

System Failure: How Top-Down IT Project Governance Hampers Local Government Operations

Per Persson¹

“We live in an organizational legacy and a technical legacy where we don’t really start thinking about what a municipality is, what it should do and how we use the municipal funds most correctly. And I think we really should do that. Is building e-services 290 times and doing integration work 290 times the right thing to spend municipal money on?”

(Technical lead)

¹Per Persson

University of Gothenburg and
Municipality of Sundsvall
per.persson@ait.gu.se

Persson, Per. "System Failure: How Top-Down IT Project Governance Hampers Local Government Operations." *Information Systems Practice Journal*. 2026: 1:1.

Abstract

Despite growing demands for efficient digital public services, Swedish municipalities remain constrained by a governance model that pre-dates the digital era. This study investigates the factors that maintain fragmented IT project structures within authority-driven digitalization initiatives. A case study was conducted on a national food regulation project driven by the Swedish Food Agency and involving Sweden’s 290 municipalities. The findings reveal that although standardized e-service specifications and data models were developed, each municipality had to implement and integrate its own local solution, resulting in redundancy, high costs, and low integration uptake. A centralized approach was briefly considered but dismissed due to legal interpretations and inertia linked to the Local Self-Government Principle. Interviews with agency and municipal stakeholders reveal systemic failure patterns driven by unclear mandates, vendor lock-in, and culture. The study concludes that meaningful digital transformation in the public sector requires government-led reform, clear policy mandates, and support for centralized solutions. The study also suggests public sectors should consider implementation of open standards to counter vendor lock-in. And these conclusions end up in a set of actionable suggestions aimed to counter the deep-rooted logics and weak top-down mandates that drive fragmented solutions, despite shared standards.

KEYWORDS

IT Project Governance, Public Sector, Inertia,
Local Self-Government Principle

Introduction

It is not uncommon that public sector IT projects frequently incur high costs and exceed deadlines. A study by McKinsey and Oxford Global Projects (Balka et al., 2022) examined a dataset with 6,003 public and private sector IT projects between 2001 and 2017, showing that 80% of public-sector IT projects exceed their planned timelines, and nearly 50% have budget overruns.

This study investigates how public sector IT project structure influences project costs, and what factors lead to fragmented IT project structures within authority-driven national digitalization initiatives. A case study is conducted in Sweden, examining an IT project in food safety, initiated by the Swedish Food Agency and the Swedish Agency for Growth, involving all 290 Swedish municipalities. The findings suggest that, even though centralized solutions have the potential to save cost and resources for municipalities, this alternative is most often not even seriously investigated. This study targets public sector digital transformation leaders including program managers and IT-architects in national authorities, and policymakers and regulators involved in setting digital governance frameworks.

Below I first introduce the problem context by describing the decentralized approach for the solution design and presenting the centralized alternative, leading to the research question of this paper. Then follows a description of the project's goals and result, followed by a description of the method. The paper ends with describing the findings and a discussion proposing actionable suggestions.

Problem context

In many countries, including Sweden, national authorities regularly introduce new laws and regulations that require digital support from government systems. To meet these demands, centralized agencies often launch overarching national projects. Conceptually, the project can be carried out in two approaches, one is a decentralized approach where each organization is required to implement its own part of the solution, and the other is a centralized approach where one organization implements a solution that all other organizations also can use.

Projects are typically implemented using the decentralized approach, where the central authority develops a solution catering for their own needs and then requires each municipality to independently implement their part of the solution (Wall, 2020; Andersson et al., 2022; Carlsson et al., 2023).

The decentralized approach

Solutions implemented in this decentralized approach are described in Figure 1.

In this decentralized approach the entrepreneur starts his journey on verksamst.se¹ where he can find information about how to manage different cases. When selecting, for instance, to apply for a permit, the entrepreneur is redirected to the municipal website in the municipality where he operates. The permit application is submitted via an e-service that integrates towards the municipality support system managing this specific application type (it must be noted that this fully automated registration flow is rarely implemented and that the registration in the support system is most often done manually). Administrators then manage the applications via the support systems user interface. There is a need to

¹ On this website government agencies like the Swedish Companies Registration Office, the Swedish Tax Agency, the Swedish Agency for Economic and Regional Growth, the Swedish Social Insurance Agency and the Swedish Public Employment Agency have collected information and services of value to you as an entrepreneur.

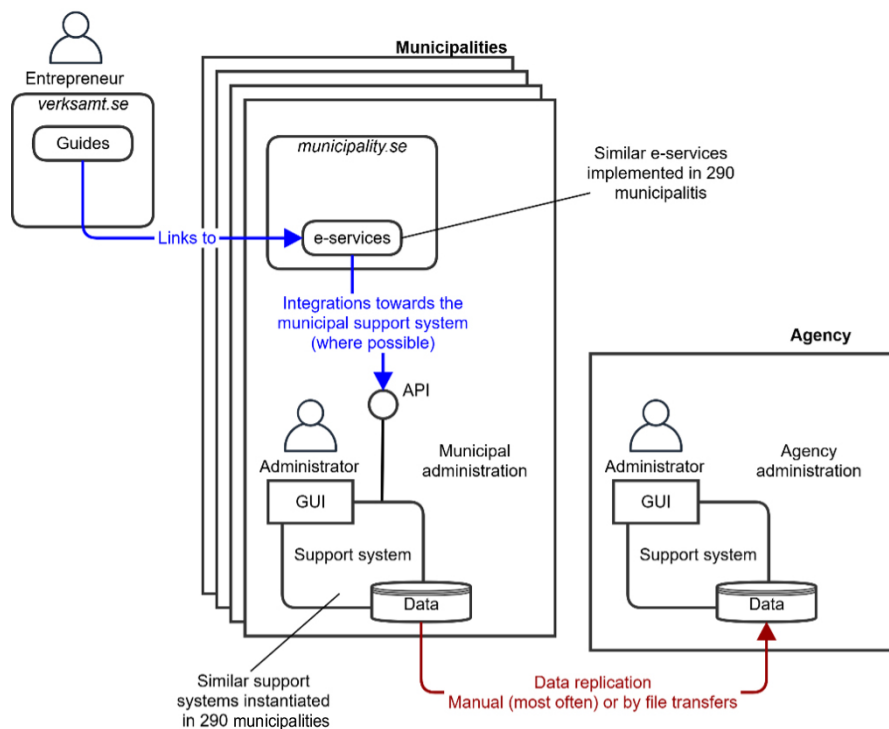


Figure 1. Decentralized approach.

feed agencies with data of municipal cases and applications, and this is (most often) managed manually or automated via file transfers.

This model creates significant challenges. Municipalities must invest local resources into national projects, leading to fragmentation, duplicated efforts, increased costs, and reduced capacity to improve local services. The OECD (2019) and Brookings Institution (2016) have both pointed out that unclear responsibilities and overlapping assignments across levels of government often result in inefficiencies within decentralized systems.

An alternative approach

A centralized approach alternative would be for national authorities to develop and operate a shared, common digital solution that all municipalities can use. Municipalities would then focus on local, manual activities such as inspections or case-handling, while relying on the national solution for digital infrastructure. This model aligns with OECD's Digital Government Policy Framework (OECD, 2024), which promotes shared digital platforms to increase interoperability and reduce costs. Successful examples of such systems include Estonia's X-Road that has significantly streamlined Estonia's public services (OECD, 2020), and Ukraine's Trembita platform which facilitates secure data exchange between government institutions, enhancing efficiency and resilience (Brookings Institution, 2024).

Figure 2 illustrates an example of the centralized approach. In this example both the information and the e-services are found at verksamt.se. Compared to the decentralized approach, the e-services have a national coverage, and all administrators are working in a shared support system, regardless of in which municipality the entrepreneur operates. Thus, there is also no longer a need to feed an agency with data of municipal cases and applications.

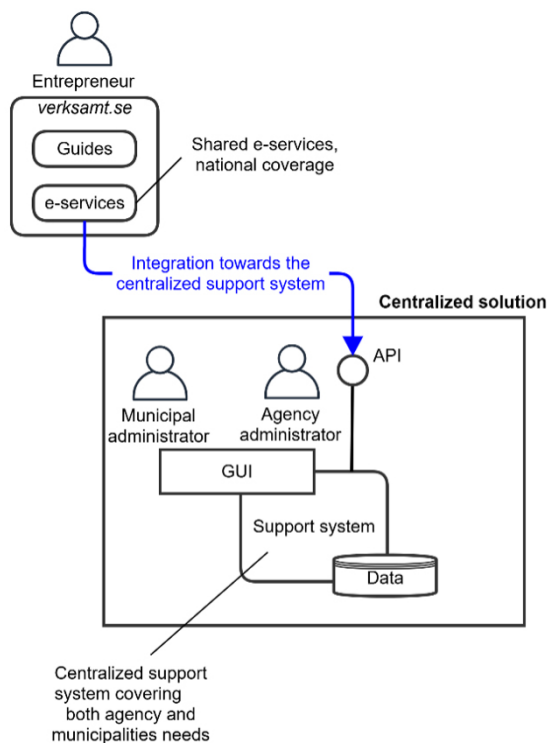


Figure 2. Centralized approach.

Research question

Although this centralized approach is occasionally considered early in public sector digital initiatives, most national projects still end with a decentralized solution implementation. This burdens municipalities with projects they did not initiate, draining resources from their own priorities and reinforcing outdated IT systems (Persson et al., 2023). Despite clear inefficiencies, a centralized approach, implementing shared national solutions, is rarely adopted in practice, and this raises the Research Question:

What factors prevent the adoption of centralized digital solutions in the public sector?

Project Background

Project goal and budget

This study examines a large digitalization initiative led by the Swedish Food Agency, launched in 2020 with an initial pre-study phase. The project was initiated to support new national regulations affecting approximately 90,000 food companies across Sweden. Each year, an estimated 10,000 new food companies are established, while a similar number of food companies close. Of these companies, 89,000 fall under the control of Sweden's 290 municipalities, while the remaining are overseen by the Swedish Food Agency. The new regulations require municipalities to adjust how they collect data and conduct on-site inspections for food companies. To comply, all municipalities must update their local systems and processes. The ambition was to have all companies transitioned to the new digital services by the end of 2023.

A key goal set by the Swedish Food Agency was to ensure a unified experience for food companies nationwide. Regardless of the municipality, companies should be able to use e-services² where they enter the same type of information and interact with similar digital interfaces. To enable this, the project developed standardized e-service and Application Programming Interface (API) specifications that each municipality's system vendors were pushed to adopt. These interfaces were designed to integrate seamlessly with local support systems, offering consistency for users and simplifying vendor implementation.

Though the pre-study showed that a decentralized solution is the most expensive, it was selected. The pre-study states that:

Locally implemented e-services are the most realistic and realizable proposed solution based on the current conditions. (Project pre-study)

Furthermore, the decision is motivated with:

Locally implemented e-services implies fewer risks, and despite the fact that there is a preponderance of [respondents] interviewed from the municipalities that are in favor of a centrally implemented e-services, the project advocates that locally implemented e-services are realized as a solution on the way to standardization, and reduced and simplified data submission. (Project pre-study)

The technical lead, who participated in the pre-study phase, summarized the decisions like this, in his own words:

That this was most certainly the most expensive option, which it always is. When 290 parties are going to do something, it will be. It's something that I was aware of, but there were no opportunities to do anything else. (Technical lead)

From a cost perspective, the total estimated implementation cost across all municipalities was 36.5 million SEK – about 126,000 SEK per municipality. The annual maintenance and operational cost were projected at 14 million SEK, or 48,300 SEK per municipality per year. Regarding the other actors, the Swedish Food Agency estimated 11.6 million SEK for implementation and 1.6 million SEK annually, and the Swedish Agency for Growth estimated 10.7 million SEK for implementation and 1.3 million SEK in annual costs. Altogether, the project's total implementation cost was estimated to 58.8 million SEK, with ongoing annual costs of 16.9 million SEK.

What makes this case particularly noteworthy is its mature and coordinated approach. Unlike many authority-led initiatives, this project did not stop at setting regulations. Instead, the agencies took active responsibility for designing, specifying, and supporting implementation across municipalities. One municipal stakeholder praised this:

It can be concluded that this approach taken by the Swedish Food Agency together with the Swedish Agency for Growth is, I would like to say, quite mature from a project perspective. Maybe you should learn here [...] There is very little room for our several suppliers to say that things are unclear. It has been a clear line from the beginning, with clear specifications and good endurance. (Municipal stakeholder 2)

² An e-service provides a digital registration capability for external (citizens and entrepreneurs) or internal (employees) users. Creating forms for data-collection is configurable, and the data are stored in a database. Administrators can then fetch the data and, most often (for not integrated e-services), insert the data into department-specific support systems for further management.

The technical lead also called attention to the difference:

The classic authority role is based on EU rules, national rules, and regulations. Then the authority comes in and makes their own regulations. Many authorities stop there. (Technical lead)

This case stands out because the Swedish Food Agency did not stop at the regulatory level but aimed for an excellent user experience and actively supported municipalities in execution, something that is not always the norm in Swedish public sector projects.

Project result

By the official end of the project in December 2023, approximately 180 out of 290 municipalities had implemented the standardized e-services. However, this left more than 110 municipalities without any digital support for collecting the newly required information from food companies. Even among the 180 that had implemented the e-services, only around 70 municipalities had integrated these services with their local support systems. This meant that about 110 municipalities used the e-services in a non-integrated way, requiring manual work to transfer data between systems.

As of September 2024, nine months after the new regulations took effect, the situation had improved modestly. By then 200 municipalities had implemented the full set of standardized e-services and an additional 48 municipalities had implemented at least a subset of the e-services. However, the number of fully integrated implementations remained at 70. This means that roughly 220 municipalities were still relying on manual processes, either due to a lack of e-services or because their e-services remained unintegrated with local systems.

Tracking the total project cost has proven difficult. As explained by the project manager at the Swedish Food Agency:

Regarding fully integrated solutions from [the vendors], there were secret prices, and maybe different prices for each municipality. Just buying licenses for the APIs had different prices depending on the size of the municipalities that integrated themselves and built their own e-services. (Project manager, Swedish Food Agency)

Due to this lack of cost transparency, no definitive financial follow-up has been possible. However, since only 70 municipalities pursued full integration, it is likely that the total municipal costs were lower than initially estimated. That said, the continued reliance on manual processes likely offsets these savings through increased administrative workload and inefficiencies.

Methodology

This paper presents a qualitative case study on a project aiming to implement support for new regulations regarding food handling, affecting the Swedish Food Agency, the Swedish Agency for Growth, and Sweden's 290 municipalities.

Interviewee	Role
Technical lead and core team member in the project, consultant	Technical lead in the project with wide experience of prior projects dealing with the same basic issues, how to design solutions, and set-up projects for joint projects between authorities and municipalities in the public sector.
Project core team representative from the Swedish Agency for Growth	Head of unit at the Swedish Agency for Growth and a core member of the project. Earlier experiences from working on government level at the Ministry of Economy, focusing on policies for simplifying public sector connections for business owners.
Project core team representative from the Swedish Food Agency	Project manager and a member of the project core team. Before the project engaged in national digitization projects at both the employment agency and the national board of health and welfare.
Municipality stakeholder 1 in the project	Head of department at the environmental administration at one of the municipalities acting as reference group in the project.
Municipality stakeholder 2 in the project	Object manager for social constructions and environment responsible for administration and digital development at one of the municipalities acting as reference group in the project.
Municipality stakeholder 3 in the project	IT and digitization strategist at the environmental administration at one of the municipalities acting as reference group in the project.
Municipality stakeholder 4 in the project	Food inspector at one of the municipalities acting as reference group in the project that nowadays is working mostly with digitalization and business development.
Municipality stakeholder 5 in the project	Business developer and e-service developer at one of the municipalities acting as reference group in the project.

Table 1. Interviewees and their roles.

Data collection

Through active participation in the project, the author had full access to documents, reports, pre-studies, project descriptions, solution descriptions, meeting notes, and public communication related to the project throughout the project timeline. For this paper, the project pre-study has been especially interesting, since it reveals the different solution alternatives and project set-ups that were discussed before the project started. In addition to this, eight semi-structured interviews with key members of the project were performed. The interviewees were selected through purposeful sampling (Patton, 2014), and their roles in the project are provided in Table 1. The interviews were conducted via online video conferencing, each lasting approximately 60 minutes. All interviews were recorded, transcribed using automated tools, and manually reviewed for accuracy.

Coding and analyses

An initial set of factors influencing the setup of authority-driven digitalization projects was drawn from the project pre-study report. This set informed the design of the semi-structured interview guide.

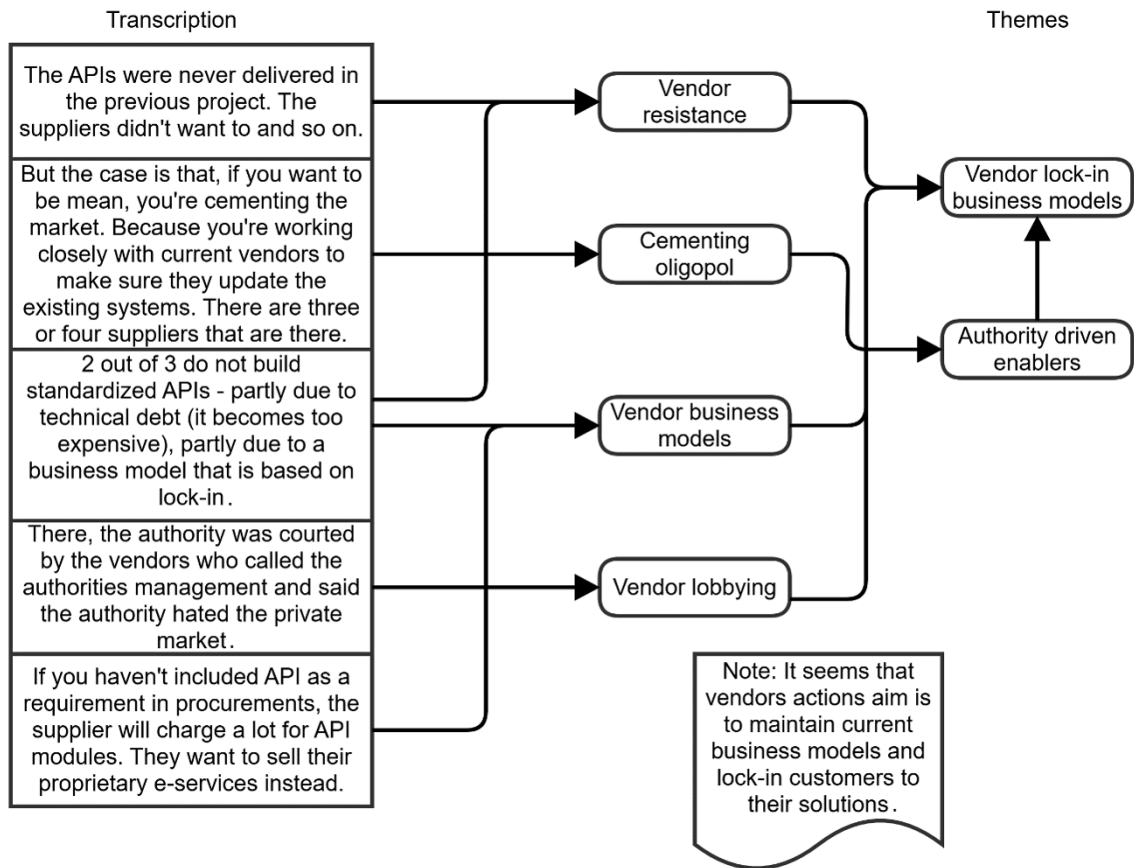


Figure 3. Example of the coding process.

The data was analyzed using a qualitative content analysis approach, starting with open coding (Saldana, 2021). The open coding process, exemplified in Figure 3, involved line-by-line reading of each transcript to identify meaningful information related to project setup dynamics, inter-organizational collaboration, technical coordination, and relation to the vendors. Coding was performed using Excel, and a codebook was developed iteratively. After the first round of coding, codes were compared, refined, and grouped into higher-order categories. To enhance the rigor and reliability of the coding process, reflexive notes were kept throughout the analysis to track the authors assumptions and evolving understanding of the material. Through this process, a set of recurring themes and tensions emerged, such as local autonomy vs. standardization, and vendor lock-in concerns. These themes informed the final interpretation and served as the basis for the study's contributions.

Ethical considerations

The author divides his time between academia and his role as chief IT-architect at one of the municipalities participating in the project. In the author's work practices, apart from participating in the project described in this study, he has experience from other projects together with various authorities. This adds justificatory knowledge (Gregor and Jones, 2007) from the field, and knowledge gained from discussions in other projects. The author also actively participates in the discussions on various topics within the field of digital transformation in the public sector in several forums. This contributes substantial tacit knowledge (Busch, 2008) about the relations between Swedish public sector bodies and the market.

While this close engagement with the field offers deep contextual understanding, it also introduces the risk of bias, and to address this several strategies were employed. First, the research focuses on explanation rather than confirmation. Although the author holds opinions about the negative effects that certain dynamics gives rise to, the research was specifically aimed at uncovering what was happening and why rather than validating those opinions. Second, the author did not participate in the pre-study phase, and thus had no influence on the selection of the solution pattern. Third, to enhance trustworthiness and reduce reliance on the author's perspective, the study incorporated multiple data sources (triangulation) and interim findings and interpretations were validated with academic peers and independent practitioners outside the author's municipality. This practice aligns with recommendations from Guba & Lincoln (1982), who highlight triangulation and peer debriefing as strategies to increase credibility and surface potential blind spots or overinterpretations. Finally, during the data analysis phase, the author was no longer actively engaged in the project in his practitioner role, which allowed for greater analytic distance.

So, by actively engaging with the field while also reflecting critically on positionality, the study aims to balance practitioner insight with academic rigor in the spirit of Coghlan (2007).

Findings

The analysis of the interviews, in combination with the project's pre-study documents, reveals a systemic pattern in how digitalization initiatives are structured in the Swedish public sector. Despite ambitious standardization efforts and a shared regulatory framework, the implementation of digital services remains highly fragmented. The analysis reveals that main factors causing this fragmentation are (1) inertia as barriers to centralized solutions, (2) absence of centralized solutions alternatives in early design, (3) vendor lock-in and market dynamics, (4) low service demands and capacity constraints in small municipalities, and (5) weak central governance and ambiguous accountability. These factors are described below.

Inertia as barriers to centralized solutions

The major factor related to inertia that impedes centralized solution is the enduring influence of the Local Self-Government Principle³. This principal grants municipalities substantial autonomy, shaping how they interpret and act upon national digitalization initiatives. One of the most telling reflections on this constraint came from the technical lead of the project, who described the situation as follows:

The Swedish Food Agency is dreaming of having a central facility register that you populate with notified facilities from an e-service. And then the municipalities are boots on the ground. But you have [...] laws against you, you have only your given mission, your given means, and your given resources. It is legally and institutionally completely impossible to do. Then you come back to the municipality local solutions. There are no other realistic alternatives. (Technical lead)

This quote underlines a common belief that legal frameworks prevent authorities from taking on central roles in service provision. However, this position is contested, and a core team member from the

³ The possibility of decision-making based on regional and local conditions is known as local self-government and is enshrined in the Swedish constitution. Local self-government is important in democratic terms. Citizens' closeness to decision-making makes it easier for them to gain access to local politicians and hold them accountable for their decisions. This in turn improves their opportunities to influence service provision in their municipality or region and how their taxes are used (SKR, 2024).

Swedish Agency for Growth pushed back against this, suggesting that the rigid interpretation of legal frameworks may be convenient rather than necessary:

The municipalities have repeatedly come back to the fact that in the area of digitization, it is completely unreasonable to apply the Self-Governing Principle in the way it is now done. They ask: Can I just get this kind of solution as a plugin service? (Team member, Agency for Growth)

Similarly, municipal representatives voiced frustrations with what they saw as an unnecessarily decentralized approach. One stakeholder commented on the inefficiencies of the chosen path:

I think it was a shame that they chose that path. They probably felt a little forced to choose the path they did. I would like to have been able to make a different assessment for Sweden's digitization in general. (Municipal stakeholder 2)

These different perspectives highlight the divergence concerning what is legally impossible. Some interviewees argue that, while legal limitations might be real, exceptions or reinterpretations are possible, especially if driven by central political will and better governance structures. The interview data also reveal that other national agencies have successfully implemented shared digital platforms. It is worth noting that none of the interviewees, nor the pre-study report, describe what specific laws and regulations are in effect, and the uncertainty of what applies is widely spread.

This raises the question whether the fragmentation of digital services is a result of genuine legal impossibility, or if it is the product of deeply embedded inertia in practices and a lack of central coordination? The findings seem to suggest the latter. The Local Self-Government Principle, while valuable in many contexts, may be over-applied in the digitalization space, leading to costly duplication, slower progress, and inconsistencies in citizen-facing services.

Absence of centralized solutions alternatives in early design

The early design and planning phase of the project set the path for how digital services would be delivered. Despite having the opportunity to implement a shared centralized solution, the decision was made to provide national specifications and standards while leaving municipalities responsible for developing or acquiring their own solutions. This decentralized approach significantly limited the potential for cost savings, faster implementation, and a unified user experience. The project manager at the Swedish Food Agency reflected on this decisive decision in the pre-study phase:

When they did the pre-study, they concluded that yes, we are making a national template. We do national specifications. Then all municipalities can build the e-services themselves. And it may seem very expensive for everyone to build it themselves. (Project manager, Swedish Food Agency)

Despite acknowledging the cost implications, the decision to allow each municipality to handle their own implementation triumphed. Several interviewees questioned why the possibility of a centralized solution was not more thoroughly explored:

Should we have central e-services at the Swedish Food Agency? Should we have all municipalities build the e-services? Where should we standardize? How far should we go? How far can we go? (Project manager, Swedish Food Agency)

The lack of a serious evaluation of a centralized approach surprised and disappointed many of the municipal stakeholders, especially given the potential for increased efficiency and reduced administrative burden:

I think it was a shame that they chose that path. They probably felt a little forced to choose the path they did. I would like to have been able to make a different assessment for Sweden's digitization in general. (Municipal Stakeholder 2)

The interviewee continued by highlighting the inefficiency of distributing development efforts across all municipalities:

If you look at an aspect like cost effectiveness, are we going to build this in 290 places? Or should we build it once? It goes without saying that there should be efficiency potential here. (Municipal Stakeholder 2)

It becomes clear from the interviews that the idea of a centralized approach was not entirely absent, but it was never seriously advanced or supported. This reveals a missed opportunity, that although the technical feasibility of a centralized solution was not entirely ruled out in the absolute earliest stage, the lack of ambition, clear mandates, and funding mechanisms meant the conversation never gained momentum.

Vendor lock-in and market dynamics

One of the most pressing and persistent challenges reported by both authority and municipal stakeholders was the role of the vendors in shaping the route of the digital implementation. Software vendors may deliberately lock in customers by designing systems that are incompatible with those of other providers. This is achieved through proprietary standards, closed architectures that hinder interoperability, and restrictive licensing conditions (Zhu & Zhou, 2012). With only three dominant vendors serving nearly all Swedish municipalities, the market structure in this case created strong lock-in dynamics, where switching between vendors was excessively expensive or technically infeasible. As the project manager explained:

With only three dominant vendors in this space, their lock-in strategies are reinforced because switching costs are so high. (Project manager, Swedish Food Agency)

These vendors were not only supplying support systems but were also aggressively bundling their own proprietary e-service platforms. This bundling strategy discouraged municipalities from adopting externally developed e-services or standardized APIs:

They build the e-services themselves and sell complete solutions to the municipality. The vendor stressed: 'You have our support system, then you must also have our e-service platform, and we'll take care of everything, so you don't have to worry.' Apart from the fact that it costs an awful lot of money. (Project manager, Swedish Food Agency)

This bundling was viewed not just as a sales tactic but for two of the vendors as a deliberate effort to resist interoperability and maintain market dominance. According to the technical lead, this was not merely passive reluctance but active non-compliance:

These two vendors did not follow the standardized API specification produced by the project, but instead made changes to their proprietary APIs. This makes it more difficult to build integrated solutions. (Technical lead)

Such behavior had direct implications for the project's outcomes and imposed operational and financial burdens on municipalities, many of whom had neither the leverage nor the resources to challenge the vendors' market position. The core team member from the Swedish Agency for Growth reinforced the strategic nature of this resistance:

There are many aspects that need to be addressed in order for all municipalities to get updated support systems—and we have to deal with the vendors and their agendas. (Team member, Agency for Growth)

These "agendas" appear to be an entrenchment, with vendors motivated to limit openness and maintain exclusive relationships with municipalities. This approach leads to substantial fragmentation, reduced innovation, and higher total costs for municipalities, especially smaller ones with limited negotiation power.

The project had proactively tried to engage vendors during the design process, but those efforts often resulted in resistance rather than collaboration:

We had over 30 meetings with them over two and a half years. It takes a lot to get them to trust us, to understand [...] that complying with these changes wasn't optional, municipalities could enforce this through legal mandates. (Project manager, Swedish Food Agency)

Despite the legitimacy of the standardized specifications, vendors still found ways to undermine or bypass the expectations by appealing directly to municipalities, offering all-in-one solutions that, while convenient, deepened their dependence. These dynamics point to three structural enablers of vendor lock-in: lack of government-enforced interoperability standards, absence of centralized procurements or negotiations towards the vendors, and a weak collective voice among municipalities.

In this context, the vendor behavior not only undermined project objectives but also reflected a broader governance gap in Sweden's digital public sector transformation. Without central mandates or strong collective pressure, vendors could continue to prioritize closed solutions, impede innovation, and continue to create long-term technical debt.

Small municipalities – Low service demands and capacity constraints

Smaller municipalities expressed that they lacked the organizational capacity and service demand to justify investing in advanced e-service platforms and support systems, as described by two of the municipal stakeholders:

Small municipality with only five new food business registrations per year, setting up an e-service feels disproportionate. (Municipal stakeholder 4)

Small municipalities don't have the same needs or capacity to prioritize these digital systems. (Municipal stakeholder 3)

This can partly explain why there is not higher adoption of the standardized e-services in the municipality sector: small municipalities do not see the value of investing in local solutions. For these municipalities, a central solution is more rational, as local investments yield little value given the low service volumes. They would likely welcome a centralized and partly automated solution though, mitigating their limited capacity for case management.

Weak central governance and ambiguous accountability

A recurring and central concern raised by multiple interviewees was the absence of a strong national central governance, a mechanism that could mandate the use of common standards across vendors and municipalities. Without this central authority or enforcement, efforts to create a unified, scalable digital service landscape in the public sector are severely impeded.

This issue is powerfully summarized by the core team member from the Swedish Agency for Growth. She notes that while the agency could potentially take on a stronger coordination role, there has been no real action to support such a mandate:

The Agency for Growth could get an extended assignment [...] but so far, absolutely nothing. (Team member, Agency for Growth)

The technical lead further highlights the lack of normative leadership and binding governance that should support such a national digital initiative:

So, there is really a damn lack of standard-setting and steering. (Technical lead)

He elaborates that this absence of top-down coordination is not due to reluctance among implementers, but rather a lack of mandate embedded in policy or instruction:

It says nowhere in our instructions or governing documents that we should work with this kind of standardization. (Technical lead)

This governance vacuum results in a situation where municipalities can choose whether to adopt standardized solutions, leaving implementation entirely voluntary. Consequently, vendors can disregard agreed-upon standards without facing consequences, undermining the consistency and interoperability of the system.

The ambiguity in accountability between different public authorities, combined with unclear mandates, diffuse ownership. The absence of enforcement has led to what can only be described as systemic inertia. In this environment, projects struggle to gain traction, and desired effects such as interoperability, shared services, and vendor accountability remain elusive. Ultimately, this lack of consistent and firm central governance is a root cause behind the project's underperformance. It explains why some vendors continue to operate outside the agreed framework, why municipalities resist centralized alignment, and why efforts at digital coordination across sectors fail to scale.

Summary of findings

Despite shared regulations and standardized e-services specifications and data models, 290 municipalities were required to implement local solutions, resulting in high costs, high complexity, delays in the project and a weak project result. The findings are summarized in Table 2.

Factor	Description	Supporting quote
Inertia	Interpretations of the Local Self-Government Principle lead to deeply embedded inertia in practices and a lack of central coordination.	<i>"Sometimes you may use municipal self-government as an excuse, a reason for things that you are not so interested in."</i> (Team member, Agency for Growth)
Unexplored solution alternatives	Solution alternatives for a shared centralized solution were not entirely absent, but it was never seriously advanced or supported.	<i>"The idea was to build centralized [...] but each municipality had to implement it [...] that was not the intention from the beginning."</i> (Technical lead)
Vendor lock-in	Vendor behavior undermined project objectives.	<i>"They refused to change [...] 'We're not going to change anything. And you can't force us!'"</i> (Project manager, Swedish Food Agency)
Low service demands and capacity constraints	Small municipalities' needs and conditions are not catered for. The same requirements apply as for the large ones despite lack of capacity and volumes justifying a digital solution.	<i>"When you have maybe 100-200 facilities, then the effort you need to put in to set up a system compared to doing it by hand will simply not be a proportionate effort."</i> (Municipality stakeholder 4)
Weak central governance	Weak governance, and ambiguous accountability and mandate for agencies, act as the underlying reasons for the above.	<i>"You get stuck in, as always in Sweden, what kind of mandate do you have, what are your means, what resources do you have to do things."</i> (Technical lead)

Table 2. Summary of findings.

Table 2 is a summary of a systemic failure mode with a pattern that repeats across projects. Despite known cost benefits of shared centralized solutions, structures and norms lead to decentralization driven by an over-appliance of the Self-Government Principle in the digital and by weak governance.

Discussion

This study addresses the research question "what factors prevent the adoption of centralized digital solutions in the public sector" by explaining how entrenched norms and market dynamics reinforce fragmented IT governance structures in the Swedish public sector. The case shows that fragmentation is not primarily a result of technical limitations but emerges from interlinked systemic forces like the lack of a national mandate and long-term vision for a shared centralized digital infrastructure, inertia based on the Local Self-Government Principle, and the market behavior of dominant vendors who resist interoperability to protect their business models. The financial implications of these structures are considerable and demonstrate the inefficiency of the current distributed model.

A central finding is the rigid and, in some cases, misplaced application of the Local Self-Government Principle in digitalization initiatives. While operational autonomy is important in a municipality's service delivery, many stakeholders confuse this with infrastructural autonomy. A municipal office may well retain decision-making power over services while relying on a centralized technical platform,

as is common with tools like MS365. Yet when digital services are tied to specific departments or administrative domains, a strong preference for local control re-emerges, especially regarding solutions that manage department-specific data. This suggests that the barrier is not purely legal or functional, but also cultural. Although resistance is often framed in terms of local uniqueness, the data indicates that such arguments are not always justified, especially when regulatory requirements are national and uniform. It can also be related to digital maturity and misconceptions about shared solutions. The findings reveal a general belief in some municipalities that adopting a shared centralized solution inherently compromises local control. This view is inconsistent with current practices in other areas, such as widespread use of centralized, cloud-based tools for email, document management, and collaboration.

To encourage adoption and mitigate resistance, shared centralized solutions could be positioned as voluntary. Municipalities with sufficient capacity and interest can maintain custom systems, while ready-made, resource-efficient alternatives can be used by municipalities that lack the means to invest in own solutions. This would create a more inclusive digital transformation landscape that supports both innovation and equity across regions. And to further create acceptance to centralized solutions national agencies and coordinating bodies must invest in raising digital maturity and governance awareness among municipal leaders. Building a more nuanced understanding of the distinction between digital solutions and service autonomy is essential to enable broader acceptance of centralized solutions.

The structural challenge regarding vendor behavior and market dynamics also needs attention. The current market is dominated by a small number of vendors with strong positions. These vendors often offer bundled solutions, combining support systems and e-service platforms, to reinforce client lock-in and resist efforts toward standardization and integration. Despite early engagement and clear specifications, vendors either ignored or reinterpreted project standards, contributing directly to the low rate of integration observed. This resistance is not just technical, it is also strategic. Vendors benefit from high switching costs and non-standard interfaces, which preserve their market share. As one project participant noted, even the perception of government involvement in providing shared services led to accusations of being anti-market:

There, the authority was courted by the vendors who called the authorities' management and said the authority hated the private market. (Technical lead)

Addressing vendor resistance requires careful handling. Confrontational approaches can damage relationships, but silence can entrench the dysfunctional market. Clear government mandates on standards compliance, joint procurement frameworks, and better collective action from municipalities are all needed to rebalance the power asymmetry between public buyers and private suppliers. Without these, ambitions to create shared centralized solutions will continue to be undermined at the implementation level.

Based on the findings, the following actionable recommendations are suggested.

Policy-level actions

- Develop a national digital government mandate – the central government should issue a clear policy vision that distinguishes operational autonomy from digital solutions provision.

- Clarify legal interpretations of the Local Self-Government Principle – commission legal guidance and case studies to demystify how shared solutions can coexist with municipal autonomy.
- Enable exceptions to EU and domestic constraints if/where feasible – proactively seek exemptions or adjustments if needed to allow centralized solutions when appropriate.

Municipal-level organizational development

- Offer voluntary centralized solutions with opt-in models – build shared solutions that municipalities can voluntarily adopt without losing control over local service delivery.
- Conduct awareness and education campaigns – raise digital maturity among municipal decision-makers to dispel myths about centralization and clarify benefits of shared solutions.
- Establish a peer network for digital leaders in municipalities – create structured forums where early adopters of shared solutions mentor lagging municipalities and share lessons learned.

Vendor governance and procurement strategy

- Mandate compliance with standardized APIs in public procurement – require all vendors to support common interface standards in future framework agreements or procurement processes.
- Create shared vendor evaluation frameworks – pool municipal procurement resources to evaluate vendors jointly, reducing asymmetry in vendor-client relationships.
- Introduce penalties for strategic non-compliance – establish contractual consequences for vendors who intentionally deviate from shared technical standards.

Project and implementation practices

- Always include a centralized alternative in pre-study phases – require that all projects document and evaluate at least one shared centralized implementation scenario.
- Use scenario-based cost modeling in early project phases – present implementation costs for both centralized and decentralized solution alternatives up front to inform smarter decisions.
- Create project governance structures with balanced representation – ensure that national agencies, large and small municipalities, and technical experts have equal influence in project steering groups

Conclusion

What emerges from this case is a broader insight, that achieving cost-effective digital services requires more than good intentions and technical blueprints. It demands systemic change, across public sector bodies, markets, and cultures. Unless Sweden's digital public infrastructure is strategically governed at a national level, local autonomy, market fragmentation, and vendor interests will continue to prevent the realization of a modern and efficient public sector.

References

- Andersson, C., Hallin, A., & Ivory, C. (2022). Unpacking the Digitalisation of Public Services: Configuring Work During Automation in Local Government. *Government Information Quarterly*, 39(1), 101662.
- Balka, K., Heslin, B., & Risse-Tenk, S. (2022). Unlocking the Potential of Public-sector IT Projects. www.mckinsey.com/industries/public-sector/our-insights/unlocking-the-potential-of-public-sector-it-projects
- Brookings Institution. (2016). Idea to Retire: Decentralized IT Governance. www.brookings.edu/articles/idea-to-retire-decentralized-it-governance/
- Brookings Institution. (2024). Ukraine: Digital Government is Central to Resilience. www.brookings.edu/articles/ukraine-digital-government-is-central-to-resilience/
- Busch, P. (2008). Tacit knowledge defined. In *Tacit Knowledge in Organizational Learning* (pp. 34-72). IGI Global.
- Carlsson, F., Matteby, M., Magnusson, J., & Berbyuk Lindstrom, N. (2023). Collective Digital Transformation: Institutional Work in Municipal Collaboration. In *Proceedings of the 24th Annual International Conference on Digital Government Research* (pp. 583-592).
- Coghlan, D. (2007). Insider Action Research: Opportunities and Challenges. *Management Research News*, 30(5), 335-343.
- Gregor, S., & Jones, D. (2007). The Anatomy of a Design Theory. *Journal of the Association for Information Systems*, 8(5), p. 1.
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Research and Technology Development*, 30(4), 233-252.
- OECD. (2019). *Making Decentralisation Work: A Handbook for Policy-Makers, OECD Multi-level Governance Studies*, OECD Publishing, Paris.
- OECD. (2020). The OECD Digital Government Policy Framework: Six Dimensions of a Digital Government, *OECD Public Governance Policy Papers*, No. 02, OECD Publishing, Paris.
- OECD. (2024). 2023 OECD Digital Government Index: Results and Key Findings. *OECD Public Governance Policy Papers*, No. 44, OECD Publishing, Paris
- Patton, M. Q. (2014). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. Sage Publications.
- Persson, P., Zhang, Y., Asatiani, A., Lindman, J., & Rudmark, D. (2023). Technical Debt in the Municipality Sector-The Missing Link with Citizens and Silofication. *The 14th Scandinavian Conference Of Information Systems*, 2023.
- Saldana, J. (2021). *The Coding Manual for Qualitative Researchers*. Sage.
- SKR. (2024). Local Self-government. skr.se/skr/englishpages/municipalitiesandregions/localselfgovernment.1305.html
- Wall, S. (2020). Digitalization in Public Administration: A Comparative Case Study About Digitalization in Two Municipalities and the Differences Between Them. www.diva-portal.org/smash/get/diva2:1456384/FULLTEXT01.pdf
- Zhu, K. X., & Zhou, Z. Z. (2012). Research Note – Lock-in Strategy in Software Competition: Open-Source Software vs. Proprietary Software. *Information Systems Research*, 23(2), 536-545.

Bio statement

Per Persson is a researcher and practitioner at the intersection of digital transformation, governance, and information systems. Drawing on a background that combines public-sector leadership with academic inquiry, he explores how socio-technical dynamics shape the success and sustainability of digital government initiatives. Beyond academia, Per has held roles in municipal and national digitalization programs, where he has contributed to designing policy frameworks, digital strategies and solution architectures that bridge technical innovation with organizational reform.