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THE USE OF FACEBOOK IN ESTONIAN MINISTRIES

Master’s thesis

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Declaration: Hereby I declare that this master's thesis, my original investigation and achievement, submitted for the master's degree at Tallinn University of Technology, has not been submitted for any other degree or examination.

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The thesis is compatible with the current demands.

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Abstract

Estonia has been a good international example of an Information and Communications Technology user for implementing e-government during the late ’90s and early ’00s (Charles 2009). The question whether the country’s success has been carried through to Web 2.0 is answered through the main research question of the thesis. The main research question is: Why would Estonian ministries use Facebook? It is answered through an analysis of the use of social media in three Estonian ministries: The Ministry of Foreign Affairs (as the most successful user of Facebook as measured by the number of fans), the Ministry of Internal Affairs (in the mid-range) and the Ministry of Economic Affairs and Communications (as the underdog with the smallest amount of fans). Elite interviews and document analysis is being used as the research method. Among other theoretical literature, the three-stage framework for social-media diffusion in the public sector proposed by Mergel and Bretschneider (2013) is used to evaluate the ministries. The results of the study show that the ministries’ use of Facebook was motivated by the wish to be modern and close to their stakeholders. It was also seen as an additional communication channel next to web-pages and press releases.

Keywords: social media, government, Facebook

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Introduction

Rapid development in e-banking through different means of electronic identification has led Estonia to be among the few successful users of e-voting (Alvarez et al. 2009). The technological advancements that led to these processes have been outstanding, and Estonia has received much attention because of them. The National Audit Office of Estonia (2006) brought out that the success was great but the government should not rest to enjoy it. Further actions had to be taken to make the process of communicating with the government even better for citizens. Also with the rapid diffusion of the internet, the preferences of users by means of communication have changed. Therefore it could be said that in the future Estonians are most likely to communicate with each other through some kind of device that is connected to the internet. Part of the communication is done with government organizations such as ministries. Especially well-known is the extensive use that the Estonian president Toomas-Hendrik Ilves makes of Twitter and Facebook accounts (Seddon 2013).

Based on case-study methods, *viz*. elite interviews and document analysis, it is discussed why and how Estonian ministries use Facebook pages to connect with the citizens. The thesis is divided into four parts: literature overview for current technological trends for government organizations; methods used for the research; overview of Estonian ministries' use of Facebook; and discussion on the findings. Qualitative methods are used to analyze the cases of three Estonian ministries: The Ministry of Foreign Affairs, the Ministry of Internal Affairs and the Ministry of Economics and Communications. The goal of this thesis is to find out why Estonian ministries are using Facebook, how they are doing it and what can be learned from their experience. Thus the main research question is, "Why are Estonian ministries using Facebook?" In order to find answers to these questions the author uses document analysis and interviews with key persons. For the general context an overview of Web 2.0 and how it could be useful for the government is given through other authors' writings.

The use of Facebook in the public sector has been academically studied in Australia (see, for example, Lubna Alam and Walker 2011; Bird et al. 2012). Several Estonian students have written their theses about Facebook, but from the perspective of users (Kostabi 2013; Rääsk 2013) or private-sector entities (Vertmann 2010). In the author's opinion the subject is important because the Facebook user base is still increasing (Facebook 2014, 39); even though younger teens are moving away from Facebook the loss is more than made up by older generations joining in (iStrategyLabs.com 2014). Between 2011 and 2013 3.3 million American teens between the ages of 13 and 17 left Facebook; however, 12.4 million adults aged 55+ joined (iStrategyLabs.com 2014). So it seems that Facebook is becoming more mainstream for the adults. But what are the government's actual benefits from using it? Getting closer to finding out is the task of this thesis.

1. Literature overview

Carlota Perez (2002) has identified the on-going techno-economic paradigm as the age of information technology. It began in the early 1970s, when the micro-processor was invented. The micro-processor reduced the size and price of computers drastically and made them widely available. Paired with an internet connection, the personal computers brought the world to end users in their homes and offices. Many services such as banking moved online and became more convenient for end users. First the web content was static and mostly provided by enterprises or government organizations. The user had little or no role in creating the content. This has changed with the emergence of Web 2.0 technologies.

1.1 Web 2.0

The main difference between Web 1.0 and Web 2.0 is that there were very few content creators in Web 1.0, and most users were acting as consumers of content, while any user can be a content creator in Web 2.0 with numerous technological aids to simplify the process (Cormode and Krishanmurthy 2008). Many authors (see Chu and Xu 2009, 717; Bonsón et al. 2012, 123) have identified Tim O'Reilly (2005) as the person who has coined the term Web 2.0. He (O'Reilly 2005) does not define it but rather describes it as a platform for services. According to Dictionary.com: "Web 2.0 is a second generation in the development of the World Wide Web, conceived as a combination of concepts, trends, and technologies that focus on user collaboration, sharing of user-generated content, and social networking." Based on Cormode and Krishanmurthy (2008), Mergel et al. (2009, 3) point out the sociological difference: "users are at the centre of all activities in Web 2.0 and technologies allow bi-directional connections with site creator and other users generating content online." Examples of Web 2.0 tools are media-sharing sites such as YouTube and Vimeo; social networks such as Facebook and MySpace; blogs and micro blogs such as Tumblr, Blogspot and Twitter; and wikis such as Wikipedia. Chu and Xu (2009, 791) note through their bibliometric study that the research on Web 2.0 has really taken off in 2005. So it can be said that Web 2.0 is a relatively new concept since academic research has a certain lag in publishing papers on newly emerged topics. The main features of Web 2.0 according to them (ibid., 728) are that Web 2.0 technology is "of the user, by the user and more importantly for the user". Dalsgaard and Sorenson (2008, 273) distinguish four functions of Web 2.0 into two categories: organizing communicative processes and organizing resources. Dialoguing + networking and awareness-making are in the first category and creating + sharing in the latter. The goal of the first category is to have a framework in which the different actors could communicate between themselves, and of the second, to have broader audiences to reflect their ideas.

The previously discussed advancements have taken place because of some technical and sociological changes in society. Mergel et al. (2009) have identified four drivers in the emergence of Web 2.0: (1) technological – rapid diffusion of broadband internet in households, (2) social – the desire of the generation of the so-called "digital natives" to create user-generated content and share it with their friends and contacts, (3) economic – investments by large social networks and revenue from media companies in order to make the sites free to end users, (4) legal – use of copyright law where licenses mandate a sharing culture rather than proprietary protection. As with any company the biggest value are its customers, the social media needs its users. For them the platform is free, and sites are maintained by "selling" the users to advertisers. With all the personal information users have uploaded it is easy to target advertisements to a very specific group who might be most likely to purchase the products and services advertised.

Based on Mergel et al. (2009, 8), a key point is that the user is at the centre of Web 2.0 applications and sometimes creates the content. Griffith and Wilding (2008, 15) suggest that "ICT offers the potential to more easily and continuously involve service users in the design and evaluation of services." (Hui and Hayllar 2010, 121) interpret this statement through the word "crowdsourcing", which is a new kind of government outsourcing in network or digital governance. It enables the organizations to develop and test new products for free, using the amateur user rather than paying professionals for it (Griffith and Wilding 2008, 15).

1.1.1 Social-networking sites

Ellison (2007, 211) defines social-network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. Analyzing German local governments' Facebook pages, Hofmann et al. (2013, 388) found that they should be seen as an additional communication channel. Also multimedia features are an important success factor for posts as they are much more commented upon and "liked" than posts without them (ibid).

Meijer and Thaens (2010, 114) point out that Eggers states in his book *Government 2.0* (2005) that technology can help government to transform itself into a "Citizen-Centred Government". By using technology government can drastically improve the delivery of services to citizens. But at the same time Eggers (2005 referenced in Meijer and Thaens 2010, 114) remarks that "Government has been especially slow to realize the full potential of digital technology".

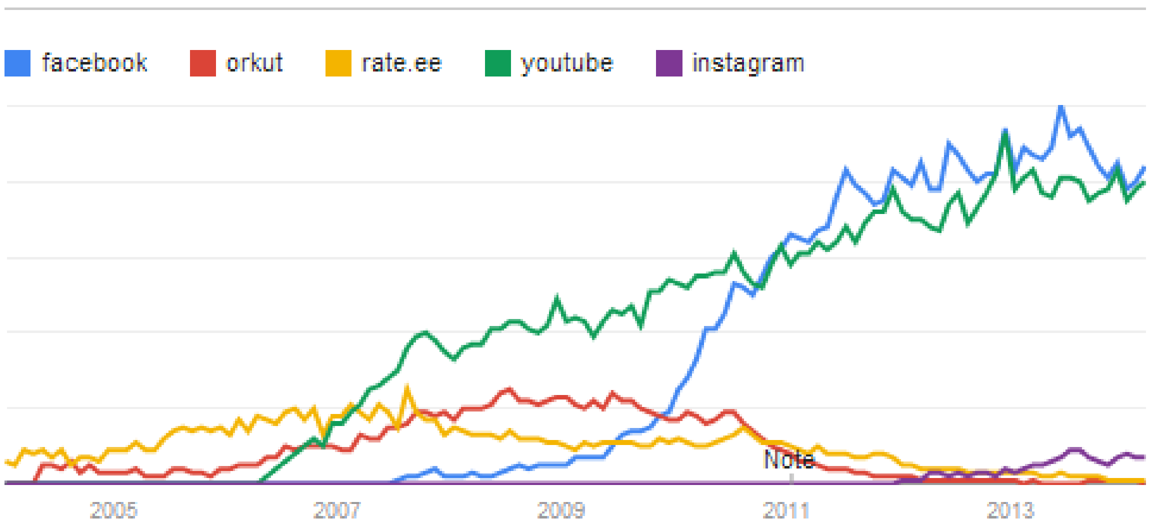
Tolbert and Mossberger (2006, 366) found that "the use of federal government Web sites appeared to have the greatest positive effect on citizen attitudes about government processes." He also found (ibid.) that "experience with local e-government did appear to have beneficial effects on citizen attitudes toward government responsiveness, which, in turn, resulted in improved general trust in local government."

For the organizations to have control over what is happening in social media, also some control measures (policies) could be set up. Hrdinová et al. (2010, 6) say that a critical element to a social-media policy is establishing rules for who has the right for setting up organization's social-media accounts. The authors (ibid.) point out that the organization may lose control of how many accounts have been made on a subject when the organization does not have strict rules or procedures on social media.

There is an opportunity that the rogue worker could "hijack" the agency's Facebook page. Estonia has had one example from the private sector where a laid-off marketing director who was an administrator on a car seller's Facebook page removed all other users. She demanded to be reinstated to her position or given 4,000 euros in exchange for the fan page. The company used "computer specialists" to get the page back. (E24.ee 3 December 2012, Arileht.delfi.ee 1 December 2012) Facebook company-user sites have the possibility to set roles who have different levels of control over content and can give and take away other users' rights. However the "manager”, as Facebook calls it, is the only one who can manage permissions on the page. There can be many managers but they have the possibility to remove rights from others. So there still is the risk of losing control over the page when one manager turns out to have not so ethical principles.

1.1.2 Facebook

Facebook had 757 million active daily users by the end of 2013, and 195 million of them were from Europe (Facebook 2014, 37). The numbers were even bigger for monthly active users: 1228 million worldwide and 282 million in Europe (ibid., 38). 945 million users viewed the site during a month from a mobile device such as a cell-phone or a tablet computer (ibid., 40). Facebook is the largest social network in Estonia according to Google Trends (2014). According to Facebook around 540,000 people in Estonia are using it. When taking into account that the latest housing and population census at the end of 2011 (http://www.stat.ee/rel2011) counted 1,294,455 permanent residents in Estonia, we can say that approximately 41.71% of Estonians are using Facebook. Since no trustworthy data could be found on the popularity of different social media sites in Estonia, Google search trends (Google.com/trends as of 23 March 2014) were used to illustrate that for the time being Facebook is the most popular social media site in Estonia (Illustration 1). Only the most popular sites were put on the graph. Less popular sites such as Twitter or LinkedIn were left out.



Data Source: Google Trends (www.google.com/trends)

Illustration 1: Interest in social-media sites in Estonia.

The business value of social-media sites for the advertiser lies in their broad user base. Therefore the most expensive takeovers according to Marketingland.com (Sterling 2014) have valued one user between 28.57 $ and 830.23 $. If we assume that companies want to make a profit from their investments then the future revenue they wish to earn from a user should be even higher. Geoffrey Fowler (2011) from *The Wall Street Journal* has calculated that in order to get one fan for a FB page the site owner has to pay around 1.07 $ in different promotion costs. For companies a FB page with a large fan base helps to advertise their products more precisely and cheaply. For the government it could be argued that it is the promotion of their message or information that is important for the users. “In effect, organizations can both cull user-generated content from social network sites and use the platform for distributing information back to users” (Veil et al. 2011, 114). McNutt (2012, 29) brings out that through social networks governments have the opportunity to tap into existing social networks, a more efficient and cost effective option than trying to create a new network or website specific to a policy. The users are already there and the organization just has to go and find their “fans” and attract them to their page.

Kietzmann et al. (2011, 243) have identified seven functional building blocks of social media: identity, conversations, sharing, presence, relationships, reputation and groups. “They are constructs that allow us to make sense of how different levels of social media functionality can be configured” (ibid.). See Appendix 1 on how different social-media sites have been constructed of different blocks with each having its own niche and therefore a different focus. According to the authors (ibid.) the five most important elements of Facebook are relationships, identity, conversations, reputation and presence. It means that for the organization these are the most important things that the users are after when using the site, and so the page creators in organizations should take these elements into account. For this purpose Kietzmann et al. (2011, 249) present a guideline of 4 Cs: cognize – recognize its social-media landscape and what rivals are doing; congruity – develop strategies that are suited to different social-media functionalities and goals of the firm; curate – creating content and communicating with the audience; and chase – the information about conversations taking place about the firm in social media. These guidelines should help an organization to develop a strategy to cope with the possibilities and opportunities of social media. The correct strategy depends on the goals that the organization plans to achieve.

1.1.2.1 Metrics

Wigand (2010, 70) marks that "future research on this emerging technology [Twitter] should focus on developing the appropriate metrics." In her opinion (ibid.) the metrics should be related to the goals set by the organization for using social media. The examples provided are learning – the number of times a hashtag or topic appears in the content can measure the interest in it; dialog – the number of audience feedback and referrals; quick distribution of information during crises – number of referrals and a search of live stream and the size of social networks measures how effective the channel is; effectiveness – the amount of time that regular followers remain followers. The criteria developed for Twitter could also be used for Facebook because the platforms are fundamentally alike in their usability.

For measuring organizations' success on Facebook Bonsón et al. (2012, 127) used the following criteria: 1. number of Facebook groups; 2. existence of an official Facebook group; 3. Number of members of the official Facebook group; 4. number of Facebook pages; 5. existence of an official Facebook page; 6. number of fans of the official Facebook page; and 7. level of activity at the official Facebook page (daily, weekly, monthly, quarterly, semestral, annual or no activity). As an alternative measure Hofmann et al. (2013, 393) focus on the success of a FB post – the frequency and the polarity of the comments it evoked. In their study (ibid.) they proved that it was reliable in cases where the goals were creating awareness and engagement and reinforcing positive attitudes toward the government.

1.2 Previous research

Other researchers who have studied Facebook in the public sector have focused on various subjects. Facebook has been studied as a means of promotion in the health-care sector (Park et al. 2011). Lubna Alam and Walker (2011, 3) have looked at the types and forms of FB uses by government and audience participation visible in government FB pages in Australia. Hrdinová et al. (2010) have studied the legal and other limitations that organizations have set for their employees regarding social-media use in the United States. Hofmann et al. (2013) have explored how local governments in Germany utilized social-networking sites for managing their external communication with citizens. Bird et al. (2012) have found that in crisis situations people turn to Facebook to find information about the situation in their community. In the following chapters the issues of users, government and social networking are looked at more thoroughly.

Hofmann et al. (2013) have used content and sentiment analysis to explore how successfully local governments in Germany utilize SNSs for managing their external communication with citizens. Based on literature they have distinguished five potential benefits of social networking sites for government communication and analyzed them in the case of three German cities. Bird et al. (2012) used an internet survey to find why Australians used FB communities during flooding in Queensland and Victoria. Lubna Alam and Walker (2011) used the classification by Askehave and Swales (2001) to divide posts on FB pages into genres. A genre analysis paired with quantitative analysis based on frequency of posts, number of likes, content generators and feedback was used to evaluate the FB use in the Australian case (ibid.). Park et al. (2011) used content analysis to examine how health organizations use interactive features and social-media channels on Facebook to manage their brand for advertising purposes.

Several studies have been made in Estonia in the field of communication, but on the level of bachelor's or master's theses. See for example Kostabi (2013), who in his master's thesis found that the users of government institutions' social-media pages wanted information, news or help and advice from these sites. Vertmann (2010) made his master's thesis about social-media strategy in a private-sector enterprise. At the time Vertmann was working for the Tallinn Stock Exchange (NASDAQ OMX Tallinn), currently he is the Head of the Communications department in the Estonian Ministry of Internal Affairs. He was also interviewed by the author of this thesis. Rääsk (2013) studied the use of Facebook by Eesti Pank's (Estonian Central Bank) employees in his bachelor's thesis and used the practices as a reference for creating a best-practice guidebook for the organization.

1.2.1 Users

The users of social media have been studied by Osimo (2008, 18), who identified four groups of Web 2.0 users based on their involvement in creating content. They are as follows: (1) content producers; (2) ratings and reviews providers, (3) users of user-generated content and (4) attention providers. The first groups have smaller numbers of participants and the latter have bigger ones. Osimo (2008, 18) estimates that the first group comprises around 3% of internet users, the second 10%, third the 40% and the fourth is made up of all the other users. It seems that the Pareto principle of 80:20 that among other things says that 20% of customers make 80% of revenue can be applied to social media also. In this case 13% of users create most of the content.

Utz and Krämer (2009) argued that the two main purposes of a social-networking site for the user are self-presentation and maintaining relationships. Joinson (2008, 1029) came to the same conclusion saying that the main reason for using Facebook was keeping in touch (42% of respondents), passive communication (15%), finding lost contacts (12%) and communication (12%). While analyzing his results, we must keep in mind that at the time of his study Facebook had just been made available for a wider public one year prior. Before that Facebook was a closed social network for students and university staff with an ".edu" e-mail address. Nadkarni and Hofmann (2012, 245) found on a population sampled from undergraduate and graduate schools that the use of Facebook is primarily motivated by two basic social needs: (1) the need to belong and (2) the need for self-presentation. While the sample was otherwise reliable in reflecting the whole population it cannot be said whether other age and social groups would have the same motivations for using Facebook. The authors (ibid., 247) suggest that future research takes into account the collectivistic or individualistic nature of a culture.

Also the issue of those users who do not have possibility to use the digitally offered services has to be covered. Bertot et al. (2010, 268) bring out four reasons: (1) technology literacy—the ability to understand and use technologies; (2) usability—the design of technologies in such ways that are intuitive and allow users to engage in the content embedded within the technology; (3) accessibility—the ability of persons with disabilities to be able to access the content through adaptive technologies; and (4) functionality—the design of the technologies to include features that users desire. For a private-sector corporation the lack of these means lost revenue but in the public sector the cost cannot be measured so easily. By its nature the public sector should provide its services to all citizens, so it must make its products and services available to the digitally challenged, as well.

1.2.1.1 Privacy

Privacy of the citizen is a crucial part of government's agenda in order to protect its citizens. Cutillo et al. (2009) identify three main security objectives in online social networks: (1) privacy – "all information on all users and their actions has to be hidden from any other party internal or external to the system, unless explicitly disclosed by the users themselves", (2) integrity – "the user's identity and data must be protected against unauthorized modification and tampering" and (3) availability – "data published by users has to be continuously available." Some of Facebook's updates on privacy settings (mostly the lack of them) have disturbed many users. See, for example, Boyd (2008) who argues, that in 2006, when Facebook updated the news feed, many users felt that their privacy had been invaded when all their “private” data was made public. She also points out (ibid., 16) that the constant updates on friends’ profile’s give an overload of information which could even be considered invasive.

Utz and Krämer (2009) found that the only real concerns about privacy led users to limit the visibility of their data on a social-networking site. They (ibid.) found a theoretical paradox in privacy settings where users have to choose between impression management and stricter privacy rules. But this hypothesis was not proven by their study (ibid.). Liu et al. (2011, 64) found that 36% of content on Facebook is uploaded with default privacy settings, while only 20% of users would prefer this setting. Others would prefer a more private setting. Liu et al. (2011, 65) also found that even a modified privacy setting matches users’ expectations less than 40% of the time. It raises the questions whether users actually understand what information they are sharing and with whom. In order to overcome the user privacy issue, Citron (2009, 839) proposes a one-way mirror approach which would allow users to interact with government but ban the government from seeing users’ data.

1.2.2 Government

Freeman and Loo (2009, referenced in Kuzma 2010, 2) suggest that there are three categories of benefits that governments can achieve from using Web 2.0 technologies: efficiency, user convenience and citizen involvement. Bonsón et al. (2012, 125) bring out four areas of possible impacts of Web 2.0 usage in the public sector: (1) improvement of public-sector transparency by bringing news closer to people; (2) improvement of policy-making by more interaction between citizen-to-government and citizen-to-citizen; (3) improvement of public services through innovative mechanisms for service delivery; (4) improvement of knowledge management and cross-agency cooperation. Chun et al. (2010, 4) conclude that, based on the United States Government’s case, the goal of using social-networking sites is to reach people where they are. These three sets of authors have made a clear point that the key purpose of using social media is to improve communication between government and citizen.

“Organizations have to find ways to connect the core characteristics of Web 2.0 in an intelligent manner to the objectives of their own organizations” (Meijer and Thaens 2010, 115). A feedback mechanism which shows citizens that their views are taken seriously has to be created (Kes-

Erkul and Erkul 2009, 6). Kuzma (2010, 10) brings out the case of Asian governments where "there is also a lack of strategic direction in governmental approach to services that are implemented." Bonsón et al. (2012, 131) come to the conclusion that in the local governments, in the first 15 members of the European Union, the use of Web 2.0 to promote e-participation is still in its infancy.

1.2.2.1 Transparency

In terms of anti-corruption, social media have four major potential strengths: collaboration, participation, empowerment and time (Bertot et al. 2010, 266). Mergel (2010a, 7) distinguishes three strategies of social-media use to promote transparency, participation and collaboration: (1) push strategy – the purpose is to get the message out; no interactions with users; (2) pull strategy – the purpose is to get the user back to your site; little interactions with audiences through comments on Facebook walls; (3) networking strategy – the purpose is to diffuse information and also collect it from users to know what people think about relevant issues. In order to make the strategy come to life organizations can create social-media policies and implement them.

According to Askehave and Swales (2001) the main approach of classifying communicative activities into genres is by understanding the purpose and type of the communication. Lubna Alam and Walker (2011, 4) analyzed the purpose and type of communication used on Australian government Facebook pages. According to them (ibid.) the wall-posts content on these pages fell into five main categories: (1) Giving information, (2) requesting information, (3) positive comment, (4) negative comment and (5) miscellaneous. They (ibid., 9) identified three apparent features or types of interaction on these Facebook profiles:

1. One-way communication of information by the administrator, with limited or no ability to question or follow up.
2. Free-ranging discussions by users, which they may find useful, but there is no evidence of any visible impact on government based on the FB sites.
3. There is no evidence of substantive policy issues being opened for discussion through these sites.

So it can be said that the Australian government has used Facebook as a tool to broadcast information to the citizens.

1.2.2.2 Organizational strategy

For government's actions in social media Chang and Kannan (2008, 19) propose a three-stage framework. According to this the government needs to set its focus on what it wants to achieve and use appropriate social-media applications. The level of required engagement rises with each stage. In the first stage the government is focused on communication and using mostly social-media applications which use a one-way approach, such as blogs, wikis and podcasts. Chang and Kannan (2008, 21) argue that communication is the easiest thing a government can do online and they should start there before moving on to more complex applications. In the second stage the focus is on interaction and social-networking sites, forums and virtual worlds. The aim here is to get feedback on service design and new ideas. In the third stage the government is focused on service delivery, and they try to provide service through the internet where the citizens are. For an institution these applications are possibly the most difficult to implement successfully but most impactful if successful (Chang and Kannan 2008, 22).

While Chang and Kannan (2008) provided a framework regarding what the organization should do in social media, Mergel and Bretschneider (2013, 2) look inside the organization to see how the use of social media is adopted. Mergel and Bretschneider (2013, 2) provide a three-stage model for social-media diffusion in the public sector. The first stage is "intrapreneurship and experimentation", where new technology is used informally by individuals mostly for non-work-related activities. Multiple versions of the same technology can be used in the same organization. Hrdinová et al. (2010, 4) distinguished three distinct ways in which government employees were using social-media tools while at work: employee use for official agency interests; employee use for professional interests; employee use for personal interests. They (ibid.) also say that the lines between these uses are rather fluid. Tensions come from blurring personal and professional norms of conduct. According to Mergel and Bretschneider (2013, 3) these conflicts between personal and professional communication norms often manifest in a set of four information-policy issues originally identified by Mason (1986): privacy of information, including electronically stored communications; accuracy of information; property or ownership rights of information; and access to information. Mason (1986) saw them as the ethical principles that collectors of data and creators of information systems should take into account before making the systems. These principles are supposed to protect the citizens from system errors which could result in serious financial or health consequences. As Mason (1986, 7) puts it "we must insure that information technology, and the information it handles, are used to enhance the dignity of mankind."

Using multiple technologies for the same purpose could lead to conflicting and incompatible forms of technology being present in the organization at the same time. Mergel and Bretschneider (2013, 4) point out that: "Unlike other types of ICT adoption in the public sector, social media adoption is often not a top-down, conscious decision sanctioned by higher-level management." Rather it is done bottom-up through early adopters within the organization. Most of the work is done voluntarily. Based on their experiential learning, social-media intrapreneurs collect experiences and evidence to build a business case for presentation to top management (ibid.).

The second stage is "order from chaos", where different parts of the organization create their own protocol. The variations are dependent on the organizational structure and culture. Decentralized organizations are likely to produce more heterogeneous outcomes than centralized organizations. To overcome these problems and unify the processes different mechanisms have been used, such as intraorganizational task forces, policy boards, steering committees and technical rule-setting processes. According to Mergel and Bretschneider (2013, 3), "This phase is characterized primarily as an organizational response to the intrapreneurial phase." Informal standards emerge as a result of unintended consequences, for example, when employees post inappropriate content and receive negative press coverage or backlash from the social media audience (ibid.). To avoid future pitfalls, employees involved in social-media efforts start to agree on and co-write informal standards, describe best practices to provide guidelines and pay increased attention to their peers across government (Mergel and Bretschneider 2013, 5).

The last stage is called "institutionalization", when (ibid.) "… the organization has a set of standards, rules, and processes for managing the process and some resources associated with the enforcement of these protocols." According to Mergel and Bretschneider (2013, 6), "social media documents provide not only detailed direction for the selection of accepted third-party social media tools, but also standards for information production and information-vetting processes, intellectual property rights, daily posting schedules, or directions on how to measure social media impact. These social media standards also justify how innovative social media practices fit into the existing technology framework."

As a criticism of e-government-diffusion models Coursey and Norris (2008, 532) say that previous theories have not been proven by empirical data. That is because they have not been based on existing theories or on empirical data (ibid.). Mergel and Bretschneider's (2013, 2-3) model is based on "specific types of ICT innovation that are initially aimed at individuals, are market driven, and rely on individual intrapreneurs to spur organizational use."

1.2.2.3 Social media policy

Hrdinová's et al. (2010, 4) analysis identified eight essential elements for a social-media policy: 1) employee access – what sites are they allowed to visit during work, 2) account management – the creation, maintenance and destruction of social-media sites, 3) acceptable use – how employees are expected to use agency resources, 4) employee conduct – what is wrong and right in employee behaviour, 5) content – who is allowed to post it and is responsible for keeping it up to date, 6) security – what are the rules for keeping everything intact, 7) legal issues – who owns the content, and 8) citizen conduct – how to handle citizens, what they are allowed to do on a page. These elements were derived from social-media policies or guidelines from different English-speaking countries, but mostly American states and counties.

While private-sector enterprises are able to use Customer Relationship Management in order to provide better and more accurate services to fulfil clients' needs, the public sector can use Citizen Relationship Management. According to Hui and Hayllar (2010, 121) the main reason to do this would be to process relevant data and to provide on-time e-services based on a better assessment of public value than one dependent on a top-down approach by government alone. They also point out (ibid.) that to reach this objective, however, both governments and citizens must collaborate proactively. Hui and Hayllar (2010, 124) also point to various studies which suggest that the early use of Citizen Relationship Management principles and practices leads to some of the fastest developing and best performances in e-government (Accenture 2002, 2007; IBM 2004; National Audit Office 2002). Therefore it can be said that organizations should have more relevant data about their clients in order to provide a better service.

As negative issues González-Herrero and Smith (2008, 145) point out that the internet can be a facilitator or trigger for crises. The first means that the internet can become a channel for discussion for events that are taking place in the real world. It can deal a devastating blow to an organization's reputation if not acted upon correctly. The second point means that spoof copy-cat webpages can act as the real one and provide misleading information. Champoux et al. (2012, 24) make the same points: the anonymity of the internet lets users say what they want about an organization, anybody can use company logos to create a page posing as the real company site, and negative comments tend to spread faster than positive ones. All of this can have an effect on the brand image if not acted upon early and correctly.

All the above-mentioned analysis methods use content created on FB pages as the empirical data to make conclusions on a subject. None of the mentioned authors have asked the organizations they study why they are doing it. The results may be biased towards outcome and do not show the actual purpose why the pages are used. In order to identify strategic purposes interviews or document analysis could be used to get the view from inside the organizations.

2. Methods

The empirical material for the thesis is collected by using a case-study-analysis method. Yin (2009, 27) brings out five components that are important in research design: research questions; hypothesis; cases that are analyzed; logic that connects data to thesis; and finally criteria used to interpret the results. The research questions were presented earlier. The cases were selected to represent the successful actors from both extremes – the most and least successful, and one in the mid-range. The success of the pages was measured by the number of fans they had. Qualitative methods are being used to collect empirical material for each case. Among these are document analysis – which has the goal to find out whether the analyzed organizations have social-media strategies and to compare them – and interviews – to get an organization's view of things. The author used interviews with elites, which, according to Tansey (2007, 8), enables researchers to interview first-hand participants of the processes under investigation, allowing for researchers to obtain accounts from direct witnesses to the events in question. An overview of the main interview questions is given in Appendix 2.

The methodological approaches distinguished by Harvey (2010) were used: among others, being flexible in the design of questions and transparent in terms of ethics. Myers and Newman (2007, 5) brings out that the pitfall with this is that the end result may be biased towards the elite. Since Estonian ministries have a small number of staff this could not be a serious problem in the author's opinion. In all the ministries looked at, mostly one person was responsible for maintaining the FB page on a day-to-day basis. By interviewing them and their heads of department, the result would give an overview of the situation in Estonian ministries. The result would not be biased because the interviewees from lower positions would balance the results obtained from higher positions.

This study has an exploratory design (Creswell and Plano Clark 2007, 75) which has the goal of helping to understand how the Estonian ministries are using Facebook. Based on the interviews and documents, the organizations are compared with the goal to find similarities and differences among them. After the analysis it could be said whether there are certain rules or procedures that the Estonian ministries have used in creating their social-media policy.

Interviews were conducted with key personnel in ministries about their social-media practices on Facebook. The interviewees were selected based on their position and work tasks in the ministry. The author intended to make a total of six interviews – two in each ministry. One with the person responsible with maintaining the ministry's Facebook page and the other with a higher-position employee in the same department. The purpose of interviewing the higher-position workers was to get a somewhat broader perspective on the role of Facebook in their organization, while the lower position would give an overview of everyday activities. A total of six interviews were planned, but five were actually conducted. One employee from a higher position declined an interview after seeing what the previous worker had answered and stated that he had nothing to add. Based on interviews conducted in other ministries it could be said that no significant differences occurred after interviewing the second representative. The respondents were asked permission to use their name and position. Only one respondent agreed to using his name. In order to protect other respondents' privacy only their job positions were used as a reference.

The interviews use a half-structured approach, which enables a more detailed collection of information when practices in ministries are different. An approach described by Rubin and Rubin (1995) is used to make the questionnaire for the interviews. According to Rubin and Rubin (1995, 203-208) general or main questions have to be asked first before moving on to more specific follow-up questions. The main questions were divided into four distinct parts by the author: the internal policy for using Facebook in the organizations, the use of Facebook in crisis situations, user privacy and feedback. Also a time-line of events (see Appendix 3) that are important in the public-sector social-media field in Estonia was created in order to see and identify the most influential actors and events.

The results of interviews and document analysis for each ministry was compared with the three stages of Mergel and Bretschneider (2013) in order to find out where the Estonian ministries are in that sense. Mergel and Bretschneider (2013) provide some characteristics that help distinguish between different stages, but there really are a few true types with all the characteristics represented. Although there are several other theories about social-media use in organizations (Lubna Alam and Walker 2011; Bird et al. 2012; Chang and Kannan 2008), Mergel and Bretschneider's (2013) was chosen because it provides the necessary framework to understand the dynamics of social-media use in public-sector organizations. Other theories, such as Chang and Kannan (2008) or Kuzma (2010), have used the criteria visible from outside the organization to describe the situation within organizations. Therefore, it could be argued that in order to look inside the organization Mergel and Bretschneider's (2013) framework provides better results understanding the reasons behind social-media use than looking at the organizations from outside, seeing that studying them somewhat from the inside through the elite interviews was possible.

3. The case of Estonian ministries on Facebook

During the writing of this thesis the Estonian government led by Andrus Ansip resigned. The new government was not formed by the same coalition partners. Also some ministerial positions were added. Therefore it has to be noted that this thesis analyzes the Estonian ministries' use of Facebook during Andrus Ansip's third government (5 April 2011-26 March 2014). Estonian government agencies' journey to social media began in December 2007, when the Ministry of Foreign Affairs opened an embassy in a virtual community called Second Life (Ministry of Foreign Affairs Press note 4 December 2007). The embassy was closed in 2011, when the ministry moved on to other social networks. In Appendix 3 a timeline is created of the Estonian ministries' events in the field of social media. Twitter stands out as the platform which had the most interest in 2009 from May to November. All Twitter accounts by Estonian ministries were created during that time. No accounts on Twitter were created earlier or later than that. Regarding other platforms no such trend could be identified.

In order to justify communication practices in the public sector the Government Office (Riigikantselei) has issued a thorough handbook on government communication (Riigikantselei 2011), where communication rules are formulated for public-sector organizations. These apply to every possible way of communicating with the public or press. For example when an organization starts to be part of an SNS, a concept has to be set with clear goals that are aimed to achieve and a plan how to do it. Also a designated public servant has to be set with the tasks of answering users' questions, seeing that technically everything works correctly and monitoring social media. The handbook (ibid.) sets four actions to be taken in the social-media sphere: (1) listen to what people have to say; (2) communicate your message; (3) answer questions quickly; (4) during crises spread your message quickly through formal channels (crisis communications). Since social media is still a relatively new concept for its users and a bit different from other web content, sometimes things can go wrong. A public *faux pas* can happen to any public person, as was the case with former defence minister Mart Laar who had a discussion on his Facebook page about the ACTA agreement. The discussion was somehow deleted and Mart Laar used the technologically wrong statement that "I was out of free space" as an excuse (Delfi.ee; Neudorf 26 January 2013). In the author's opinion this statement reflects the possibility that any information that is on the internet can become known to everybody in a matter of hours.

Kitsing (2011, 10) gives an overview of how Estonian banks helped the government to offer citizens services via identification services. The government made some of its services available online, and banks offered secure ways for citizens to identify themselves and use these services. This could have been the starting point of a platform for other web-based services.

Hofmann et al. (2013, 389) argue that for governments, measuring success in social media is difficult, as adequate metrics are missing. In order to quantify the use of Facebook in Estonian ministries, an overview was made by the author (Table 1). The ministries' homepages and Facebook pages were looked at in order to find out whether or not they had a direct link to their Facebook page and to gather some statistics about them. For comparative reasons the Government Office is also looked at. Those institutions that scored yes had the link on the first page on the ministry's homepage. Only one ministry did not have a link to its Facebook page. One of the most important things that Facebook has are its users. Therefore the followers were also counted. The number of fans the page had on that date was divided by the numbers of days the page had been active. Results show that two ministries stand out significantly over the others – the Ministry of Foreign Affairs with 2.66 fans per day and the Ministry of Education with 2.48 fans per day. Others had less than one fan per day.

Other things looked at were the time when the page was created and the language it was in. The attractiveness of social media reached the Reform Party (Reformierakond) first. They started with their first pages as early as 2009 (Ministry of Foreign Affairs and Government Office); the Ministry of Social Affairs followed in 2010. The first Facebook page by a ministry headed by a politician from IRL was created in 2011. Although the Reform Party was the first to implement Facebook pages they have not created one for every ministry that they lead. The Reform Party created its own FB page on 20 May 2009, IRL on 2 February 2010. We can see that for the Reform Party, some ministries' FB pages were created earlier than the party's FB page. For IRL it is the opposite – first the page for the party was created, then the pages for ministries.

Table 1

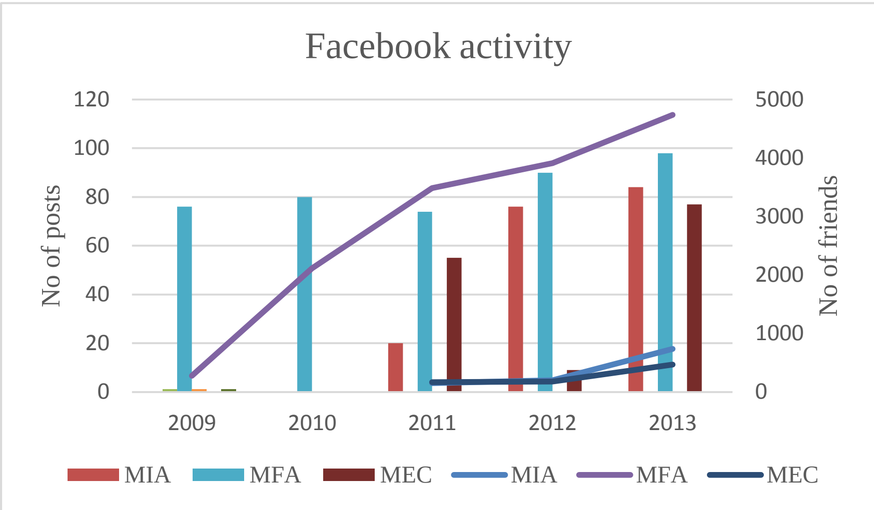
Estonian ministries on Facebook

Name	Link to Facebook page on homepage	Followers	Page created	Language	Party	Fans per day
Ministry of Foreign Affairs	Yes	4,774	05/03/2009	Estonian & English	Reform	2.66
Government Office	Yes	1,350	14/07/2009	Estonian	Reform	0.81
Ministry of Education	Yes	1,284	01/09/2012	Estonian	IRL	2.48
Ministry of Social Affairs	Yes	854	19/07/2010	Estonian	Reform	0.66
Ministry of Internal Affairs	Yes	755	09/11/2011	Estonian	IRL	0.93
Ministry of the Environment	Yes	614	11/12/2011	Estonian	Reform	0.79
Ministry of Economics and Communication	No	490	06/01/2011	Estonian	IRL	0.44
Regional Minister	Yes	433	09/11/2011	Estonian	IRL	0.53
Ministry of Finance	No	No			IRL	
Ministry of Justice	No	No			Reform	
Ministry of Defence	No	No			IRL	
Ministry of Agriculture	No	No			IRL	
Ministry of Culture	No	No			Reform	

Source: ministries' web pages and FB pages as of 31 January 2014; Author: Sander Pikkel

Three ministries were selected for further analysis. The first and most successful, as measured by number of fans, is the Ministry of Foreign Affairs (from here on MFA) and the least successful the Ministry of Economics and Communication (from here on MEC). MFA has attracted the largest number of fans and fans per day. Ironically the latter was the only one that did not have a link to its Facebook page on its homepage. Even though the Regional Minister has less fans, he is not analyzed more thoroughly because he shares the back office with the Ministry of Internal Affairs. The last minstry that was analyzed more closely was one in the mid-range – the Ministry of Internal Affairs (from here on MIA). Facebook has set the rule that a fan page should have at least 100 fans to provide the page owner with the opportunity to share his/her content with more people by paying for it. Any ministry or governmental organization looked at for this paper fulfilled this criterion.

MFA and MIA have been most consistent in creating posts on their FB pages. They have both shown stability in making wall posts. This cannot be said about MEC which has shown great volatility in its posting schedule. In 2011 and 2013 it made over 50 posts a year while in 2012 it only managed to make 9. In the measure of fans other ministries have not been able to repeat MFA's success. At the end of the first year MFA had 279 fans, MIA 150 and MEC 170. At the end of the second year MFA already had 2,111, MIA 200 and MEC 180. So growth has been somewhat slower for the latter ones. In the author's opinion it has a lot to do with the way that MFA approached its FB page launch. The second post invites users to take a quiz and to win a free trip to Estonia. Also several other campaigns were used during the first year. Another boost in the user numbers came in spring when the eruption of Eyjafjallajökull disrupted air travel in Europe. The users wanted access to information about getting home which MFA provided and also to communicate with others in similar situation (Belovas 2010).



Source: metrix.station.ee, FB pages of ministries. Author: Sander Pikkel

Figure 2 **Facebook activity.**

3.1 The Ministry of Foreign Affairs

According to its homepage (Foreign Policy Objectives 2009) the ministry's mission is "The safeguarding of Estonia's security and welfare, as well as the promoting of Estonia's interests in the world, by planning and implementing the nation's foreign policy and co-ordinating its foreign relations." The ministry was the first of the Estonian ministries to create a Facebook page. It was done on 5 March 2009. With over 4,700 fans MFA is the most popular among the Estonian ministries on Facebook. It also has a *spin-off* site of its Web Consulate. The ministry has had a long track record of social-media presence, starting with Second Life in 2007 (Ministry of Foreign Affairs, 4 December 2007). In addition to Facebook, as of spring 2014 the ministry has established pages on YouTube, Flickr, Twitter and also runs several blogs. The ministry itself (Respondent 3) says that the technical solution is not as important as the readiness to be modern, to develop oneself and to be adaptable. Respondent 5 said that already new social networks have been under consideration, but the transition has to have a clear gain for the ministry.

3.1.1 Reasons for creating the page

Former Chancellor of the ministry Marten Kokk (2009) has said upon opening the Foreign Ministry's blog that "Foreign ministries are very conservative institutions, which use information very carefully. Even though every day tens to hundreds of memos move around the office, silence stands out from the institution only to be illustrated by press releases." Respondent 3 said that the purpose for the ministry to go into social media was to be closer to its target audiences where they actually are and where discussions take place, but also to promote Estonian foreign policy goals. Respondent 5 added that they could not assume that if information was put somewhere, the people would find it. For this reason they had to go closer to where people actually were. For example Facebook is used by foreign offices to keep in touch with local Estonians in their country.

The use of Facebook becomes important during crisis situations, when information has to be broadcast very quickly. For example the eruption of the Eyjafjallajökull volcano in May 2010 that resulted in the cancellation of more than 100,000 flights in Europe increased the number of fans on the MFA page by 50%. This was due to Estonian travellers' need for information on how to get back to Estonia and the ministries work in coordinating relevant information in order to help those people (Belovas 2010). Respondent 5, who was in the "crisis team", said that the ministry had a lot of niche information which was important to Estonians abroad, but not suitable to be put on the homepage or into press releases. Therefore they used FB as the channel for giving out this information. During that time FB was not so widely used in Estonia, and they had to teach people on the telephone how to use it (Respondent 5). The FB page received more than 300 posts within five days, mostly from people trying to get information on how to get home. The ministry provided timely information about different possibilities, and people communicated with each other for alternative means of transport or a place to spend the night abroad safely. So it can be said that FB is used to give out information which is not suitable for other channels.

3.1.2 Target audience

The ministry (Respondent 3) sees its audience as public-opinion leaders, representatives from non-governmental organizations, businessmen, journalists, cultural elite, Estonians living abroad and foreigners interested in Estonia. Respondent 3 brings out that for many of the ministry's messages all communication channels can be used. The message has to be put into the correct form for each channel.

One of the most difficult groups for MFA are youngsters who are making their first trips abroad. Since their parents have made many of their decisions for them, they sometimes get into trouble abroad (Respondent 5). They are not keen on using Facebook because their parents are there (Olson 2013). In order to overcome this, MFA has created a seminar which they carry out in schools. The goal of these seminars is to educate youngsters on different problems that could arise when they are travelling, working or marrying abroad (Respondent 5). Also the Web Consulate and Travel Smart (Reisi Targalt) webpages are promoted.

3.1.3 Privacy

During the interviews the author asked about the issue of user privacy. The ministry's point of view (Respondent 3) is that the users themselves should decide how much information they want to share about themselves. For example some questions posted publically on the Web Consulate's wall are about the issue of the enquirer marrying a foreigner, which in the author's opinion could be classified as delicate information or at least something users normally would not like to share with complete strangers. In some cases, when the ministry's worker feels that in order to answer the question, he or she needs more delicate information, they ask questions through private messages (Respondent 3 and Respondent 5). Respondent 5 also pointed out that some people knowingly ask questions about their problems publically because they feel that they trust the Web Consulate but are not sure about the responder when their question is directed to somebody else. The publication of their problem can sometimes be part of their healing process (Respondent 5), which is a part of their psychological needs. It can be said that privacy is important for the ministry of Foreign Affairs, but the risk of giving out their private data is on the user. The privacy issues vary between pages because the user does not have very many private questions he or she could ask the ministry. They are rather posed to the Web Consulate.

3.1.4 Managing of the page

Since the ministry has many social-media channels, different departments are assigned to manage them. The press, public diplomacy and consular departments are doing it in Estonia, and press representatives with diplomats are doing it abroad (Respondent 3). The press department is responsible for the ministry's official FB page, and the consular department runs the Web Consul page together with the public-diplomacy department. In order to ensure continuous activities on the page and to protect it from hijacking, many workers have been assigned to the page (ibid.). They also have the obligation to change the password after a certain period of time. If somebody would like to make a new page for a department, it would have to get the green light from both the press and the public-diplomacy departments (Respondent 3). According to Respondent 5 the FB page has some restrictions for use within communication between institutions as to what information can be transferred through it, which is totally understandable because the ministry cannot control who else has the ability to eavesdrop on the communication taking place in FB.

The ministry has analyzed its homepage, FB-page usability and the questions people ask. According to Respondent 5 the three most popular pages on the ministry's homepage are on a consular subject: travel information to specific countries, general travel and consular information and travelling to foreign countries. In order to classify this information the *spin-off* site "Web Consulate" was made with the purpose of providing users with all the necessary travel information: Risks about countries that should be avoided, changes about visa regimes and answers to users' questions about different issues. The statistics that Facebook provides are analyzed to find out what kind of posts the users like and share the most. User opinions are also taken into account when making new content and organizing the page. Mostly the “reach” and “shares” of posts are being viewed (Respondent 5).

3.1.5 Social-media policy

As of the beginning of 2014 MFA is the only ministry of the three ministries looked at that has an internal social-media policy. Unfortunately the policy was for in-house use only and could not be used as a reference for this work. Respondent 3 said that in general it gives directions and principles that the user should consider while using social media. The ministry has its own internal training programme where people who go to work in foreign countries are given an overview of social-media possibilities. It is done as a friendly conversation where more experienced colleagues share their know-how and knowledge about social media use within the organization and in private life (Respondent 5). Workers are not limited by what they can publish, but they are given suggestions on how to act (ibid.). The principles from the handbook of government communication are also used.

3.2 The Ministry of Internal Affairs

According to Statutes of the Ministry of the Interior (Riigi Teataja RT I 2007, 27, 156) The Ministry’s area of government includes ensuring internal national security and protecting public order, guarding and protecting the state border, performing border control and ensuring the border regime, organizing matters related to crisis management, the state operation stockpile and rescue operations, citizenship and migration, churches and congregations, developing local government, planning and co-ordinating regional administration as well as regional development, organizing and supervising nationwide spatial-planning activities, issues related to marital status, as well as drafting the relevant legal acts.

The Ministry of Internal Affairs (from here on MIA) has a little over 750 fans, which is ten times less than the Ministry of Foreign Affairs. Under the ministry’s management is the Police and Border Guard Board, which has successfully launched three Web Constables pages. The European Crime Prevention Network has given the project an honourable mention during the Best Practice Conference 2012 (EUCPN website). Web Constable was the most innovative project. The ministry has pages on YouTube, Flickr and Issuu. Also it runs a specific blog about nation-wide planning.

3.2.1 Reasons for creating the page

The communication department of the ministry created the Facebook page on 9 November 2011, taking an example from other ministries that already had their page (Vertmann 2013). Respondent 2 added that the consensus in the ministry was that Facebook and social media were already a big part of everyday communication. Respondent 2 said that the ministry did not have many resources to contribute to social media so they chose the most relevant channels. Based on the author's interview on 14 November 2013 with the head of communications department in the ministry, Mr Tex Vertmann, the following statements could be made: for the time being, the use of Facebook has not been very well thought through in the ministry and most of the content is published *ad hoc* when an interesting subject appears.

The four main purposes of maintaining a Facebook page for the ministry are, according to Vertmann (2013): (1) branding of the organization, (2) reaching the interested audience, (3) giving a more human view of the organization and (4) sharing best practices of internal security. According to Respondent 2 the ministry analyzed its goals on Facebook before creating the page. These were: (1) communicating the goals, actions and priorities of the ministry; (2) bringing attention to the regional policy field through a separate page; (3) having people more involved in the ministry's actions; (4) getting better contact with social-media users; (5) branding the ministry; (6) enhancing and keeping trust towards the ministry. Some news that are not suitable for other means of communication but still are interesting for people, like building a new house or minister's appointments, are shared only on FB (Vertmann 2013).

3.2.2 Target audience

The people who the ministry would like to see as their FB-page audience are not set by any written rules. Communication is directed to Estonian-speaking people who usually are a bit younger and more active in using the internet (Vertmann 2013). Also workers of the ministry, stakeholders and cooperation partners are considered to be a target audience (Respondent 2). No campaigns have been implemented nor are planned to be made in order to attract more fans to their page. However while doing the interview with Mr Vertmann, the ministry had a little quiz on its FB page about internal security. The purpose of this quiz was to share facts through a more playful setting (Vertmann 2013). Visitors of the FB page have left comments about the ministry's policy issues, and the ministry has taken these into account, but no real discussion has started on the page. No crises during which the FB page could have been used as a communications channel have happened in the ministry's field. Previous crises, such as the removal of the Bronze soldier in 2007 or the flooding in Pärnu in 2005, happened before the launch of the ministry's FB page.

3.2.3 Privacy

As for privacy the ministry has the opinion that Facebook users should know that their posts on walls are visible to other users. Vertmann (2013) said that to date no personal questions have been asked on their Facebook page, and most users with personal problems prefer to use different ways of communication, such as telephone or e-mail. Respondent 2 added that there is always the option to delete the question and send the response via more private means of communication. This is only done when the ministry feels that the person has asked a very personal question on the ministry's wall (ibid.). One reason may be that in case of an issue regarding police, they ask the Web Constable, and other areas of ministry are not so related to everyday problems of FB users.

3.2.4 Management of the page

The management of the social-media site is the task of the chief specialist of the communications department. She is also responsible for the ministry's intranet and webpage among other tasks according to the communication department's chief-specialist job description (Kommunikatsiooniosakonna peaspetsialisti ametijuhend). The communications department offers support only for the ministry's official and the Regional Minister's Facebook page since the Regional Minister does not have his own ministry and uses the same back-office resources as the Ministry of Internal Affairs (Vertmann 2013). If other departments wanted to make their own, pages then it should have a very solid reason, the ministry rather prefers to make sub-pages or campaigns on the official Facebook page.

The ministry has reduced the risk of hijacking the page by workers or third parties by not giving only one worker access to the administrator roles. The roles are divided among different people who have different roles (Vertmann 2013). The main posting responsibility lies on the shoulders of the head specialist of the communications department, but content is also provided by other workers. Only the automatic report sent weekly by Facebook is looked through and analyzed (Respondent 2). Otherwise the ministry does not count the “likes” or analyze the “success” of its posts.

3.2.5 Social media policy

The handbook on government communication by the Government Office sets the rules and suggestions for every public-sector official about communication outside the organization. Hence the ministry has not reglemented the use of Facebook for its employees separately but “they must acknowledge who they are and what they do on Facebook” (Vertmann 2013). Vertmann also said that the freedom of speech is not limited in any way. If an employee wants to make a positive or critical comment about the ministry, it could be done without any sanctions afterwards (Vertmann 2013).

3.3 The Ministry of Economic Affairs and Communications

According to the ministry’s homepage (The Objectives… 2014), “The objectives of the Ministry of Economic Affairs and Communications is to create overall conditions for the growth of the competitiveness of the Estonian economy and its balanced and vital development through the drafting and implementing Estonian economic policy and evaluating its outcomes.” The Ministry of Economic Affairs and Communication is the underdog of the Estonian ministries as measured by fans. It only has a little over 490 fans. It is somewhat ironic that the ministry whose responsibility is the communication in Estonia has not yet established a notable presence in social media. However, the FB page is not the only social-media platform they are using. They also have pages on Youtube and Twitter and run a blog about the European Union’s support called Support Pocket (Toetustasku). Also a wiki is used for internal and institutional communication with the ministry’s partners (Respondent 1). Whereas the other two ministries have a link on their webpage to social media pages, MEC does not have this item in their webpage menu.

3.3.1 Reasons for creating the page

The Facebook page of the ministry was created on 6 January 2011 because at that time 60% of those Estonians who used the internet also used Facebook, and the ministry wanted to be present (Respondent 1). The data of social-media users was from a study made by TNS Emor, a statistics agency, in 2012. So it could be that the page was founded first on a feeling that it was important to be on Facebook, and relevant statistics confirmed it later. The department of public relations initiated the creation of the page and is now responsible for its upkeep (Respondent 1). The purpose of the page is to provide an additional channel to keep interested parties in touch with the ministry’s actions and also to provide an additional platform for discussion (Respondent 1). In the author’s opinion the latter has not been successful if we look at the comments and posts on the ministry’s wall on Facebook. Similarly to the Ministry of Foreign Affairs the ministry has a plan to make a rulebook about Facebook communications. No campaigns to attract attention or get more fans have been made. But the ministry has the plan to make them in the future.

3.3.2 Target audience

Communication on FB is directed to anybody who speaks Estonian and is interested in the ministry’s work (Respondent 1). This includes the workers of the ministry, partners, governmental institutions, journalists, entrepreneurs and the broader public. Most of the topics published on FB are also published through other channels, but the ministry is planning to create more unique content for FB in order to upgrade the value of this channel in the future (ibid.). Some content is planned to be appear first on FB or only on FB. The ministry has put galleries of events on its FB page and encouraged journalists to use them as press materials. Since the FB page has been active no crises have happened in the ministry’s field that additional communication could have helped to solve.

3.3.3 Privacy

To date there has been no content that has had questionable privacy issues. A social-media guidebook is being made for FB, which, among other things, should set rules for this issue. The ministry does not archive the content that is posted on the FB page (Respondent 1). They also do not delete questions that are posted on the wall.

3.3.4 Management of the page

Information that is put on the page and all settings, such as setting administrators, are changed by the department of public relations. Everyday activities related to the page are also handled by this department. The maintenance of the Facebook page is an additional task for the internal-communications specialist in the public-relations department (Respondent 1). The specialist has a bachelor's degree in communications and media and a master's degree in international business.

In order to avoid the hijacking of the page, some rules, which were not disclosed in the interview, were set. Also in case of trouble, the ministry's IT department would also help (Respondent 1). The head specialist of internal communications is responsible for social-media activities. A questionnaire has been created with the ministry's workers with the goal of finding out how to make the FB page better (Respondent 1). Some ideas have already been used. Soon a similar questionnaire is planned to be made with FB page fans, as well.

Similarly to other ministries, MEC also uses statistics provided by Facebook. They measure the reach of each post, look how many comments are made and how many people are talking about this. The goal of this analysis is to make posts that get the target audience's interest and provide good points to have a discussion on the FB page by the visitors (Respondent 1). Hence the posts made to FB are not press releases but have more additional information and pictures. The ministry has not used any outside help in creating or maintaining the page. Therefore there are no direct costs for them, only the workers' salaries and time.

3.3.5 Social-media policy

The use of FB for the workers of the ministry is not limited; however, they must always keep in mind where they work and that they should not have a conflict of interest between their private interests and those of the ministry (Respondent 1). When using FB as a means of communication for work-related subjects the good reputation of the ministry has to be kept in mind (ibid.).

4. Discussion

The four functions (dialoguing; networking and awareness-making; creating; sharing) of Web 2.0 by Dalsgaard and Sorenson (2008, 273) have all been mentioned by the Estonian ministries as some of the uses of social media. All ministries had the goal of dialoguing as one of the purposes of being on FB. They wanted to engage their audiences and to start discussions with them. The awareness-making in this context is that everybody in a connected network is aware what the other members of their personal network are doing. This is accomplished when network members update their profiles and pages. The ministries can also use the networks to post news and relevant information to their fans. Creating content and posting it on the web differs from paper news, which has regular times of publication. The content on the web can be updated anytime as the story develops. Also the web becomes the platform, so different people can edit the same information through any device that is connected to the internet. And lastly sharing content was mostly used for raising interest in some subjects.

The three-stage model of social-media diffusion in the public sector proposed by Mergel and Bretschneider (2013, 2) is discussed on the basis of Estonian ministries. The first stage, *intrapreneurship and experimentation*, was not identified as the prominent stage in any of the ministries questioned. Before the popularity of FB among Estonians, Rate.ee and Orkut.com were the social networks that were used predominantly. The interface of both had the possibility to form groups of people with similar interests or fan pages. The technical layout was more basic than that of Facebook's fan pages. So the first stage could have been ministry's workers using those social networks firstly for keeping in touch with friends and classmates. Sometimes when the pages developed more in order to make better fan pages the idea could have come to use the page as a business card for the ministry. Mergel and Bretschneider (2013, 4) argue that social-media adoption is often not a top-down, conscious decision sanctioned by higher-level management in the public sector. Before it could have happened the initiative takers should have had personal contact with the network. MIA and MEC prove this point to be correct, however MFA, which was the first ministry in social media, has the opposite practice. MEC and MIA had the initiative come from the public-affairs or communications department, which was then presented to the higher-lever management. MEC also had an analysis on the user base of FB in Estonia at that time and why it was important to be there.

The second stage, *order from chaos*, is characterized as an organizational response to the intrapreneurial phase (Mergel and Bretschneider 2013, 5). Some initial standards are set from initial backlashes in order to avoid future pitfalls and to describe best practices for developing guidelines. Also intraorganizational task forces could be used in order to unify different processes and provide more heterogeneous outcomes. While Mergel and Bretschneider (ibid.) talk about problems within different parts of an organization, no such evidence was found in the cases of Estonian ministries. This might be due to the fact that all the ministries looked at had only one page, except for MIA, which also ran the Regional Minister's FB page. But this was also done by the department of communications, which had the right to make new pages or to stop someone from making them (Vertmann 2013). It might also be related to the fact that Estonian ministries do not have a very long history in social media, nor a very broad base of fans. The 10,554 followers the ministries have in total make up about 1.95% of Estonian FB users. So we really cannot say that they have a big fan base. The most successful Estonian page is "Eestlased Facebookis", which had 100,931 followers as of 31 January 2014. This amounts to 18.69% of Estonian Facebook users.

What definitely speaks about the second stage is the handbook on government communication (Riigikantselei 2011) published by the Estonian Government Office. It has a chapter (ibid., 77) about social media. All the questioned ministries pointed it out to be something their employees relied on. Otherwise the rules were set inside the organization, and no steering committees have been established.

The third stage, *institutionalization* (Mergel and Bretschneider 2013, 5), means that the organization has a set of standards, rules and processes and some resources associated with the enforcement of these protocols. MFA had an internal rulebook which gave directions on what to keep in mind when starting to use social media and what to look for when using it (Respondent 3). MEC had a rulebook which was being constructed while the author was making the interviews (Respondent 1). No ministry questioned had made any obstacles to their employees using FB during working hours, and no internal rules were set for employees for personal use. It was recommended, though, that workers should always think where they work and who they represent. For internal use FB is not regarded safe for talking about work issues.

Based on Chang and Kannan's (2008) framework it could be said that Estonian ministries are partly in the second stage and partly in the third. The ministries themselves are using social-media applications to communicate and get ideas from the users. Their spin-off sites "Web Constable" and "Web Consulate" are actually providing services to the citizen. They do it by answering users' questions on Facebook. Usually this type of service would be made by telephone or e-mail.

The eight essential elements for social-media policy identified by Hrdinová et al. (2010) were also present in the Estonian ministries and public sector. Although the policies were not reachable for analysis the general contents of those documents or procedures were mentioned in the interviews. In the author's opinion the same eight elements were present, but they were not as strict and well-phrased as those analyzed by Hrdinová et al. (ibid.). Employee access (1) was not limited in any of the cases, although as Vertmann (2013) put it, the worker always had to keep in mind that his or her first priority was to get the job done. Account management (2) was usually done by the department responsible for communications or public affairs. Hrdinová et al. (2010, 6) say, "Acceptable use (3) policies typically outline an organization's position on how employees are expected to use agency resources, restrictions on use for personal interests, and consequences for violating the policy." There were no limitations and consequences by ministries how their employees were allowed to use organization's resources for social media as a personal use. Employee conduct (4) is mostly covered by the Civil Service Code of Ethics. No special or organization specific conditions came out in the interviews. Content (5) could be provided by anybody in the ministry in all cases, but it was made online through the communications or public-affairs department. Also if information changed, the same departments were responsible for making updates and giving responses to commentators. For security (6) no special policy was made, and mostly the regular IT policies were used. Usually some site-specific measures were accounted, such as creating multiple administrators or changing the password after a while in order to protect the site from hijacking. Some legal issues (7) were distinguished by Hrdinová et al. (2010, 11) to find out who is responsible for statements made on social media by public servants on their personal pages on leisure time. Estonian ministries had not set rules for employees to post a disclaimer that all content provided was their personal opinion. Vertmann (2013) said that in MIA freedom of speech was important, and also negative comments about the ministry made by staff would be tolerated. Citizen conduct (8) – only comments that were vulgar or evasive to someone's privacy would be deleted. This was true in all ministries' cases. The basic two-way communication would usually be conducted by the department of public affairs or communication. The citizens are encouraged to post comments and be active in discussions.

While MFA has been the innovation leader in the use of FB within ministries in Estonia. Other ministries have followed, but they do not seem to be very sure why they are doing this. MFA, on the other hand, has a clear strategy to be where the users are, starting with Second Life and going through Twitter, Flickr, Facebook and many others. In the author's opinion MFA acts as a marketing department of the country. Also the big number of fans could be explained by the users' interest in Estonia, not in the ministry itself. Among the questioned ministries it was the only one that had the initiative for a FB page coming from the top management of the ministry. Other ministries had the initiative come from departments of public affairs or communication.

The interviews with representatives from ministries showed that each ministry had its own reasons for initiating its FB page. MEC and MFA wanted to be where people were, and MIA followed other's lead; they wanted to be on FB because others already were there. The purpose of the page was not very different in different ministries. All wanted to share their information with interested parties. Depending on the purpose of the ministry there were some variations: MFA stated that their FB page was created also for giving information about Estonia to foreigners, and MIA wanted to share best practices of internal security. All questioned ministries had shared their webpage content on FB and made specific content also which was only shared in social media. All had made the department of communications or public affairs responsible for maintaining the FB page but enabled all interested workers to create content.

As the experience of MFA shows, the communication in Facebook is most active during crisis situations. People are trying to find help from the state and prefer using the easiest options for them. As mentioned earlier, most of Estonian internet users are also Facebook users. It means that the government could be only a few clicks away. MFA took a proactive approach during the Eyjafjallajökull volcano eruption when they had information which was relevant to some Estonians in foreign countries but still too specific to be announced as a press release or put on the ministry's homepage. This information was put on the ministry's FB page and Twitter. FB was not as popular back then as it is now, so the ministry directed all the people who needed help and called or e-mailed the ministry to their FB page. In some cases they needed to help people use FB. While the FB pages have been active, no other similar crises have taken place. MIA and

MFA preferred to use social media including FB during crisis-communication as the first channel of communication. MEC said (Respondent 1) that it did not have any preference to use FB as a first means of communication.

Since all FB content is public for the other users, an important issue is how user privacy is managed. There were little differences among ministries, but it was not a very important issue for them. MIA and MFA presumed (Respondent 2, Respondent 3) that every user knew that their wall posts on the ministry's wall are visible to everyone and that every user has read the terms and conditions of Facebook. However MFA did not ask for delicate information through wall posts but instead used private messages in order to protect user's privacy (Respondent 3). MEC said (Respondent 1) that they had not had any issues arise about privacy but they were planning to regulate that issue in the upcoming rulebook about social-media use by the ministry.

The target audience is not very different among ministries. All see people who speak Estonian and are interested in the ministry's actions as their audience. In addition MFA also sees foreigners interested in Estonia as their audience. Therefore their page is partly in Estonian and partly in English. The interest in the posts created by the ministry are analyzed in all cases using the built-in analysis tool by Facebook. However, differences occur when we talk about what is done with the information. While MIA does not analyze its page and content at all, MFA and MEC use the built-in tool; however, the purposes are somewhat different. MFA's point is to find the most interesting content, and for that purpose "likes" and "shares" are monitored and user feedback gathered. MEC, on the other hand, is interested in creating discussion and therefore they analyze the "reach", "comments" and "talking about this" of each post (Respondent 1).

Conclusion

The use of social media in Estonia is not regulated by a central system, but each ministry has had the opportunity to set their own rules and regulations. While the central government has set some guidelines through the *Government Communications Handbook* (Riigikantselei 2011), there are no specific rules on how a government organization should act on social media. When we look at the three stages proposed by Mergel and Bretschneider (2013) – *intrapreneurship and experimentation*; *order from chaos* and *institutionalization* – it is not so easy to tell where Estonian ministries are on that scale. Written rules in organizations are a sign of *institutionalization,* but without going further inside the organization, it cannot be said for certain if they are compliant with the other criteria.

The goal of this thesis was to find out why Estonian ministries use Facebook. It can be said that they do it because it is low-cost and effective in terms of communication. Also some want to be modern and close to users (Ministry of Foreign Affairs), and others do it because everybody is doing it (Ministry of Internal Affairs). Dialoguing with their audiences was one of the reasons in all three ministries for using social media. As the audience all ministries saw mostly Estonian-speaking internet users, with the exception of Ministry of Foreign Affairs, which directed some of its communication to English speakers interested in Estonia. The ministry also stood out from the others, because it had a clear strategy to be wherever the users are. The technical platform was not as important as user engagement. However, the goal of initiating discussion has not been reached, and no real input for policies has been made in any of the cases. Beyond that, it can be said that the use of Facebook by the ministries has actually been successful, not least as the yardstick for success, the actual goals of that use, such as being modern and being where everyone else is as well, has been quite modest as well.

Summary in Estonian

Eesti on riigina olnud 1990. aastate lõpul ja 2000. aastate alguses edukas info- ja kommunikatsioonitehnoloogia kasutuselevõtja ning pälvinud seetõttu rahvusvahelist tähelepanu (Charles 2009). 2012. aastal saadi 20. koht ÜRO E-valitsuse indeksis ning 5. koht E-osaluse indeksis (United Nations 2012) 190 osalenud riigi seas. Kiired arengud e-panganduse valdkonnas, just erinevate elektrooniliste identifitseerimisvahendite osas, on teinud riigist ühe vähese eduka e-valimiste kasutaja. Käesolevas magistritöös otsiti vastust küsimusele, kas senine edu on üle kandunud teise põlvkonna (Web 2.0) internetiteenustele, millele vastatakse peamise uurimusküsimuse kaudu: „Miks kasutavad Eesti ministeeriumid Facebooki?“ Küsimusele vastatakse analüüsides sotsiaalmeedia kasutust kolmes Eesti ministeeriumis: Välisministeerium (fännide arvult kõige edukam), Majandus- ja Kommunikatsiooniministeerium (fännide arvult kõige vähem edukam) ning Siseministeerium (keskmise näitena). Ministeeriumite sotsiaalmeedia kasutamist ja seniseid praktikaid uuriti juhtumianalüüsi meetodeid kasutades: dokumendianalüüsi ja võtmetähtsusega isikute intervjuusid.

Töö on jagatud neljaks osaks: esmalt antakse ülevaade hetke tehnoloogilistest trendidest valitsusorganisatsioonides, teises osas kirjeldatakse lähemalt uurimuseks kasutatud meetodeid, kolmandas koostatakse ülevaade Eesti ministeeriumite tegevusest Facebookis ning neljandaks analüüsitakse leide. Facebooki kasutamist valitsusorganisatsioonides on varasemalt uuritud näiteks Austraalias (Lubna Alam ja Walker 2011). Mitmed Eesti üliõpilased on oma bakalaureuse- ja magistritöödes uurinud Facebooki kasutamist Eestis üldiselt. Näiteks kasutajate ootustest lähtuvalt on teemat käsitlenud Kostabi (2013) ja senisest kasutamise praktikast eesmärgiga luua organisatsiooni hea tava – Rääsk (2013). Lisaks on Vertmann (2010) koostanud erasektori organisatsiooni jaoks sotsiaalmeedia kasutamise strateegia. Autori hinnangul on käesoleva uurimuse teema oluline, sest Facebooki kasutajate koguarv on tõusuteel (Facebook 2014, 39). Kuigi varateismelised on sealt lahkumas, on üle 55-aastaste kasutajate arv piisavalt palju suurenenud, et teismeliste arvu vähenemine tasa teha (iStrategyLabs.com 2014). Autori hinnangul näitab see, et Facebookist on saamas suhtluskeskkond laiema avalikkuse jaoks.

Analüüsi tulemusena selgus, et ministeeriumite peamiseks Facebooki kasutamise põhjuseks on selle keskkonna kasutamise madalad kulud ning informatsiooni edastamise efektiivsus. Mõned ministeeriumid soovisid olla modernsed ja kasutajatele lähedal (Välisministeerium) ning mõned kasutasid, sest kõik teised tegid seda samuti (Siseministeerium). Kõik küsitletud ministeeriumid tõid välja, et kasutajatega dialoogi astumine ning diskussiooni alustamine oli üks peamisi sotsiaalmeedia kasutamise eesmärke. Diskussiooni alustamise kohta andmeid ei leidunud ning sisendit poliitikate loomise osas sotsiaalmeedia kaudu pole seni tulnud. Samas võib Facebooki kasutamise vaadeldud ministeeriumites lugeda vähesel määral edukaks, sest ollakse kasutajatele kättesaadavad seal, kus nemad on. Eestis pole sotsiaalmeedia kasutamine tsentraalselt reguleeritud ning ministeeriumitel on olnud oma võimalus luua enda töötajatele oma reeglid. Tulevased uurimused võiksid otsida vastust küsimusele: „Millisel valitsemise tasandil toimuvad diskussioonid pakuvad sisendeid poliitikate loomiseks – kas näiteks kohaliku omavalitsuse tasand maapiirkondades või parlamendikomisjonid.“ Kuna sotsiaalmeedia näol on tegemist üsna värske tehnoloogiaga, siis ilmselt saab aja jooksul selgeks selle täpne roll valitsemise juures. Kas sellest saab ainult info jagamise keskkond või koht, kus toimuvad reaalsed diskussioonid kodanike ja riigi vahel.

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Interviews

Respondent 1 (11 December 2013) Executive Officer of the Public Relations department in the Ministry of Communications and Economic affairs. E-mail interview.

Respondent 2 (4 December 2013) Head specialist in the Communications department in the Ministry of Internal affairs. E-mail interview.

Respondent 3 (14 January 2014) Press Specialist in the Press department in the Ministry of Foreign Affairs. E-mail interview.

Respondent 4 (13 February 2014) Head of the Public Relations department in the Ministry of Communications and Economic affairs. E-mail interview.

Respondent 5 (11 February 2014) Desk Officer in 2nd Division (Consular Assistance Division) of the Consular Department in the Ministry of Foreign Affairs. Phone interview.

Tex Vertmann (14 November 2013) Head of the communications department in the Ministry of Internal affairs. Phone interview.

Appendix 1. Functional building blocks of social media

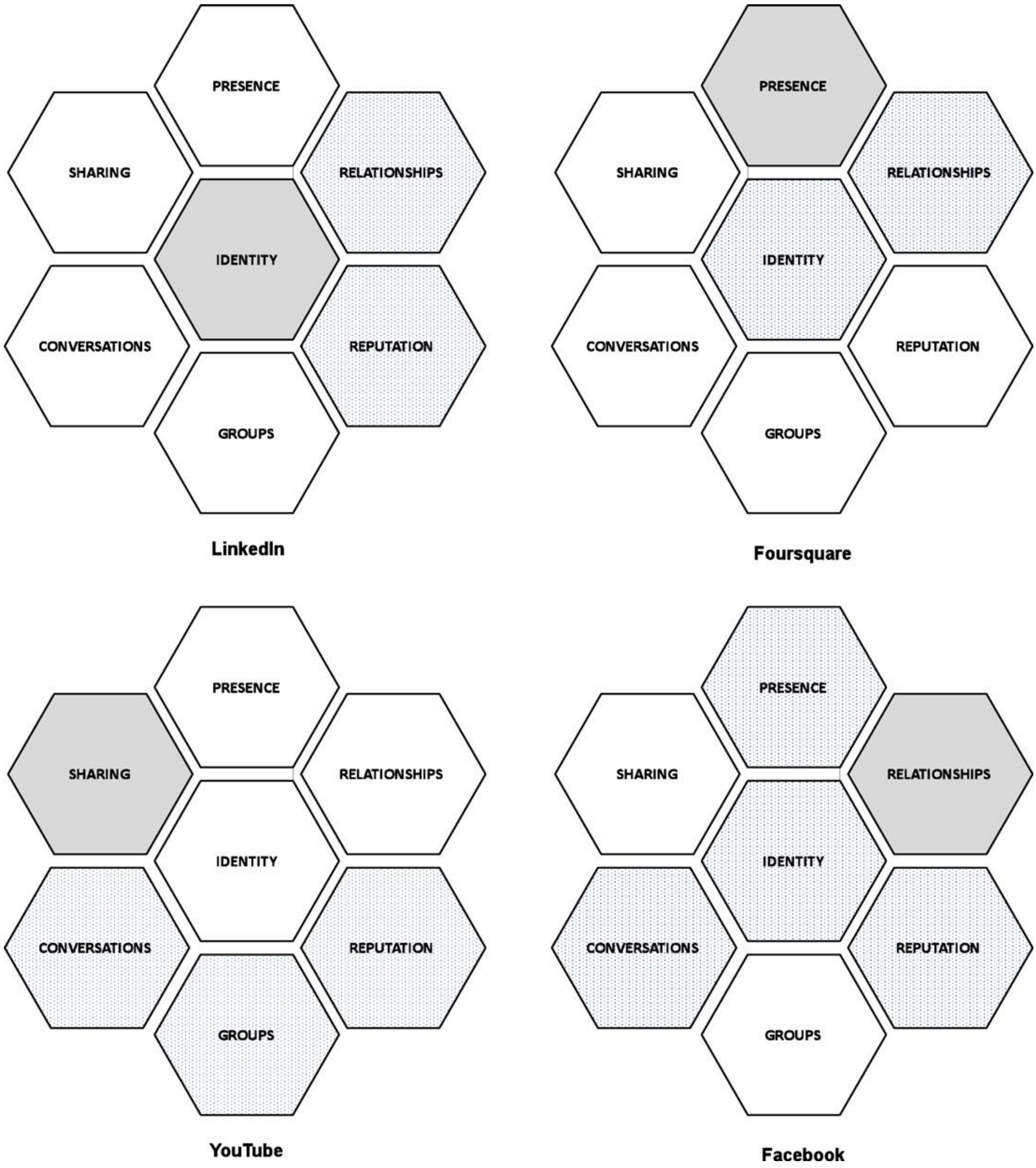

Figure 1: Kietzmann et al. (2011).

Appendix 2. Interview questions

- When was the ministry’s Facebook page created?
- From where did the initiative come to go into social media?
- What is the purpose of the ministry’s Facebook page? Has the ministry defined it in any way?
- What does the ministry take into account before using specific social media tools?
- Who is the main audience of the ministry’s Facebook page?
- Are the subjects that are posted to Facebook also put on to ministry’s homepage?
- How are the questions asked by the citizens archived? Are they being analysed in any way?
- How is the interest in social-media content measured? Does it provide an additional input for future posts? Are there any feedback mechanisms in action?
- What is the cost of maintaining the page?
- Has the ministry ever made any campaigns to attract more fans? Is it planning to do so?
- Who is responsible for maintaining the page? Where is he or she in the structure of the ministry? What are the educational requirements for this position?
- Is it done as a main job or as an additional task?
- What would be the situation during which messages would be put to social media first before sending out a press release?
- Does the press have the right to use the content (such as pictures or videos) posted by the ministry?
- How is user privacy protected? Some of the content created by the users has private information. What does the ministry do in order to avoid giving out private information?
- What are the regulations for ministry’s workers to use Facebook? Is their use anyhow limited?

Appendix 3. Timeline of social media in Estonian ministries