

Governing Identification

The Case of BankID and the Impact of Private Ownership in Vital
Identification Services

Leopold Bjärkling, Sofia Hedström, Josephine Mesterton

Stockholm Business School
Bachelor's Degree Thesis 15 HE Credits
Subject: Business Administration
Spring/Summer semester 2025
Supervisor: Rickard Grassman
English title: Governing Identification
Word count: 12763

Stockholm Business School



Abstract

In modern society, people have become evermore dependent on different forms of e-identification. E-identification in anything from mundane practical dealings of everyday payments to the more significant financial and contractual obligations in people's lives. First as a mere complement, but increasingly as a substitute to traditional forms of identity cards. With a constantly evolving digital landscape, questions about the legitimacy and security of these technical products become of paramount concern as much in safeguarding private integrity as to issues of national cyber security. This paper analyzes the Swedish application BankID through the lens of institutional theory, and inquires into the ways in which private ownership and monopolistic market positions may have an impact on such security considerations. In Sweden, close to the entire population uses this electronic identification system, which operates at the intersection of market-driven logics and state-oriented obligations with few competitors. This application has grown to become a key digital infrastructure, managed through a company which in turn is owned by the largest private banks in the country. The private ownership structure could be seen as the reason for its successful development. However, problems arise when having such a vital and sensitive gateway into a plethora of services concentrated in one sole privately owned organization in terms of calibrating market incentives with a rather different set of logics. By analyzing public governing and private integrity, we aim to discover the implications of private ownership of such a crucial technical infrastructure.

Keywords: Digital Infrastructure, Electronic Identification, Ownership Structure, Monopoly, Institutional Logics, Digital Exclusion

Abstract	
Table of Content	3
1.0 Introduction	5
1.1 Background	5
1.2 Problematization	7
1.3 Purpose and Research Question	10
2.0 Literature Review	10
2.1 Monopolization and monopolies	10
2.1.1 Coopetition	12
2.2 Ownership Structures: State vs Privately Owned	13
2.2.1 State Ownership: Hybrid Organizations	14
2.2.2 Private Ownership	15
2.3 Institutional theory	16
2.3.1 Competing logics	17
2.4 Summary	18
3.0 Methodology	18
3.1 Epistemological and theoretical approach	18
3.2 Purpose	19
3.3 Data collection	19
3.4 Sampling strategy	20
3.5 Interview list	21
3.6 Data Analysis	22
3.7 Ethical considerations	23
3.8 Limitations	23
3.9 Conclusion methodology	23
4.0 Analysis	24
4.1 Ownership Structures	24
4.1.1 Private Ownership	24
4.1.2 State Ownership	26
4.1.3 Alternative solutions	27
4.2 Digital Exclusion	28
4.2.1 Coordination Numbers	28
4.2.2 The Elderly and the Accessibility Gap	29
4.3 Trust and Security	30
4.3.1 Systemic Risk and Financial Fraud	31
4.3.2 Division of Responsibility	31
4.4 Market Dynamics	33
4.4.1 Monopolistic tendencies	33
4.4.2 European Context	34
4.5 Future Reforms	35

4.5.1 Initial Identification	35
4.5.2 Regulation	36
5.0 Discussion	37
5.1 Our findings	37
5.2 Ownership Structures	38
5.3 Digital Exclusion	39
5.4 Trust and Security	39
5.5 Market dynamics	40
5.6 Future reforms	41
6.0 Conclusion	42
7.0 Limitations and Further Research	44
8.0 Appendix	45
References	48

1.0 Introduction

1.1 Background

The use of electronic identifications (eID) have grown immensely in today's modern and digital society (van Dijck et al, 2019: 900), particularly in Sweden which has one of the highest eID uses in the world (BankID, 2023: 14). Electronic identifications are online identities which are used in order to confirm a person's identity towards different organizations (van Dijck et al, 2019: 898). The word eID has many different meanings ranging from the username a person or entity has on social media (Anand et al, 2021: 15), to an online identity which is verified towards government issued personal numbers such as BankID (Söderström, 2016: 137). The digital paradigm in modern society is one of the factors which has enabled the rapid growth and widespread use of eIDs (Gupta, 2023: 453).

EID's can be seen as infrastructural aids which enable people to participate in online communities as well as the monitoring of online spheres, both to identify oneself as well as make one known to others (Van Dijck, 2019: 897; De Hert, 2008: 73). The use of the service BankID has grown since its inception in Sweden, from being a means to log into a bank account to an identity verifier used by a range of organizations in different fields. BankID is now used by both private citizens as well as businesses as one of the main methods of identifying an identity (SOU, 2023: 94). Bank ID enables people to log into different companies, banks and organizations as well as sign contracts digitally with a verified electronic identity (Söderström, 2016: 140).

In Sweden, Bank-ID was first introduced in the 1960s as a complementary form of identification, used and issued by banks (Huzs, 2018: 398). These Bank-ID's were internationally recognized standard issue identification cards. The idea of having a private organization issuing a form of identification has thus been an integral part in Swedish society (Grönlund, 2010: 196), stretching back over 60 years (Huzs, 2018: 398). In the 1990s the development of an eID in Sweden started, but was eventually handed over to the banking sector because of their pre-existing infrastructure regarding electronic banking services. In 2002 the company Finansiell ID-teknik was formed as a collaborative project by some of the banks because of the previous initiative from the government (Grönlund, 2010: 200-201). In 2003, the first electronic identification was made by a private person in Sweden (Söderström,

2016: 136). Since then, the service BankID and Mobilt BankID has grown to become the largest service provider of e-identification in Sweden, with nearly 8,5 million users in 2023 (Bank ID, n.d: 4).

Since the banks are the issuers, one needs a personal number as well as a bank account at one of the larger banks in Sweden in order to obtain a BankID, (SOU, 2023: 78). In Sweden people receive a personal number from the Swedish tax agency. A personal number is an individual number which corresponds to a specific person with a verified identity (Grönlund, 2010: 196). Although not all people get a personal number, many instead receive a coordination number. This has similar qualities to a personal number, such as being tied to an individual, but it does have certain limitations in comparison to a personal number (Nordiskt samarbete, n.d.).

For other eID's it can in some cases be sufficient with a coordination number in order to obtain it, for example Freja eID, but that is not the case with BankID (SOU, 2023: 79). Consequently, there is a distinct part of society who are excluded from the use of eIDs in Sweden, as well as the corresponding services which they provide (Kaharevic et al, 2021: 33). Therefore, groups in society do not have the same access to health care and contact with public services as others and this creates a digital exclusion from core societal structures (Blomgren et al, 2023: 39). With the constantly evolving and digitizing society elderly people are one of the groups which at times find it the hardest to adapt to these changes (Lythreitis, 2022: 6).

The Swedish situation differs from other European nations, such as in Finland where there are multiple different eID solutions. Previously, Finland had a similar situation to Sweden where their BankID had a monopoly on the market with a 90% user coverage and was owned by the banks (Bazarhanova et al, 2020: 526-527). Finland at the time also had a national eID, FINEID, which was government issued. On the Finnish market, their BankID became the most used, and consequently gained a monopoly because of usability and costs associated with the FINEID (Rissanen, 2009: 2). The introduction of EU-regulations and new Finnish anti-competition laws, weakened the country's BankID. The new law helped create the Finnish Trust Network (FTN) which made it easier for other actors to enter the market. Today Finland has a number of larger eID providers (Bazarhanova et al, 2020: 528-531), as opposed to the market dynamics in Sweden (Witt, 2023: 1).

Sweden's reliance on a single eID system namely BankID, has created a need for evaluating the Swedish eID market. Questions are raised in terms of ownership, competition and inclusion, which will be explored further in the next section.

1.2 Problematization

Whether the state or private actors should control a critical digital infrastructure that BankID has grown to become, has been debated (e.g TV4 Nyheterna, 2025; Debattredaktionen, 2023) but has rarely been academically researched. With its 8,5 million users in Sweden, it has gained a central role as a digital identity system, needed in order to access everything from health care to financial services (Huzs, 2018: 392; BankID, 2023: 4). While it has provided Swedish society with an efficient eID solution, there are still risks associated with a product that is run by a private company. The question is then raised of what values should guide a fundamental infrastructure service, and what happens when such a product becomes practically monopolized by one actor (Witt, 2023: 1).

One of the trade-offs between private and public ownership is based in their respective internal logics. While private actors focus on efficiency and innovation, state actors focus more on inclusion and democratic oversight. Private ownership usually improves the performance and profitability of competitive sectors (Megginson & Netter, 2001, 321). However, public value considerations such as inclusion, equity, and transparency, are often subordinated in privately managed digital infrastructures, where logics of market performance dominate (Scholl & Scholl, 2014: 165).

In different industries there are contrasting business logics which transform the value creation of the enterprises and translate it to their customers. Thus, a business model creates and outlines how the company will conduct and in turn create a profit within its field of expertise (Teece, 2010: 173). The organizational logic of banks can be viewed from them being private actors and as mentioned, driven by efficiency and profitability (Megginson & Netter, 2001). Banks are driven by multiple logics both from high regards of security as well as creating value for its stakeholders. Consequently, one of the larger factors for value creation within the banking sector is security. Customers expect a safe and secure platform in order to protect their financial assets as well as their own data protection. For banks one of the most important aspects of their business model is the brand image that their customers experience.

The brand image is built upon a safe and efficient system which can be easily accessed by the users (Mancuso et al, 2025: 8-10).

Between different sectors and organizations, the logics that drive their incentives vary. As a consequence, the contrasting ways of thinking will result in different actions and outcomes (Göbel et al, 2020: 400). If these organizations choose to collaborate, it is not clear how the competing logics will adapt, and which one will lead at what time (Cai & Mountford, 2020: 365). In regards to government logic in comparison to business logic, there are both similarities as well as distinct differences. The hierarchical structures reach over both sectors, but their decision making processes vary drastically. Government decisions are associated with longer processes where several aspects are taken into account as well as a number of actors taking part. Furthermore, their main goal is to the greatest extent, public welfare. On the contrary, business decisions are less participatory, but moreover rapid in comparison. Additionally, their main goal is rather private welfare than public welfare (Göbel et al, 2020: 404).

There are different business models within the banking sector, one of which is the enabler banking business model. The enabler business model is built upon the integration of fintech services into the traditional banking system, such as BankID. The enabler model is built upon the integration of innovative services which help the customers of the bank to use their services more easily (Hanafizadeh et al, 2021: 7-9). Similarly to the Microsoft business model where the company integrated spreadsheets and word processors in order to increase its monopoly on the market. By integrating systems and functions downstream a company can thus ensure the use of their system (Gisser et al, 2001: 211-212). The banks integrated BankID to all of its digital services in order to increase its usability for their customers. The integration of an eID service into banking, and later on public services as well, has led to a user reliance on BankID (Witt, 2023: 1-2).

A monopoly occurs when one or a few actors hold prominent positions within a specific market or sector, where there are also complicated and difficult obstacles for other actors to enter the market within (Sundie et al, 2008: 179). A core function of the monopoly is that its supply on the market covers all of the demand there is of the products which it produces or distributes (Skoruks, 2014).

The Swedish eID market is constructed of a few actors and BankID being the largest provider with a user coverage of 99,4% within the adult population (BankID, 2023: 4). BankID can thus be established to hold a monopoly on the market (Witt, 2023: 1). The dominance that BankID currently holds on the Swedish market has raised concerns from the Swedish Competition Authority, asking for market reforms and regulation (Jernsten, 2024: 3). Market dominance of this scale can lead to issues of both lock-in as well as lock-out. Individuals inside the system never get presented with alternatives, while individuals outside the system cannot access it at all. One example being users that do not have a personal number or are struggling to use digital tools (Kaharevic et al, 2021: 34-39; Blomgren et al, 2023: 49).

BankID's practical monopoly is not a classic market failure, it is closer to a result of state dependence on a private solution to produce and maintain a public good. The setup reflects some of the competing institutional logics of the private versus the public. State's logic being inclusion and stability while the private sector's logic aligns closer with efficiency and shareholder value (Furusten, 2023; Zhou et al, 2016). When the private service of issuing eID becomes critical to citizens in order to participate in Swedish society, the difference in institutional logics can lead to harm, especially for marginalized groups (Kaharevic et al, 2021: 34).

On top of the worries of inclusion, another debate has sparked interest globally, namely the topic of surveillance capitalism. Shoshana Zuboff (2022) created a framework showing how private actors in the digital sphere extract more information and in turn commodify the behaviours of their users (Zuboff, 2022). Even without explicit monetization, digital identity systems pose surveillance risks through data centralization, profiling capabilities, and non-transparent system designs (Taylor, 2017: 6).

Different Swedish departments and authorities have echoed these concerns in a collection of reports in recent years. The Agency for Digital Development (DIGG), Finansinspektionen and the Swedish Riksbank have all criticized both state and private actors for the current situation of eID in Sweden (DIGG, 2023; Finansinspektionen, 2022; Riksbanken, 2019). DIGG pointed to the democratic risks due to the lack of transparency and state-oversight on such a critical service (DIGG, 2023). Finansinspektionen and Riksbanken on the other hand highlighted the systemic risks with the societal dependence on BankID. They argue that such high concentration on one eID solution harms financial stability in the event that BankID

would malfunction or shut down completely. The proposed suggestion to battle the situation has been to introduce a state-owned and government issued version of eID to diversify and strengthen the eID market (SOU, 2023: 97).

1.3 Purpose and Research Question

Therefore a distinct research gap is found. While there have been writings regarding state versus private ownership, not enough focus has been put on monopolistic tendencies of critical public infrastructure. This is evident in cases of highly digital, and high-trusting markets, such as with the case of BankID in Sweden. Broader themes of institutional theory, competing logics, ownership and monopolies, will be applied to the eID situation in Sweden. Consequently, we will look into which risks private ownership and market dynamics poses in terms of a vital identification service in Sweden. We will therefore explore:

To what extent does private ownership impact the public good of governing vital identification services?

2.0 Literature Review

2.1 Monopolization and monopolies

Electronic identifications can be seen as infrastructural aids which enable people to participate in online communities but also in the governing of online spheres (Van Djick, 2019: 897; De Hert, 2008: 73). The use of the service Bank ID has grown since its inception in Sweden from being a means to log into a bank account to an identity verifier used by a range of organizations in different fields (SOU, 2023: 94). Bank ID was founded by a collaboration of Swedish banks as an alternative way to log into the bank services, it was and is still a privately owned and run company used by both private as well as public organizations today (Grönlund, 2010: 200-201; BankID, 2023: 4). BankID has a 99,4% user coverage in the Swedish adult population (BankID, 2023: 4) and holds a monopoly on the Swedish eID market (Witt, 2023: 1).

A monopoly is when an entity has exclusive ownership of a product or service (Merriam Webster, n.d.), and where other actors are limited or not present on the market (Guo et al,

2023: 1631-1636). Monopolization is favorable for an entrepreneur since it ensures that there is a lack of, or no competition, within its market segment. It assumes it will generate a higher profitability since they can set the price and have an easier time adapting to market demand (Skoruks, 2014: 204). A few of the reasons which can cause a monopoly situation on the market is partly a lack of competition, or complicated obstacles which will be difficult for a competitor to overcome, in order to join the market (Sundie et al, 2008: 178). A core function of a monopoly is that its supply on the market covers all of the demand of the products which it produces or distributes (Skoruks, 2014: 204).

Today many markets have needed to consolidate businesses in order to stay competitive on the global market which in turn leads to larger companies covering larger business segments. This monopolization of modern markets can be seen as a consequence of globalization (Skoruks, 2014: 203), as well as digitalization (Silvestrov et al, 2022: 1). In the wake of digitalization many of the previous principles attributed to monopolies and monopolization no longer apply since the markets have changed drastically. With the digital economy many organizations have consolidated, and a person can have many accounts on different platforms, even though the different apps are all part of one large organization. Today it has become difficult to avoid using services from the larger digital organizations as they have acquired their competitors (Silvestrov et al, 2022: 11).

Another example of a monopolized eID solution is the case of India where the centralized eID provider, India Stack, covers the whole eID market. (Anand et al, 2021: 3-6). India stack is based upon India's own version of a personal number which is called Aadhaar. Aadhaar is a biometrically structured data base of the majority of the Indian population (Hicks, 2020: 331). The solution was introduced as a means to increase welfare and financial aid but has in turn created a larger digital divide (Anand et al, 2021: 2). The eID has a monopoly on financial services as well as digital identifications in India (Hicks, 2020: 337), similarly to BankID's market dominance in Sweden (Witt, 2023: 1).

The relevance of exploring monopolization within the context of eID in Sweden pertains to the market dominance which BankID currently holds (Witt, 2023: 1). BankID has been able to grow and develop as a product for over 10 years with nearly no market interference (Huzs, 2018: 392). There are differences between a public and a private monopoly. In the case of BankID, which is a private monopoly, it is market driven and will prioritize to maximize its

profits. Whereas a public monopoly of the same size and impact, will try to maximize the public welfare that the company and product supplies society with (Weibull et al, 2017: 120-128).

2.1.1 Coopetition

Coopetition is a term used when competing organizations cooperate on a project in order to enhance a specific product or service. The strategy entails that a number of competing organizations join together to create an alliance, where they cooperate while at the same time compete with one another (Ritala, 2012: 307-309). This is similar to the founding of Finanssiell ID-teknik BiD, which was created through a cooperation between the banks in Sweden (Grönlund, 2010: 198).

Coopetition is an effective measure employed when a sector wants to develop a market or product as well as increase the efficiency within the development (Ritala, 2012: 309-319). Coopetition can thus be viewed as a paradox as it contains two different elements, both cooperation and competition (Droege et al, 2023: 2093). Coopetition is favorable to use when there is limited competition on the market and where there is a benefit to cooperating rather than developing individual products or solutions (Ritala, 2012: 313). The reason for participating in coopetition for businesses is to create value for all of its stakeholders, both shareholders and customers (Gur et al, 2025: 2).

The value creation of coopetition is derived from the risk reduction the organizations can take as they share the costs as well as the profits from a project. The organizations are also able to share both knowledge and experience with one another in order to increase their efficiency (Droege, 2023: 2095). Coopetition also has the ability to increase the variety and amount of innovative ideas generated from the partnership (Mathias et al, 2024: 2940). Coopetition generates better business performance as well as market size, this is especially relevant in knowledge intensive industries (Ritala, 2012: 319).

The possible downsides of coopetition is that as it is a paradoxical phenomena, where the tensions between cooperation and competition between organizations, can be difficult to balance. Coopetition can also lead to “learning races” where one organization gathers knowledge about another without sharing as much to the collaborative partners. Furthermore, it can create tensions between the partners due to opportunistic behaviour from one party and

in turn limit the cooperation between the organizations (Droege et al, 2012: 2094-2096). This can in turn lead to a break in the partnership and the organizations going back to being competitors with different advantages (Hoffman et al, 2018: 3041). In Sweden with the BankID model, the banks have proven to collaborate and compete simultaneously (BankID, n.d.) due to the value it creates for both the organizations and the users (Gur et al, 2025: 2).

In the case of BankID, the Swedish banks collaborated in creating a mutual eID solution rather than each bank providing their own. The benefits experienced from cooperating thus outweighed the potential risks of competing, this despite the banks remaining competitors on the financial markets. This underscores the relevance of coopetition when developing complex technical innovations as a means to co-create value on a competitive market.

While coopetition and monopoly help describe market dynamics, the ownership structure of companies also plays a crucial part in how businesses act. By looking into the difference between state and private ownership, we can further our understanding in terms of why businesses behave the way they do.

2.2 Ownership Structures: State vs Privately Owned

Historically, firms have to a greater extent been viewed as strictly state or privately owned, but it has later come to be explained as more nuanced than that (Ahlstrom et al, 2015: 93). However, for the purposes of this thesis, we will explore it using a slightly generalized approach.

The main purpose for privately-owned firms stands to be profit maximization (Bruton & Peng, 2015), and it has been shown that private ownership tends to outperform government ownership in terms of productivity (Deephouse et al, 2007: 220). Despite that, state actors may shape how new markets develop as they have the power to control others (Goodstein & Velamuri, 2009: 489). Due to their role connected to legislation and regulations, they can therefore affect efficiency from that end (Casasnovas, 2022: 232). Additionally, even though private ownership is associated with furthering innovation, there are studies debating the opposite (Gao et al, 2017: 378). Government ownership increases innovation too, but that it lacks the enthusiasm to display it (Huang et al, 2019: 222). Nonetheless, the ownership structure has a great impact on an organization in regard to how it adapts and responds to the surrounding environment (Uchida, 2023: 778).

2.2.1 State Ownership: Hybrid Organizations

In terms of their motive, state owned enterprises are crucial players in the implementation of goals formed by state regulation. As these will be of the highest priority, it will guide the incentives of the organization (Inoue, 2020). There is however a limited amount of more recent top studies analyzing state owned enterprises, and earlier dated research is prone to oversimplify the ownership structures (Ahlstrom et al, 2015: 93). The degree of state control varies drastically in reality (Zhou et al, 2016: 377), as well as their scope and complexity (Fewer et al, 2024: 11). Most often, these public-private collaborations are viewed as hybrid organizations (Fewer et al, 2024: 11), where the biggest difference corresponds to the degree of state involvement (Gao et al, 2017: 377). Despite these firms representing close to 20% of the global equity market value, there is little to show their vital existence in more recent studies (Ahlstrom et al, 2015: 92).

From an economic-driven perspective, the focus of state owned enterprises is seen to be of a more administrative character rather than economic profit (Zhou et al, 2016: 376). Despite that, it has been shown that it is all depending on the focus of the viewer. If explored with the intention to see the company's contribution to public service, it is almost certainly a positive view. In contrast, if the priority leans towards a more business-like perspective, the observer is most likely dissatisfied with the performance of the company (Jay, 2013: 140).

Government involvement within organizations has been shown to vary in both degree of ownership and control (Gao et al, 2017: 377). In their article, Ahlstrom et al (2015) study 36 different organizations within 24 countries, where two of them were located in Brazil and Portugal. These organizations experienced drastically different levels of state involvement, despite them both being categorized as hybrid. The Brazilian company had high state ownership but to a great extent independent operations, while the Portuguese firm had low state ownership but high government control. The authors describe the reason for the different degrees of state involvement, being connected to the importance of the organization's product. As the importance of the product increases, so should the state control.

2.2.2 Private Ownership

Overall, studies show how privately owned enterprises outperform state-owned enterprises, with efficiency and innovation often being associated with the former (Megginson and Netter, 2001, 321). There are however situations where it might not be as suitable, two examples being critical public infrastructure (Ogden and Watsen, 1999: 526–527) and sectors with low to no competition (Wolf, 2009: 2642–2645). In these cases, private ownership could instead be corrupted and become a worse alternative to state control (Megginson and Netter, 2001: 324–326).

One example of private ownership is Wolf's (2009) study, where privately owned oil companies are compared to state-owned businesses in regards to their performance. Wolf finds that over time, private oil companies are more profitable, as well as performing better in regards to output and efficiency. He also points out that the oil sector is in part a political business. Due to this, state-controlled companies might be driven by different goals, other than solely output. Factors like long-term sustainability and strategic control are harder to measure in comparison to bottom line statistics of profit charts. (Wolf, 2009: 2642–2645)

Another example refers to a study that monitored privately owned companies that substituted what is typically viewed as strict government responsibility. These firms operate within private security in different countries, and more specifically they supply military forces. According to the authors, these enterprises lack transparency and accountability because of their private nature. It is difficult to monitor and fully track their activities as a result of improper legislative oversight. However, the authors explain the distribution of responsibility to be rearranged rather than removed from state power. This is blurring the lines between state and private control over a key security infrastructure. In this case, the author suggests that privatization and outsourcing might contribute to efficiency, but furthermore to a loss of legislative oversight (Godfrey et al, 2013).

Beyond control and management, ownership structures assign organizations to distinct institutional environments that in turn prescribe differing normative expectations. It is therefore important to acknowledge institutional theory, in order to provide a valuable understanding of how these differing forms of ownership embody competing institutional

logics within their organizations. Each of these logics promote particular assumptions about legitimacy and organizational purpose.

2.3 Institutional theory

Institutional theory has shifted from being a view that focused on what was going on inside an organization and the value itself created (Jay, 2013: 138). Moving to a macro perspective (Thornton & Ocasio, 2008: 100) emphasizing the substantial influence made by the institutional environments in which they exist (Furusten, 2023). This environment consists of legal, as well as socially and mentally constructed expectations, to which the organization must adapt and comply in order to be perceived as legitimate actors within that field (Meyer & Rowan, 1977). These expectations are therefore not naturally occurring, instead they are socially constructed and can change over time. Because of this, institutions are pressured to act and operate within a limited space, in order to be recognized by society (Furusten, 2023).

The environment changes depending on the field in which the institution exists. There is seen to be both a direct environment, as well as an indirect environment for each sector. Despite their different scope, both are equally important, pressuring institutions to act a certain way to be acknowledged (Furusten, 2023). Within the environment, activities become institutionalized and by that, establish expectations and taken-for-granted characteristics that have to be fulfilled (Meyer & Rowan, 1977: 340). The theory argues that despite institutions having different sets of goals, their development is strongly influenced by their institutional environment. It explains that you have to look beyond internal management decisions and market forces, and instead look at the broader perspective and its complexity, to understand why institutions expand like they do (Furusten, 2023).

From this, a new perspective arose to institutional analysis, namely the institutional logic approach. Within the institutional environment there are underlying influences, which have come to be described as institutional logics (Thornton & Ocasio, 1999: 802). These can be understood as a set of organizing principles that help provide a framework that impacts how organizations and individuals operate within their environments. It shapes the values and beliefs, and therefore the behaviour of the organizations (Furusten, 2023). It is common within multiple fields that several logics co-exist. However, it is not clear why they in some organizations blend together, and in others create conflict (Besharov et al. 2014: 365).

2.3.1 Competing logics

Within organizations, there are several institutional logics that continuously compete or coexist with one another (Hargrave et al, 2016: 580; Thornton et al, 2013). Heterogeneity has come to better describe the multiplicity of institutional fields, rather than homogeneity that has previously identified institutional logics (Besharov & Smith, 2014: 365; Thornton et al, 2013). These logics provide sets of goals that reflect its core values, but in turn yield contradicting priorities that undermine one another (Reay & Hinings, 2009). Therefore, these opposed logics tend to compete with each other, where one becomes the dominant and the rest subordinate (Hargrave et al, 2016: 581). However, Besharov & Smith's (2014) framework describes it as more complex. They believe we have to both consider the compatibility as well as the centrality of the conflicting logics. This can be done by comparing how their assigned beliefs work together as well as their validity and relevance in the organization (Besharov & Smith, 2014: 367-370).

Multiple competing logics can also have a positive impact on institutions. There are ways to find mechanisms on common ground (Reay & Hinings, 2009: 642), and by that further innovation and development (Thornton et al, 2013). Although their existence can lead to confusion in regards to how organizations should navigate within their own operations (Besharov & Smith, 2014: 369), the multiplicity can also enable reaching goals that otherwise would not be possible (Hargrave et al, 2016: 594). This heterogeneity has in turn led to the emergence of so-called hybrid organizations (Jay, 2013).

Most spoken of is the hybridization at organizational level (Jay, 2013; Besharov & Smith, 2014), but in addition, research shows presence of its emergence on a deeper field level as well (Hargrave et al, 2016). In these organizations, the conflicting views can be described by the "service paradox" (Jay, 2013: 141). Hybrid organizations can be seen to have two core logics that compete with their beliefs and preferences at a fundamental level (Besharov & Smith, 2014: 367). Based on what logic is favored or valued above the other, organizations and their operations can both be viewed as a success and failure, all at the same time (Jay, 2013: 140).

An example of this, is the work presented by Reay and Hinings (2009) in their study of the health care system in Alberta, Canada. It explains how the historically dominant logic,

medical professionalism, had to compete with the later introduced logic of business-like health care. The focus shifted from having the medical aspects as the key driver within the institution, to instead introducing the aspect of cost-efficiency in order to make the business more profitable. The regional health authorities that were created, stood for the business approach that clashed with the medical professionals and their priorities. Originally, this created tensions within the organization where the two parties could not come to an agreement as neither of them wanted to compromise. Later on, they realized that when they worked together, they could reach solutions with better outcomes than they would have been able to separately.

2.4 Summary

In this literature review we have explored the important connections between ownership structure and monopoly, and showed its importance when analyzing market dynamics. Private ownership might be more efficient and lead to further innovation, but when looking at vital services, state ownership could offer a safer alternative. Additionally, coopetition and monopolization highlights how digitalization has come to redefine previous market dynamics. Studies show that stricter regulation might be needed to ensure accountability. Its relevance shows in regards to BankID and its importance on the Swedish market, both in terms of public interest, but also innovation and competition.

3.0 Methodology

3.1 Epistemological and theoretical approach

It is important to consider the philosophical aspects of research as they aid in describing reality as both the researchers, previous work and interviewees perceive it as. This research aims to gather knowledge from how the interviewee perceives and interacts with the world (Bell et al, 2022, 27).

Ontology is based on your own perception of what reality is, and it theorizes about the assumptions which we make in order for something to exist (Bell et al, 2022, 26). A constructionist ontological stance means that the social phenomena studied is made real by activities made by humans interacting with it (Bell et al, 2022, 27). A constructionist

ontological stance, states that reality exists because of the social interactions actors make in regards to the social phenomena studied. It also means that the reality is constantly changing and shifting depending on the social interactions the phenomena has with its actors (Bell et al, 2022, 28).

In this paper, an ontological constructivist approach was best suited and then an interpretivist epistemological approach is best suited to interpret the data. Since epistemology considers the theories of what is known and what can be known, it contributes by adding how we gain knowledge from that perception. In our research the interviewee's own perspectives of the world are considered, and therefore an interpretivist approach is best suited to understand the data (Farquhar, 2012, 5).

By this, we can base the analysis on experts within the field, to understand and gain knowledge from their own subjective experiences. The research aims to gather knowledge from how the interviewee perceives and interacts with the world. Making these considerations is essential in order to make sure of the validity and rigour of the research (Faruquhar, 2012, 3).

3.2 Purpose

This method is appropriate as it provides a deeper understanding by several actors involved, but furthermore provides the stand point and insights of those that contribute to the current situation in Sweden. This research will gather important insights from experts from the private sector and government representatives, and in turn demonstrate the findings (Bell et al, 2022, 12). By combining both primary and secondary data we aim to get a deeper understanding of the subject (Bell et al, 2022, 97).

3.3 Data collection

Two methods were used for the data collection, primary data as well as secondary data. Primary data was collected through interviews with relevant actors. Whereas the secondary data consist of previous research in relevant areas and topics for this paper (Bell et al, 2022, 97).

Firstly, the primary data was gathered through semi-structured interviews with a set of predetermined open questions. The interviews were constructed to understand current policy

decisions, regulations and market dynamics in regards to the eID in Sweden. The questions were also adjusted according to the position and relevance of the interviewee. In accordance with the flexibility of constructed questions, it allows the participants to share their individual views without being controlled or manipulated by the questions (Bell et al, 2022). The interviews were conducted both in person as well as digitally over Teams. All of the interviews were recorded with consent of the interviewee and thereafter transcribed with the help of AI, and later controlled manually for accuracy.

In addition, secondary data was gathered by analysing articles and reports, in order to examine current situations and previous studies. This was employed for a wider understanding of the subject, and to both strengthen and question this study. This approach will complement the interviews by contributing a historical context, as well as an institutional perspective. It therefore validates and contrasts the participant's claims. All documents and reports were systematically collected and analyzed, in order to identify any relevant and important information or contribution (Bell et al, 2022). The use of multiple sources of data therefore strengthened the findings and conclusion by triangulating the evidence (Farquhar, 2013).

3.4 Sampling strategy

In order to choose both interview participants and documents, a purposive sampling strategy was employed. The factors for the choice of participants was based on their experience on the research or direct involvement in the field. Then in order to receive both independent and personal insights, the sample included a balanced figure of participants from each segment. The interviewees were gathered through emailing relevant organizations and industry professionals, as well as through referrals from previous interviewees. A total of 16 interviews were conducted over a period of six weeks where a balance was made between digital and in person interviews (Bell et al, 2022). The sampling method thus provides relevant data with clear depth. The findings in this method are not meant to be generalizable (Bell et al, 2022).

3.5 Interview list

Name	Organization	Meeting place	Date	Interview length
Johan Henriksson	Freja eID Group AB	Physical	10/4/25	51:48
Charlotte Pataky	Finansiell ID-Teknik BID AB	Physical	14/4/25	1:09:00
Robert Malm & Jon	Skatteverket	Physical	22/4/25	59:24
Niclas Westén	Nordea Sweden	Physical	24/4/25	1:38:28
Ingrid Hasselström	Attorney for Data Protection	Digital	4/5/25	45:20
Peter Göransson	Finance Sweden	Digital	5/5/25	48:36
Anders Edlund	GetSwish AB	Digital	6/5/25	26:31
Lisa Larsson	PTS	Digital	6/5/25	28:19
Krista Arplund	DIGG	Digital	7/5/25	43:43
Martin Engman	SPF Seniorerna	Digital	8/5/25	48:13

Cecilia Borglin	Svenskar i Världen (SviV)	Digital	9/5/25	44:39
Fredrik Af Malmborg	Entrepreneur	Physical	13/5/25	40:45
Khashayar Farmanbar	Social Democratic Party	Physical	13/5/25	37:32
Anders Ygeman	Social Democratic Party	Physical	14/5/25	41:24
Mikko Hiekkataipale	Nordea	Digital	19/5/25	34:37
Anonymous Employee	Swedbank	Digital	19/5/25	28:52

3.6 Data Analysis

In order to examine the answers provided, a thematic analysis of the interviews were made, in accordance with data found in documents and reports (Bell et al, 2022, 13). The analysis consisted of transcribing the interviews in order to read them thoroughly, and connect answers to broader themes that were found. Connecting insights from the interviews with findings in the reports and articles, we were able to find alignments and gaps. By cross-verifying collected data, we could achieve a reliable and deep understanding in the analysis (Bell et al, 2022).

3.7 Ethical considerations

Making ethical considerations was a crucial part of the research process. The interviews were conducted in accordance with ethical guidelines. The participants were informed and gave consent, as well as received clear information about the purpose of the study. In order to maintain confidentiality, the participants were given the opportunity to be anonymous and were assured that the data was handled securely. Participants were also informed that their involvement was voluntary, and that they have the option to withdraw at any time (Bell et al, 2022).

3.8 Limitations

The methodology has many strengths but despite these there are some limitations. Subjectivity is a natural fact of qualitative research although this limitation will be addressed through triangulation. Triangulation is previously described as connecting several data collection methods, in order to strengthen the validity and robustness of the information (Farquhar, 2012). Despite this, the perspective of the researcher can still influence the interpretations of the results since the researcher had to interpret the results themselves. Using a smaller sample size was intentional as it was a means to capture depth within the topic even though it had the possibility of leading to it not covering all of the viewpoints. Document bias was considered, since previous researchers have had their own subjectivity when conducting their research. Bias within official records can also be prominent since it can reflect institutional agendas set by the writers, and therefore they require critical analysis in order to identify missed perspectives (Bell et al, 2022).

3.9 Conclusion methodology

To conclude, the methodology section explained a combination of both qualitative interviews alongside document analysis. This was in order to provide a comprehensive understanding of the researched topic. Integrating multiple data sources will enhance its credibility, while the ethics protocols will ensure participant protection and data integrity.

4.0 Analysis

4.1 Ownership Structures

The ownership and governance arrangement of BankID was a recurring theme in the interviews and presented concerns about tensions among efficiency-oriented private sector logics and idealized public sector values of equity, accountability, and universal service. Because of its large usage and broad scope, BankID has positioned itself as a national infrastructure. BankID is a privately owned system, operated by a consortium of banks in Sweden through cooperation. Since this private ownership structure is uncommon for a foundational infrastructure, interviewees regularly questioned it in terms of governance, inclusion, and security.

4.1.1 Private Ownership

A number of interviewees described BankID origins as a response by the private sector to a request by the public sector.

"The state wanted to do it, but it was the banks who actually created something that developed successfully. That's how BankID came about."

— Johan Henriksson, Freja eID Group AB

The project was initiated to create an eID solution in regards to the technical developments in society, and public initiatives in its early days were unable to provide a successful infrastructure.

"Should the state develop its own eID? Or rely on the market to solve it? They chose the market route."

— Krista Arplund, DIGG

Therefore, the state made the decision to give the project to the banks as they were believed to have the reach and infrastructure to create a scalable solution that the state did not have at the time.

“They solved a problem they themselves had [...] making it possible for customers to identify themselves digitally.”

— Anders Ygeman, Social Democratic Party

This market-based innovation was seen as efficient and effective in terms of the number of users. The Swedish banks were also more prepared than other parties in the field of identification, since the banking sector was already heavily regulated in terms of sensitive data.

“I don’t see any major risks in [private ownership] itself... We don’t just have a knife to our throat—we have it inside our throat every day—this has to work.”

— Niclas Westén, Nordea

This equipped the banks with the technical and legal know-how to develop BankID further.

“BankID is probably Europe’s best technical solution [...] the banks have a history [...] of handling sensitive information.”

— Khashayar Farmanbar, Social Democratic Party

However as time went by, several interviewees thought BankID's private ownership had grown more problematic as the infrastructure's role in society had become greater. The banks are now deciding who gets access outside of the financial system, into new fields such as social insurance, taxes and public health. The interviewees highlighted issues with this.

“Since it’s private, they can do whatever they want [...] but because they manage critical infrastructure, it becomes a challenge.”

— Cecilia Borglin, SviV

“We’re not against private solutions, but relying entirely on a private solution for such a central function – that’s a problem.”

— Martin Engman, SPF Seniorerna

In cases where users for various reasons lose their eID, they effectively get shut out from these services, a weakness in the system.

"Nowadays, BankID is more than a banking service, it is access to society. Losing access is losing your capacity as a citizen."

— Niclas Westén, Nordea

4.1.2 State Ownership

One of the questions during the interviews was whether the state should take control over BankID and its surrounding infrastructure. The effects of such an action was discussed, although most interviewees did not look favourably on it. Both in regards to its impact on innovation and the difficulties it would face in practice due to its integration with Swedish services.

"I don't see a state takeover of BankID as feasible. We don't live in Russia."

— Employee, Swedbank

"I absolutely don't believe in a state takeover [...] we wouldn't see the same pace of innovation."

— Anders Edlund, Getswish AB

Another worry among interviewees was about the short-term implications, were there to be change of leadership in these private organisations. While it might work well today, it could change.

"When you change CEOs [...] the level of ambition can fluctuate [...] it's more stable in a public agency."

— Ingrid Hasselström, Attorney for Data Protection

Therefore, adjustment of governance was discussed in order to guarantee resilience, social inclusion, and state accountability.

"A publicly owned infrastructure must be controlled according to public principles. That is inclusivity, transparency, and legally granted guarantees—not commercial interest alone."

— Krista Arplund, DIGG

4.1.3 Alternative solutions

Due to gaps with the existing model, some proposed developing a hybrid system in which a state-provided e-ID complements BankID instead of replacing it.

“I think the best model would be somewhere in between. So more than one, less than 14 authentication solutions.”

— Mikko Hiekkataipale, Nordea

Other interviewees instead proposed an overhaul to the current system, where the state controls who issues eID through public procurement, where one private actor is responsible on behalf of the government.

“And I actually think this was the worst mistake you could have made. It would have been better for the state to use public procurement of eID for the coming 5 years. If you don’t want it completely state owned and let the private sector take part, that’s fine.”

— Khashayar Farmanbar, Social Democratic Party

Most interviewees believed however on a state issued eID as an alternative. Then BankID would still be the widely used and highly trusted solution for consumers, while the state builds a complementary identity infrastructure centered on guarantees under law.

“It is not about competing with BankID. It is about providing people with choice—and a right to access.”

— Johan Henriksson, Freja eID Group AB

“A state alternative with solutions [...] where you may not have the same regulations that banks must follow—I think that would be a very good complement.”

— Employee, Swedbank

However, with the introduction of the state eID some interviewees argued that more measures would need to be taken, in order for the inclusion goals to be met and to improve the issues of digital exclusion in Sweden.

“All in all, state eID is great, but the fear is people will think the problem is solved – it isn’t.”

— Cecilia Borglin, SviV

4.2 Digital Exclusion

While BankID is generally seen as a national infrastructure for digitalization, in the interviews it was mentioned that important groups are left out and unable to access it. Exclusionary reasons for access were mentioned as stemming from structural and regulatory issues rather than individual ability. Excluded categories mentioned by interviewees included those with coordination numbers, Swedish residents abroad, and older citizens.

4.2.1 Coordination Numbers

One of the structural exclusion issues revolves around those who do not possess a Swedish personal number but rather a coordination number. Representatives from the banks do not currently view coordination numbers to be as secure as a personal number, and do not therefore grant them an eID.

“These individuals can’t properly prove their identity. It’s not their fault—it’s a societal problem.”

— Niclas Westén, Nordea

This presents an issue of access. The group with coordination numbers can still live and work in Sweden, but remains outside the Swedish digital society.

“Even if someone is eligible to be here and take part, they might never obtain a bank account—and if they don’t have one, they never get BankID. That’s a circular system.”

— Peter Göransson, Finance Sweden

“There are services which not everybody can use [...] Could somebody say this is discrimination?”

— Mikko Hiekkataipale, Nordea

Several interviewees pointed out that although BankID is technically reserved for those with personal numbers, these rules also exclude thousands of residents and citizens from necessary digital services. One example is Swedes born abroad.

“We have Swedes living overseas who are entitled to vote and pay taxes and who get benefits—and without a Swedish bank account and personal number, they’re invisible online.”

— Cecilia Borglin, SviV

Some however mentioned that while FrejaID is more inclusive than BankID in many instances, there are cases where both private eID parties fall short.

“BankID reaches many, but not all [...] there's still a large group who can't get a Freja ID either.”

— Robert Malm, Skatteverket

This exclusion is both rooted in infrastructure and regulation, since BankID is strongly integrated into the SPAR register (Statens personadressregister), made up of individuals who have previously been registered in Sweden. Despite having a personal number and bank account, bank regulations and risk profiles regularly bar those same users from being able to acquire BankID.

“And you’ve been able to stay in it for up to three years after moving abroad. After that, you’re removed from the register. And if you’re removed from that register, then BankID becomes a problem—because you’re no longer active in SPAR.”

— Cecilia Borglin, SviV

4.2.2 The Elderly and the Accessibility Gap

Aside from those excluded by documentation and registration, another group highlighted was older people, especially those less digitally capable. Interviewees pointed out that exclusion based on age is as much about design choices as technical capacity.

“We’ve had members who’ve lost their independence because they couldn’t cope with BankID. They couldn’t log in to healthcare, to the pharmacy, or even view their

pension.”

— Martin Engman, SPF Seniorerna

The digitalization process has been prominent in Sweden, with government departments, banks, and even municipalities replacing traditional physical access with digital portals, nearly all requiring BankID.

"BankID wasn't built to be universally accessible. We now see the result of that omission."

— Krista Arplund, DIGG

For older individuals living alone or those with disabilities, this becomes a problem when access to digital services is not considered a universal matter. In light of the upcoming Accessibility Act, which comes into force in June 2025, legal requirements are being introduced to ensure that e-identification services are designed for broad accessibility.

" the legal requirements of the European Accessibility Act are not tailored to specific impairments [...] It should be for everyone."

— Lisa Larsson Falk, PTS

Interviewees noted however that just making digital systems more accessible is not enough, and that physical services still need to be provided for those that for various reasons need it.

"It must always be possible to get things on paper—there have to be alternatives. Most people will still choose the digital option and digital mailboxes and so on. But you can't say that's the only option. If you do, you will exclude people."

— Martin Engman, SPF Seniorerna

4.3 Trust and Security

An ongoing theme throughout the interviews was the high trust in BankID as a service. Despite this, the interviewees still raised concerns regarding security and institutional robustness. On the one hand, BankID is given high credibility by its users, several interviewees referred to it as one of Sweden's most important digital tools. On the other hand, most of the interviewees noted the risk of concentrating the main eID infrastructure into private ownership as this introduces serious vulnerabilities.

4.3.1 Systemic Risk and Financial Fraud

One of the frequently expressed risks among the interviewees was regarding financial fraud with BankID. Interviewees highlighted that while being technically secure, the system is socially compromised.

"We view a new generation of fraud in that criminals take advantage of people's trust in BankID. It is not a technical flaw but a trust flaw."

— Niclas Westén, Nordea

The social issue means that consumers are targeted through phishing, and its consequences are becoming increasingly difficult, particularly among older citizens. Fraud has evolved and moved away from being a high-skill, technical crime, into common low-skill manipulation and abuse of consumers.

"Nowadays most of the fraud requires victim social manipulation. [...] About 90% of fraud has some kind of social manipulation."

— Mikko Hiekkataipale, Nordea

"Women fall for romance scams, and men fall for investment scams."

— Niclas Westén, Nordea

4.3.2 Division of Responsibility

In the interviews it was noted that the Swedish system offers little consumer protections when it comes to financial fraud conducted through an abuse of eID services.

"Stronger consumer protections. What responsibilities do I have when using an eID?"

— Krista Arplund, DIGG

Despite all these challenges, most interviewees noted that neither institutional rules nor regulation mechanisms have evolved to meet the changing security threats.

"The infrastructure is privately owned but its impact is public. But nobody actually owns the social implications."

— Ingrid Hasselström, Attorney for Data Protection

Interviewees contended that consumers tend to be held accountable in these fraud cases through user agreements while banks and service providers evade responsibility.

“Swedish consumers [...] do not enjoy legal protection against fraud in the same way.”

— Khashayar Farmanbar, Social Democratic Party

A worry is that BankID is treated as a national ID in practice but is not regulated as one. There is no assurance for availability, no legal requirement for universal access, and no single protocol for handling fraud cases.

“When a single system goes out, a significant portion of society comes to a halt. That is today's reality.”

— Peter Göransson, Finance Sweden

According to several interview participants, this is a gap in governance, particularly given BankID's use for accessing health, education, banking, and welfare services.

“If BankID doesn't work properly, or gets compromised through hacking, your life is literally at a standstill—and there is no obvious route to recovery.”

— Jon Fleck, Skatteverket

In spite of its structural defects, most interviewees highlighted that BankID is held in extremely high esteem by its users.

They don't even know that it isn't a state system. That's how confident they are in it.

— Krista Arplund, DIGG

This trust in the service has been built up over time, and still remains high simply because it has been working without any major disruptions, as mentioned by representatives from banks and service providers.

“BankID has never been compromised.”

— Peter Göransson, Finance Sweden

“We have an uptime of 99.99%. [...] We perform updates, security patches, repairs, replacements, fixes—all while it remains up and running.”

— Charlotte Pataky, Finansiell Id-Teknik Bid AB

Trust is both an advantage and disadvantage for BankID, it makes it an easy and accessible product to use, although such high levels of trust makes it hard to critique and change critically.

“They’ve solved the problem so well that people haven’t had any demand for anything else.”

— Anders Ygeman, Social Democratic Party

4.4 Market Dynamics

The position of BankID is not only attributed to technical success, but also in combination to historical policy choices, absence of regulatory action, and lack of competition within Sweden’s eID market. As interviewees pointed out, it has resulted in a system that is extremely efficient but increasingly monopolistic in nature and raises issues regarding entry barriers and user dependency. These issues become more visible when compared with the developing European context where more diverse and state-oriented designs come into place.

4.4.1 Monopolistic tendencies

Although BankID is praised in terms of its user numbers and service offerings, a number of interviewees cautioned that it operates as a de facto monopoly due to its integration into critical services. As described by interviewees, BankID's close integration with financial services, such as Swish, has solidified its stronghold with entry barriers for competitors.

“You have to be a bank customer even to use Swish [...] you need to have a BankID.”

— Anders Edlund, Getswish AB

This dynamic makes it difficult for competing e-ID providers such as FrejaID to acquire traction, even when developing additional features or working to be more inclusive.

“There is no competition. There is no time pressure, there is no innovation power”

— Johan Henriksson, Freja eID Group AB

Banks and service representatives oppose the integration accusations, saying that they do not have a regulatory duty to implement more than one e-ID.

“There is currently no requirement to have multiple e-identifications. So actors choose to integrate only BankID, because it’s easier.”

— Charlotte Pataky, Finansiell Id-Teknik Bid AB

“It’s not so easy for someone else to come in and say ‘we have a new solution, now you should replace your existing one.’”

— Peter Göransson, Finance Sweden

Still, these barriers have resulted in an absence of competition, which has given rise to complacency according to interviewees.

“It’s not like I can go elsewhere. That’s a general problem.”

— Ingrid Hasselström, Attorney for Data Protection

Furthermore, though the technology of BankID has evolved rapidly over time, various interviewees pointed out that innovation has now stagnated.

“We’re also approaching the point where their interests might no longer necessarily be to keep pushing this forward [...] while the state might actually need this to be much more developed.”

— Khashayar, Social Democratic Party

4.4.2 European Context

Throughout most interviews the Swedish solution was compared with other European nations. For example, countries like Estonia and Ukraine opted for a state directed eID-solution.

“But for example, in Ukraine and Estonia, there are no private players involved in e-identification at all. It’s only the state.”

— Khashayar Farmanbar, Social Democratic Party

In other countries, Finland being one example, a multiple platform solution has been adopted.

“In Finland, it’s a bit different because there are several identification solutions that are more equal. That creates a different market dynamic.”

— Mikko Hiekkataipale, Nordea

Throughout the interviews it was noted that despite its deficiencies, BankID is the world leading eID solution with higher user coverage and larger system integration than remaining European counterparts.

“In many other countries, everyone has a state eID – but no one uses it.”

— Krista Arplund, DIGG

“There’s no other country where e-identification is so integrated across all levels of society.”

— Charlotte Pataky, Finansiell Id-Teknik Bid AB

4.5 Future Reforms

A common theme throughout interviews is that Sweden’s existing e-ID system, while successful, could be seen as unsustainable over time. With BankID becoming increasingly used as infrastructure at a national level, many commented on the absence of proper regulation surrounding the service. Most interviewees were open to reform, while some underlined a need of a more resilient, diverse, and accountable identity system.

4.5.1 Initial Identification

Almost all interviewees agreed on the need for additional reform in terms of the very first stage of identification, namely initial identification (grundidentifiering).

“You can’t just issue a state e-identification. There has to be a whole ecosystem behind it, and someone must take responsibility for the initial identification.”

— Niclas Westén, Nordea

They also agreed that the party responsible for the initial identification should be the state.

“I believe initial identification should be done by public authorities, such as the Tax Agency or the Police.”

— Johan Henriksson, Freja eID Group AB

The critics mentioned that trusting financial organizations to do identity verification is problematic, as banks do so based on commercial risk calculations and not on a notion of public service missions.

“It’s the banks’ own risk assessments that determine who gets access to BankID, meaning that people correctly identified by government ID can still be denied.”

— Robert Malm, Skatteverket

On the other hand, proponents viewed state initial verification as a way to minimize risk and cost from the banking sector.

“However, I think it’s good that the state does the initial identification. The company thinks so too.”

— Charlotte Pataky, Finansiell Id-Teknik Bid AB

One path that holds promise is integrating eID with biometric authentication, for example using fingerprints in order to provide secure national identification. According to some interviewees, this will enhance safety and reduce risk of financial fraud and be compliant with EU eID wallet standards.

“So it would be preferred if you could connect it to biometrics. In order to increase security over time.”

— Anders Ygeman, Social Democratic Party

However, the world of biometrics is legally complex according to some interviewees, and would take time to successfully implement.

“Biometrics offer great opportunities technically but they’re quite heavily regulated.”

— Jon Fleck, Skatteverket

4.5.2 Regulation

Apart from technology, many of the interviewees stressed that e-ID markets require regulatory reform to correct structural shortcomings. Critics noted that barriers to entry do exist, mainly because of few incentives nor mandates for financial service providers to host alternative e-IDs to BankID.

“BankID is in a huge monopoly situation. Formally, there’s competition—practically, there’s none.”

— Martin Engman, SPF Seniorerna

“It’s clearly a natural monopoly [...] but then it must be regulated.”

— Fredrik af Malmberg, Entrepreneur

“There is such an incredible connection between BankID and Swish. [...] They’re building each other into the systems. This creates enormous lock-in effects and makes it practically impossible for others to compete.”

— Johan Henriksson, Freja eID Group AB

A suggested solution is to make public and commercial services accept more than one certified e-ID, and not default to BankID alone. However, this is not the case today.

“There is no requirement to accept more than one e-ID. And if you’ve already made the investment and integrated BankID, of course you’re not going to redo that.”

— Charlotte Pataky, Finansiell Id-Teknik Bid AB

Consumer protection became a principal concern as well, especially on issues of fraud and rights of access. Several interviewees proposed granting legal rights to users, including appeal rights in cases of e-ID denial, timely assistance, and access to alternatives during outages.

“We need user rights that treat digital identity the same way we treat electricity or water. It’s a basic service.”

— Ingrid Hasselström, Attorney for Data Protection

“There’s clearly a need for regulation so that more solutions can actually function.”

— Anders Ygeman, Social Democratic Party

5.0 Discussion

5.1 Our findings

The current eID market in Sweden is highly concentrated to one actor, which shows that BankID shows monopolistic tendencies today. The reasoning behind this market structure is partially due to the lack of government intervention and regulation, but that despite these

deficiencies the service BankID is world leading and highly secure. It was emphasized that BankID is a functional system which has held a prominent role in the digitalizing society. Despite this, concerns were raised on inclusivity issues, as well as public welfare. This was all in regards to having a large private company being responsible for eID in Sweden. It became a common view that digital exclusion is a result of governance decisions. By outsourcing identity provisioning to private actors, the Swedish system is driven by market logic rather than public interests. The general concern is whether BankID can continue to exist as a national eID system without a parallel state-backed option that guarantees universal access.

5.2 Ownership Structures

One of the more prevalent themes which were brought up during the interviews was the structurally exclusive eID situation which is occurring in Sweden. This was discussed as partially being a product of its ownership structure since the banks are able to choose their customers and the banks being the issuers of BankID. Throughout the interviews, it was revealed that the reason for today's system is due to the government outsourcing eID to a private actor in order to fill a gap which the state couldn't at the time. The creation of BankID was funded by the banks and because of its ownership structure the banks have made financial services dependent on BankID.

Despite this, many of the interviewees were positive about BankID as a service and the infrastructure that they have created. Almost all interviewees agreed that BankID is a secure and dependable system which has solved the eID gap in an effective and cost-efficient way. BankID was the only eID solution in Sweden for multiple years, which made it possible for them to develop and spread their product across different sectors and functions. This is what led BankID to grow into becoming an integral part of Sweden's digital society.

BankID has now evolved to include not only banking services but also welfare services, taxation, and online presence. This has in turn has led people who do not have access to the service, to be left out of the Swedish digital society. Consequently, a distinct part of the population experiences digital exclusion. Therefore, it was proposed that the motivations should move from private to public interests and not to be a commercial asset.

When it came to ownership structures, many of the interviewees were supportive towards the idea of a private / public partnership between the banks and the government, rather than a nationalization of BankID. It was discussed as an opportunity to increase the availability and inclusion in society, as well as to make the service compliant to EU-standards.

5.3 Digital Exclusion

Within the legal framework of today, the banks are within their rights to choose their own customers and in extension who gets to receive a BankID. With the current model, groups without a bank account and a personal number therefore become excluded from the eID network. These groups are residents with coordination numbers, Swedes abroad as well as elderly without enough technical knowledge.

With the rise of BankID and its prevalence in critical services, several interviewees have stressed that these services should not depend on commercial interests alone. The critics were united in their opinion of how BankID has become a form of public good, and that the focus must be to strive for inclusion of all citizens.

However, other interviewees noted the need for security when issuing eID. In cases of people without a personal number, it's not viewed as secure since their identity isn't strengthened. This is partially due to the strict banking rules which exist in relation to anti-money laundering and "Know Your Customer" (KYC) which the banks operate under. So, if a person can't strengthen their identity, the interviewees noted that the banks aren't allowed to give out an eID. Most respondents agreed that a state eID would be more inclusive and accessible due to their more democratic internal logics.

5.4 Trust and Security

Due to its success in implementation, BankID has gained high levels of trust among its users as well as their business partners, often being mistaken to be a state service in regards to stability and robustness. Despite this, critics raise future risks of having such an important infrastructure under private management. Despite it functioning well today, interviewees worried what the implications could be if a shift in leadership were to happen.

Furthermore, the interviewees highlighted the issues of dependence on a single eID service in Sweden. The risks associated with having limited options have been shown during

cyberattacks when the service BankID has been unavailable. These situations have led the Swedish digital society to go unavailable for multiple hours at a time. A backside of being a frontrunner of digitalization is that when it shuts down, it affects all parts of Swedish society.

Many interviewees highlighted the rise of eID fraud at the same pace of the integration of BankID. So while the technical digital infrastructure is sound and secure, social engineering and phishing attempts have left citizens vulnerable. With the legal system surrounding eID today, the majority of the responsibility is placed on the individual, particularly impacting elderly citizens. To battle these issues, opponents to the current system have called for stronger consumer protections and public regulation to BankID in order to ensure trust and safety for its users.

5.5 Market dynamics

In the interviews it was revealed that despite the Swedish eID market technically being open, it is structurally closed. BankID having above 99% coverage, and being the main eID service for all financial services, has made it grow into a natural monopoly. Interviewee's mentioned that it is close to impossible to penetrate the market since BankID will always be the largest one in Sweden. This is because the banks are able to choose who they want their client's to be as you need to have a bank account and a personal number in order to obtain a BankID.

BankID has been able to reach this market share partially from being the only actor on the eID market for many years, but especially through the creation of Swish. Swish, which is an instant payment solution also owned by the banks, only offers BankID as a way to sign transactions. In the interviews it was revealed that through this partnership between Swish and BankID, the user coverage of BankID increased significantly. This helped BankID gain further traction in Sweden, as the users of Swish first needed a BankID in order to send and receive payments.

It was discussed in the interviews that because of BankID's monopoly on the Swedish eID market, competition has become stifled. There are other eID services such as FrejaID, whose market share to a large part consists of users which BankID does not accept. This can for example be people with coordination numbers, or young people who use it for their sports teams. BankID has a secure and functioning infrastructure which has contributed to its market dominance but the factor which makes it difficult for competitors to enter the market is the

fact that the banks only accept BankID. They have been able to create a market with limited regulations in terms of inclusion, consumer welfare as well as competition.

The Swedish system also compares uniquely to other European countries where the public relies on state infrastructures in order to issue and manage eID for all. Whereas in Sweden the public relies on a group of banks to issue and manage eID services for most. Sweden is a global leader in usability and user coverage but instead lags behind in terms of inclusion and diversity of eID providers.

Despite the problems with BankID when it comes to inclusion and accessibility, interviewees pointed out the fact that there is no option for other eID providers. BankID works as the base of the eID system in Sweden and other actors can only join as a complement. Currently there is not a freedom of choice when it comes to choosing which eID a person wants as you need BankID for all online financial services.

5.6 Future reforms

Throughout the interviews there was a wide agreement towards future reforms in the context of eID's in Sweden. The market has been able to grow without state intervention, and working on the banking sector's own standards. Most interviewees were opposed to the idea of nationalizing BankID but rather saw the state eID service as complementary solution.

With the introduction of a state issued eID the interviewees saw it as a complementary eID which could be helpful to fill the gaps in the market. It will be useful for the groups which have previously gone without BankID or other eID providers because of gaps in the system. Despite this most interviewees didn't see it as being a prominent solution with the way the eID market looks today. As BankID has a monopoly on the financial market the interviewees stated that there are low expectations about how much traction the state's option will actually get. Instead there was a lot of support for using it as a means to do the initial identification but that other eID's could then use the verified identity to confirm its users.

Many interviewees also discussed the integration of biometrics into the issuing of eIDs as this would increase the security of the users. If integrating biometrics into the state issued eID the possibility of integrating previously excluded groups into the eID market would be made

easier. Since one of the concerns the bank has had is to make sure that people only have one BankID and with biometrics that would be possible.

Many interviewees also called for the introduction of more regulations when it comes to eID services, specifically in the cases of inclusion as well as consumer welfare. The interviewees asked for the market to be regulated towards becoming more open and to give users a greater choice in eID providers both for public, but also for private services. Since BankID is the biggest and most used eID service, it's also the most commonly used and accepted eID, both for banking but also for welfare services such as healthcare. By adding new laws and regulations regarding which eIDs are accepted it would improve the issue of digital exclusion in Sweden.

The interviewees also brought up the issue of consumer welfare when it comes to fraud as most of the responsibility lies on the consumer rather than the bank. If more regulations would be added in terms of who is responsible in cases of fraud banks would have to make the systems more secure for the users. Especially for marginalized groups such as the elderly who are more often than others the victims of "social fraud".

6.0 Conclusion

To conclude, there are risks with private ownership of critical societal infrastructures. The most prominent risks which were identified and reiterated throughout the interviews were focused on market dynamics and private ownership, as well as security, dependency and inclusion.

The market dynamics of the eID market in Sweden shows that BankID currently holds a monopoly position, with high entry barriers and no significant competition. The monopolistic situation we have, is rooted in the fact that there has previously not been a demand nor need for an alternative solution. This was due to BankID not having the same market position as it has today. Few could have predicted the immense growth and integration of BankID, and due to the sheer speed, regulation has not been able to keep up. The previous decade has contributed to reshaping the eID market and by that BankID's position in society. It has gone

from working as a complement to physical identifications, to instead replacing it to a certain extent.

A recurring theme from the interviews was the tensions between the commercial logics of the private actors against the public service ideals in Sweden. The banks make decisions with BankID based on their internal risk assessments rather than universal digital inclusion. This highlights a clear limitation on private ownership, where its goals do not align with the needs of the individuals wanting access to the service. So while private actors do excel in efficiency and innovation due to their internal logics, their incentives do not grant protection for all citizens.

The concentration of BankID on the market has led to a societal dependence on the service. The risks associated with a system shut down have been shown to be significant as there are no other options. Therefore, when the system goes out the access to financial as well as public services goes out as well. This reliance on a single system could be voided if there were more actors on the market in order to alleviate the risks of a complete system shut down.

Another consequence from the monopolistic tendencies of BankID is digital exclusion. Originally BankID was formed as a way for the banks to verify their own customers. These rules still apply today, even though the service has grown beyond the banks themselves. This, alongside a lack of government regulation and intervention means that the banks are well within their rights to do so. Regardless, this has led some people to go without a BankID and in turn not being granted access to vital parts of Swedish digital society.

Furthermore, the risk of accountability in terms of who is responsible when issues occur in settings such as fraud and phishing, is growing. To reiterate, in line with the growth and integration of BankID, criminals have adapted too. This has led to a significant rise in social fraud targeting elderly and less digitally capable citizens. Which is yet another reason to further regulations within the eID sector.

An overarching theme and discussion was the relation of the ownership structure of BankID. Which in many aspects is a success story and a leader among its European counterparts. Despite this, the tensions between private and public logics continue to create issues. A

hybrid model between the state eID and BankID is favoured in order to combine these competing logics.

Lastly, the risks associated with private ownership of a vital identification service are generally outweighed by the benefits which BankID has provided Swedish society. However, going forward, BankID needs to be regarded as a critical public infrastructure and needs to be governed accordingly.

7.0 Limitations and Further Research

The limitations of this study is that the interviews conducted with public officials as well as former and current lawmakers was mostly in the opposition of the current government. This in turn could skew the results of the interviews since they couldn't defend themselves on this topic. Furthermore, all of the interviews were conducted with experts within the eID sector and not with private people which could have led to perspectives and insights being limited. Another limitation is the fact that the government issued eID has not yet been formalized and thus the consequences are purely hypothetical.

A future study after the release of the government issued eID will bring further depth to the topic. As well as looking further into digital exclusion within highly digitized societies in relation to eID services. By interviewing impacted groups researchers would be able to obtain a more nuanced view and greater scope of the issue.

8.0 Appendix

Intervju frågor - Finansiell ID-Teknik

1. Kan du kort beskriva din roll och din bakgrund?
2. Vad BankID är för typ av tjänst och hur kom den till?
 - Var det på initiativ av Skatteverket?
3. Hur ser du på marknaden för e-legitimation i Sverige idag? Hur ser du skillnad mellan situationen i Sverige gentemot resten av Europa?
4. Hur ser ni på BankIDs dominans i relation till konkurrens och innovation inom branschen – och hur påverkar det er position och utveckling?
5. Vad kostar en verifiering i BankID-appen för ett företag?
 - Är det samma kostnad för alla företag?
6. Hur ser er ägarstruktur ut inom Finansiell ID-teknik?
 - Vad är din syn på att BankID ägs av storbankerna?
 - Ser du några potentiella problem med det? Fördelar?
7. Tror du att en statligt kontrollerad e-legitimation skulle vara bättre eller sämre för samhället i stort? Varför / varför inte?
8. Vad skulle en statlig övertagning av BankID innebära för innovation och konkurrens på eID-marknaden?
9. Hur påverkar ägandestrukturen tillit bland användare, tror du? Skulle en statlig tjänst skapa mer eller mindre förtroende, varför / varför inte?
10. Om staten skulle ta över BankID, vad skulle det innebära för konsumenten och marknaden?
11. BankID kräver svenskt personnummer och bankkonto hos vissa banker. Hur ser du på den typen av krav ur ett inkluderings- och jämlikhetsperspektiv?
12. Hur arbetar ni med att göra e-legitimation tillgängligt för grupper som annars riskerar digitalt utanförskap (t.ex. äldre, nyanlända)?
 - Anser ni er själva vara ett tryggt och inkluderande eID?
13. Hur arbetar ni med datasäkerhet och personlig integritet på Finansiell ID-teknik?
 - Säkerhet med en samhällsfunktion beroende av en aktör (ex swish)

14. Hur behandlar ni era kunders personliga data och hur behandlar ni känslig data från användare?
 - Hur länge lagrar ni användardata?
 - Hur skiljer ni på olika typer av data?
 - Vad använder ni datan till?
15. Hur ser du på kritiken mot datainsamling av personlig information i sammanhanget med e-legitimationer?
16. Har ni varit i kontakt med DIGG eller regeringskansliet kring skapandet av en statlig e-legitimation?
17. Om du fick ge ett råd till svenska staten i frågan om kontroll och utveckling av e-legitimation tjänster – vad skulle det vara?
18. Finns det något du tycker saknas i eID-debatten som du vill lyfta?

Intervjufrågor - Swedbank

1. Kan du kort beskriva din roll idag och din bakgrund?
2. Hur länge har du arbetat med frågor som rör eID eller digital identifiering?
3. Hur ser du på marknaden för e-legitimation i Sverige idag?
 - a. Hur fungerade inloggning på Swedbank innan BankID?
 - b. Hur blev ni en av de största ägarna i Finansiell ID-teknik när företaget kom till?
 - c. Vad ser du för skillnad mellan användandet av eID i Sverige gentemot andra europeiska länder?
4. Ser ni några risker med den nuvarande modellen där ett privat företag ansvarar för eID i Sverige?
 - a. Vilka faktorer tror du bidrog till BankIDs omfattning i Sverige? Både vad gäller antal privata användare samt organisationer.
5. Tror ni att det statliga eID-alternativet kommer vara bättre eller sämre för samhället i stort? Varför (socialt/ekonomiskt)?

- a. Under pågående arbete av den statliga e-legitimationen, har ni blivit ombedda att rådge i processen?
6. Vad skulle en statlig övertagning av BankID kunna innebära för innovation och konkurrens på eID-marknaden?
7. BankID kräver svenskt personnummer och bankkonto hos vissa banker. Hur ser du på den typen av krav ur ett inkludering- och jämlikhetsperspektiv?
 - a. Tror du att en statlig aktör skulle vara mer inkluderande än en privat aktör i detta? Varför / Varför inte?
 - b. Vilka lösningar eller förbättringar tycker du behövs för att minska det digitala utanförskapet?
 - c. Hur arbetar ni med att göra e-legitimation tillgängligt för grupper som annars riskerar digitalt utanförskap (t.ex. äldre,)?
8. Hur ser du på säkerhetsutmaningarna med e-legitimationer idag, exempelvis cybersäkerhet och finansiella bedrägerier?
 - a. Idag bär individen till större del ansvaret vid bedrägerier. Anser du att det är rätt eller bör ansvarsfördelningen ändras?
9. Hur arbetar ni med datasäkerhet och personlig integritet på Swedbank?
 - a. Hur länge lagrar ni datan som ni får ta del av ifrån BankID användning?
 - b. Vad använder ni datan till?
10. Om du fick ge ett råd till svenska staten i frågan om kontroll och utveckling av e-legitimation tjänster – vad skulle det vara?
11. Finns det något du tycker saknas i eID-debatten som du vill lyfta?

References

- Ahlstrom, D., Bruton, G.D., Peng, M.W., Stan, C. and Xu, K., 2015. State-owned enterprises around the world as hybrid organizations. *Academy of Management Perspectives*, 29(1), 92–114. <https://www.jstor.org/stable/43822076>. (Accessed 25/04/02)
- Anand N, Brass I. Responsible innovation for digital identity systems. *Data & Policy*. 2021, 3, e35. <https://doi.org/10.1017/dap.2021.35> (Accessed 25/04/21)
- BankID (n.d.) 'Historia', BankID. <https://www.bankid.com/om-oss/historia> (Accessed 25/03/11).
- BankID. (2023). *Hållbarhetsrapport*. Finansiell ID-Teknik BID AB. https://www.bankid.com/assets/bankid/files/hallbarhetsrapport-2023_webb.pdf (Accessed 25/04/06)
- Bell et al. (2022) *Business Research Methods*. Oxford: Oxford University Press
- Bazarhanova, A., Yli-Huumo, J. & Smolander, K. (2020). From platform dominance to weakened ownership: how external regulation changed Finnish e-identification. *Electron Markets* 30, 525–538. <https://doi.org/10.1007/s12525-019-00331-4>.
- BESHAROV, M. L., & SMITH, W. K. (2014). Multiple Institutional Logics in Organizations: Explaining Their Varied Nature and Implications. *The Academy of Management Review*, 39(3), 364–381. <http://www.jstor.org/stable/43699249> (Accessed at 25/04/23)
- Blomgren, L. and Czekierda, H. (2023) *Statlig elektronisk identifiering i en marknadsdriven försörjningsmodell: om dess förutsättningar och utmaningar i Sverige*, Master's thesis, Linköping University, Department of Management and Engineering. <https://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-197709> (Accessed 25/03/11).
- Cambridge University Press. (n.d.). *Privatization*. In *Cambridge Dictionary* (Accessed: April 7, 2025, from <https://dictionary.cambridge.org/dictionary/english/privatization>
- Caputa, W., Krawczyk-Sokołowska, I., Paździor, A., & Sozanskyy, L. (2025). Digital thinking as a navigator of the progressive digitalization process in an enterprise.

Technological Forecasting and Social Change, 210, 123862.

<https://doi.org/10.1016/j.techfore.2024.123862>

Cardinali, P. G., & De Giovanni, P. (2022). Responsible digitalization through digital technologies and green practices. *Corporate Social Responsibility and Environmental Management*, 29(4), 984–995. <https://doi.org/10.1002/csr.2249>

Casasnovas, G. (2022). When States Build Markets: Policy support as a double-edged sword in the UK social investment market. *Organization Studies*, 44(2), 229-252. <https://doi.org/10.1177/01708406221080133> (Accessed 25/05/14)

Debattredaktionen. (2023, March 8). Debatt: Bank-ID:s nya krav ökar utanförskapet – men problemen kunde lösts enklare för länge sedan. *Dagens Industri*. <https://www.di.se/debatt/debatt-bank-id-s-nya-krav-okar-utanforskapet-men-problemen-kunde-losts-enklare-for-lange-sedan/> (Accessed 25/05/15)

De Hert, P. (2008). Identity management of e-ID, privacy and security in Europe: A human rights view. *Information Security Technical Report*, 13(2), 71–75. <https://doi.org/10.1016/j.istr.2008.07.001>

DIGG – Myndigheten för digital förvaltning. (2023). *En säker och tillgänglig statlig e-legitimation: Slutredovisning av regeringsuppdrag* (I2022/01335). <https://www.digg.se/publikationer/rapporter/2023/en-saker-och-tillganglig-statlig-e-legitimation> (Accessed 25/05/17)

Droege, C. et al. (2022) ‘Inter-firm Coopetition and credit ratings: How the debt market reacts to inter-firm coopetition’, *British Journal of Management*, 34(4), 2093–2115. <https://doi-org.ezp.sub.su.se/10.1111/1467-8551.12689>.

Fewer, T.J., George, G., Lazzarini, S., McGahan, A.M. and Puranam, P., 2024. Partnering for grand challenges: A review of organizational design considerations in public–private collaborations. *Journal of Management*, 50(1), 10–40.

Finansinspektionen. (2022). *Förstärkt digital motståndskraft hos företag i den finansiella sektorn*. <https://www.fi.se/sv/publicerat/rapporter/rapporter/2022/forstarkt-digital-motstandskraft-hos-foretag-i-den-finansiella-sektorn/> (Accessed: 25/03/20)

Furusten, Staffan (2023). *Institutional theory and organizational change*. Second edition
Cheltenham: Edward Elgar Publishing

Gao, G. Y., Zhou, K. Z., & Zhao, H. (2016). State Ownership and Firm Innovation in China: An Integrated View of Institutional and Efficiency Logics. *Administrative Science Quarterly*, 62(2), 375-404. <https://doi.org/10.1177/0001839216674457> (Accessed at 14/05/25)

Gisser, M., Allen, M.S. (2001). One Monopoly Is Better Than Two: Antitrust Policy and Microsoft. *Review of Industrial Organization* 19, 211–225 .
<https://doi-org.ezp.sub.su.se/10.1023/A:1011100703677>

Godfrey, R., Brewis, J., Grady, J., & Grocott, C. (2013). The private military industry and neoliberal imperialism: Mapping the terrain. *Organization*, 21(1), 106-125.
<https://doi.org/10.1177/1350508412470731> (Accessed 25/05/28)

Goodstein, J. D., & Velamuri, S. R. (2009). States, Power, Legitimacy, and Maintaining Institutional Control: The Battle for Private Sector Telecommunication Services in Zimbabwe. *Organization Studies*, 30(5), 489-508. <https://doi.org/10.1177/0170840609104395>
(Accesses 25/05/28)

Gong, Y., & Yang, Y. (2025). Analyzing digital government partnerships: An institutional logics perspective. *Government Information Quarterly*, 42(1), 101987.
<https://doi.org/10.1016/j.giq.2024.101987>

Greenwood, R., Deephouse, D. L., & Li, S. X. (2007). Ownership and Performance of Professional Service Firms. *Organization Studies*, 28(2), 219-238.
<https://doi.org/10.1177/0170840606067992> (Accessed 25/05/14)

Grönlund, Å. (2010). *Electronic identity management in Sweden: governance of a market approach*. IDIS 3, 195–211 . <https://doi.org/10.1007/s12394-010-0043-1> (Accessed 25/03/09)

Guo, X., Song, X., Dou, B. et al. (2023). Can digital transformation of the enterprise break the monopoly?. *Pers Ubiquit Comput* 27, 1629–1642
<https://doi-org.ezp.sub.su.se/10.1007/s00779-022-01666-0>.

Gupta, A. (2023). Digitalisation of the Welfare State: Lessons for the Emerging Economies. *Indian Journal of Public Administration*, 69(2), 453-467.

<https://doi.org/10.1177/00195561231153903> (Original work published 2023)

Gur, F.A. and Greckhamer, T. (2025) 'Coopetition in practice: Managerial practices for navigating cooperation with competitors', *European Management Journal*.

<https://doi.org/10.1016/j.emj.2025.01.003>.

Hanafizadeh, P., & Marjaie, S. (2021). Exploring banking business model types: A cognitive view. *Digital Business*, 1(2), 100012. <https://doi.org/10.1016/j.digbus.2021.100012>

Hargrave, T.J., Pacheco, D.F. & York, J.G., 2016. *Converging winds: Logic hybridization in the Colorado wind energy field*. *The Academy of Management Journal*, 59(2), 579–610.

Hermansson, Å., & Lindkvist, J. (2022). *BankID - ett verktyg för frihet eller förtryck? En studie om det digitala utanförskapet som effekt av arbetet för digital inkludering* [Bachelor's thesis, Lund University]. Lund University Publications.

Hicks, J. (2020). Digital ID capitalism: how emerging economies are re-inventing digital capitalism. *Contemporary Politics*, 26(3), 330-350.

<https://doi.org/10.1080/13569775.2020.1751377>

Hoffmann, W. et al. (2018a) 'The interplay of competition and Cooperation', *Strategic Management Journal*, 39(12), 3033–3052. <https://doi-org.ezp.sub.su.se/10.1002/smj.2965>.

HUSZ O. Bank Identity: Banks, ID Cards, and the Emergence of a Financial Identification Society in Sweden. *Enterprise & Society*. 2018, 19(2), 391-429.

<https://doi.org/10.1017/eso.2017.43>

Inoue, C., 2020. Election cycles and organizations: How politics shapes the performance of state-owned enterprises over time. *Administrative Science Quarterly*, 65(3), 677–709.

Jay, J., 2013. Navigating paradox as a mechanism of change and innovation in hybrid organizations. *The Academy of Management Journal*, 56(1), 137–159.

<https://www.jstor.org/stable/23414348>

Jernsten, R. (2024) En säker och tillgänglig statlig e-legitimation, SOU 2023:61, Konkurrensverket.

<https://www.regeringen.se/contentassets/432e635bdd964101a297164b2b003945/konkurrensverket.pdf> (Accessed 25/04/10)

JIA, Nan. HUANG, Kenneth G. & ZHANG, Cyndi Man. Public governance, corporate governance, and firm innovation: An examination of state-owned enterprises. (2019). *Academy of Management Journal*. 62(1), 220-247.
https://ink.library.smu.edu.sg/lkcsb_research/6549

Kaharevic, A., and Skill, K. (2021) 'Digital Citizenship in a Swedish Marginalised Neighbourhood: Different attitudes to and experiences of digital inclusion and eHealth', *JeDEM - eJournal of eDemocracy and Open Government*, 13(1), 1-22.
<https://jedem.org/index.php/jedem/article/view/637/509> (Accessed: 25/03/11).

Lythreath, S., Kumar Singh, S., & El-Kassar, A. (2022). The digital divide: A review and future research agenda. *Technological Forecasting and Social Change*, 175, 121359.
<https://doi.org/10.1016/j.techfore.2021.121359>

Meyer, J. & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *The American Journal of Sociology*, 83(2), 340-363.
<http://www.jstor.org/stable/2778293> (Accessed 25/05/03)

Mancuso, I., Messeni Petruzzelli, A., Panniello, U., & Vaia, G. (2025). Business model innovation in the banking sector: How digital technologies transform innovation drivers in value mechanisms. *Journal of Engineering and Technology Management*, 75, 101858.
<https://doi.org/10.1016/j.jengtecman.2024.101858>

Mathias, B.D., Solomon, S.J. and Hutto, H. (2023) 'Passing the torch: Exploring how tradition and innovation influence coopetition among street performers', *Journal of Management Studies* [Preprint]. <https://doi-org.ezp.sub.su.se/10.1111/joms.12995>.

Meggison, W. L., & Netter, J. M. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature*, 39(2), 321–389.
<https://doi.org/10.1257/jel.39.2.321>

Nordiskt Samarbete (no date). Svenskt Personnummer. Nordiskt samarbete.

<https://www.norden.org/sv/info-norden/svenskt-personnummer> (Accessed 25/05/27)

Ogden, S. G., & Watson, R. (1999). Corporate performance and stakeholder management: Balancing shareholder and customer interests in the privatized water industry. *Academy of Management Journal*, 42(5), 526–538. <https://doi.org/10.2307/256918>

Reay, T. & Hinings, B. (2009). Managing the Rivalry of Competing Institutional Logics. *Organization Studies*, 30(6), 629-652.

<https://journals-sagepub-com.ezp.sub.su.se/doi/10.1177/0170840609104803> (Accessed 25/04/23)

Riksbanken. (2019). *Remissvar om betänkandet Ett säkert statligt ID-kort med e-legitimation (SOU 2019:14)*.

<https://www.riksbank.se/globalassets/media/remisser/riksbankens-remissvar/svenska/2019/remissvar-om-betankandet-ett-sakert-statligt-id-kort-med-e-legitimation.pdf> (Accessed 25/04/20)

Ritala, P. (2011) ‘Coopetition strategy – when is it successful? empirical evidence on innovation and market performance’, *British Journal of Management*, 23(3), 307–324. <https://doi.org/10.1111/j.1467-8551.2011.00741.x>.

Rissanen, T. (2010). Electronic identity in Finland: ID cards vs. bank IDs. *Identity in the Information Society*, 3, 175–194. <https://doi.org/10.1007/s12394-010-0049-8>

Scholl, H. J., & Scholl, M. C. (2014). Smart governance: A roadmap for research and practice. In *iConference 2014 Proceedings*, 163–176. iSchools. <https://doi.org/10.9776/14060>

Silvestrov, S., Starovoitov, V., Firsov, D., & Krupnov, Y. (2022). Control of platform monopolization in the digital economy: The implication of open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 66. <https://doi.org/10.3390/joitmc8020066>

Skoruks, D. (2014). Complex econometric model of monopolization process evaluation. *Procedia - Social and Behavioral Sciences*, 110, 992–1001. <https://doi.org/10.1016/j.sbspro.2013.12.863>

SOU, 2023, Utredningen om säker och tillgänglig digital identitet (2023) '*En säker och tillgänglig statlig e-legitimation*'.

<https://www.regeringen.se/contentassets/a5930bae77714ecc9e9a7b51e9f240ae/en-saker-och-tillganglig-statlig-e-legitimation-sou-202361.pdf> (Accessed 25/03/19).

Stadtler, L., & Van Wassenhove, L. N. (2016). Coopetition as a paradox: Integrative approaches in a multi-company, cross-sector partnership. *Organization Studies*, 37(5), 655–685. <https://doi.org/10.1177/0170840615622066>

Swish. (n.d.). *Skaffa Swish*. Getswish AB.

<https://www.swish.nu/faq/private?category=get-swish> (Accessed 25/03/19)

Söderström, F. (2016). *Introducing public sector eIDs: The power of actors' translations and institutional barriers* (Doctoral thesis). Linköping University, Department of Management and Engineering. <https://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-132737>

Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. *Big Data & Society*, 4(2), 1–14. <https://doi.org/10.1177/2053951717736335>

Teece, D. (2010). Business Models, Business Strategy and Innovation, Long Range Planning, 43(3), 172-194. <https://doi.org/10.1016/j.lrp.2009.07.003>.

Thornton, P. H., & Ocasio, W. (1999). Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958– 1990. *American Journal of Sociology*, 105(3), 801–843. <https://doi.org/10.1086/210361>

Thornton, Patricia & Ocasio, William. (2008). Institutional Logics. *The SAGE Handbook of Organizational Institutionalism*. Publisher: Sage Publications Ltd. (Accessed 25/04/23)

Thornton, P.H., Lounsbury, M. & Ocasio, W., 2012. *The institutional logics perspective: A new approach to culture, structure and process*. Oxford: Oxford University Press. [online] <https://doi.org/10.1093/acprof:oso/9780199601936.001.0001>

TV4 Nyheterna (2025) SWISHS dominans ifrågasätts Efter Störningar, TV4 AB.
<https://www.tv4.se/artikel/tt-250526-swishstorning1-0a9d68c9/swishs-dominans-ifragasatts-efter-storningar> (Accessed 25/05/26)

Uchida, D. (2021). The Wheel Comes Full Circle? An Integrated View of Organizational Responses to Institutional Pressures. *Journal of Management*, 49(2), 771-807.
<https://doi.org/10.1177/01492063211057845> (Accesses 25/05/28)

van Dijck, J., & Jacobs, B. (2019). Electronic identity services as sociotechnical and political-economic constructs. *New Media & Society*, 22(5), 896-914.
<https://doi.org/10.1177/1461444819872537> (Original work published 2020)

Star, S. L. (2020). *Infrastructure and ethnographic practice: Working on the fringes*. In B. Jordan (Ed.), *Advancing ethnography in corporate environments: Challenges and emerging opportunities*, 167–182. Oxford University Press.
<https://doi.org/10.1093/oso/9780190284720.003.0011>

Witt, H. (2023). Betänkandet Staten och betalningarna (SOU 2023:16), Konkurrensverket,
<https://www.regeringen.se/contentassets/787d57e3f9664794bff96da908317bc6/konkurrensverket.pdf> (Accessed 25/04/29)

Wolf, C. (2009). Does ownership matter? The performance and efficiency of state oil vs. private oil (1987–2006). *Energy Policy*. 37(7), 2642–2652.
<https://doi.org/10.1016/j.enpol.2009.02.041>

Zuboff, S. (2022). Surveillance capitalism or democracy? The death match of institutional orders. *Philosophy & Social Criticism*. <https://doi.org/10.1177/0191453722108664055>