 State-centred-collaborative-governance: A “new” governance model for ICT success

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Abstract: This article proposes a new concept—state-centered-collaborative-governance—that describes and explains the ICT governance model and its success in Sweden. As the role of the state lies at the center of dispute for the different governance models, this article revisits the historical government’s role in various industrial revolutions as well as tracking the role played by the Swedish government and that of other stakeholders in its ICT trajectory. By drawing attention to Sweden’s ICT success and the governance model best represents its experience, this article argues that (1) because of the nature and impact of the sector, there is no need to shun active state involvement and (2) successful ICT governance can be achieved from state-centered-collaborative governance. As the state-centered-collaborative-governance model bears resemblance with meta-governance—one of the latest governance terms that emerged in the public governance literature, the article compares these two models and discusses the shortcomings of meta-governance. In conclusion, this article proposes that the state-centered-collaborative-governance model be accepted as a “new” governance model and one governance model that can lead to the success of ICT and other sectors.

Subjects: Social & Political Theory; Genetics - Sociology; Research

Keywords: ICT governance; governance model; meta-governance; network governance; technological revolution; Sweden

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1. Introduction

Various governance models have emerged in public administration literature throughout history. Resembling Keynesian’s model that advocates a “hands-on” government, the hierarchical governance model refers to top-down formalistic governance through enforceable law, regulation instruction, intervention and close supervision. Since the 1970s, discussions on “governance without government” (Rhodes, 1997) has sparked a transition from this hierarchical governance to market-orientated governance, aligned with the neo-liberalism ideologies endorsed by supranational agencies (e.g., the UN, the World Bank and IMF) and other New Public Management (NPM) experts. Market governance emphasizes deregulation, privatisation, competition, minimum state involvement and prudent government. In this model of governance, the role of the state changes from control to steering, e.g., setting goals and priorities (Peters & Pierre, 1998) with tools such as incentives and education (C. M. Hall, 2011). Soon after, the notion of governance network took hold and is disseminated “quickly across the social science disciplines” (Sørensen & Torfing, 2005, p. 200). Responding to a failure by both market and hierarchical coordination, increasing differentiation within the state, diminished capacity of the state, a blurred line between the state and society, as well as societial and technological development (Peters & Pierre, 1998; Provan & Kenis, 2008; Sørensen, 2006), network governance focuses on self-regulated networks where decisions are “neither enforced by legal measures, economic incentives, nor by normative control” (Sørensen & Torfing, 2005, p. 202). One key assumption in network governance is that participation in networks is equal footing, voluntary, independent, involving negotiation and bargaining, coordination, and relies heavily on trust and reciprocity (Sørensen & Torfing, 2005). In this model, the state doesn’t directly fulfil functions or offer services, but shape the conditions of networks, facilitate exchanges or information flow, identify where actions are required and create new networks if existing doesn’t fulfil certain function sufficiently (Dunn-Cavelty & Suter, 2009; Keast, 2022). These governance models originate in the analysis of economics but are increasingly routinely used to examine spheres such as technological, social and environmental. Table 1 summarises the main period and characteristics of these three governance models.

For the technological sphere, prevalence and acceptance of governance models in this domain follow a similar trajectory although greater state involvement is more readily accepted. For example, state involvement was described as one key characteristic by many historians during the first two waves of industrial revolutions (Cunningham, 1921; Howe, 2016; Weller & Bawden, 2005). During the third ICT revolution, states’ role has again been far from minimum, especially during the early days of telecommunication development. High research and development (R&D) costs are said to have resulted in a high market concentration of large, often government-controlled, national monopolies in the early days (Giertz et al., 2015). In the 1960s, many of these national monopolies were deregulated and privatised following the increasing popularity of the neo-liberalism discourse. Since the mid-1990s, amidst increased discussions of the role of ICT in network governance, discussion on network governance in ICT governance also emerged (Ariño & De La Torre, 1998; Christensen et al., 1998; Khanna, 1998; Madhok & Tallman, 1998). This article proposes an alternative governance model to explain ICT governance, considering particularly the growing interdependency and complexity as well as ICT’s impact on other spheres. Against such context, governments are often called to be more and directly involved and therefore play a much bigger role in ICT governance. In the case this article analyses—Sweden, the prevailing belief is also that Sweden “would hopelessly lag in the information society’s global competition” if the state did not take its responsibility (Hall, 2008, p. 36). In fact, analysis of the Swedish ICT trajectory (e.g., Eskelinen et al., 2008) tends to describe it as state-centric and interventionistic (Lorentzon, 2007). This article interrogates ICT development and state role in Sweden more closely. By analysing Sweden’s ICT success and its governance model, this article argues that (1) because of the nature and impact of ICT, state stronger involvement in this sector is expected. This is similar to during other waves of the industrial revolution.(2) What best characterise the Swedish ICT experience is not any of the three governance models, but state-centered-collaborative-governance.
Table 1. Hierarchical, market and network governance models

|                      | Hierarchical | Market-orientated | Network                        |
|----------------------|--------------|-------------------|--------------------------------|
| Time period          | Pre-1970    | Since 1970s       | Since 1980s                    |
| Key characteristic   | Top-down    | Bottom-up         | Interdependence                |
| Focus                | • Strong state | • Deregulation     | • Public and private partnership and coalition |
|                      | • Top-down formalistic governance | • Privatisation and minimum state involvement | • Self-regulation |
|                      | • Close supervision and tight control, often through bureaucratic structures, laws or regulation | • Prudent government | |
|                      | • From control to steering through goals setting or incentives | • From control to steering through goals setting or incentives | |
| Assumptions          | • Strong state governance is desirable | • Strong state is undesirable and unnecessary | • State is hollowed out |
|                      | • State is capable to govern as required | | • Partnership and self-regulation are desirable |
|                      |               |                   | • Equal participation |
| In response to       | • Hierarchical governance failure | • Increasing popularity of neo-liberalism | • Market governance failure |
|                      | • Increasing popularity of New Public Management movement | • Increasing popularity of New Public Management movement | • Increasing interaction between state and society |
|                      |             |                   | • Technology accelerates interdependence |

As the role of the state lies at the centre of dispute for the three governance models, this article starts with a revisit of the historical government’s role in earlier technological revolutions as well as the ICT revolution. It then analyses Sweden’s experience, the role of the Swedish government as well as that of other stakeholders to distil the essence of its governance model. It concludes that neither hands-on, hands-off, nor network governance captures Sweden’s ICT success well. Instead, a state-centred-collaborative-governance model captures Sweden’s ICT success the best. As this state-centred-collaborative-governance model bears resemblance with meta-governance—one of the latest governance terms emerged in the public governance literature, the article then compares these two models. This article concludes by proposing that the state-centred-collaborative-governance model be accepted as a “new” governance model and one governance model that can lead to the success of ICT and other sectors.

2. State’s role in first to third technological revolutions

The first and second technological revolutions were driven by steam engines, electricity and oil, respectively. They both preceded the post-World War II Keynesian model and post-Keynes neoliberalism. Despite popular perceptions that free trade had driven Britain’s rise during this period, however, the majority of contemporary historians agree that neoliberalism doesn’t capture this part of history well (Amery, 1908; Ashworth, 2014; Cain, 2002; Mokyr, 2003, 2005). Instead, the protectionist approach was pervasive (Cunningham, 1921; Howe, 2016; Weller & Bawden, 2005) and “free trade was a consequence, not a cause of Britain’s success” (Cain, 2002, p. 107, emphasis added). Comparing the government’s role on the eve before and shortly after the first industrial revolution, Weller and Bawden (2005) also suggest that one should also examine the early forms of governance from both the supply and demand sides. More specifically, they point out that the government had poor control before industrialisation, often relying on local elites to maintain order. There was also little need or capacity to manage effectively. But with the rise of greater
interconnectedness and available tool like telegraph and railways, state power and responsibility greatly expanded, adding the set-up of appropriate legal, financial and administrative structures to ensure stability to encourage capital investment (Howe, 2016).

Comparative studies for the period between the first two waves of the industrial revolution also suggest that free trade had numerous disadvantages when other industrialised nations’ power arose (Howe, 2016). Both American’s catch-up and Germany’s rise were said to be government-led and centralised from the start (Weller & Bowden, 2005). Shaw (2016) also holds the lesson for Britain that “a return to protection was essential to meet the rising challenge of the United States and Germany as it had been to wrest supremacy from the Dutch in the past” (as cited in Howe, 2016, p. 910).

ICT—the third industrial revolution—is generally seen as an essential vehicle to greater societal progress and development (Gulati & Yates, 2012): not only in products or services offered but also in the competitive conditions of products and services. In addition to the economy, ICT is also expected to accelerate service delivery, stimulate openness and transparency, and promote social development and quality of life (Gulati & Yates, 2012). In other words, ICT is often seen as essential in an all-encompassing socio-economic process (Avgouropoulos, 2008) that impacts a vast range of social, economic, political and cultural aspects. It is often seen both as a vision (nice to head towards) and necessity (necessary to head towards). Similarly, over the years, ICT policy has also become less about the technical aspects—computers, cables, software, but more about preparing society for a transition into the future (Jorgenson & Vu, 2016) which encompasses a wide range of aspects. Against this background, great attention and expectation have been placed on the governments. Typically, governments’ role in ICT development include:

- Continue to ensure strong and stable political and legal institutions (including effective regulator as well as other cyber activities, e.g., cybercrimes);
- A balance between different sectors (e.g., health, service delivery, the infrastructure of various kinds) in the country, including direct financial investment into the sector by public funds or incentives to private sectors;
- Encourage partnership between university research and business needs;
- Determine what skills are key and determine strategies to promote through education or other institutions;
- Ensure cybersecurity (Andoh-Baidoo, Osatuui & Kunene, 2014; Aisenberg, 2018; Krauss, 2013).

Analysing the challenges many policymakers face, Ulrich and Chacko (2005). Also, see Jorgenson & Vu, 2016) stress the importance of the governments to “set the roles of the game, serve as a catalyst for ICT initiatives, particularly those related to public goods, and ensure that proper enabling environment exists for all actors involved in the process” (p. 196). The importance of deliberate engagement with a wide range of stakeholders, initiated and led by the government, has also been repeatedly mentioned and advocated (e.g., Jorgenson & Vu, 2016; Ulrich & Chacko, 2005). In addition, governments also need to consider the “discursive function for promoting the information society” (Boucas, 2017, p. 557), what happens beyond the national border, including international agenda, compliance to international practice, influence from international bodies or donors, or platforms or multinational corporations (Kendall et al., 2006).

The discussion on stronger governments’ roles receives another boost during the aftermath of the financial crisis. Capano et al. (2015) add the need for an active state to be involved at an unprecedented level with recurrent security and economic crises. Zysman and Breznitz (2012) call this a double-bind: On one hand, the government is still expected to be hands-off, intervene only when establishing and regulating appropriate frameworks, to allow ground-up experimentation and innovation; on the other hand, the government needs to set up measures to monitor, intervene, hopefully, prevent future crises.
3. Sweden’s ICT trajectory: A brief genealogy and current status

This article draws on and analyses Sweden’s ICT experience because it is not a nation that lags behind ICT development; a typical situation where an active state role is called for. Instead, it is generally seen as a leading IT nation despite its relatively small size. Currently, Sweden ranks top in new patents as well as a few other ICT user access and e-provision indices. Its ICT success is also seen in its vibrant ICT industry, including Ericsson which continues to be significant in today’s global telecom landscape, and also many of its well-known start-ups (e.g., Skype, Spotify, Minecraft, Candy Crush, etc.) In the latest Europe’s Digital Progress Report (EDPR) 2020 which tracks and ranks the progress of the 28 EU member states with a Digital Economy and Society Index (DESI), Sweden achieves an overall ranking of No. 2, well above the EU average in terms of connectivity, ICT specialist concentration, as well as digitization of business and e-commerce activities. Sweden enjoys a high number of ICT users at the workplace and home with a high number of telephone lines, mobile phones, computers and Internet subscriptions per capita. It also has a strong and rapidly growing ICT sector and a relatively intensive ICT usage in traditional industries as well as advanced IT markets, with high ICT use both among consumers and enterprises, for software, hardware and services.

According to Giertz et al. (2015), Sweden’s ICT success can be traced back to its early telecommunications industry in the late 1800s. Similar to the experience in other countries in their early telephony development, the early Swedish telecommunication sector was marked by a state-governed monopoly (Lorentzon, 2003, 2007). Monopoly continued to be a key feature in the Swedish ICT landscape until the early 1990s when liberalisation rapidly unfolded in this sector. The state involvement did not diminish when liberalisation took place, however. Around the mid-1990s, ICT became “a high-priority item on various governments’ agendas accompanied by several selected expert committees, new agencies, spending schemes (in particular computers in schools and the development of an extensive national broadband net) and a profusion of reports and publications from government (or semi-public) institutions on ICT-related issues” (Hall & Löfgren, 2004, pp. 149–50. Original explanation). The next section analyses state involvement in Sweden’s ICT development more closely.

4. A state-centric experience?

Scholars have provided explanations of Sweden’s state-centricity in its ICT development from a wide range of angles: Sweden’s history with central governing (Lorentzon, 2007), the institutionalization of the welfare state (Giertz et al., 2015; Lorentzon, 2007), and the industry characteristic with dominant industry incumbents (Eskelinen et al., 2008; Giertz et al., 2015; Lorentzon, 2007). Tracing back into history, along with the private company Ericsson that focused on infrastructure and equipment manufacturing (for international market), Televerket, a state authority acting as a state-owned corporation, was both a producer (for Sweden’s domestic market) and regulator between 1853 and 1993 (Lorentzon, 2007). Televerket was privatized during telecommunication sector liberalisation in 1993, although the Swedish government continues to hold a large proportion of its shares (close to 40%). In recent decades, Sweden, together with other Scandinavia countries, has also been said to have seen a shift in the relationship between the government and interest groups: a response to the danger of close integration of interest groups in the state apparatus (Christiansen, 2016) where “interest groups have to some extent lost their privileged position in policy formation” (Christiansen, 2016, p. 44) in “major reforms carried through with interest groups at arm’s length in many different policy areas” (Christiansen, 2017, p. 42).

This article focuses on the period post-mid-1990s because this is the time when the post-liberalisation environment is most prevalent. Broadly, the Swedish government pursued the following since 1995—the latter two as main instruments in achieving the first (Olsson, 2006):

- Set overall ICT vision and policy;
- Assumes direct responsibility in providing funding for infrastructure development;
Play an active role in facilitating labor mobility, primarily through training and employment matching. (Giertz et al., 2015)

Conceptualising ICT vision and policy mainly took the form of setting pro-competition regulations (Eskelinen et al., 2008), undertaking the role of as a supervisory body to allow or encourage competition between market players, coordinating local and regional government ICT initiatives, and supporting developments with rules, guidelines and security. Some scholars have also commented on the strong nationalistic dimension in the various Swedish ICT policy documents (Hall & Löfgren, 2004). In fact, this nationalistic dimension is also said to be “omnipresent” (Verdegem & Fuchs, 2013. Also, see Hall & Löfgren, 2004), often framed in Sweden’s ambition to lead Europe and the world (Olsson et al., 2003). Indeed, Sweden’s ICT visions are often embedded in what Hall and Löfgren (2004) refer to as “classical integrative nationalism” that attempts to reconcile concerns with Sweden’s global competitiveness with the reinvigoration of the welfare state.

In terms of infrastructure, the state assumed direct responsibility for providing funding for establishing public ICT infrastructure nationwide (Olsson, 2006). A tax discount was offered for municipalities who wanted to develop their ICT infrastructures (Olsson, 2006). Labor mobility was achieved through the state’s direct and indirect involvement in the education sector. National Action Programme for ICT in schools* (ITiS) was launched in 1999 (1999–2002)—the most extensive investment in school development in Sweden (Hall, 2008; Kajlert, 2001). It comprises both training and infrastructure elements (computer, access to the Internet, email address, etc.) and many teachers obtained laptops for free (Hall, 2008). In addition to the infrastructure component, training was another key element in ITiS for almost half of the Swedish teaching profession (Hall, 2008). Schools leaders were also specifically targeted (as the main driving force to implement ICT) with special training courses created for them (Hollingsworth, 2005). Kk-stiftelsen (The Knowledge Foundation) was established in 1994 by the Swedish Parliament with its own school IT program to encourage schools to develop new practices and disseminate experience from other projects. In the higher education sector, the Swedish government “increased spending on education from 5.3 percent of GDP in 1990 to 7.4 percent by 2000, and doubled spending on higher education specifically (from 1 percent of GDP to 2 percent in this period)”, registering a large increase in tertiary education completion (Thelen, 2019). Spending on the labour market (Active Labour Market Programmes, ALMPs) also expanded during the same period, rising from 1.7% to 2.6% of GDP by 1994. During 1992–97, ALMP expenditure as a share of total public expenditure and GDP was higher than in any other OECD country (Thelen, 2019). In addition, the Knowledge Life (KL) program of 1997–2002 also offered further training at adult education centres, especially for computer science (Thelen, 2019).

In the wider society, the government conceived schemes such as PC purchase tax incentives for employees (tax-free purchase or tax discount through their employers) and households and businesses (Magnusson & Hermelin, 2019) in 1998. The Swedish employee PC purchase scheme was particularly popular. Similar to the ItiS programme, many Swedish employees acquired their first home computer through it. By 2006, about 40% of Swedish households took advantage of the Home PC program (Thelen, 2019). All above suggest that although the top-down approach was clearly more prevalent in earlier years of national monopoly, the Swedish state still actively participated in the post-liberalization ICT development.

5. Collaborative network governance?
Collaborative governance is seldom mentioned as a key characteristic in any analysis of the Swedish ICT experience. However, the collaboration in the sector, in different forms, on different levels and from many different angles, is also extensive, if not pervasive.

On the policy-making side, Hall and Löfgren (2004) stress the collaborative nature during the Swedish ICT policymaking process in its critical moments of the mid-1990s when its first ICT policy emerged. During this time, “initiation, agenda-setting and framing of ICT-related questions in
Sweden are results of more or less stable patterns of interaction between many different actors, such as parts of national and local governments, political and societal groups, business organisations and/or trade organisation” (Hall & Löfgren, 2004, p. 150). ICT Commissions’ (1994–2003, 4 successions) role in these policy formulation processes has been instrumental, with members comprising high-ranked senior ministers, leading executives of the business community (Hall & Löfgren, 2004). In the subsequent IT Policy Strategy Group (2003–2006), besides the chairman and the IT minister, the group also comprised members from different sectors (Hall, nd).

The government, industry and university triad has been one key feature in Sweden’s overall ICT experience, particularly from its tradition of corporatist society with close ties between government and large corporations (Giertz et al., 2015). Giertz et al. (2015) trace this triad origin further back in history to the early days of the telephone era and the subsequent flourishing of both the export industry and the growing financing of the public sector. The triad was marked by a corporatist society, with very close cooperation between government, incumbents and trade unions, as well as that between governmental and private corporations like Ericsson. The close link between government and industry also spread into an interest in research and higher education by the government, as well as the industry with many applied research programs co-funded by both the government and industries.

This corporatist model crumbled after the 1980s when the perception changed to demand the government take a more active role in the industry and not hand over the commercialization to private incumbents, but the bilateral relationship between the government and universities as well as that between the industries and universities remains strong (Giertz et al., 2015).

[before the internet bubble] Incumbents like Ericsson, Televerket and ABB could set the agenda for both higher education in engineering sciences and applied research in technical universities as well as in sectoral research institutes … [after the bubble] companies like ABB and Ericsson decided to concentrate their business and close down their factories the existing research … Research institutes like Acreo then became more of an incubator than an institute partly financed by Swedish incumbents with a common research interest. Governmental funding was also partly transferred to help the establishment of new ventures. (Giertz et al., 2015, p. 92)

From early on Swedish society was optimistic about a better future with technological development. As a national champion in ICT, the private ICT giant Ericsson has acted as a motor for the ICT economy in Sweden. It has contributed to cultivating and “soaking up” (Giertz et al., 2015) ICT expertise in Sweden, but also led to the early adoption of ICT devices and services in the Swedish society, which in turn attracts foreign investment in ICT companies in Sweden.

Collaboration and cooperation manifest within different levels of governments and across geographic locations too. Although the regional development budget is usually small compared to the national budget (Lorentzon, 2007), as Giertz et al. (2015) observe, both local- and city-level networks continue to be important in Sweden’s ICT sector. Many local areas and authorities create their own IT strategies, for example (Giertz et al., 2015). The role of the local digital agenda is significant too (Magnusson & Hermelin, 2019). Lorentzon (2007, p. 249) explains this “new regionalism” as a result of “supranational structural policy, the growth of regional consciousness and cross-border networks”. Hall (2008) goes as far as to claim that state-centeredness often only remains rhetorical while self-governance at the local level is the actual situation. Using the example of ItiS, Hall proposes that the programme might have been “attractive for the government since it gave the impression of national initiative but in practice relieved the government from responsibility for implementation” (Hall, 2008, p. 37).

The collaboration and cooperation at the supranational level are also evident. When Sweden formally joined the EU in 1995, it was clear Sweden’s further growth would be guided by that of the EU (Giertz et al., 2015). The broader national ICT vision in Sweden is clearly shaped by European influences. Often,
decisions, particularly those regarding infrastructure, are made at the EU level (Hall & Löfgren, 2004). Sometimes, “the reference to EU regulation became a way of de-coupling the discourse from the policy solution” (Hall, 2008, p. 37), especially when faced with the prospect of massive spending and the decision-makers backed out. Early EU influence also included adapting to objectives and regulations and aligning national priorities to that of the EU, particularly that of deregulation and liberalisation of the telecommunication sector (Hall & Löfgren, 2004; Lorentzon, 2003, 2007). Municipalities, on the other hand, have also taken advantage of the EU programme that promotes infrastructure access, especially broadband development (Magnusson & Hermelin, 2019). Lorentzon (2007) also gives examples of IT-Norrköping with support from both the EU and Arvidsjaur. However, Sweden is not a passive follower of EU objectives. For example, Swedish emphasis beyond economics is said to be way ahead of its EU’s i2010 vision in 2010 (European Digital Agenda-Europe 2020) that still focuses on its economic dimension (Verdegem & Fuchs, 2013).

Besides the EU connection, the Nordic cooperation in various forms and at various levels has also been instrumental, especially in the Swedish early ICT experience. This primarily applies to the Nordisk Mobil Telefon (NMT) standard set in the 1970s with active Nordic cooperation in terms of technical assistance and technology transfers (Giertz et al., 2015). This collaboration served as a model in the establishment of Groupe Spécial Mobile (GSM) in 1988, which later became the global standard (Giertz et al., 2015). In more recent years, concerns about being overtaken by its Nordic neighbours (Finland and Denmark) are clearly visible in the Swedish ICT policy discourse.

This suggests a high level of stakeholder involvement and collaboration, but different from the collaboration that network governance suggests. Consistent with other analyses of the Swedish ICT experience (Eskelinen et al., 2008; Lorentzon, 2007), this analysis shows that the Swedish government did play an extensive role in its ICT development. However, this analysis also shows that its state involvement is also closely intertwined with close collaboration with other stakeholders: supranational bodies, regional government, industry, society, higher learning institutions, etc. Different from other analyses of the Swedish ICT governance model, this analysis suggests the Swedish case represents a state-centred (not centric) collaborative governance that operates in between the “hands-on” and “hands-off” extremes. It resembles the network governance model (Keast et al., 2006; Von Tunzelmann, 2003), but places the state at the center of this network. In this mode of operation, the state assumes an omnipresence but not overwhelming power over other stakeholders. It serves as the central point in the network, has a regulative aspect, providing rules, roles and procedures; a normative aspect that conveys norms, values and standards; and an imaginative aspect that produces identities, hopes and visions (Sørensen & Torfing, 2005). It is networks “in the shadow of hierarchy” (Scharpf, 1994, p. 41) or “embedded in a hierarchical structure and government has the power to approve and disapprove negotiated outcome” (Gjaltema et al., 2020, p. 1774). It is also similar to Capano et al.’s (2015) claim that “while the role of the state may indeed have changed to adapt to and accommodate more complex and rapidly changing environments, the dominant role of government in these new governance arrangements remains intact” (p. 312). In this model, the role of the state is not tight control and regulation as in the hierarchy governance model, far exceeds the steering only role in the market governance model, and is also distinctively differently from primarily shaping network role in the network governance model which assumes that the relationship between the different stakeholders in the network is equal, voluntary or independent.

6. State-centered-collaborative-model vs meta-governance
There is a resemblance between this state-centered-collaborative-model to that from meta-governance—another concept governance literature has turned to in recent years. Meta-governance emerged in the mid-1990s and often refers to the governance of governance, organisation of self-organisation, regulation of self-regulation, steering of self-steering (Gjaltema et al., 2020; Jessop, 2002) with an emphasis on “influencing various processes of self-governance” (Sørensen, 2006, p. 100) or self-governing actors. In Gjaltema et al.’s (2020) systematic review of the usage of the term, the authors propose the term be used as an umbrella term for all three previous governance models and suggest that “meta-governance is ‘government plus governance’ and can be constraining as well as enabling, as it ‘combines control and facilitation’” (Gjaltema
et al., 2020, p. 1774). They point out that meta-governance suggests “the new role of the state in the networked society” and “brings government back in at a more central stage, thereby questioning the nature of governance as pure self-organizing networks in which governments fulfill a limited steering role” (Gjaltema et al., 2020, pp. 1773, 1774).

However, definitions of meta-governance that focus more on the practice of governing, e.g., meta-governance as “a practice by (mainly) public authorities that entails the coordination of one or more governance modes by using different instruments, methods, and strategies to overcome governance failures” (Gjaltema et al., 2020, p. 1771) sheds little light on concrete governance style. The suggestion that meta-governance allows the use of any of the three previous governance models also provides little practical guidance as governance itself is about selecting the most suitable model to govern. Similarly, Jessop’s (2002) definition of meta-governance on coordination of structures is also essentially what governance is as governance is the process and structure of exchange between the state and the society (Peters & Pierre, 1998). In addition, meta-governance is generally seen as a response to network governance failure, but the target of meta-governance remains the network, not network governance itself. Lastly, ICT networks are not only about self-organising, self-regulating or self-steering organisations: there are spontaneous responses (usually from the market) in ICT development, but there is also often a lot of deliberate planning and execution (usually from the state). State-centered-collaborative governance, in this sense, provides a more concrete and also realistic description of a governance model, on par with the hierarchical, market, network governance models. Table 2 provides a comparison of network, meta-governance and state-centered-collaborative governance models.

| Table 2. Network, meta-governance and state-centered-collaborative governance models |
|-----------------------------------------------|
| Network | Meta-governance | State-centered-collaborative |
| Time | Since 1980s | Since mid-1990s | Phenomenon emerges similar time to network governance, but the term itself is new |
| Key characteristic | Interdependence | Governing governance | Collaborative governance centered around the state |
| Focus | • Public and private partnership and coalition  
• Self-regulation | • Use of any suitable governance model (e.g., hierarchical, market, network)  
• State can be hands-on or hands-off in framing, shaping or coordinating network | • Collaborative governance (similar to market and network), but state remain central (hands-on) |
| Assumptions | • State is hollowed out  
• Partnership and self-regulation are desirable  
• Equal participation | • This is a catch-22 model | • Collaboration remains desirable and essential, but effective coordination from the state is still needed |
| In response to | • Market governance failure  
• Increasing interaction between state and society  
• Technology accelerates interdependence | • Network governance failure and challenges | • Adequacy of the explanation power of this concept  
• Inadequacy of the meta-governance concept |
7. Conclusion
By drawing attention to Sweden’s ICT success and the governance model best represents its experience, this article argues that (1) because of the nature and impact of the sector, there is no need to shun active state involvement and (2) successful ICT governance can be achieved from state-centered-collaborative governance. Although applying this governance model requires flexibility, e.g., in terms of incorporating various forms of collaboration from various role players at different times, the state still takes a central stage and has a leading (but not domineering) role, beyond just framing the network or a hands-off approach. This model also aligns with the suggestion by Ulrich and Chacko (2005) and Jorgenson and Yu (2016) that government should lead deliberate engagement with a wide range of stakeholders in ICT development in the increased connectivity, pulls and pressures from multiple forces in the contemporary world.

This case study demonstrates that this governance model is one viable model for ICT success. This article argues that this model might be applicable for the ICT sector due to its increasing impact on other social and economic domains and the increasing interconnectedness of the domains although certainly not all ICT success is state-centered (e.g., Finland is said to be more bottom-up, Eskelinen et al., 2008). Ultimately, the choice of governance model or success might be related to the path a country or a certain sector has taken: e.g., how strong the state has been historically, what is the level of capacity or interest within the state or civil society, what is the attitude towards the state (e.g., trust or scepticism), what kind of administration culture or tradition the country has, or what role a particular sector plays in other sectors, etc. (Braithwaite, 2020; Peters & Pierre, 1998). With the increasing interdependency and complexity among different sectors and within one particular sector, however, this model might be worthwhile to be examined further in the governance literature.

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Notes
1. The Keynesian model is largely linked to the economic recession with an underlying assumption that the market is unstable and inefficient (Fletcher, 1989). Its focus is largely to rely on government fiscal and other monetary policies to steer economic development.
2. Although discussion on modern applicability of such model continues, e.g., (Hill & Lynn, 2004).
3. Including creating and managing public entity as well as the liberalisation process, setting overall ICT vision and policy (Olsson, 2006), assuming direct responsibility in providing funding infrastructure development; and taking “an active role to facilitate labour mobility” (Giertz et al., 2015, p. 68), particularly in re-educating its citizen.
4. Schools in Sweden are managed (including teaching training and investment in technology) by municipalities. Its 1992 curricula emphasised teacher collaboration (instead of teaching in silo) and envisaged ICT to be a powerful tool in promoting such transition (Kojert, 2001).

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