in Estonia and Invest Estonia, is a part of the Estonian Business and Innovation Agency, formed in January 2022 on the basis of Enterprise Estonia and Kredex, two state agencies being gradually merged into a single entity (Estonian Business and Innovation Agency 2022). The Estonian Investment Agency introduces itself as a

government agency promoting foreign investments in Estonia and assisting international companies in finding business opportunities in the country (Estonian Investment Agency 2022b).

The investment promotion agency offers comprehensive, one-stop investment consultancy services, doing so free of charge and creating tailored solutions to suit the needs of potential investors (Estonian Investment Agency 2022c).

In 2022, it facilitated a record-breaking 351 million euros of foreign direct investment to and the creation of 1,600 jobs (full time equivalent; FTE) in Estonia (Estonian Investment Agency 2023a). In 2023, the amount of investment facilitated was 336 million and the number of jobs created (FTE) was 1,078 (Estonian Investment Agency 2023b). The main sectors of investment included industry and manufacturing (77 per cent of investment facilitated in 2022; 73 per cent in 2023), followed by information technology (19 per cent in 2022; 10 per cent in 2023).

The agency has been awarded the Top Investment Agency title by Site Selection Magazine for three consecutive years 2018–2020 (Jones-Kelley 2020). In 2020–2023 it has been named the top investment agency of Emerging Europe (Turp-Balasz 2021, Turp-Balasz 2022, Grzegorczyk 2023), based on methodology heavily relying on assessing the digital communication and publicly available digital toolset of the agencies (Emerging Europe 2022, 13; Emerging Europe 2023, 13). One of Invest Estonia's digital tools, the ComparEST investment location attractiveness comparison tool was nominated for Emerging Europe Awards in the Modern and Future-Proof Policymaking category (Emerging Europe 2023b).

In 2021 and 2022, the agency's digitalisation and automation program was included in the United Nations Educational, Scientific and Cultural Organisation (UNESCO) global list of top 100 projects solving problems related to the 17 United Nations Sustainable Development Goals with the application of artificial intelligence (AI), the Estonian Investment Agency's AI efforts being mentioned in relation to SDG 8: Decent Work and Economic Growth and SDG 9: Industry, Innovation and Infrastructure (IRCAI 2021; IRCAI 2022).

In addition, the agency has received an award from the United Nations (UNCTAD 2020) for facing the challenges of COVID-19 and several awards related to digital communication, such as the Content Marketing Award at Digital Marketing 2020 (Bestmarketing 2020) and International Trade Council's award for most creative investment promotion marketing (International Trade Council 2022).

From social media to advanced support agents

The set of digital tools in use at the agency, referred to as "non-human agents", entails using technologies such as natural language processing, process automation and sales force automation to provide potential investors with the information they need, when they need it (Emerging Europe 2022, 11).

As also previously stressed by the agency's employees (UNCTAD 2022b; Kaha 2020), Manager 1 points out that investment promotion agencies of smaller economies have less resources than those of big economies, resulting in a need for more efficient, "smarter", work processes and automation. While the Estonian agency is constantly working to increase the amount of resources at its disposal, during the previous strategy period (2019-2023), it has been able to start using some of the existing resources more effectively than before, through more efficient processes and digitalisation. In the current period (until 2030) it is continuing the efforts.

The array of types of digital tools in use, based on the classification provided of De Crombrugghe and Moore (2021, 13; see Table 3), is one of the widest among small OECD economies.

Table 3. Types of digital tools used at the Estonian Investment Agency

Online interactive maps or platforms		
gital internal communications, management, and collaboration tools		
Virtual site-selection visits and VR-based technology*		
Social media campaigns		
Video conferences, e-meetings, webinars, virtual fairs		
Online interactive maps and platforms		
Digital customer support service		
Big data analytics**		

^{* -} in limited use.

(Adapted from De Crombrugghe & Moore 2021, 13; additions by the author on grey background)

^{** -} in limited / test use; wider deployment planned.

The Estonian Investment Agency is using interactive online maps to provide potential investors with relevant data on Estonia's regions, their industrial parks, educational institutions, infrastructure objects, etc. The Regions tool gives a potential investor interested in a region a quick overview where to look for a suitable business location. (Manager 1)

Since 2021, an automated news scraper, utilising machine learning has been in use at the agency. It has the purpose of spreading the news created by the Estonian Investment Agency, its partners within the mother organisation (e-Residency, Work in Estonia, Trade with Estonia, e-Estonia Briefing Centre) and outside (Research in Estonia, Study in Estonia, various ministries, and other relevant organisations; various news sources covering topics related to Estonia and business in the country) among Invest in Estonia employees. The tool has dual purposes (Manager 1) – collecting content for external marketing, public relations and cooperation activities, as well as facilitating internal communications. It automatically informs the agency's team of most important news within the agency, as well as its partner network. The tool also helps to gather information and success stories about Estonia's business environment, which the sales team can use for their activities.

A sales force automation system, an advanced collaboration and client relations management (CRM) system, based on standard software enhanced with non-standard solutions, is in use. Its non-standard features include advanced dashboards for analysis and semi-automated reporting, helping investment advisors make better decisions and remind them of needed sales actions. Understanding the results achieved and making informed decisions based on that is perceived as one of the effects of digital automation as the agency (Kaha 2020, 59).

The Estonian Investment Agency has used virtual reality (VR) in its applications to some extent only – in cooperation with the e-Estonia Briefing Centre and several partners outside the agency's mother organisation, an interactive VR tool to promote Estonia's digital business environment has been utilised at various events in Estonia and abroad, also featuring a web interface that could be used at home, using a set of standard VR goggles. Developing VR solutions is not considered a priority at the agency, though various ideas have been discussed over the years (Manager 1).

Social media campaigns are extensively used as a part of the agency's marketing effort, providing a way to widen "the upper part" of the organisation's "sales funnel". For effectively conducting social media campaigns, different means of automation, beginning with AI-assisted social media content creation, automatic content posting, and advanced engagement tracking, are in use. The content creation, in turn, benefits from news scraping, described when referring to internal and external communications tools. (Manager 1)

According to the interview with Manager 1, while possibilities for travelling may be back to the pre-COVID-19 standards, the ways how societies across the globe arrange their work have been altered. An invitation to a conference in Asia a few years ago might have meant several days away from the office, as well as considerable expenses – now a presentation on Estonia's economy at an event in Bali could be done as a simple and quick video call. There are several examples of online events held, including in cooperation with Estonia's largest tech conference Latitude59 and other partners. While for the events and calls, standard software solutions are used in most cases (often varying based on the potential investors' needs and information security arrangements), supportive tools such as dedicated landing pages for "digital visits" to Estonia (referring to sets of online meetings and presentations) and online events have been created.

Digital customer support services are seen as a core part of the agency's digital toolset. A chatbot with multi-website, multi-lingual language processing capabilities to handle the primary information needs of potential investors (Suve) is in use, together with automation solutions to handle customer enquiries (Eia) and automatically or semi-automatically create investment offers, referred to as value propositions. Suve shares content and "intents" (goals or objectives expressed by a user in the chatbot) with the investment agency's sister department within the Estonian Innovation Agency, Work in Estonia. The digital customer enquiry handling agent Eia utilises a hybrid system of rule-based reasoning and advanced machine learning. (Manager 1)

Improving results and saving time

Manager 1 sees the ease at which employees can do their jobs, the standardisation of tasks, and an increase in the number of projects that can be handled by the investment promotion agency as the main effects of digitalisation. Similar perceived effects have also been described previously (Kaha 2020, 59; see Figure 7, p 23).

According to the Manager 1, digitalisation, especially the automation of processes, creates possibilities to save human working time. For example, the electronic investment advisor Eia, replying to investors' enquiries automatically and semi-automatically and providing them with value propositions if needed, saves employees' time which in turn can be converted into a monetary value. As around 50 per cent of the investment promotion agency's budget is covered by labour costs, the effect can be considerable. As "the whole world" (with several examples from retail trade mentioned by Manager 1) is moving towards digital and automatic, it can be seen as enhancing the resources at the agency's disposal – as labour costs grow, automation and digitalisation help the investment promotion agency to "broaden its working hands". The time-saving effect is used as the core component of the costs and benefits model of digital automation at Invest in Estonia (Kaha 2020, 31).

In addition, using an advanced digital tool sends a message to the potential investor, stressing the professional approach applied by the investment promotion agency's team. Manager 1 points out that an investment promotion agency creates "an image of the country" to the investors, making it important to reflect the story told to investors also in actions – to "sell" the digital business environment of Estonia, the investment agency's own services need to be digitalised.

Thirdly, Manager 1 emphasises the human-like characteristics purposefully given to several digital tools replacing human work. He describes how he imagines the working days of a digital tool, such as an electronic investment advisor, being rather different from the days of a human advisor — while a human takes a certain time for e.g., creating a value proposition or an offer to invest, the electronic advisor is a ready-made tool with programmatic logic in its "head", meaning that while the number of investors to be served grows, it can easily manage the growing numbers. According to Manager 1, investors are looking for answers to specific questions, and generally, it does not matter who or what brings them – whether it is programmatic automation, artificial intelligence, or a human.

This, in turn, brings the fourth effect mentioned – the possibility to widen the "upper part of the sales funnel", which makes it possible to analyse a larger number of leads than before, turn them into a larger number of investment projects and finally, a larger number of successes. According to Manager 1, the agency currently has the capability to process around 1,000 investment leads per year, resulting in around 35 successful investment projects, the ratio of leads *vs* successes being almost constant in the past few years.

On the way from the initial lead to a successful investment, automation is used to prioritise and decide which projects need human interactions. The data is collected and analysed, meaning that decisions about the extent of needed human interaction and the additional success potential that, for example, extra employees working on a project, could bring in a case or another are considered. (Manager 1)

Strategic view on the digital

While made before the beginning of his own tenure, Manager 1 sees the initial managerial decision to start strategically implementing digital tools at the agency as the pivotal point in the agency's digital journey.

One of the core success factors of digitalisation at the agency is simplification, combined with standardisation of processes. In the interview, the opinion is expressed that these factors could have increased effectiveness even without using digital tools. If there is standardisation, investment advisors do not have to "invent the wheel" for every project that they are involved in. They

have a standardised toolset instead, be it digital, analogue or combined, for that. While it may – at first sight – seem that standardisation contradicts another goal of digitalisation, seen in the agency's strategy for the next years – personalisation – according to Manager 1, there is no contradiction. Thanks to standardising, the potential investors needing a personalised approach, can be prioritised.

Preceding the development of digital tools with extensive planning to identify the business problems needing to be solved and solutions available is another important success factor. For example, Manager 1 mentions the necessity for mapping customer needs to decide whether to create new virtual reality solutions, such as virtual reality supported investment visits or virtual tours of industrial facilities and other sites.

In 2020, the year known for the emergence of the global COVID-19-related health situation, the agency received United Nations Investment Promotion Award for Excellence in the Response to COVID-19 crisis (UNCTAD 2020a), the main reason being the investment agency's use of digital capabilities to reduce the impact of COVID-19 on business and the economy, the agency ensuring reliable and up-to-date information for investors and using crowd-sourced innovative ideas from the private sector, in order to try to tackle the pandemic (UNCTAD 2020b).

While many of the digital tools at the agency were already in use before the COVID-19 health crisis, the crisis helped to accelerate their development. Suve, the chatbot, was developed during a hackathon to fight the effects of COVID-19. It was employed as a country-wide effort to fight misinformation during the COVID-19-related emergency situation declared in 2020. It worked on the websites of various government and private institutions as a bot giving accurate information on health-related, legal and economic topics. As the health situation improved, it found a "peacetime" use on Invest in Estonia and Work in Estonia websites, focusing on business, investment and employment topics. Led by Invest in Estonia and Work in Estonia employees but backed by various private and public partners, including at the highest level of the country's IT and crisis communications management, Suve, in its initial role, can be seen as a success story of the whole-of-government approach to digital tools development. (Manager 1)

Using e-Estonia as an enabler

According to Manager 1, there are several different ways the whole-of-government digitalisation affects investors and potential investors in Estonia: on the one hand, it is the brand of digital Estonia that is known across the world; on the other hand, the brand is filled with content: the public sector is one of the most digitalised globally, as shown by a recent OECD study (OECD 2024).

General digitalisation of state services affects the life of entrepreneurs in various ways, e.g., allowing payments to the government to be made, taxes declared, applications filed, and digital signatures to be given. At the same time, according to Manager 1, partners utilising digital processes could share both leads to be handled and data to be collected and analysed for the agency to make solid business decisions.

Historically, the Estonian Investment Agency has had strong relations with pieces of the whole-of-government puzzle (including having e-Estonia Showroom, e-Residency and Work in Estonia as its structural units), and it retains strong relations with players in the field. The Team Estonia initiative (Team Estonia 2023) involves business diplomacy efforts of the Estonian Innovation and Estonian Business and Innovation Agency (by several of its departments), the Ministry of Foreign Affairs and the Ministry of Economic Affairs and Communications. If needed, the investment agency can make proposals on developing the government's digital solutions through its foreign representatives, as well as its policy advocacy processes (Manager 1).

Towards big data and audiovisual support agents

The agency's strategy for 2023 – 2030 sets an ambitious goal of raising the amount of investment to Estonia it facilitates from approximately 200 million euros to 400 million euros. The strategy foresees the creation of a separate digitalisation, AI, and automation strategy that, according to Manager 1, has the goal of more efficient and "smart" automation, including developing new applications for digitalisation in data analysis. Such a strategy is being created.

While a successful sales organisation with its digital toolset has been built up in the last years, the next step will be using digital tools for analysis. It is, according to Manager 1, important to provide partners with access to at least a part of the toolset so that they can "speak the language" of the investment promotion agency, further contributing to developing a strong whole-of-government approach.

Partner organisations are seen as a supplement to the existing team, as "data and intelligence providers" that help the investment promotion agency make knowledgeable decisions and, through that, be more proactive in its sales processes. Using digital tools to automatically analyse the data collected, it is possible to get to know – for example – what kind of investments are needed and how they fit in existing value chains. (Manager 1)

Big data, together with feedback from successful and unsuccessful investment projects could be used to make informed decisions – be it for policy advocacy, prioritising potential investors, or achieving increased proactiveness. The latter could mean identifying a gap in a value chain and finding potential investors that may be interested in filling it – possibly already before they,

themselves, have considered investing in Estonia. While the digitalisation of sales processes has been successful thus far, the next opportunities could lie in business development – helping to create a "country product" that can be successfully sold. (Manager 1)

In addition, there are some other concrete possibilities, mentioned by Manager 1. For example, the agency's existing internal communications tool could be built upon to create solutions for more automatic external communication, including marketing.

Manager 1 also stresses the possibility of developing an "audiovisual" investment advisor – while the current electronic investment advisor creates documents in a textual form, also including graphs and images, automatically created real-time video content could be used to, for example, to introduce the strengths of Estonia's business environment.

The need for interactive geo-solutions may also increase in the future, as the unique selling points of regions are being developed as a country-wide policy, needing to be clearly communicated to potential investors. (Manager 1)

4.2 Case 2: digital tool usage at Invest in Finland

Finland is a member of the OECD with a working-age population of 4.3 million (World Bank 2022a). In 2021, Finland's inward FDI stock of 98 billion US dollars (UNCTAD 2022a, 212) formed 33 per cent of the country's GDP of 299 billion dollars (World Bank 2022b), meaning that out of the small OECD economies whose investment promotion agencies are looked at in the thesis, the stock *vs* GDP ratio was the lowest, while the actual inward FDI stock placed highest.

Foreign-owned companies accounted for roughly 1 per cent of all companies operating in Finland in 2023, employing 16 per cent of Finland's workforce and 39% of its exports (Business Finland 2024). In recent decades, the number of foreign-owned companies operating in Finland has grown more than ten times: In 1992, there were 429 such companies in Finland, while in 2021, there were already 4,400 (Business Finland 2022b). During uncertain times of COVID-19 global health crisis and the stressed economic situation of 2023 (related to high interest rates and economic uncertainty), the number of new foreign companies settling in Finland has decreased significantly (Business Finland 2024).

Finland's key opportunities promoted to potential investors include circular and bioeconomy solutions, data centres, digital solutions, energy, food, gaming and Metaverse, health and life sciences, space economy, and tourism (Business Finland 2022a). Finland is advertised as one of the least restrictive countries regarding foreign investment (Business Finland 2022b).

Bringing funds to the nation with stability in its DNA

Business Finland is the Finnish public-sector organisation promoting foreign direct investments to Finland, as well as offering innovation funding, internationalisation services and promoting tourism (Business Finland 2022c). It has over 700 employees working at 40 foreign locations and 16 offices in Finland. The investment arm of Business Finland, Invest in Finland, is a part of the World Association of Investment Promotion Agencies (WAIPA 2022).

Invest in Finland Bureau was created in 1992 when Finland was in deep recession, and the government was starting to comprehend the importance of foreign direct investment (Business Finland 2022b). Over the years, it has seen several structural reforms: 1) merging with the Finnish Trade Promotion Organisation (Finpro) in 2002; 2) Finpro merging with the Finnish Funding Agency for Technology and Innovation (Tekes) in 2012, forming Business Finland. (Business Finland 2022b)

In 2021, Business Finland facilitated 40 successful investment projects, totalling in 161 million euros of investment to the country and creating 619 new jobs; in order to do this, 1013 new investment leads were created and 111 virtual investor visits to Finland made (Polo 2022). In 2022, the amount of investment was 203 million euros, with 735 jobs created; the pipeline included 60 visits to Finland and 626 companies proactively contacted (Business Finland 2023). In 2023, the interest in investing in Finland fell due to economic uncertainty and high interest rates (Business Finland 2024).

According to Business Finland (2022a), there are several reasons for foreign businesses to invest in Finland, such as it being one of the wealthiest countries in the world, regarding growth and development in the economic, technological and social spheres. Finland is promoted as a "functioning society as a platform" with open business and government practices; a nation of designers, engineers, problem-solvers, and pioneers at the forefront of digitalisation and ICT and having stability "in its DNA" (Business Finland 2022d). At the same time, the agency has identified drawbacks for investors, including the limited smoothness of permit and immigration processes and banking services for foreign companies and the limited progress that has been made in enabling foreigners to found companies electronically (Business Finland 2024).

Going digital to grab the value

Digitalisation is a core strategic priority of Business Finland (Business Finland 2022e). The strategy, set for a period from 2020-2025, foresees investment into modern digital tools and automated processes that utilise artificial intelligence. The reason for digitalisation is defined as facilitating operations and allowing the Business Finland team to focus on activities that are "more value-generating".

Digital tools have been implemented at the agency for over twenty years. In 2002, an important part of the agency's digital strategy was formed by reactive queries that, according to a then Invest in Finland representative, implied that the prospective investor was already interested in Finland and had made a commitment to start searching for more information (Hildén 2002). In 2008, the internet was used mainly as a channel of information provision, including fact sheets, news, case studies, and contact information (Valkola 2008).

According to Manager 2 (see Table 2, p 34 for list of interviewees) interviewed in 2024, one of the later pivotal moments within Invest in Finland's digitalisation journey, together with accelerating developments, took place quite recently, a few years ago. One of the influencers of digitalisation was COVID-19.

According to an OECD survey (De Crombrugghe & Moore 2021, 13), Finland's national investment promotion agency uses an array of digital tools in its operations (see Table 4). Big data analytics is deployed, digital internal communications, management and collaboration tools used, virtual site-selection visits and VR-based technology utilised, video conferences, e-meetings, webinars and virtual fairs arranged, online interactive maps and platforms have been taken into use.

Table 4. Types of digital tools used at Invest in Finland

Big data analytics		
Digital internal communications, management, and collaboration tools		
Virtual site-selection visits and VR-based technology*		
Social media campaigns		
Video conferences, e-meetings, webinars, virtual fairs		
Online interactive maps and platforms		
Al-based marketing tools**		

- * in limited use, with the possibility of wider deployment in case of technological advances.
- ** Al-aided processes in translation, recommendation engines, etc., where artificial intelligence aids humans.

(Adapted from De Crombrugghe & Moore 2021, 13; additions by the author on grey background)

One of the focal points of helping the agency towards what has previously been called engaging in activities that are more "value-generating", is implementing advanced analytics. According to the interviewee, this includes using advanced data analytics to understand who the investment agency's most relevant customers are and what is of value to them. The use of data relies on a clear scope of data points – within large sets of data, the right ones need to be identified. An important part of the agency's data toolset is its customer relations management system (CRM), which acts as the data backbone of the digital services. (Manager 2)

Different digital tools are used in Business Finland's marketing, including those related to social media. One of the past examples, having claimed recognition, was a podcast series aimed at investors, that covered topics such as digitalisation and innovation in Finland (De Crombrugghe & Moore 2021, 13). According to Manager 2, however, finding the right target groups for some of the social media actions is becoming more difficult, though there are ongoing efforts in this field.

While the definitions of artificial intelligence vary, it can be said that solutions relying on artificial intelligence (AI) are being explored at the agency, some of the possible areas of use being translations and content recommendations. According to Manager 2, in many other areas, more traditional solutions are preferred. For example, Invest in Finland does not rely on large language models (LLMs), a technology that has recently gained momentum across the globe, for content creation, as the resulting content may often be too generic. In other words, when adapting latest technologies, their limitations are understood and considered. (Manager 2)

Towards a data-backed investment agency

Among core effects of systematically gathering and analysing data on potential investors is the possibility to make business decisions backed by it. This, in turn, may result in better business decisions on average.

According to Manager 2, relying heavily on data allows more efficient customer service and marketing. This results in more efficient usage of the agency's limited resources. In the end, it means better results.

One of the examples of increased effectiveness is being able to identify data points on potential investors, possibly implying that their interests are similar to those of Invest in Finland's. Being able to identify the data points allows increased proactivity, resulting in the possibility of explaining the clearly targeted investors that the country being promoted is a key player in certain selected areas, particularly in the areas most relevant to the investor in the given communications loop.

Digitalisation has changed the way Invest in Finland communicates with investors and potential investors – as Manager 2 puts it, an agency cannot be as self-centred as before in its message creation; messages have to be created, based on data about the target groups and their needs.

Being curious and choosing the right partners

Manager 2 sees a factor related to organisational culture, curiosity to try new solutions prevalent in Invest in Finland, as one of the key success factors of its digitalisation efforts. As she explains, a culture of trying fast and consequently either failing or succeeding fast, quickly results in data that can be used in planning the next steps.

Another key success factor is choosing the right personnel and the right outside partners to manage the agency's elaborate tools, such as the organisation's CRM. This entails ensuring the trust-worthiness of the partners, as they may have various levels of access to the customer relations management system shared by the whole Business Finland. (Manager 2)

Effective data protection is seen as one of the key characteristics of the set of digital tools within Invest in Finland. On the one hand, this creates geographical and technical restrictions on which data centres / locations can be used for storing data and how the data can be shared with outside parties, including service providers and partners within Business Finland's partner network; on the other hand, the investors' preferences on their data need to be taken into account to follow Finland's laws and the European Union's strict data regulations. This means that within framework of data protection, a set of specific skills, including in legal affairs, is needed. (Manager 2)

Another data-related success factor is being able to unify the various data points collected into a systematic and comprehensible structures, allowing analysis, interpretation, and use. This is seen by Manager 2 as one of the data-related priorities for 2024 and includes various technical measures, such as creating integrations between tools and data sources.

As in case of several other investment promotion agencies, the COVID-19 health crisis strongly affected the development of digital tools and strategies. According to the Senior Director of Invest in Finland, Antti Aumo, digitalisation of the IPA's processes was a priority already before COVID-19 – but the pandemic clearly accelerated it (OECD 2021b).

Manager 2 explains this phenomenon: COVID-19 brought a change in understanding within the agency, showing that there are no alternatives to digitalisation; some manual activities needed to be stopped and replaced by digital ones. The manager adds that in a way, COVID-19 could be considered as an asset in change management, as there are no plans to return to the pre-COVID-19 toolset.

Another aspect of the COVID-19 related change is, according to Manager 2, the increase of competition for FDI, using digital tools. COVID-19 resulted in even the investment promotion agencies that did not previously put much effort into digitalisation, setting focus on developing new digital tools across the globe.

Cooperating but protecting the data

It can be said that the wider approach towards digitalising the foreign investment process in Finland begins with digital services provided by other arms of Business Finland besides Invest in Finland – including services that are not directly related to investment promotion or facilitation. Several of the services by Business Finland, related to funding, international growth and program activities (such as Food from Finland or Smart Mobility and Batteries from Finland), creation and development of ecosystems, etc., aimed at Finnish customers, may also be used by the entities registered in Finland by foreign investors. Information, webinar recordings and offerings are available in English, while it is also possible for foreign-owned entities to apply for funding, submit documents and make necessary changes via an online tool. (Business Finland 2022g)

The next level of online services that can be useful in the context of investment promotion or for foreign investors, is formed by the services offered by Team Finland. It is a network of entities that "can help companies go global" (Team Finland 2022a). The network entails organisations such as Business Finland, the Academy of Finland, the Confederation of Finnish Industries, the Finnish Patent and Registration Office, etc., several of which run their own digital services (Team Finland 2022a). At the same time, Market Opportunities, a common Team Finland online tool to provide information about sales leads and opportunities, country overviews and future watch reports, as well as recovery-related projects funded by the European Union, is provided (Team Finland 2022c).

A still wider level entails all the other digital services available to entrepreneurs, including foreign investors, be it registering a company or reporting taxes for it. This is where cross-border identification comes into play. European tokens that have been approved by the European Union for use in cross-border identification can be used for e-identification in many but not yet all e-services. The same applies to foreign individual's unique identifiers, a fairly new identification service provided by the government of Finland. (Suomi.fi 2022)

While it is possible to set up a limited liability company online in Finland, restrictions that influence foreign investors (who often are not residents of Finland) apply. If even one of the company share-holders, board members or directors at the time of establishment does not have a Finnish personal ID or access to either Finnish personal Internet banking codes, a mobile certificate or an electronic

identity card, it is not possible to use the online option. In addition, the online service is available only in Finnish and Swedish (Business Information System 2022). It, however, must be said that Finland's Business Information System provides an abundance of online information on conducting business registration offline, if needed.

Gaining access to some of the next digital steps after business registration, however, is easier for foreign investors. For example, using the Incomes Register's e-services is possible for company representatives who do not possess a Finnish personal ID but have a European token or a foreign individual's unique identifier (Incomes Register 2022).

According to Manager 2, data sharing within the whole-of-government approach is somewhat restricted by data protection laws. For that, Business Finland has had to build its data analytics cycles internally. This, however, is not necessarily a disadvantage, as according to Manager 2, there are other competent institutions in Finland working on development of citizen services, possibly beneficial for investors (e.g., implementing single-sign-on solutions).

Systematically planning for the future

Business Finland is planning for the future in a systematic way, engaging in futures research to look at the external operating environment concerning Finland's competitiveness (currently for period from 2020 until 2030; Business Finland 2020a). Rather than predicting the future, Business Finland sees the process enabling the organisation to develop insight to take into account when planning its strategic activities. As digitalisation is a key topic in both, the original future scenarios (Business Finland 2020b) and the updated future scenarios (Business Finland 2020c), heavily influenced by the emergence of the COVID-19 pandemic, they are a relevant source on how the future of going digital is seen at the organisation.

In the scenarios, several topics possibly affecting the attitudes towards and decisions on digital tools usage at the agencies emerge. The concepts discussed include: the world being divided into digital blocks in the future; earning income from the use of digital data becoming possible; being able to break away from digital devices becoming a luxury; a new class divide, based on digital competence, emerging; cryptocurrencies replacing traditional money; the importance of digital ethics rising in significance and the use of data becoming more regulated internationally.

As described, COVID-19 can be seen as an influencer of digital tools usage of the present – but as Business Finland proves, also of the future. As the updated look at the future shows, in case of Business Finland, it has had a clear impact on how the future, including the future of digital tools usage in the country, is seen.

Understanding that new opportunities in the economy, discussed in the scenario, do not automatically equal new digital opportunities in investment promotion, several possible digital trends have been identified in the post-outbreak scenario: 1) virtual interaction growing in both business-to-business and business-to-consumer activities (possibly reducing one of the disadvantages of Finland, its remote location); 2) consumer activities transferring to online; 3) technological competences becoming more valuable before COVID-19.

As Manager 2 explains, enough room is left in the organisation's roadmaps to adjust to changing conditions. To achieve success, the employees of the agency need to keep an open mind and gather various enablers. It is possible to add and to remove components, to increase or decrease the efforts. For example, some years ago, a lot more effort was put into tools, such as virtual site-selection visits and VR-based technology, than today. At the same time, the agency is retaining the ability to engage the technology as soon as the need or the more advanced technological possibilities emerge.

While there are opportunities in the future, there are also threats. Manager 2 considers the biggest threat to digitalisation at Invest in Finland to be the risk of losing resources needed to develop the digital tools. This can happen, for example, in case political parties at power do not understand the value of the agency's work. According to Manager 2, one of the ways to mitigate this threat, is putting effort on measuring results and reporting them.

Another threat perceived by Manager 2 is growing competition in digital investment promotion. This may result in extensive efforts from the agency, in turn possibly resulting the lack of proper skills or proper partners to help the agency with digitalisation.

4.3 Case 3: digital tool usage at the investment promotion agency of Costa Rica

Costa Rica is a member of the OECD with a working age population of 3.6 million (World Bank 2022a). In 2021, Costa Rica's inward FDI stock of 50 billion US dollars (UNCTAD 2022a, 212) formed 78 per cent of the country's GDP of 64 billion dollars (World Bank 2022c), meaning that out of the small OECD economies whose investment promotion agencies among cases, the stock *vs* GDP ratio was second highest after Estonia, while the actual inward FDI stock also placed second highest – after Finland.

In search of high-tech investors

Coalición Costarricense de Iniciativas de Desarrollo (CINDE), Costa Rica's investment promotion agency, is a private, non-political, and non-profit organisation, that has existed for 40 years (CINDE 2022a). The agency sees itself as an organisation in constant transformation, with a capacity for adaptability in line with market demands (CINDE 2019a).

As an example of the past and ongoing economic developments, the former Head of CINDE, Edna Camacho (2003) has described how in the 1980s, the agency targeted industrial companies looking for cheap labour, and later, in the 2000s, started taking advantage of qualified and productive labour to attract higher value-added companies, such as high-tech companies "like Intel".

CINDE (2022a) sees FDI's role for Costa Rica as "to generate employment and greater opportunities for its most valuable asset: people; with the goal of contributing to the social and economic development." and advertises the key investment sectors of Costa Rica as being: 1) smart manufacturing, including in the field of life sciences; 2) knowledge-intensive services, such as digital technologies, creative industries and enhancing corporate and business processes; 3) health and well-being, including opportunities in tourism infrastructure (CINDE 2023). According to Manager 3, as a recent development, the topic of sustainability has come more into focus within the agency's value proposition, than ever before. Manager 4 (see Table 2, p 34 for list of interviewees) uses the term "sustainable productivity" to further describe the merge of productivity and sustainability used in investor-oriented propositions.

Though seemingly successful in attracting FDI to Costa Rica, in May 2023, several months after the interview was conducted, Costa Rica's government decided to cut funding to CINDE by 73 per cent, arguably due to poor contribution towards creating new jobs outside the capital area and relying too much on investments from the United States (O'Farrell 2023c). CINDE, however, continues operation.

Digital tools for people, prosperity, and the planet

An array of digital initiatives has been set up to promote Costa Rica as an investment destination, including for providing personalised, analytics-based investment advice and to create virtual 360-degree experiences. Advanced technologies, such as machine learning are in use (in content marketing, segmenting digital content) and predictive analytics implemented (to achieve better success rates when approaching potential investors). (CINDE 2022b)

CINDE has been using artificial intelligence (AI) in its trial programme for the past five years. It uses machine learning for predictive analysis and determining where investors are looking to

invest. In total, 150 data points are used and more than 800,000 companies around the world tracked (O'Farrell 2023b).

The agency has declared that some of its digital tools, namely those connected with its website, are aimed at "providing potential investors with digital experiences aimed at Industry 4.0 investments" and impacting what CINDE calls "the triple bottom line": people, planet, and prosperity (CINDE 2021a). Sustainability is seen as one of the priorities in the agency's core strategy (CINDE 2019b) and is described as one of the important features when planning internal processes and tools by Manager 3. There is documented evidence that CINDE is paying attention to the environmental impact of its digital services – for example, CINDE's website has been certified as a carbon-neutral website by the United Nations Framework Convention on Climate Change (UNCFF 2021).

CINDE's Managing Director Jorge Sequeira has explained the agency's choice to create advanced features, such as geospatial tools connected to its website with how much companies in today's world rely on data. Sequeira (CINDE 2021a) explained: "We live in a world where data is essential to make decisions. That was a priority when designing and creating this virtual landscape that includes interactive information points about our business ecosystem."

As part of their investors' services, CINDE also incorporates digital tools in their talent development initiatives, such as their FutureUp programme. It is aimed at matching the supply of knowledge economy jobs with demand. The programme uses an Al-based digital employment orientation platform that predicts and recommends learning paths to ensure users' employability opportunities, personalised based on experience, capabilities, and interests. (De Crombrugghe & Moore 2021)

The agency has implemented a set of digital tools, belonging to various types in the categorisation used in the OECD survey (De Crombrugghe & Moore 2021, 13; see Table 5, p 54).

Table 5. Types of digital tools used at CINDE

Digital customer support service

Big data analytics

Digital internal communications, management, and collaboration tools

Al-based marketing tools

Social media campaigns

Video conferences, e-meetings, webinars, virtual fairs

Online interactive maps and platforms

Virtual site-selection visits and VR-based technology

(Adapted from De Crombrugghe & Moore 2021, 13; additions by the author on grey background)

According to an OECD survey (De Crombrugghe & Moore 2021, 13), Costa Rica's national investment promotion agency uses a larger than average array of digital tools in its operations.

Digital customer service is provided, big data analytics is deployed, digital internal communications, management and collaboration tools used, virtual site-selection visits and VR-based technology utilised, video conferences, e-meetings, webinars, and virtual fairs arranged, online interactive maps and platforms have been taken into use.

While most of the interactions between the potential investors and the investment promotion agency take place face-to-face, digital tools, such as a customer portal that, for a period, have been used at CINDE, help facilitate and systemise the interactions. In CINDE's customer portal, customers could create tickets – requests for help or assistance that would be logged and that would get replies from the investment promotion agency. The solution was available on computers, as well as in the forms of apps that could be downloaded from digital distribution platforms App Store and Google Play. According to Manager 4, the customer portal project was suspended due to internal issues, as other projects had to be prioritised, but CINDE is hoping to continue developing it.

Advanced data analytics is used to analyse profitability and assess the viability of projects (CINDE 2022b, 30). This includes predictive analytics, the goal of which is seen at CINDE as promoting "greater rates of success" when approaching potential investors (CINDE 2021b, 29). In

addition, an investment services mobile app was launched in 2021 to personalise services provided to investors and potential investors (CINDE 2022b, 30) and to foster the personalised and analytics-based approach for new businesses that is also seen as one of the principles of digitalisation at CINDE (CINDE 2021b, 29).

CINDE is actively conducting virtual visits. Virtual 3D tours of over 20 property developments were available online in 2021 (CINDE 2022b, 30), seen at CINDE as one of the tools to deal with the "new normal" (CINDE 2021b, 29), or the time after COVID-19.

An example of a virtual fair is Multilingual job fair allowing the more than 40 companies participating find multilingual staff to fill their more than 5,000 available positions (CINDE 2022c), referred to by CINDE (2020, 8) as the largest job fair in Costa Rica. Machine learning is used mostly in content marketing, to segment (CINDE 2021b, 29) articles for audiences in Europe and the USA (CINDE 2022b, 30).

The Costa Rican Investment Promotion Agency has been awarded by the United Nations Conference on Trade and Development (UNCTAD 2021) for its use of digital tools, such as website and social media, giving visibility to case studies and news on investments in the health sector, and for facilitating innovative partnerships that strengthen the health ecosystem in the country.

Walking the talk: focusing on digital

In the interview, Manager 3 pointed out that to promote digital, high-tech investments, the investment promotion agencies must "walk the talk", meaning that digitalisation of the agency's operations is a crucial part of showing the investors that the potential host country of high-tech investments is focusing on digital in its actions, an investment promotion agency being a contact point directly faced towards the potential investor.

As one of the priorities, creating "a 360-degree view", meaning systematic collection of information about investors and potential investors, has been set. It means that information about customers can be gathered, using relatively effective ways, avoiding the use of ineffective and less modern ways of data collection, such as surveys. What Manager 6 considered a success story, was the agency's clear and easily usable CRM system, providing the needed basis for various online and offline activities.

As a success factor, the role of a general manager with IT background bringing along change was stressed by Manager 6. A general manager with information technology background made it possible to do some quick changes. This, combined with prior long-term data collection, already implemented in a systematic way, resulted in the possibility for taking a leap forward in digitalisation.

According to Manager 6, COVID-19 transformed the way some of the interactions with customers were conducted. While for investor meetings, face-to-face is the preferred way of proceeding at CINDE, during the COVID-19, physical meetings could in many cases not be offered for safety reasons. According to the interview, the agency has moved back offline in case of meetings and visits, as physical ones are often more effective, as they provide better possibilities for the potential investor to see what the country offers and – for example – to conduct benchmarking. (Manager 6)

On the other hand, COVID-19 contributed towards digitalisation at CINDE: among other changes, developing its website and creating virtual visit experiences to sites that are important for investors to be able to "virtually visit", such as industrial parks and free zones. Solutions like that contribute towards attracting investments even after the COVID-19 era – they are often used to create an overview for the investor, prior to an actual visit. Virtual reality solutions can also reach a larger group of potential investors than physical site-visits could. At the same time, virtual reality solutions have drawbacks. As, according to Manager 5, the audiovisual data used in virtual environments gets outdated quickly and is expensive and time-consuming to update, face-to-face interactions are at times more efficient to conduct even in case of site-visits to industrial parks and free zones.

Already at the early stages of the COVID-19 crisis, the Managing Director of CINDE, Jorge Sequeira gave an interview, stating that the situation would transform investment promotion agencies. "Investors will travel less in the future and there will be a shift to virtual agendas, he told in an interview to fDI Intelligence (Dettoni 2020). "Site visits will still happen when it's time for the investor to make a decision, but many preliminary visits will happen virtually. The digital transformation agenda of IPAs is going to accelerate rapidly."

Some of the major digital developments began still earlier, before the COVID-19 pandemic ever hit the news, providing the agency with a quick and simple possibility to continue without too much change within the "new reality" of COVID and after. For example, the online job fairs (CINDE is among other activities conducting actions related to talent development, determining talent needs and talent matching) that took place online already before COVID-19 were simply kept online. (Manager 6)

A long-term effort affected by outside decisions

In digitalisation, CINDE also put stress on working with its stakeholders during the global health crisis. Related parties, such as free zone developers, were encouraged to shift to digital services by, for example, providing virtual tours of their facilities. (Dettoni 2020)

The digital "whole-of-government" approach is, according to Manager 6, still gradually being applied in Costa Rica, one of the examples important for potential investors being the implementing

of digital permitting. The broader digitalisation effort includes analysing and rebuilding processes to avoid caveats, such as double-permitting.

It was stressed by Manager 6 that digitalisation and its basis, data collection, cannot be thought from the perspective of political cycles – it has to be a long-term effort in order to be successful. In the months after the interview, though, the continuation of long-term digital development at CINDE has been put under severe stress.

In the future, as described earlier, the government of Costa Rica is planning to rely on Promotora del Comercio Exterior de Costa Rica (PROCOMER), the country's trade and export agency, to attract inbound investment, replacing privately-run CINDE. While Manuel Tovar, Costa Rica's Minister of Foreign Trade and President of PROCOMER has stated that the decision was not political in nature, Juan Carlos Hidalgo, President of Costa Rica's opposing Social Christian Unity Party, in contrast, has claimed he sees the process as purely political. Though with reduced funding, Pilar Madrigal, director of investment advisory at CINDE has stated that the organisation will continue to attract investment and work with its stakeholders. She also stated that she is confident that there is still a place for a private non-profit organisation in Costa Rica's investment promotion ecosystem.

In 2024, CINDE, has shown evidence that it is continuing to bring results in investment promotion, communicating a successful project and assuring its customers and partners via social media (CINDE 2024) that they are "thrilled to continue working for Costa Rica".

4.4 Summary of outcomes

While the three investment promotion agencies looked at – Costa Rica's CINDE, the Estonian Investment Agency, and Invest in Finland are digital-oriented, their activities, goals and achievements in, as well as approaches towards digital tools usage differ considerably.

Even if all sets of tools, as divided by the OECD IPA digitalisation survey (De Crombrugghe & Moore 2021; see Table 3, p 38; Table 4, p 46; Table 5, p 54) are shared by all three agencies, different approaches towards their implementation have been chosen.

For example, the Estonian Investment Agency and CINDE extensively use digital customer support services but do it differently. While CINDE has created a customer service portal, together with a mobile app where customers could submit support tickets to the agency, the Estonian Investment Agency has created an "artificial agent" called Eia, taking care of the customers' information needs through an "e-Consulting" service and providing them with elaborate investment offers. Catering for more basic information needs at the Estonian agency is the chatbot Suve, which shares content and intents with Invest Estonia's sister department Work in Estonia.

Advanced data analytics is used at all the agencies looked at. In Costa Rica, it relies heavily on machine learning. CINDE has been using artificial intelligence (AI) in its trial programme for several years, including in predictive analytics. Implementing machine learning models are currently also seen as one of the priorities at the Estonian Investment Agency, machine learning models being built into both, internal communications and customer service tools. In Finland, the current focus is on unifying the various data points gathered in various contexts and getting to know the customer as well as possible, in order to aim right actions towards the right customers.

Especially after the COVID-19 health crisis, conducting online activities, such as video calls, online fairs and video conferences, e-meetings, and webinars has become an everyday occurrence. The approaches, though, vary – the job fairs by CINDE being a targeted effort towards its strategic goals while the Estonian agency has chosen to achieve visibility and engagement through joining forces with one of the biggest tech conferences in the country. All three agencies are seeking, though, a perfect balance between increased effectiveness and cost-savings of online communication and the possible trust-building effects of face-to-face meetings.

Social media is extensively used at all three agencies, the approaches used by each being different – from Business Finland's creative use of media through creating podcasts, to Estonian Investment Agency using social media as an integral part of its sales and marketing funnel. Invest Estonia also uses large language models (LLMs) in its social media efforts, while the Finnish agency considers the results achieved by LLMs as too generic for content creation.

Online interactive maps and platforms are in use at all three agencies, with varying levels of effort put into the field. In Costa Rica, the interactive experience is combined with advanced technologies, such as virtual reality based remote site visits. At the same time, the Estonian agency has experience in using virtual reality in marketing.

In digital internal communications, all three agencies use customer relations management (CRM) platforms as core digital tools. The Estonian agency also puts effort into keeping its employees in a communications loop, including the agency and its partners within the whole-of-government network. Machine learning is applied in the process.

The use of virtual reality solutions is limited at the Estonian and Finnish agencies (the latter being ready for next steps, as technology matures, the former having tested solutions in cooperation with other departments of its mother organisation). While it has been extensive at the Costa Rican agency, the agency has identified various drawbacks, such as the relative difficulty of updating VR content of sites, e.g., industrial parks.

The main reason for the use of digital tools at the agencies looked at, is the pursuit for increased effectiveness. The cases of small OECD economy investment promotion agencies share the understanding that their resources are always limited and smaller than those that their bigger counterparts can use. This creates the demand to use both, their financial and human resources effectively. As expressed by the Finnish representative, the data gathered from digital tools can be used to align the interests of the agency and the potential investor.

In the case of all three agencies, pivotal periods of change towards digitalisation were identified by the managers interviewed, in all three cases being prior to the COVID-19 pandemic. At the same time, the effects of global events, such as the emergence of COVID-19 as influencers of IPA digitalisation cannot be overlooked in any of the three cases. While digitalisation at all three agencies was ongoing by 2020 when the global health crisis emerged, the global health situation, restrictions to travelling and face-to-face meetings helped push the digitalisation efforts.

Some of the success factors of digitalisation include using a strategic approach towards it, the ability to systematically collect information and make decisions based on the information collected, while being able to protect the data collected.

This means a need for various skills within the organisation and its partners, as well as adapting an organisation culture where quick explorations needed for effective digitalisation, including those ending in quick but information-providing losses, are accepted and even valued.

The current chapter delivered the outcomes of the thesis. It focused at three cases at focus in the thesis, describing and analysing them.

5 Discussion

The current chapter delivers the discussion, focusing on approaches towards digitalisation at the digital-oriented investment promotion agencies, exploring the future visions of digitalisation, covering the practical implications of the thesis, and delivering the conclusions.

5.1 Approaches towards digitalisation

An approach shared by the three cases looked at, is the strategic nature of the efforts towards going digital. This has resulted in sustained, long-term digitalisation pushes that the agencies hope to have lasting effects from. While long-term strategic efforts have clear advantages over pushes within limited timeframes, they also create obvious threats. As seen in the latest developments in the case of Costa Rica and expressed by the Finnish agency's representative – political decisions on resource allocation for investment promotion may have lasting effects on digitalisation at investment promotion agencies. Even the most digitally advanced agencies are not safe in this regard, as also proven by the case of the former Israeli investment agency, left out from the list of cases due to it having been liquidated in its previous form via a political decision.

To address how investment promotion agencies treat this threat, the previously created framework (Figure 8, p 28) depicting relations between external influences on digitalisation, services within the whole-of-government approach and digital tools implementation at investment promotion agencies, was updated to include political decision-making as a potential influencer of digitalisation (see Figure 9, p 61). While this is in a way similar to other external influences, investment promotion agencies do have measures to influence decisions. They can build dependencies via the whole-of-government approach and via direct policy advocacy, including measuring and reporting of their results to those in power. How successful these measures are, however, is unclear, as it depends on a multitude of factors, including but not limited to the political system, possible power struggles within it, and availability of resources to back potential political decisions.

The emergence of external influences, such as the COVID-19 related global health crisis, economic crises, and development in technologies, such as artificial intelligence, may influence political decisions, digital government services, and digital tools implemented by investment promotion agencies. The existence, lack and quality of digital government services influences how investment promotion agencies can and have to build up their digitalisation efforts. Political decisions can influence both, digitalisation efforts at investment promotion agencies and those undertaken within the whole-of-government approach.

Investment promotion agencies have the possibility to influence government digital services e.g., through example, technology transfer or policy advocacy and political decisions through policy advocacy (including rigorous reporting on results achieved). (Adapted from De Crombrugghe & Moore 2021; Novik & De Crombrugghe; 2018, OECD 2020b; Dayan 2022; updated based on outcomes)

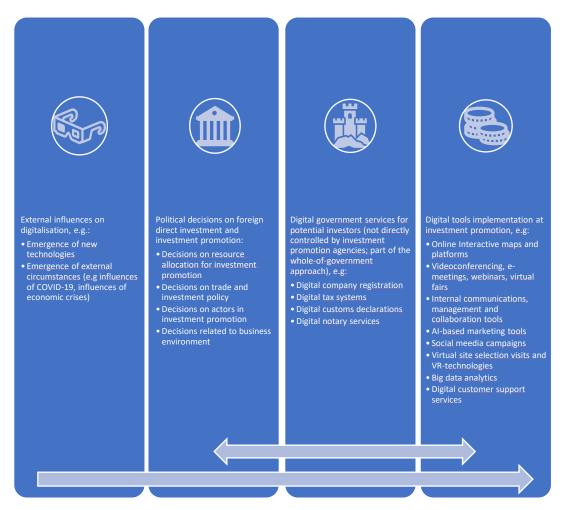


Figure 9. Updated framework. Relationship between external influences, political decisions, government digitalisation and digital tools implementation at investment promotion agencies. (Adapted from De Crombrugghe & Moore 2021; Novik & De Crombrugghe; 2018, OECD 2020b; Dayan 2022; updated based on outcomes)

Several other core similarities can be found in the approach towards digital tools usage – one of them being reliance on a strong information backbone, a customisable, yet rigid customer relationship management system. What all three cases share, is a strong CRM, used as the data backbone for various digital tools usage. This includes the possibility to integrate the database with

various tools and may even have the ability to create automation within the CRM tools themselves, resulting in sales force automation systems. The choice, implementation and maintenance of a CRM is important in the success or failure of the agency's digital operations. Maintaining long-term relations with investors and documenting them is crucial for investment promotion agencies, partly because of the nature of foreign direct investments – "reflecting a lasting interest and control by a foreign direct investor" (UNCTAD 2019). Whether it is possible to retain relations with the help of digital, or more effort should be put on face-to-face interactions, is another question, debated by representatives of investment promotion agencies across the globe.

Culture and skills supporting digitalisation

Yet another core topic of approaching digitalisation involves the organisation culture and how digitalisation is supported by it. As described by the manager at Business Finland, quick experimentations, quick wins and quick losses are needed to sustain the innovative mindset needed for effective digitalisation. While this, at first sight, seems to contradict the need for a long-term, strategic approach, at a closer look, it does not have to be like that. The investors acting in fast-paced and digitalised industries may have lasting interests in destination countries of their investments, but they do need the investment promotion agencies to – as an representative of CINDE interviewed put it – "walk the talk". The investing companies themselves are often going through similar processes of continuous experimentation and harnessing the latest technologies. This, in turn, is exemplified by the Estonian agency seeing marketing and PR as one of the effects of its digital tools usage perceived by its employees (Kaha 2020) – innovating and talking about innovating enable the creation of an "innovation powerhouse" image potentially desired by customers.

Skills and the ability to acquire needed know-how from outside the organisation are seen as crucial for successful digitalisation. As technologies and priorities change, the needed skillset is constantly developing in time. For example, organisations having been looking for skills related to virtual reality a year ago, might be interested in skills related to large language models now. As put by the manager at Business Finland, the agencies still have to be ready to quickly move back into a previous realm as technology develops, possibly allowing the discovery of a new competitive edge of a new kind or creating conditions to stay in pace with the competition. On the downside, there is the perceived threat of not having enough talent to fulfil the technology-enabled dreams and stay in competition.

Future of digital tools

The future vision of all investment agencies covered as cases entails a long-term approach towards digital tool creation and usage. While policy changes are seen as the biggest threat at one of the three agencies and as the threat has been realised at one (though claims about it being a political or non-political process from various parties are different), this may result in the development of more advanced reporting and policy advocacy processes. While efforts put into reporting do not contribute towards the *de facto* effectiveness of the agency, they help create needed proof of effectiveness and through that – security. This tendency – being objectively effective yet scared of being considered not effective – is somewhat surprising.

There are several possible strategies for ensuring the survival of a digital agency, including cooperating with outside parties within the whole-of-government approach. When there are processes shared with outside parties, it may become more difficult for political actors to limit the resources needed for digital efforts at the agencies. In other words, building technology and knowledge networks within the government can result in important dependencies (other institutions relying on the agency) for sustaining the agencies' digitalisation efforts. On the downside, dependencies may work the other way, as well.

The significance of the whole-of-government approach is also growing through the effort put into data cooperation with related parties. While data sharing can become more useful, it is also becoming more difficult due to increasingly strong regulations on data protection. This, in turn, results in increased effort put into secure data handling and compliance in data handling. In other words, data becomes more expensive.

An approach that can be used by agencies, is systematic planning for the future, including utilising methods from future studies toolset. While the results achieved by utilising this approach may entail some concrete measures and techniques, enough room must be left for adjustments and changes, resulting from developments in technology and the surrounding circumstances. In the case of global game-changers, such as the emergence of the COVID-19 pandemic, the future scenarios may need to be completely rewritten, as was done in the case of Business Finland. It means that the toolsets in use are not magic bullets and even the best researchers are seldom able to foresee what cannot be effectively foreseen.

5.2 Practical implications, limitations, and ethical concerns

The thesis was inspired by a practical need for identifying best digitalisation practices at investment promotion agencies. It was written by an employee of, realised with the help from and commissioned by the Estonian Investment Agency, meaning that the results and suggestions from the thesis can be put into practice at the agency.

Practical implications

The results and suggestions of the thesis can and will be used within the Estonian organisation to make better decisions on digital tools planning and deployment, as well as help the author make better decisions filling the role of Chief Technology Officer at the investment agency.

As the first step, the results and conclusions will be used for finalising the Estonian Investment Agency's digital strategy that is being created in parallel to compiling the thesis.

Some examples of principles that have already been included in the draft strategy document are:

- Developing advanced data analytics, including big data analytics, based on the examples from Finland and Costa Rica;
- 2. Systematically preparing for the future, employing principles from the futures research toolset;
- 3. Seeing rigorous reporting mechanisms on the effects of digital tools deployment as a core part of the tools deployment process (in order to mitigate political risks);
- 4. Engaging further in the whole-of-government approach towards digital tools development, cooperating with various outside parties for the dual purposes of providing potential investors with the best possible service and gaining increased security through building technological and knowledge networks;
- 5. Developing the skillset needed for tools development, data protection and data-related compliance within the organisation and finding competent partners from outside.

In addition, the results have already been used within the draft strategy's sections, focusing on situational awareness.

The thesis was written within the wider context of an ongoing merger between the Estonian Investment Agency's parent organisation Enterprise Estonia and the state-run foundation KredEx, forming the Estonian Innovation Agency. During this process, learning from best practices of other organisations across the globe was seen as one of the priorities within the organisation (Lugna 2022), the thesis being one of the attempts to contribute to this regard.

The still wider background of the thesis is the global transformation of investment promotion: investment promotion agencies across the globe are transforming, with increased focus gradually being set on digitalisation. National and subnational entities aiming at attracting foreign direct investment are trying to achieve increased efficiency by utilising latest digital tools and technologies. Thus, though not directly applicable to different contexts, the thesis may also provide some insights for IPAs seeking to optimise their use of digital resources in investment promotion initiatives.

The results, conclusions and suggestions will be shared at a workshop at the organisation and used in presentations the Estonian Investment Agency's employees regularly give to colleagues within international networks of investment promotion agencies. The ideas for further studies will be discussed within the investment agency.

Limitations, delimitations, and ethical concerns

When the researcher is the primary instrument for data collection and analysis, as in the case of a qualitative study, it is wise to be aware of one's shortcomings and biases that might impact the study (Merriam & Grenier 2002, 5).

There were limitations and delimitations.

The scope of this study was limited to the national investment promotion agencies in the three small OECD economies that, according to the report "Investment Promotion and the Digital Economy: A Comparative Analysis of Investment Promotion Practices Across the OECD" (De Crombrugghe & Moore 2021), possessed the largest array of digital tools. As only three cases were studied, the results should not be applied to similar contexts.

Although the study was conducted among three digital-oriented investment promotion agencies of the small OECD economies, according to the definition used, the list of digital-oriented agencies may change over time. While the width of the array of digital tools in use at investment promotion agencies in OECD countries serves as a suitable reference for choosing the cases for the thesis, the OECD average is not applicable as a reference in many other contexts. It is thus important to understand the limitation of looking at "cases": that cases can only be studied and understood in context, as they exist in the here and now (Gillham 2000a, 1).

The documents used in the document analysis conducted for composing the case studies were limited to documents publicly available on the websites of agencies and documents publicly findable at the time of research via internet search engines and referrals from colleagues. Where applicable, internet archive search engines, such as archive.org, were used in addition. While some documents in Finnish, Spanish and Estonian were analysed, the language of the documents was

mostly limited to English. This means that there may be other relevant documents that could not be identified, that are not public, or that the author is not able to understand due to limited knowledge of languages.

The list of interviewees was limited to managers of the investment promotion agencies. A larger list of respondents, including investment advisors, marketers, CRM specialists, data analysts, etc, could have given additional insights into digital tools usage at the agencies; however, due to the limited volume of the thesis, a wider and predictably more resource-consuming approach was not applied.

In addition, the data collection process during the interviews and the availability of documents set a limitation to the information obtained. The interviewees had the possibility to choose what to share and what not to share. It is thus possible that the interviewer working at an investment promotion agency may have also influenced the amount of information the managers were willing to share. Oral, recorded agreements were made with the managers on how the data collected would be used.

The difference in how the interviews were conducted (video *vs* face-to-face; group *vs* individual; see Table 2, p 34 for list of interviews) may have had influence on what data could be gathered on different cases, yet in case of sources that are often hard to access, such as managers, it was crucial to take into account their preferences. In addition, due to lack of resources, the author had to avoid potentially high travel costs.

As qualitative research entails a researcher taking an active role in the collection and interpretation of others' meaning making, this often raises ethical concerns that are "inextricably intertwined with trustworthiness of the findings" (Merriam & Grenier 2002, 19). The author working at one of the investment agencies among the cases, and the agency being a commissioner of the thesis, can be seen as posing a potential ethical concern, especially in the interview process.

To mitigate this threat, the author explicitly let the interviewees know of the connection and that it was up to them to decide what information they share (for example if any issue possibly affecting an agency's competition situation should arise). Regarding trade secrets and confidentiality-related matters, the principles from the guide "Trade Secrets and Confidentiality in Master Theses" (Haaga-Helia University of Applied Sciences 2022) were applied.

Limitations and concerns in data collection and analysis have additionally been discussed in Chapter 3.

5.3 Suggestions and recommendations

As the thesis was realised within the wider context of an ongoing merger between the Estonian Investment Agency's parent organisation Enterprise Estonia and the state-run foundation KredEx, several recommendations are aimed at the Estonian Investment Agency and its parent organisation. The recommendations will be shared at a workshop within the organisation.

Recommendations are as follows:

- To continue developing digital tools for investment promotion as a part of the strategic effort, taking into account the competition situation and latest developments at other agencies;
- 2. To plan for the future in a systematic way, including consider the creation of future scenarios in economic and digital developments;
- 3. To further develop the skillset needed for digital development, as well as data protection and data compliance within the organisation, including outside partners in developments where needed;
- 4. To continue playing an increasing role in developing the whole-of-government approach towards investment promotion through policy advocacy and the development of digital tools;
- 5. To view rigorous reporting mechanisms on the effects of digital tools deployment as a core part of the tools deployment process.

There is existing research on digital tool usage, its effects, prerequisites, and success factors at investment promotion agencies, yet the opportunities provided by digital tools are developing quickly. Thus, based on the outcomes of the thesis, the following suggestions are made for further studies:

- 1. Research focusing solely on possible future developments / future scenarios in digital tools for investment promotion;
- 2. Research focusing on technological advances influencing further digital tools development at investment promotion agencies;
- 3. Practical, yet systematic, small-scale research on the possibilities in using latest technologies, such as large language models (LLMs) and advanced virtual reality technologies (e.g., Web3) in investment promotion activities.

The research suggestions will be shared within the Estonian Investment Agency.

5.4 Conclusions

Promoting foreign direct investment is in transition across the globe, with increased focus being set on digitalisation. Investment promotion agencies are trying to achieve increased efficiency by utilising the latest digital tools and technologies. Digital tools in investment promotion can provide a competitive edge, but their implementation may have a set of prerequisites and success factors. Digitalisation can have costs and a digital strategy may need to be implemented.

The thesis focused on three cases of digital tool usage at national investment promotion agencies. Commissioned by the Estonian Investment Agency, it investigated how and why digital tools are used at digital-oriented investment promotion agencies of small Organisation for Economic Co-operation and Development (OECD) economies of Costa Rica, Finland, and Estonia.

The purpose of the thesis was to describe, compare, and understand the ways and motivation of investment promotion agencies in three small economies to implement digital tools for investment promotion, as well as the prerequisites, success factors of digitalisation and effects that using digital tools brings to them. The main research question was "How do digital-oriented investment promotion agencies in the small OECD economies of Costa Rica, Estonia and Finland use digital tools to promote foreign direct investment?" and it was supplemented by sub-questions, focusing on the reasons behind digital tools usage, its success factors and effects.

The thesis was realised in the wider context of an ongoing merger between the Estonian Investment Agency's parent organisation, Enterprise Estonia, and the state-run foundation KredEx, forming the Estonian Innovation Agency. During this process, learning from the best practices of other organisations across the globe is seen as one of the priorities within the organisation (Lugna 2022). The thesis was one of the attempts to contribute to this regard.

It was also inspired by a practical need to understand better what the practices in digital tools usage at investment agencies are. The results and suggestions of the thesis can and will be used within the organisation to make better decisions on digital tools planning and deployment, as well as help the author make better decisions filling the role of Chief Technology Officer at the Estonian Investment Agency.

To mitigate potential ethical concerns, transparency about the author's work role throughout the interview process, as well as throughout the thesis was retained and recorded agreements on data usage made. The limited number of cases studied means that the results cannot be generalised to similar context. There are other limitations and delimitations to the thesis, discussed in Chapters 3 and 5.

The outcomes of the thesis showed that the cases of digital tools usage at Estonian, Costa Rican and Finnish national investment promotion agencies had several core similarities, including in their approach towards implementing digital tools. At all of them, digitalisation was seen as a strategic effort, supported by a pro-innovation organisation culture and the skillset provided by employees and outside partners. The strategic approach entailed more than just including the term "digital" in strategy documents – oftentimes involving systematic data collection and data protection. Pivotal timeframes could be identified for the beginning of accelerated digitalisation at all three agencies. While the changes at the agencies began before the emergence of the COVID-19 health crisis, COVID-19 accelerated them considerably. For example, online activities like video calls, online fairs and video conferences have since become considerably more frequent.

In the case of some of the digital tools in use at the agencies, different approaches had been chosen. While, for example, social media is extensively used at all three agencies, how it was used varied from content creation enabled by large language models at the Estonian agency to Business Finland's history in creative use of digital audio. In some cases, the emergence of new technologies had resulted in the loss of focus on previous ones.

As exemplified by Invest in Finland, an approach that investment promotion agencies can use to deal with the uncertainties of digitalisation, is systematic planning for the future, utilising methods from the future studies toolset. While this approach may entail some concrete measures and techniques, to be successful, enough room must be left for adjustments and changes resulting from developments in technology and the surrounding circumstances.

A surprising phenomenon that was discussed, is even the most digital investment agencies seeing their strategic digitalisation efforts threatened by political processes. While it may be possible to influence policy-making through effective reporting and attempts of networking and dependencies within the whole-of-government approach towards investment promotion, the effectiveness of such actions remains unclear.

Besides policy-making, lack of skills was seen as one of the potential threats towards digitalisation at investment promotion agencies.

Based on the results, several recommendations were given to the Estonian Investment Agency:

- 1. The continuation of developing digital tools as a strategic effort;
- 2. Planning for the future in a more systematic way than previously, learning from the efforts of Business Finland;
- 3. Advancing the needed skills for digital development and data protection within the organisation and finding partners to outsource them from;
- 4. Continuing efforts within the whole-of-government approach towards digitalisation, including taking part in organisation-wide and inter-organisation digitalisation efforts, furthering the viewpoint of potential investors and mitigating political threats towards digitalisation;
- 5. Seeing rigorous reporting mechanisms on the effects of digital tools deployment as a core part of the tools deployment process (in order to mitigate political risks).

Recommendations from the thesis have been compiled into the draft digital strategy of the Estonian Investment Agency.

The current chapter provided the discussion, focused on approaches towards digitalisation at the digital-oriented investment promotion agencies, explored the future visions of digitalisation, covered the practical implications of the thesis, and delivered the conclusions.

References

Abamu, B. 2019. Introducing Investment Promotion: A Marketing Approach to Attracting Foreign Direct Investment. International Journal of Marketing Studies, 11, 4, pp. 91-98.

Almafraji, M., Almsafir, M. 2014. Foreign Direct Investment and Economic Growth Literature Review from 1994 to 2012. Procedia – Social And Behavioral Sciences, 129, pp. 206-213.

Annual Investment Meeting. 2020. Investment Promotion Agencies: Digital Strategies For FDI Attraction Post-Covid-19 (Spanish). Online video. URL: https://www.youtube.com/watch?v=wRk-clfHyxEk. Accessed: 4 November 2022.

Atomico. 2022. State of European Tech 2022. URL: https://stateofeuropeantech.com/1.europeanteach-a-new-reality. Accessed: 14 February 2023.

Baiashvili, T., Gattini, L. 2020. Impact of FDI on economic growth: The role of country income levels and institutional strength. EIB Working Papers, 2, European Investment Bank. Luxembourg.

Bestmarketing. Digiteo võitja case study: naked truth about doing business in Estonia. URL: https://www.bestmarketing.ee/uudised/2020/11/18/digiteo-voitja-case-study-naked-truth-about-doing-business-in-estonia/. Accessed: 7 February 2023.

Blaine, H. 2009. Preface. In Blaine, H. (ed.). Foreign direct investment, pp. vii-x. Nova Science Publishers. New York.

Borensztein, E., De Gregorio, J., & Lee, J-W. 1998. How does foreign direct investment affect economic growth? Journal of Economics, 45, pp. 115-135.

Bseiso, M. 2013. Social Media & Investment Promotion. LAP LAMBERT Academic Publishing.

Bunn, D. 2022. International Tax Competitiveness Index 2022. Tax Foundation. Washington.

Business Finland. 2020a. Alternative futures from Finland. URL: https://www.businessfin-land.fi/en/for-finnish-customers/strategy/business-finland-scenarios. Accessed: 11 November 2022.

Business Finland. 2020b. Business Finland Scenarios. URL: https://www.businessfin-land.fi/494c2a/globalassets/finnish-customers/about-us/scenarios/bf scenarios publication.pdf. Accessed: 11 November 2022.

Business Finland. 2020c. Business Finland Scenarios, Codiv-19 update June 2020.URL: https://www.businessfinland.fi/49d56c/globalassets/finnish-customers/about-us/scenarios/post-co-rona-business-finland--skenaariot_eng_2020.pdf. Accessed: 11 November 2022.

Business Finland. 2022a. Why Finland. URL: https://www.businessfinland.com/explore-business-opportunities. Accessed: 10 November 2022.

Business Finland. 2022b. Invest in Finland hits 30. URL: https://www.businessfin-land.com/news/2022/invest-in-finland-hits-30. Accessed: 23 January 2024.

Business Finland. 2022c. The starting point of your future business. URL: https://businessfin-land.com. Accessed: 10 November 2022.

Business Finland. 2022d. Why Finland. URL: https://www.businessfinland.com/why-finland. Accessed: 10 November 2022.

Business Finland. 2022e. Strategy. URL: https://www.businessfinland.fi/en/for-finnish-custom-ers/strategy. Accessed: 10 November 2022.

Business Finland. 2022f. How do we work? URL: https://www.businessfinland.fi/en/for-finnish-customers/about-us/service-model. Accessed: 11 November 2022.

Business Finland. 2022g. For Customers in Finland. URL: https://www.businessfinland.fi/en/for-finnish-customers/home. Accessed: 11 November 2022.

Business Finland. 2023. Prosperity for Finland. URL: https://www.businessfinland.fi/en/for-finnish-customers/about-us/invest-in-finland. Accessed: 23 January 2024.

Business Finland. 2024. Ulkomaisten investiintien määra putosi vuoden 2019 tasolle. URL: https://www.businessfinland.fi/ajankohtaista/uutiset/tiedotteet/2024/ulkomaisten-investointien-maara-putosi-vuoden-2019-tasolle. Accessed: 19 February 2024.

Business Information System. 2022. Start-up notification – limited liability companies. URL: https://www.ytj.fi/en/index/notifications/start-upnotifications/limitedliabilitycompanies.html. Accessed: 11 November 2022.

Camacho, E. 2004. La IED en Costa Rica y el modelo de CINDE. Powerpoint slides. URL: https://slideplayer.es/slide/93159. Accessed: 17 January 2023.

Carkovic, M. & Levine, R. 2005. Does Foreign Direct Investment Accelerate Economic Growth?. In Moran, T. (ed.), Graham, E. (ed.) & Blomström, M. (ed.). Does Foreign Direct Investment Promote Development?. Center for Global Development. Washington DC.

Casey, W. 2013. National Investment Promotion Policies and Foreign Direct Investment Flows. International Journal of Business and Economics Perspectives, 8, 1, pp. 14-28.

CINDE 2019a. CINDE Announces: CINDE receives award for best investment project in Latin America and the Caribbean thanks to IBM's Cybersecurity Center. Press release. URL: https://www.prnewswire.com/ae/news-releases/cinde-announces-cinde-receives-award-for-best-investment-project-in-latin-america-and-the-caribbean-thanks-to-ibms-cybersecurity-center-300830931.html. Accessed: 28 April 2022.

CINDE. 2019b. CINDE Strategic Vision 2019-2022. URL: https://www.cinde.org/en/resources/strategic-vision-2019-2022. Accessed: 19 January 2023.

CINDE. 2020. Our services: Investor Services Provided by CINDE. URL: https://f.hubspotusercon-tent30.net/hubfs/5082883/Resources/CINDE%20-%20Investor%20Services%20Catalogue.pdf. Accessed: 19 January 2023.

CINDE 2021a. CINDE Costa Rica Launches New Digital Investor Experience in Line with Industry 4.0. Press release. URL: https://www.cinde.org/en/essential-news/cinde-costa-rica-launches-new-digital-investor-experience-in-line-with-industry-40. Accessed: 19 Janary 2023.

CINDE 2021b. Impact Report 2020. URL: https://f.hubspotusercontent30.net/hubfs/5082883/Resources/CINDE%20-%20Impact%20Report%202020%20ENG.pdf. Accessed: 20 January 2023.

CINDE. 2022a. About CINDE. URL: https://www.cinde.org/en/about. Accessed: 2 May 2022.

CINDE. 2022b. Impact Report 2021. URL: https://5082883.fs1.hubspotusercontent-na1.net/hubfs/5082883/Resources/CINDE%20-%20Impact%20Report%202021%20EN.pdf Accessed: 2 May 2022.

CINDE. 2022c. 40 companies have 5,000 new jobs available in the virtual multilingual fair by the Costa Rican Investment Promotion Agency (CINDE). Press release. URL: https://www.cinde.org/en/essential-news/40-companies-have-5-000-new-jobs-available-in-the-vir-tual-multilingual-fair-by-the-costa-rican-investment-promotion-agency-cinde. Accessed: 19 January 2023.

CINDE. 2024. Straumann Group announces its arrival to Costa Rica as a strategic investment to the region. URL: https://www.linkedin.com/posts/cinde straumann-group-announces-its-arrival-to-activity-7153143800826134528-ii6L?utm_source=share&utm_medium=member_desktop. Accessed: 19 January 2024.

Ciobanu, M. 2015. Decisive role of proactive FDI promotion policies (FDI promotion agencies). The USV Annals of Economics and Public Administration, 15, 2, pp. 91-104.

Dayan, S. 2022. Advancing Digital Tools for Investment Promotion & Facilitation in the MENA Region. OECD. Paris.

De Crombrugghe, A. & Moore, S. 2021. Investment Promotion and the Digital Economy: A Comparative Analysis of Investment Promotion Practices Across the OECD. OECD. Paris.

Department of Enterprise, Trade and Employment. 2021. Foreign Direct Investment. URL: https://enterprise.gov.ie/en/what-we-do/trade-investment/foreign-direct-investment-fdi-/. Accessed: September 15 2022.

Dettoni, J. 2018. Investment promotion 4.0. URL: https://www.fdiintelligence.com/content/feature/investment-promotion-40-70913. Accessed: 3 November 2022.

Dettoni, J. 2020. fDi's Virus Diaries: 'The crisis is going to transform IPAs'. fDi Intelligence. URL: https://www.fdiintelligence.com/content/locations/global/americas/fdi-s-virus-diaries-the-crisis-is-going-to-transform-ipas-77823. Accessed: 19 December 2023.

Drahokoupil, J. 2008. The Investment-Promotion Machines: The Politics of Foreign Direct Investment Promotion in Central and Eastern Europe. Europe-Asia Studies, 60, 2, pp. 197-225.

e-Estonia. 2023. e-Governance. URL: https://e-estonia.com/solutions/e-governance/government-cloud. Accessed: 14 February 2023.

Echandi, R., Qiang, Z., & Kusek, P. 2017. Maximizing potential benefits of FDI for competitiveness and sustainable development: World Bank Group report on investment policy and promotion diagnostics and tools. World Bank. Washington.

eeBot. 2020. Suve. URL: https://eebot.ee/en

Emerging Europe. 2022. Investment Promotion Report 2022. Emerging Europe. London.

Emerging Europe. 2023a. Investment Promotion Report 2023. Emerging Europe. London.

Emerging Europe. 2023b. Emerging Europe Awards. URL: https://emerging-europe.com/future-of-emerging-europe-awards-shortlisted. Accessed: 19 December 2023.

Enterprise Estonia. 2018. EASi strateegiline tegevuskava 2019-2023.

 $\label{eq:url:matth:ma$

Accessed: 12 May 2022.

Estonian Business and Innovation Agency. 2022. EASi ja Kredexi ühendasutus. URL: https://eas.ee/eas/. Accessed: 7 February 2023.

Estonian Investment Agency. 2016. Estonian Investment Agency Contact by Office Locations. Internet Archive. URL: https://web.archive.org/web/20160613042336/http://www.investinesto-nia.com/en/estonian-investment-agency/contact-by-office-locations. Accessed: January 22, 2024.

Estonian Investment Agency. 2022a. Estonian Investment Agency. Internet Archive.

URL: https://web.archive.org/web/20220203130324/https://investinestonia.com/investment-agency. Accessed: 22 January 2024.

Estonian Investment Agency. 2022b. Estonian Investment Agency.

URL: https://investinestonia.com/investment-agency. Accessed: 1 May 2022.

Estonian Investment Agency 2022c. Foreign direct investment. URL: https://investinesto-nia.com/business-in-estonia/estonian-economy/fdi/. Accessed: September 15 2022.

Estonian Investment Agency. 2023a. Foreign direct investments in Estonia hit an all-time high mark in 2022. URL: https://investinestonia.com/foreign-direct-investments-in-estonia-hit-an-all-time-high-mark-in-2022. Accessed: 23 January 2024.

Estonian Investment Agency. 2023b. Our results. URL: https://investinesto-nia.com/dash/?start=2023-01-01&end=2023-12-31. Accessed: 23 January 2024.

Farrell, R. 2002. Research issues in Japanese FDI, pp. 75-90. In Bijit, B. (ed.). Foreign Direct Investment. Research issues. Routledge. London and New York.

fDi Intelligence. 2022. The fDi Report 2022. Global Greenfield Investment Trends. The Financial Times Ltd. London.

fDi Intelligence. 2023. fDi Intelligence. URL: https://www.fdiintelligence.com. Accessed: 19 December 2023.

Feuvrier, P. 2020. Luxembourg, the chain of direct investment ownership and the residence principle. Presetation at IFC Conference on external statistics "Bridging measurement challenges and analytical needs of external statistics: evolution or revolution?". URL: https://www.bis.org/ifc/publ/ifcb52 26.pdf. Accessed: 9 September 2022.

Foreign Direct Investment. 2022. Navigating Troubled Waters. Foreign Direct Investment, Oct 13 2022, pp. 28. The Financial Times Limited. London.

Gillham, B. 2000a. Case Study Research Methods. Continuum, London.

Gillham, B. 2000a. The Research Interview. Continuum, London & New York.

Google Cloud. 2023. Google Cloud Speech-to-Text API. Version 2. URL: https://cloud.google.com/speech-to-text/docs. Accessed: 8 December 2023.

Grzegorczyk, M. 2023. Estonia once again sets the emerging Europe standard for investment promotion. Emerging Europe. URL: https://emerging-europe.com/news/estonia-once-again-sets-the-emerging-europe-standard-for-investment-promotion. Accessed: 19 December 2023.

Grosse, R. & Kujawa, D. 1988. International Business. Homewood. Irvin.

Guimón, J. & Filippov, S. 2012. Competing for High-quality FDI: Management Challenges for Investment Promotion Agencies. Institutions and Economics, 2, 4, pp. 25-44.

Harding, T. & Javorcik, B. S. Investment Promotion and FDI Inflows: Quality Matters. CESifo Economic Studies, 59, 2, pp. 337-359.

Haaga-Helia University of Applied Sciences. 2022. Trade Secrets and Confidentiality in Master Theses. URL: https://haagahelia.contenthub.fi/NiboWEB/haagahe-lia/getPublicFile.do?uuid=18058166&in-

<u>line=false&ticket=cba6b2035a48fb993b4799711efe6a0b&type=original</u>. Accessed: 11 November 2022.

Hayakawa, K., Lee, H., Park, D. 2014. Are Investment Promotion Agencies Effective in Promoting Outward Foreign Direct Investment? The Cases of Japan and Korea. Asian Economic Journal, 28, 2, pp. 111-138.

Heilbron, A. & Kronfol, H. 2020. Increasing the Development Impact of Investment Promotion Agencies. In World Bank. Global Investment Competitiveness Report 2019/2020: Rebuilding Investor Confidence in Times of Uncertainty, pp. 170-207.

Hildén, Riitta (2002) Suomi kansainvälistyy - kymmenen vuotta kilpailua suorista ulkomaisista investoinneista; Invest in Finland 1992-2002. Edita Oy, Helsinki.

Huggins, R. 2001. Embedding inward investment through workforce development: experiences in Wales. Environment an Planning C: Government and Policy, 19, pp. 833 – 848.

Incomes Register. 2022. Foreign companies and their representatives: How to grant authorisations for Incomes Register matters. URL: https://www.vero.fi/en/incomes-register/companies-and-organi-sations/employers/authorisation/foreign-companies-and-their-representatives-how-to-grant-authorisations. Accessed: 11 November 2022.

International Monetary Fund. 2009. Balance of Payments and International Investment Position Manual, sixth Edition. URL: https://www.imf.org/external/np/sta/bop/BOPman.pdf Accessed: 8 September 2022.

International Monetary Fund. 2004. Annotated Outline of the Balance of Payments and International Investment Position Manual, fifth edition. URL: https://www.imf.org/exter-nal/np/sta/bop/pdf/ao.pdf. Accessed: 8 September 2022.

International Trade Center. 2018. WTPO18 recap: Digital tips for trade and investment promotion. World Trade Promotion Organization Conference. Online video. URL: https://www.youtube.com/watch?v=E1yAtLN cU4. Accessed: 4 November 2022.

International Trade Council. 2022. Winners Of The 2022 Go Global Awards. URL: https://goglobalawards.org/2022-winners-government/. Accessed: 7 February 2023.

Invest in Israel. 2022. About us. URL: https://investinisrael.gov.il/How-we-lep/Pages/Who-we-are.aspx. Accessed: 2 May 2022.

Invest Lithuania. 2022. About us. URL: https://investlithuania.com/about-us. Accessed: 20 September 2022.

IRCAI. 2021. IRCAI Global Top 100: A list of the top 100 projects solving problems related to the 17 United Nations Sustainable Development Goals. URL: https://ircai.org/global-top-100-outstand-ing-projects/results. Accessed: 7 February 2023.8

IRCAI. 2022. IRCAI Global Top 100: A list of the top 100 projects solving problems related to the 17 United Nations Sustainable Development Goals. URL: https://ircai.org/global-top-100-outstand-ing-projects/results. Accessed: 19 December 2023.8

Jeong, J. 2022. Seoul launches investment promotion agency for FDI expansion. The Korea Economic Daily. URL: https://www.kedglobal.com/foreign_investments/newsView/ked202202070007. Accessed: 3 November 2022.

Jones-Kelley, A. 2020. Top Investment Promotion Agencies. Site Selection Magazine. URL: https://siteselection.com/issues/2020/may/top-investment-promotion-agencies-2020.cfm. Accessed: 7 February 2023.

Kachawamba, M. & Sæbø, Ø. E-Government in Marketing a Country: A Strategy for Reducing Transaction Cost of Doing Business in Tanzania. International Journal of Marketing Studies, 3, 4, pp. 2-16.

Kaha, A. 2020. Automatiseerimise eeldused, edutegurid ja efektid Ettevõtluse Arendamise Sihtasutuse välisinvesteeringute keskuse näitel. Master's thesis. Tallinn University, School of Digital Technologies. URL: https://www.etera.ee/zoom/85011/view?page=1&p=separate&tool=info. Accessed: 12 May 2022.

Kerge, J. 2022. Ühendasutus: Uus struktuur. Enterprise Estonia's Intranet. Accessed: 15 January 2024.

Kotíková, S. & Čuhlová, R. 2021. Forecasting foreign direct investment flows in the COVID-19 pandemic times and the role of investment promotion agencies. Economics Management Innovation, 13, 1, pp. 26-38.

Laudicina, P. & Peterson, E. 2022. Optimism dashed: The 2022 FDI Confidence Index. Kearney. Chicago.

Lederman, D. & Lesniak, J. 2018. Open and Nimble: Finding Stable Growth in Small Economies. International Bank for Reconstruction and Development / The World Bank. Washington.

Lozanda, H. & Kritz, G. Investment promotion agencies on the Internet: evaluating promotion tactics and web presence. Journal of International Business Research, 6, 2, pp. 17-31.

Lugna, L. 2022. Strateegiapäev. Powerpoint slides. Accessed: 8 April 2022.

Makombe, I., Kachwamba, M. 2011. Internet Marketing in the Public Sector: the Case of Investment Promotion Agencies. International Journal of eBusiness and eGovernment Studies, 3, 2, pp. 79–89.

Merriam-Webster. 2022. Promotion. URL: https://www.merriam-webster.com/dictionary/promotion. Accessed: 13 September 2022.

Merriam, S. & Grenier, R. 2002. Qualitative Research in Practice: Examples for Discussion and Analysis. Jossey-Bass, San Francisco.

Metaxas, T. 2010. Place marketing, place branding and foreign direct investments: Defining their relationship in the frame of local economic development process. Place Branding and Public Diplomacy, 6, 3, pp. 228-243.

Morisset, J. & Andrews-Johnson, K. 2004. The Effectiveness of Promotion Agencies at Attracting Foreign Direct Investment. FIAS Occational Paper No. 16. The World Bank. Washington.

O'Farrell, S. 2023a. Al in FDI | Paris IPA boss says the tech is 'not trustworthy'. fDi Intelligence. URL: https://www.fdiintelligence.com/content/search/(offset)/locations/global/is-investment-promotion-ready-for-ai-83008. Accessed: 19 December 2023.

O'Farrell, S. 2023b. Is investment promotion ready for AI?. fDi Intelligence. URL: https://www.fdiintelligence.com/content/search/(offset)/locations/global/is-investment-promotion-ready-for-ai-83008. Accessed: 19 December 2023.

O'Farrell, S. 2023c. Costa Rica shakes up FDI strategy. fDi Intelligence. URL: https://www.fdiintelligence.com/content/feature/costa-rica-shakes-up-fdi-strategy-83209. Accessed: 19 December 2023.

Odendaal, N. 2003. Information and communication technology and local governance: understanding the difference between cities in developed and emerging economies. Computers, Environment and Urban Systems, 27, 2003, pp. 585-607.

OECD. 2008. OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition. URL: https://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf. Accessed: 8 September 2022.

OECD. 2015. OECD Benchmark Definition of Foreign Direct Investment - 4th Edition. URL: https://www.oecd.org/investment/fdibenchmarkdefinition.htm. Accessed: 8 September 2022.

OECD. 2018. Mapping of Investment Promotion Agencies in OECD countries. URL: https://www.oecd.org/investment/Mapping-of-Investment-Promotion-Agencies-in-OECD-Countries.pdf. Accessed: 4 November 2022.

OECD. 2020a. Investment promotion agencies in the time of Covid-19. OECD, Paris. URL: https://www.oecd.org/colombia/global-oecd-welcomes-colombia-as-its-37th-member.htm. Accessed: 20 September 2022.

OECD. 2020b. Investment promotion agencies in the time of Covid-19. OECD, Paris. URL: https://www.oecd.org/coronavirus/policy-responses/investment-promotion-agencies-in-the-time-of-covid-19-50f79678/. Accessed: 1 November 2022.

OECD. 2020c. OECD Investment Policy Reviews: Egypt 2020. OECD, Paris. URL: <a href="https://www.oecd-ilibrary.org/sites/9f9c589a-en/index.html?itemId=/content/publication/9f9c589a-en/index.html?itemId=/content/

OECD. 2020d. OECD Investment Policy Reviews: Myanmar 2020. OECD, Paris. URL: tentType=book. Accessed: 4 November 2022.

OECD. 2021a. OECD welcomes Costa Rica as its 38th Member. OEDC, Paris. URL: <a href="https://www.oecd.org/newsroom/oecd-welcomes-costa-rica-as-its-38th-mem-ber.htm#:~:text=The%20OECD's%2038%20members%20are,Norway%2C%20Poland%2C%20Portugal%2C%20Slovak. Accessed: 20 September 2022.

OECD. 2021b. OECD Energy Investment Policy Review of Ukraine. OECD, Paris. URL: https://www.oecd.org/investment/oecd-energy-investment-policy-review-of-ukraine-6e6e58c6-en.htm. Accessed: 4 November 2022.

OECD. 2022a. FDI Stocks. OECD, Paris. URL: https://data.oecd.org/fdi/fdi-stocks.htm#indicator-chart. Accessed: 9 September 2022.

OECD. 2022b. Investment promotion and facilitation for sustainable regional development. Summary report. OECD. Paris. URL: https://www.oecd.org/investment/investment-policy/7th-OECD-IPA-Network-Meeting-summary-2022.pdf. Accessed: 3 November 2022.

OECD 2022c. OECD Investment Policy Reviews. OECD, Paris. URL: https://www.oecd.org/daf/inv/investment-policy/oecd-investment-policy-reviews-concept-note.pdf. Accessed: 4 November 2022.

OECD. 2022d. OECD Investment Policy Review: Bulgaria. OECD, Paris. URL: <a href="https://www.oecd-ilibrary.org/sites/6a0325b7-en/1/3/6/index.html?itemId=/content/publication/6a0325b7-en-accessed:4/publication/6a0325b7-en-acces

OECD. 2022e. Data - PISA. URL: https://www.oecd.org/pisa/data. Accessed: 14 January 2023.

OECD. 2024. 2023 OECD Digital Government Index. URL: https://www.oecd-ilibrary.org/govern-ance/2023-oecd-digital-government-index_1a89ed5e-en;jsessionid=W_5rUs-K0AlBqaultSHrTt4v30eycupQknxlEvkl.ip-10-240-5-69. Accessed 1 February 2024.

Olev, A., Alumäe, T. 2022. Estonian Speech Recognition and Transcription Editing Service. Baltic HLT.

Peetersoo, K. 2019. VIK 2019: Digitaalsete tööriistadega veel proaktiivsemaks. Enterprise Estonia's Intranet. Accessed: 15 April 2020.

Phillips, J., Helibron, A. & Kher, P. 2021. Lessons in Investment Promotion: The Case of Invest India. Washington: The World Bank.

Polo, A. 2022. New FDI to Finland 2021. URL: https://www.businessfinland.fi/494c91/globalas-sets/invest-in-finland/iif-fdi-statistics-2021-finland_website_lo.pdf. Accessed: 11 November 2022.

Procolombia. 2022. Invest in Colombia. URL: https://investincolombia.com.co/en. Accessed: 20 September 2022.

Raganowicz, K. 2019. Analysing the Cities' Inward Investment Promotion Websites. International Journal of Synergy and Research, 6, 1, pp. 149-161.

Smit, J. 2008. Evaluating Investment Promotion Agencies, Investment Advisory Series A, number 3. United Nations. New York and Geneva.

Stratejai. 2022. The Blue Print for Artificial Intelligence at Flanders Investment & Trade. Online video. URL: https://www.youtube.com/watch?v=-44xdo5tRaA. Accessed: 4 November 2022.

Suomi.fi. 2022. Identification using different identification tokens. URL: https://www.suomi.fi/instructions-and-support/information-on-eidentification/identification-using-different-identification-tokens.

Accessed: 11 November 2022.

Team Estonia. 2023. Team Estonia. URL: https://eas.ee/team-estonia. Accessed: 1 February 2024.

Team Finland. 2022a. Team Finland Network of Organisations. URL: https://www.team-finland.ri/nland

Team Finland 2022b. Market Opportunities. URL: https://www.marketopportunities.fi. Accessed: 11 November 2022.

Turp-Balazs, C. 2021. Estonia again takes top spot in Emerging Europe's investment promotion report. URL: https://emerging-europe.com/news/estonia-again-takes-top-spot-in-emerging-europes-investment-promotion-report. Accessed: 1 May 2022.

Turp-Balazs, C. 2022. Estonia tops Emerging Europe's investment promotion survey; Prague takes business-friendly city title. URL: https://emerging-europe.com/news/estonia-tops-emerging-europes-investment-promotion-survey-prague-takes-business-friendly-city-title/. Accessed: 7 February 2023.

UNCFF. 2021. Voluntary Cancellation Certificate. URL: https://www.cinde.org/assets/documents/UNFCCC-certificate-CINDE-

<u>164c377ed13c6f869dd7aeae89c9d392bb1af2c0e5a23cc02049ff4cd7d0aac9.pdf</u>. Accessed: 19 January 2022.

UNCTAD. 1997. Survey of Best Practices in Investment Promotion. United Nations. New York and Geneva.

UNCTAD. 2001. The World Of Investment Promotion At a Glance. ASIT Advisory Studies No. 17. United Nations. New York and Geneva.

UNCTAD. 2002. World Investment Report 2001. URL: https://worldinvest-mentreport.unctad.org/wir2001/part-1-the-geography-of-international-production/. Accessed: September 16 2022.

UNCTAD. 2016. UNCTAD Investment Promotion Awards 2016. URL: https://unctad.org/system/files/official-document/unctad xiv wifd1 en.pdf. Accessed: October 11 2022.

UNCTAD. 2019. UNCTAD Handbook of Statistics. URL: https://unctad.org/system/files/official-doc-ument/tdstat44 FS09 en.pdf. Accessed: September 8 2022.

UNCTAD. 2020a. Investment promotion agencies from Estonia, India and Rwanda receive UN awards for excellence in their COVID-19 responses. URL: https://unctad.org/news/investment-promotion-agencies-estonia-india-and-rwanda-receive-un-awards-excellence-their. Accessed: 12 May 2022.

UNCTAD. 2020b. Estonia Investment Agency. United Nations (UNCTAD) Investment Promotion Awards 2020. Online video. URL: https://www.youtube.com/watch?v=HxrQxtZD_Ng. Accessed: 7 February 2023.

UNCTAD. 2021. UNCTAD awards agencies for promoting investment in health and the blue economy. URL: https://unctad.org/news/unctad-awards-agencies-promoting-investment-health-and-blue-economy. Accessed: 28 April 2022.

UNCTAD. 2022a. World Investment Report 2022. URL: https://unctad.org/webflyer/world-investment-report-2022. Accessed: September 9 2022.

UNCTAD. 2022b. UNCTAD Pedagogical Video: Digitalization of Investment Promotion in Estonia and India. Video. URL: https://www.youtube.com/watch?v=iJehihoPAUI. Accessed: 3 November 2022.

UNESCAP. 2017. Investment Promotion Fundamentals and Image Building. URL: https://www.unescap.org/sites/default/files/UNESCAP-Myanmar-Investment%20promotion%20and%20im-age%20building-June%202017.pdf. Accessed: 16 September 2022.

Valkola, M. 2008. Country brand management and use of country brand in promotion of foreign investment. Case Finland. Master's Thesis, Aalto University,

Department of Marketing and Management. URL: https://aaltodoc.aalto.fi/han-dle/123456789/58483. Accessed: November 4 2022.

Van Beers, C. 2004. Multinationals and the Knowledge Economy in Small Countries. Economic Bulletin, 6, 41, pp. 205–208.

Van den Berghe, D. 2021. The new era for investment promotion and attraction. Workshop presentation. The Economic and Social Commission for Asia and the Pacific.

Varblane, U., Vissak, T. & Vahter, P. 2010. Otsesed välisinvesteeringud maailmamajanduses ja neid selgitavad teooriad. Tartu Ülikooli Kirjastus. Tartu.

Varblane, U., Varblane, U., Pulk, K., Vissak, T., Lukason, O. 2020. Nutikate välisinvesteeringute uuring: Eestis tegutseva välisosalusega ettevõtete analüüs, et selgitada välja uute välisinvesteeringute maandamise fookus ja kriteeriumid. Tartu Ülikooli majandusteaduskond. Tartu.

Varblane, U. 2020. Nutikate välisinvesteeringute uuringu tulemused, väliskapitali mõju, kitsaskohad ja võimalused Eestis. Tartu: Tartu Ülikool.

Verslo Žinios. 2018. Lietuva tapo 36-ąja EBPO nare. URL: https://www.vz.lt/verslo-aplinka/2018/07/05/lietuva-tapo-36-aja-ebpo-nare. Accessed: 20 September 2022.

Vogler, B. 2020. IPA Toolbox. A Practical Guide to Support Investment Promotion Agencies. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Bonn and Eschborn.

WAIPA 2022. Members. URL: https://waipa.org/members. Accessed: 10 November 2022.

Wells, L. T. & Wint, A. G. 1990. Marketing a Country. FIAS Occational Paper No. 1. The World Bank. Washington.

Whyte, R., Roca, F., Di Fiori, V., Griffin, C., Zhai, B. 2012. Global Investment Promotion Best Practices. The World Bank. Washington.

Whyman, P. & Baimbridge, M. Labour Market Flexibility as a Key Determinant of Foreign Direct Investment: Evidence from the UK. 2009. Preface. In Blaine, H. (ed.). Foreign direct investment, pp. 21-44. Nova Science Publishers. New York.

Sanchiz, Alex, and Ahmed Omic. 2020. State of Investment Promotion Agencies: Evidence from WAIPA-WBG's Joint Global Survey. World Bank. Washington. WAIPA (World Association of Investment Promotion Agencies). Geneva.

World Bank. 2020. Doing Business 2020. International Bank for Reconstruction and Development / The World Bank. Washington.

World Bank. 2022a. Population Ages 15-64. URL: https://data.worldbank.org/indicator/SP.POP.1564.TO?name_desc=false. Accessed: 9 September 2022.

World Bank. 2022a. GDP – Finland. URL: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2021&locations=EE&start=2021. Accessed: 9 September 2022.

World Bank. 2022b. GDP – Finland. URL: https://data.worldbank.org/indica-tor/NY.GDP.MKTP.CD?end=2021&locations=Fl&start=2021. Accessed: 9 September 2022.

World Bank. 2022c. GDP – Costa Rica. URL: https://data.worldbank.org/indica-tor/NY.GDP.MKTP.CD?end=2021&locations=CR&start=2021. Accessed: 17 January 2023.

Young, C. 2005. Meeting the new foreign direct investment challenge in East and Central Europe: place-marketing strategies in Hungary. Environment and Planning C: Government and Policy, 23, 5, pp. 733–758.

Appendices

Appendix 1. Interview question plans

Business Finland interview

[Explaining data usage, agreeing on terms]

What is your role at Business Finland?

What do you consider the main selling points of Finland to attract FDI?

What do you consider the most important opportunities Finland has to offer to foreign investors?

Business Finland has an ambitious strategy until 2025. How does digitalisation at Invest in Finland relate to the strategic goals?

The strategy sees digitalisation as enabling the activities that are "more value-generating". What does this mean for the investment arm of Business Finland?

How do you involve customers in improving and creating digital tools and services?

How do you involve partners in this process? State? Whole-of-government approach?

What is the point in Invest in Finland's history that you could name as the beginning of digitalisation or truly enforced digitalisation?

According to previous research, in 2002 an important part of the agency's digital strategy revolved around reactive activities, such as responding to client enquiries. How has this changed in the past 20 years?

What does invest in Finland do in the field of Big data analytics? How is big data utilised for the benefit of the agency and its customers? What are the main effects? Could you name some success stories in this field? What does an IPA need to be good in big data analytics?

What are digital internal communications, management and collaboration tools used for? What are the main effects? Could you name some success stories in this field? What does an IPA need to use digital tools successfully in internal communications, management, collaboration?

Concrete tools:

- Virtual site-selection visits and VR-based technology
- Video conferences, e-meetings, webinars
- Virtual fairs, online interactive maps and platforms
- Social media campaigns podcasts named as a success story?
- Al-based marketing? Digital customer support service?

Whole-government effort is discussed a lot and sometimes considered needed for effective investment promotion / facilitation. How does this work in Finland?

How do the networks possibly helping foreign investors work – there is Team Finland – what is it from the point of view of Invest in Finland?

How much effort does Invest in Finland put into policy advocacy to get the government services "right"? What are the main concerns? What are the pluses of the current environment?

Not all of the services are provided in English – what to think of that? Not all services allow foreigners to use their identification methods – how would this working affect potential investors?

Antti Aumo, digitalisation of the IPA's processes was a priority already before COVID-19 – but the pandemic clearly accelerated it has said that. How much did COVID-19 actually influence the process? What changed? How quick were the changes?

What are the main takeaways from the COVID-19 crisis in the field of going digital?

And looking at the future scenarios, it can be seen that COVID-19 basically "rewrote its future" after COVID-19 becoming prominent.

Business Finland is really into futures research – how do the scenarios actually help you in understanding the future? In the field of digital tools, is there any learning points? How do for example business or IT analysts use the scenarios to build tools?

What have the main prerequisites of digitalisation at your IPA been?

Name some of the main success factors of digitalisation at your IPA.

Invest in Estonia interview

[Andmekasutus, sissejuhatus]

Millised on sinu igapäevased tööülesanded VIKis?

Mis on Eesti kõige tugevamad müügiargumendid praeguses olukorras?

Millised on kõige olulisemad ärivõimalused, mida Eesti välisinvestoritele pakub?

Mida näed kui kõige olulisemaid eesmärke uues VIKi stateegias (2023 – 2030)? Senine strateegia oli loodud eelmise aasta lõpuni – kuidas hindad selle toimimist?

Palun kirjelda, kuidas aitasid digitööriistad kaasa senise strateegia eesmärkide saavutamisse.

Milline on digitööriistade osa uues strateegias?

Miks vajame lähitulevikus eraldi automatiseerimise / AI / digistrateegiat – kuidas iganes seda nimetada? Mida tähendavad selle juures märksõnad skaleeritavus ja läbipaistvus?

Otsime pidevalt uusi võimalusi, kuidas tehnoloogia arengut kasutades jõuda paremate tulemusteni välisinvesteeringute maandamisel.

Muudame turunduse ja müügi tööprotsesse tõhusamaks läbi andmeanalüüsi ning automatiseerimise, mis aitab jõuda laiema grupi potentsiaalsete huvilisteni ja tagada kindel kvaliteedistandard teenuse osutamisel.

Tehisintellekti võimaluste kasutamine aitab info täpsemini pakendada lähtuvalt potentsiaalse investori huvidest, lihtsustab ja kiirendab suhtlust ning valikute tegemist.

Kujundame tehisintellekti kasutamise strateegia, mis on aluseks läbipaistva ja skaleeritava tehnoloogilise innovatsiooni edendamiseks välisinvesteeringute maaletoomisel.

Kirjanduses võib kohata väidet, et digitaliseerimata jätmine IPAdes võiks potentsiaalsetele investoritele saata valesid signaale. Kuidas see Eesti kui digiriigi puhul toimib? Kui suured on potentsiaalsete investorite ootused?

Kuidas on digitaliseerimise alastesse otsustesse kaasatud potentsiaalsed investorid ja kuidas nende vajadusi arvesse võetakse?

Uus strateegia ütleb, et Digitaliseerime ja automatiseerime müügitoe ja investorteeninduse protsesse, et olla efektiivsemad ja pakkuda paremat teenindust, kliendikesksuses järeleandmisi tegemata. Mida tähendab siinkohal efektiivsus, mida parem teenindus ja mida kliendikesksus?

Strateegia kohaselt võiksid eesmärgid olla: "paremad tulemused", "suurem standardiseeritus", "laiem katvus", "suurem personaliseeritus", "lihtsustamine", "kiirus" ja lisaks "skaleeritavus" ja "läbipaistvus".

Läbi mille võiks üldse defineerida digitööriistade edukust? VIKi töötajad on varasemates intervjuudes rääkinud nii ajasäästust (mis on ühtlasi ka rahasääst), väljundi suuremast ühtsusest, turnudusvõimalustest kui muust – isegi sellest, et mõnda humaniseeritud digikolleegi tajutaksegi kui kolleegi, mitte kui tarkvarajuppii. Mida sellest arvata? Kuivõrd mõõdetavad on digitööriistade efektid tegelikkuses?

Kuidas on digitööriistade kasutussevõtmisel kaasatud partnerid?

Milline võiks olla see hetk, mida defineerida kui jõustatud digitaliseerimise algust VIKis? Mis on sinu ametis oleku aja jooksul muutunud?

Mil määral võib selle aja jooksul kirjeldada liikumist reaktiivsetelt digiteenustelt proaktiivsematele, nagu on kirjeldatud näiteks Soome IPAs?

Oled varem maininud, et mõned meie konkurendid teevad edusamme suurandmete töötlemisel. Millised võiksid olla võimalused suurandmete analüüsil, mida VIK kasutada võiks? Mida see endaga kaasa toob või tuua võib? Mida oleks selleks vaja, et suurandmetega edukalt töötada?

Kuidas toimib sisekommunikatsioonis digitööriistade kasutamine? Mida see endaga kaasa toob? Millised võiksid olla meie edulood selles osas? Kuivõrd võib öelda, et ka mõned teised tööriistad, mis ei ole mõeldud otseselt sisekommunikatsiooniks, selle paranemisele kaasa aitavad? Mida vajab VIK selleks, et sisekommunikatsioonis edukalt neid tööriistu kasutada? Kuivõrd võib öelda, et VIKi org kultuur on selline, et sisemised tööriistad on riskivaba koht uute lahenduste kasutamiseks?

Minevikus on VIK kasutanud VR-tehnoloogiaid – eelkõige koostöös meie e-Estonia kolleegidega. Kuidas hindad seda kogemust? Mida võiksime selles osas järgmisel korral paremini teha? Millised võiksid olla puudujäägid? Kuivõrd on tehnoloogiad piisavalt valmis, et ka näiteks VR-visiite teha või tööstusparke VR-i abil tutvustada, nagu tehakse mõnes teises riigis? Mida on üldse vaja, et edukalt VRi kasutada? Mis kasu sellest olla võiks?

Miks peaksime ka nüüd, kui reisimine on taas vaba, korraldama videokonverentse, virtuaalseid kohtumisi? Kuivõrd on need võimelised asendama näost-näkku suhtlust? Mida arvata sellest, et mõne IPA juhid arvavad, et digitaalsele suhtlusele ei tohiks niivõrd palju rõhku panna kui IPAd praegu panevad?

Miks kasutada virtuaalseid messe, interaktiivseid kaarte ja platvorme? Uus strateegia näeb ette senisest tugevamat regionaalset fookust. Kuidas info kaardil kuvamine sellele kaasa aitab? Milliseid lisavõimalusi võiks siin veel olla?

Kasutame sotsiaalmeediat väga intensiivselt, paneme rõhku nii sisu sagedusele kui kvaliteedile. Mida see endaga kaasa tuua võiks?

Mida toob kaasa digitaalse klienditeeninduse rakendamine? Uueks asjaks on Al-põhine marketing, sisuloome osas. Mida me sellega saavutada võiksime?

Digitööriistad ja teenused ja digiriik Eestis üldisemalt – millist rolli need mängivad investorite Eestisse toomisel? Näiteks täis-digitaalne ja kiire ettevõtte asutamine? Kuvõrd oluline on IPA jaoks digi-ärikeskkond üldisemalt?

Eelmise aasta intervjuus mainisid head koostööd võrgustikuga. Kuivõrd toimib see digiteenuste osas? Milline roll on selles lähemal võrgustikul? Kuidas aitab VIKi näiteks e-residentus? Kuidas worki digiteenuste olemasolu? Kuidas Startup Estonia digiteenused?

Miks on saatkonnatöötajatel ja VMi töötajatel on võimalik kasutada mõnd meie digitööriistadest? Milliseks võiks see koostöö kujuneda tulevikus?

Kuivõrd palju panustab meie äriarenduse pool üldisesse digiteenuste arendusse Eestis ja digipoliitikate kujundamisse, et välisinvestoritel oleks siin parem ja lihtsam? Miks?

Palju on räägitud samas kontekstis COVIDist ja sellest, kuidas IPAd on digitaalsemaks muutunud. Kuidas mõjutas COVID VIKi digiteenuseid?

Mis olid COVIDi perioodi suurimad õppetunnid digitaliseerumise osas?

Mõned IPAd tegelevad tulevikustsenaariumite loomisega ning teevad ka oma digiotsuseid vastavalt siis neile võimalikele stsenaariumitele. Miks VIK seda ei tee?

Mida pead kõige olulisemateks eeldusteks ja eduteguriteks, mis digitaliseerimisel VIKis olnud on?

Mida on digitaliseerimine kaasa toonud?

CINDE interview

[Explaining data usage, agreeing on terms]

What are your roles at CINDE?

What do you consider the main selling points of Costa Rica to attract FDI?

What do you consider the most important opportunities Finland has to offer to foreign investors?

How do you involve customers in the improvement and creation of digital tools and services?

How do you involve partners in this process? State? Whole-of-government approach?

What is the point in CINDE's history that you could name as the beginning of digitalisation or truly enforced digitalisation?

What does CINDE do in the field of big data analytics? How is big data utilised for the benefit of the agency and its customers? What are the main effects? Could you name some success stories in this field? What does an IPA need to be good in big data analytics?

What are digital internal communications, management and collaboration tools used for? What are the main effects? Could you name some success stories in this field?

Discussion of concrete technologies:

- Virtual site-selection visits and VR-based technology
- Video conferences, e-meetings, webinars
- Virtual fairs, online interactive maps and platforms
- Social media campaigns podcasts named as a success story?
- Al-based marketing
- Digital customer support service

Whole-government effort is discussed a lot and sometimes considered needed for effective investment promotion. How does this work in Costa Rica?

How much effort does CINDE put into policy advocacy to get the government services "right"?

What are the main takeaways from the COVID-19 crisis in the field of going digital?

What have the main prerequisites of digitalisation at your IPA been?

Name some of the main success factors of digitalisation at your IPA.