

# The Translation and Adaptation of Mandated IT: From Central eGovernment Strategy to Local Government Practice

Charlotte J. Brandt<sup>1</sup>[0000-0002-9913-4871] and Jeppe Agger Nielsen<sup>2</sup>[0000-0002-8675-326X]

<sup>1</sup> Aarhus University, Department of Management, Fuglesangs Allé 4, 8210 Aarhus V, Denmark  
chjb@mgmt.au.dk

<sup>2</sup> Aalborg University, Aalborg, Denmark

**Abstract.** While most studies on IT adoption concentrate on voluntary adoption, this study reports on how mandated, eGovernment change initiatives are translated from central eGovernment strategy into local government practice. The empirical setting is found in the Danish eGovernment initiatives aiming to make public service delivery more digital. We provide a qualitative case study of how public sector organisations react to mandated eGovernment initiatives, and highlight the role of translating actors at different levels in driving this process. In particular, by showing how translation work unfolds in the network of actors both inside and outside adopting organisations, we provide new insights into the variety of modifications that happens to mandated, large-scale digitalisation strategies before and after adoption, and how this led to different outcomes. Although mandated adoption implies that organisations decision about IT use is somewhat limited our study reveals some leeway for translation and adaptation, and highlight the different translation rules in use (copying, addition, omission and alteration).

**Keywords:** Adoption, Translation, Mandated IT, eGovernment Strategy.

## 1 Introduction

Governments around the world are urging or demanding local governments to digitalise public service [1-3]. Central eGovernment strategies often guide the direction and pace of public service digitalisation with the purpose to control the outcome in local government organisations. While previous eGovernment policy statements were based on voluntary adoption, recent strategies increasingly involve regulatory intervention, where local government organisations are mandated to implement certain initiatives from the digitalisation strategies at a certain time [4].

Currently, however, we know little about the process through which such mandated, large-scale change initiatives are materialised as new practices within the organisations [5-8]. Most literature on IT adoption is focusing on voluntary adoption [9-12], and

shifting the focus to mandated change initiatives evokes some distinctive characteristics, such as limited freedom for decision-making and impact of resistance. By mandated IT adoption, we refer to forced compliance with decisions made by external entities [7, 13]. Mandated, large-scale IT adoption can for instance be found in the public sector where central government bodies mandate the use of e-procurement or digital self-service solutions throughout the public sector [14]. When IT adoption is mandated, the organisations are coerced by others to implement the same solution seemingly leading to isomorphism [15]. However, the issue of mandating IT adoption can be seen as “a fight for fixed ideas” [7], and when allowing local customisation, some studies show that open conflict can be avoided or mitigated, and develop into a process of discussion and negotiation leading to contextual transformation of the idea [7, 12]. Such a transformation process can be outlined in a typology of translation modes (the reproducing, the modifying and the radical modes) and four associated translation rules (copying, addition, omission and alteration) [16]. This study zoom-in on mandatory IT adoption by answering the overall research question: *How are mandated digitalisation strategies translated from central eGovernment strategy into local government practice?*

The empirical setting for this study is found in the Danish eGovernment initiatives transforming the public sector to make public service delivery more digital. To answer the research question the following sub questions are examined using a qualitative case study together with the theoretical lens of translation theory [17]: (1) How are eGovernment strategies shaped and modified outside adopting organisation as they circulate between organisations in the Danish public sector landscape? (2) How are eGovernment strategies shaped and modified while they are materialised as practice inside specific local government organisations? While the first question concentrate on translation work and the associated translation rules at the field level (pre-adoption), the second question concentrate on organisational level translation work. Following the logic of exploratory studies, our sub questions emerged during the study, as the empirical data was analysed through the theoretical lens of translation [16, 18].

Through this lens, we discuss how such translation efforts at different levels impact the digitalisation idea presented in the eGovernment strategy. As such, this study sheds new light on mandated, large-scale digitalisation initiatives that have been disregarded in most existing IS adoption research [7].

## **2 The translation perspective**

The theoretical framing of this study is based on the translation literature adopting the perspective, that when an idea (for instance expressed in a strategy) is spread to different organisations it is subject to contextual translation, and therefore the original idea as well as the adopting organisations will not remain unchanged [17]. The translation perspective was initiated by Latour [19] to explain how a token or an idea moves in a chain of active members shaping and changing it along the way. The notion of translation was later picked up by the Scandinavian Institutionalism stream of organisation research and used to explain the circulation of management ideas and practices [17, 18], and have more recently been applied – but only sparingly - in studying IT-

enabled change initiatives [12, 20]. Nielsen, Mathiassen & Newell demonstrate how ideas about mobile IT use emerged and became translated into various local arrangements, even though the IT technology appeared to be similar on the face of it [12]. Pries Heje & Baskerville show how agile methods are translated for local settings by choosing fragments of the method and re-articulating them on an ongoing basis according to the exact needs of the local setting in which it was implemented [20].

Translation is depicted as an alternative or supplement to the more established diffusion perspectives. While diffusion of innovation studies investigate what factors are impacting the willingness of the potential adopters to adopt an innovation or how to predict or increase the adoption rate among the potential adopters [21], translation research zoom-in on how ideas are circulated in time or space, and is subjectively understood in relation to the contexts in which the idea lands. From a diffusion perspective, changes in the original idea are often seen as distortions, which must be prevented. In the translation perspective changes are perceived as enrichments that increase the usefulness of the “travelling” idea in new context [22] as active translators, interpret and adapt the idea in order to find contextual fit [23, 24].

Translation is theorised to happen at two different levels, field (“source context”) and organisation (“recipient context”) respectively [12, 16]. At the field level a variety of individual and collective actors including government bodies, consultants, interest organisations and management gurus are involved in transforming and reconstructing ideas into “quasi objects” [17] such as prototypes, books, strategies or presentations. Hence, ideas are not materialised into working practices at this level but different stakeholders dedicated to theorising change [25] discuss and negotiate to make sense of, operationalise and propagate new ideas. At the organisational level, where travelling ideas are materialised into working practices, managers and employees of the adopting organisations discuss and negotiate how to customise their practices to comply with the travelling constructs (in this case mandated digitalisation strategy). Most translation studies tend to focus on the adopting organisation [16, 23], however in this study the translation at field level is included.

Translation is essentially about transformation and change [22] and involve a “*process of negotiation during which meanings, claims and interests change and gain ground*” [23]. From a translation perspective, (IT-enabled) ideas are therefore expected to be modified throughout their diffusion, and evolve differently in different settings [17, 26, 27]. Translation studies have predominately concentrated on voluntarily adoption of management ideas such as lean management [11], TQM [28], reputation management [29], Balanced Scorecard [30], and agile methods [20]. However, when shifting the focus to adoption of mandated strategies the leeway for translation of such mandated ideas, associated with coercive pressure [15], is expected to be lower.

Recently, Røvik [16] has emphasised the need to better understand the leeway for translation as management ideas and strategies travel from one context to another, and outlined a typology of translation modes (the reproducing, the modifying and the radical modes) and four associated translation rules (copying, addition, omission and alteration). The translation rules describe how the idea is translated by the recipient; as a direct copy, or the recipient can add to, omit from, or alter the idea in order to increase the contextual fit. Additionally, Røvik identified a number of conditional variables translatability of the travelling idea, the transformability of the idea, and the similarity

between source and recipient units – and discusses the appropriateness of each translation rule in relation to these variables [16]. In this paper, our focus is at translatability and transformability. The dynamics are described in the following with relevance for mandated adoption.

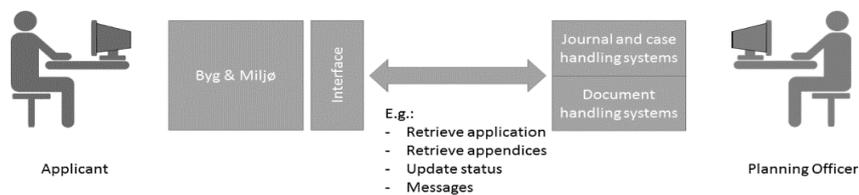
*Translatability of the travelling idea* is determined by (1) explicitness of the idea, so that a high degree of explicitness results in a high degree of translatability. (2) Complexity, where low complexity results in a high translatability. Complexity is low if the source practice is a clear-cut application, whereas a high degree of context-specific human skills in the source practice results in a high degree of complexity. (3) Embeddedness, where a low degree of embeddedness results in a high degree of translatability. Embeddedness is low if the desired practice is embedded in one organisation or department, but if the desired practice is dispersed in networks that crisscross organisational and national borders, embeddedness is high. If a travelling idea has high translatability, it is possible for the recipient to replicate or copy it directly, whereas low translatability requires addition, omission or alteration, because the idea cannot be transferred directly to the recipient [16]. In this case, translatability is argued to be high since explicitness is high, complexity is low, and embeddedness is low: (1) expression of the digitalisation idea in several strategies and plans leads to high explicitness; (2) a clear-cut application – Byg & Miljø – leads to low complexity; and (3) focusing Byg & Miljø at implementation in the planning area leads to low embeddedness.

*Transformability of the idea* is determined by the translators' degree of freedom to interpret, change and make their own version of the travelling construct. Transformability is a function of (1) the technological component, where a high degree of dependency of a technological component results in a low degree of transformability, because the technological component limits the possibility to transform the travelling idea; and (2) regulation of the transfer process where a high degree of regulation, e.g. legislation or a management order, results in low transformability, because the freedom to transform the idea is low. If the idea has a low degree of transformability, there is only little or no opportunity to change it, and the idea must be replicated or copied directly [16]. Hence, when a strategy is mandated, omission and alteration are not appropriate translation rules to choose, which is in line with the translation theory stating that a high regulation of the transfer process results in a low transformability of the travelling object, thereby leaving little or no opportunity to change the travelling object [16]. In this case, transformability is argued to be low as both dependency of a technological component and the degree of regulation of the transfer process is high. Seen from this perspective, we expect copying to be the dominant translation rules at play since translatability is high, making it possible for the recipient to replicate or copy the source practice directly, and transformability is low, thereby limiting the possibility to transform the idea. However, we also know from the IS literature, that compliance is not guaranteed; organisations and actors subject to mandated IT adoption can resist the mandate resulting in workarounds or deviations [7].

### 3 Research method

#### 3.1 Site background

To answer the research question, we conducted a qualitative case study as to how the Danish national eGovernment initiatives (2011-2015) transformed from central government strategy to local government practice. Specifically, we investigated the initiative to digitalise the planning application process, which was mandated in June 2014 with the law on digital self-service [31]. The initiative was accomplished by implementing the IT solution, Byg & Miljø, a web-based application system covering the process through which citizens and organisations apply for planning permissions and environmental approvals. In most municipalities, the planning application process was formerly initiated by filling in a pdf application form, and even if this was done electronically, the application data had to be keyed into the case handling systems upon arrival in the municipalities. The vision for Byg & Miljø was to improve the speed and consistency with respect to quality of the planning application process, and the business case expected to realise an economic potential of around 30-38 mio. DKK/year from 2015 by digitalising approximately 80% of the 180.000 applications/year [32, 33]. The intended architecture for integrating Byg & Miljø into the local governmental IT architecture is shown in figure 1.

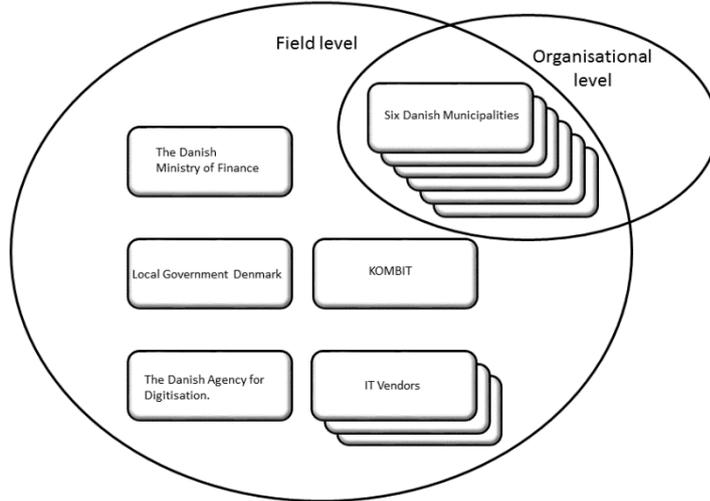


**Fig. 1.** Integration of Byg & Miljø into the local governmental IT architecture

The applicant enters planning applications into the user interface of Byg & Miljø. Through an integration interface, the data is then transferred to the journal and document handling systems of the municipality concerned. During the case handling, the Planning Officer interacts with the case and document handling systems from which status updates and messages are sent to Byg & Miljø. Here the applicant can access them.

#### 3.2 Case study approach and data sources

The case study was carried out as single-case embedded design with multiple levels of analysis [34] reflecting our research interest in field level translations and organisational translation as visualised in figure 2.



**Fig. 2.** Structure of single case embedded design case study

At the field level, we concentrate on the translation work performed by heterogeneous actors who were heavily involved in developing and adapting eGovernment strategies including municipalities (implementing the strategy), the Danish Agency for Digitisation, Local Government Denmark (interest organisation for municipalities), KOMBIT (supporting the strategy implementation by specifying the requirements, and carrying out the acquisition process), and IT vendors (delivering the technical solutions). At the organisational level, we examined how six local government organisations strived to digitalise the planning application process as mandated in the eGovernment strategy. The selection of six sub-cases at the organisational level was done using maximum variation to maximise the utility of information from the cases selected [35, 36]. The digitalisation process was anticipated to be relatively more demanding for small municipalities because fewer employees must carry through the digitalisation effort; hence, the size of the municipality was expected to have an impact on the ability to undertake the digitalisation initiatives. For this reason the municipalities were first categorised as either small (< 20,000 citizens), medium-sized (20,001-99,999 citizens) or large ( $\geq$  100,000 citizens). To be able to identify important common patterns that cut across variations, a theoretical replication strategy of maximum variation was used [36]. Hence, a municipality, which had chosen to advance the digitalisation process, and a municipality, which had chosen to postpone their digitalisation process, were selected from each of the three size categories. The date for launching the digital solution, Byg & Miljø, on the municipality website was used to divide the potential cases in “Advanced” or “Timely” with respect to the digitalisation process.

Our case study data include multiple sources of evidence collected during the period 2013 to 2015. First, we draw from national level eGovernment strategy 2011-2015 from the Danish Agency for Digitisation, the Local Government Digitalisation Strategy

2010-2015, the Local Government Action Plan 2011-2015, the Local Government Gradual Plan III, and individual local government digitalisation strategies. Only four of the six municipalities had a digitalisation strategy covering the relevant period. An overview of the collected documents is shown in Table 1.

**Table 1.** Overview of collected documents

Document	Publisher
eGovernment Strategy 2011-2015 (44 pages)	The Danish Agency for Digitisation
Local Government Digitalisation Strategy 2010-2015 (65 pages)	Local Government Denmark
Local Government Action Plan 2011-2015 (32 pages)	Local Government Denmark
Local Government Gradual Plan III (54 pages)	Local Government Denmark
- no digitalisation strategy at the relevant time period	Small-advanced municipality
Digitalisation Strategy 2011-2015 (8 pages)	Small-timely municipality
Digitalisation Strategy 2013-2015 (20 pages)	Medium-advanced municipality
Digitalisation Strategy 2009-2012 (16 pages)	Medium-timely municipality
Digitalisation Strategy 2012-2015 (27 pages)	Large-advanced municipality
- no digitalisation strategy at the relevant time period	Large-timely municipality

Second, we conducted seven semi-structured interviews with key stakeholders involved in developing eGovernment strategies in the Danish local government landscape. This type of data was used to understand how eGovernment strategies are shaped and modified as they circulate between organisations (sub question 1). An overview of the interviews at field level is shown in Table 2.

**Table 2.** Overview of interviews at field level

Source	Interviews
The Danish Agency for Digitisation	1 interview
KOMBIT	3 interviews
Local Government Denmark	2 interviews
IT vendor	1 interview

In addition, we relied on semi-structured interviews with 18 respondents in the six selected local government organisations to obtain knowledge about how these organisations transformed eGovernment strategies into practice (Table 3). For each organisation, we interviewed (1) planning officers, (2) decision-makers in the IT area, and (3) decision-makers for the subject area (i.e. planning). This type of data was used to understand how eGovernment strategies are shaped and modified inside specific local government organisations (sub question 2).

**Table 3.** Overview of interviews at the six embedded cases (organisational level)

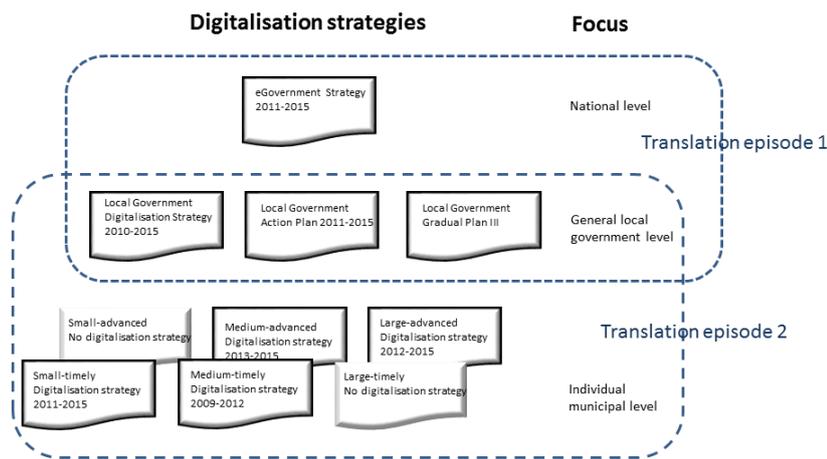
	Advanced digitalisation process	Timely digitalisation process
Small	<p><b><i>Small-advanced municipality</i></b></p> <ul style="list-style-type: none"> <li>- Planning Officer</li> <li>- Digitalisation Consultant</li> <li>- Business Manager</li> </ul>	<p><b><i>Small-timely municipality</i></b></p> <ul style="list-style-type: none"> <li>- Planning Officer</li> <li>- IT &amp; Process Consultant</li> <li>- Business Manager</li> </ul>
Medium-sized	<p><b><i>Medium-advanced municipality</i></b></p> <ul style="list-style-type: none"> <li>- Planning Officer</li> <li>- IT Manager</li> <li>- Business Manager</li> </ul>	<p><b><i>Medium-timely municipality</i></b></p> <ul style="list-style-type: none"> <li>- Planning Officer</li> <li>- IT Manager</li> <li>- Business Manager</li> </ul>
Large	<p><b><i>Large-advanced municipality</i></b></p> <ul style="list-style-type: none"> <li>- Business Manager</li> <li>- Chief Digitalisation Consultant</li> <li>- Business Architect</li> <li>- IT Manager, Enterprise</li> </ul>	<p><b><i>Large-timely municipality</i></b></p> <ul style="list-style-type: none"> <li>- Project Manager for Byg &amp; Miljø and System Administrator for planning case handling system</li> <li>- IT Manager</li> </ul>

In all, interviews were conducted with 25 respondents which were heavily involved in the implementation process. Most interviews were conducted with one person, but if the contact person in the organisation for some reason suggested the interview be conducted with more than one person at a time, this was accepted. Thirteen of the interviews were conducted in person at the field site, and the remaining six interviews were conducted by telephone. The interviews were based on interview guides: one for each role reflecting the three different perspectives in the municipalities. When interviewing the organisations at field level the interview guide was carefully customised to the specific role and organisation to obtain as much relevant information as possible. Each interview lasted between 45 and 180 minutes. All interviews were tape-recorded, and transcribed. The respondents were offered to read and verify a transcription of their interview.

### 3.3 Data analysis

To understand how mandated e-Government strategies evolve during translation from the national level to the individual municipal level, it is necessary to establish an understanding of the purpose of the national level e-Government strategies, and how these strategies are interpreted and inscribed in the individual municipalities' IT or digitalisation strategies. To establish this understanding, a content analysis focusing on the planning area was carried out about the aim of the strategies in order to describe and make inferences about the characteristics of communications [37]. Translation episode 1 comprise the national level and the local government level, and includes the national

eGovernment Strategy 2011-2015 (the starting point for translation), the Local Government Digitalisation Strategy 2010-2015, and associated Action Plan 2011-2015 and Gradual Plan III. Translation episode 2 comprise the individual municipal level, and includes the individual municipalities' digitalisation strategies. An overview of how the analysed documents contribute to translation episodes 1 and 2 is shown in figure 3.



**Fig. 3.** Overview of how the analysed documents contribute to translation episodes 1 and 2

The digitalisation strategies and interviews were coded and analysed using computer-assisted qualitative data analysis software, QSR NVivo 11. After initial coding of the objectives and focus in each strategy, instances of the theoretical concepts copying, addition, omission, and alteration were identified.

## 4 Findings

### 4.1 Translation work outside adopting organisations – translation episode 1

The translation of the national/central eGovernment strategy took place not only inside adopting municipalities but also outside those organisations when various actors such as government agencies, interest organisations and vendors translated national eGovernment strategies into more specific and focused strategies (Local Government Digitalisation Strategy) and achievable tasks (action plans).

The national eGovernment Strategy (2011-2015) focuses on three main issues; (1) making public service more efficient; (2) deliver an improved quality of public service to citizens, and (3) give companies the opportunity to grow and achieve global competitive advantages by mandated use of the available technological opportunities. The eGovernment Strategy does not directly mandate IT adoption in the planning applica-

tion process, but presents a general statement about mandatory use of digital self-service solutions for the citizens: “By 2015, it will be mandatory for citizens to use digital solutions to communicate in writing with the public sector” [38]. The concrete goals for IT use are: “By 2015, we expect to be able to send 80% of all correspondence to citizens in digital form. We also expect that 80% of all applications and correspondence from citizens will be in digital form” [38].

In the context of this paper, The Local Government Digitalisation Strategy and the associated action plan and gradual plan represent the first important translation where we see a shift in focus from general statement to policies for specific local government areas, including the planning area. The Local Government strategy was heavily inspired by the national eGovernment Strategy, thereby reflecting copying as the dominant translation rule/strategy as ideas of efficiency, increased service, and mandatory IT use are maintained, e. g.: “Goal: 80 municipalities have implemented digital planning application in 2015. 70% of the applicants are utilising it” [39]. However, several examples of additions were found, thereby making the mandatory IT adoption mandate approach more concrete. Examples include the objective of redesigning administration processes in the internal organisation by digitalising sub-areas and cross functional cooperation in order to increase efficiency, and establishing efficient data management by modelling and standardising data in the municipalities.

#### **4.2 Translation work inside adopting organisations – translation episode 2**

When translating the objectives of the Local Government Digitalisation Strategy into their own digitalisation strategies, the municipalities choose to copy, add to or alter the objectives in order to increase fit and recognisability in the intended settings. No evidence of omission was found. This might be a result of the mandated nature of the digitalisation strategies at the organisational field level. When a strategy is mandated, omission is clearly not an appropriate translation rule to choose, which is in line with the translation theory stating that a high regulation of the transfer process results in a low transformability of the travelling object, thereby leaving little or no opportunity to change the travelling object [16].

One local digitalisation strategy produced well before the Local Government Digitalisation Strategy expressed objectives that were converging with the later strategies thereby revealing that translation between the strategies from national level over local government level to municipal level, is not a one-way process, but a two-way dynamics. This process is found to be enabled and supported by the increased interaction between actors, and the inter-organisational structures established in the organisational field of municipal digitalisation.

The results of the analysis are summarised in Table 4 below.

**Table 4.** Translation of mandated eGovernment initiatives

	Objectives/strategic focus	View on mandatory IT adoption	Translation rule
<i>National eGovernment Strategy</i>	<ul style="list-style-type: none"> <li>- Cost savings through efficient public service</li> <li>- Increased service levels for the citizens</li> <li>- Growth and competitive advantage for the private sector</li> </ul>	General statement about mandatory use of digital self-service solutions	-
<i>Local Government Digitalisation Strategy</i>	<ul style="list-style-type: none"> <li>- Efficient public service decreasing public spending</li> <li>- Improved digital service delivery to citizens and companies</li> <li>- redesigning administration processes in the internal organisation</li> <li>- establishing efficient data management</li> </ul>	Focused and concrete articulation of mandatory IT use	Copying Addition
<i>Large advanced municipality, Digitalisation Strategy 2012-2015</i>	<ul style="list-style-type: none"> <li>- Deliver more effective municipal services</li> <li>- Involve the citizens and increase transparency</li> <li>- Strengthen the employees', managers' and stakeholders' ability to innovate</li> </ul>	Articulation of compliance with mandatory IT use and ambitions for digitalisation beyond this	Copying Addition
<i>Large timely municipality</i>	<ul style="list-style-type: none"> <li>No digitalisation strategy</li> <li>- Cost savings</li> </ul>	Compliance with mandatory IT use, but only to achieve cost savings, and not increased service level	Copying Omission
<i>Medium advanced municipality, Digitalisation Strategy 2013-2015</i>	<ul style="list-style-type: none"> <li>- Increase efficiency and quality</li> <li>- Self-service is found to be easily accessible</li> <li>- The journal and case handling are found to provide an optimal work flow</li> <li>- IT is found to support communication and knowledge sharing between colleagues</li> <li>- The digital inequality between the citizens is being lowered</li> </ul>	Articulation of compliance with mandatory IT use and ambitions for digitalisation beyond this	Copying Addition
<i>Medium timely municipality, Digitalisation Strategy 2009-2012</i>	<ul style="list-style-type: none"> <li>- increase the service level</li> <li>- support improved production of core output</li> <li>- make business processes more efficient by eliminating manual activities, reuse of data, and integration of processes</li> <li>- utilise digitalisation to become a more attractive workplace</li> </ul>	Produced before the national level strategies, however expressing the same objectives	Copying

<i>Small timely</i> municipality	No digitalisation strategy - cost savings - increased service - redistributing saved resources for tasks that are digitalised to more complicated tasks requiring face-to-face communication	Articulation of compliance with mandatory IT use, however also contradicting the objective of generating cost savings	Copying Alteration
<i>Small timely</i> municipality, Digitalisation Strategy 2011-2015	- increase efficiency - use digitalisation to develop and improve service delivery - develop active citizenship and support democracy - to integrate digital solutions across the organisation - to increase the focus at digital management	Articulation of compliance with mandatory IT use and ambitions for digitalisation way beyond this	Copying Addition Alteration

In the large-advanced municipality, the objective of digitalisation is materialised by using the translation rule copying for the objectives cost savings and increased service level. The translation rule addition is used for other objectives, e.g. to involve the citizens and increase transparency, and to strengthen the employees', managers' and stakeholders' ability to innovate. As the large-advanced municipality had already achieved the cost savings and the increased service level with their own digital planning application system, they had already realised the objectives for cost savings and increased service level. Realisation of these objectives was terminated, because the municipality decides to comply with the coercive and normative pressure to implement Byg & Miljø instead of their own customised digital planning application system. The municipality is 'putting ideas onto actions', that is, giving a name to something already being done [17], because the planning applications were already digitalised before it was mandated in the national level digitalisation strategies.

In the large-timely municipality the idea of digitalisation is materialised by using the translation rule copying for the objective cost savings, however, also the translation rule omission is used as the objective of increased service level is missing in their project charter. In order to turn ideas into action, the large-timely municipality compiled a project charter with specific images of action to become able to act upon the idea. As the project had already started in 2010, before the project charter was written in 2013, the large-timely municipality was also putting ideas onto action [17].

In the medium-advanced municipality the translation rule copying is used for the objectives cost savings and increased service level for materialising the idea of digitalisation. In order to turn the idea into action, the medium-advanced municipality ensures the projects are tangible and manned with the right competencies before the projects are directed into the different administrative units. The medium-advanced municipality sees the digitalisation strategies as putting ideas onto action [17], because the municipality was working with digitalisation ten years ago as the purpose and rationale for digitalisation was clear already then.

In the medium-timely municipality the translation rule copying is used for the objectives cost savings and increased service level for materialising the idea of digitalisation. In order to formulate the proper scope, uncover support needs, and maintain managerial focus, a project description to digitalise the planning case area was written thereby putting ideas into action [17].

In the small-advanced municipality the translation rule copying is used for the objectives cost savings and increased service level for materialising the idea of digitalisation. However, the municipality is also using the translation rule alteration, because the redistribution plan where the saved resources for tasks that are digitalised to more complicated tasks requiring face-to-face communication can be seen as contradicting the objective of generating cost savings. Putting the ideas into action was initiated with a number of meetings between business and IT established to detect what would have to be prepared when implementing Byg & Miljø.

In the small-timely municipality the translation rule copying is used for the objectives cost savings and increased service level for materialising the idea of digitalisation. However, the municipality is also using the translation rule addition for the objective to use digitalisation to develop active citizenship and support democracy. Putting the digitalisation idea into action was initiated with the development of the Digitalisation Strategy 2011-2015, a process involving a wide range of actors in the municipality. The small-timely was at first ahead of the gradual plan, so it is argued that the municipality is putting ideas onto actions [17].

## 5 Concluding remarks

This article contributes to the IS adoption literature by shifting the focus from voluntary adoption to mandated strategic initiatives. Our analysis provides a rich picture of how public sector organisations react to mandated eGovernment strategy digitalisation initiatives, and highlight the role of translating actors at different levels in driving this process. Our analysis reveals how translation work unfolds in the network of actors surrounding mandated local government digitalisation strategies (translation episode 1), and inside specific organisations (translation episode 2). We provide insights into the variety of modifications that happen to mandated, large-scale digitalisation strategies before and after adoption. Although mandated governmental IT strategic initiatives implies that organisations decision about their use of the IS is limited [13] our study reveals some leeway for translation.

The empirical study reported in this paper expand our knowledge of how translation theory functions in the context of mandated IT systems. While this body of research mainly examine voluntarily adoption and translation of specific management ideas and practice we suggest its relevance in understanding the adoption of mandated, large-scale IT strategic change.

## References

1. Andersen, K.V., et al., *European e-commerce policies in the pioneering days, the gold rush and the post-hype era*. Information Polity, 2004. **9**(3, 4): p. 217-232.
2. Beynon-Davies, P. and M.D. Williams, *Evaluating electronic local government in the UK*. Journal of Information Technology, 2003. **18**(2): p. 137-149.
3. McShane, I. and J. Thomas, *Unlocking the potential? – Australia's digital strategy and major public libraries*. Prometheus, 2010. **28**(2): p. 149-163.
4. Henriksen, H.Z. and J. Damsgaard, *Dawn of e-government - an institutional analysis of seven initiatives and their impact*. Journal of Information Technology, 2007. **22**(1): p. 13–23.
5. Baptista, J., *Institutionalisation as a Process of Interplay Between Technology and its Organizational Context of Use*. Journal of Information Technology, 2009. **24**(4): p. 305-319.
6. Besson, P. and F. Rowe, *Strategizing information systems-enabled organizational transformation: A transdisciplinary review and new directions*. Journal of Strategic Information Systems, 2012. **21**(2): p. 103-124.
7. Carugati, A., et al., *My choice, your problem? Mandating IT use in large organisational networks*. Information Systems Journal, 2018. **28**(1): p. 6-47.
8. Tung, L.L. and O. Rieck, *Adoption of electronic government services among business organizations in Singapore*. Journal of Strategic Information Systems, 2005. **14**(4): p. 417-440.
9. Sevón, G., *Organizational Imitation in Identity Transformation*, in *Translating organizational change*, B. Czarniawska and G. Sevón, Editors. 1996, Walter de Gruyter & Co: Berlin. p. 49-67.
10. Sahlin-Andersson, K., *Imitating by Editing Success: The Construction of Organization Fields*, in *Translating organizational change*, B. Czarniawska and G. Sevón, Editors. 1996, Walter de Gruyter & Co: Berlin. p. 69-92.
11. Morris, T. and Z. Lancaster, *Translating Management Ideas*. Organization Studies, 2006. **27**(2): p. 207-233.
12. Nielsen, J.A., L. Mathiassen, and S. Newell, *Theorization and Translation in Information Technology Institutionalization: Evidence from Danish Home Care*. MIS Quarterly, 2014. **38**(1): p. 165-186.
13. Brown, S.A., et al., *Do I really have to? User acceptance of mandated technology*. European Journal of Information Systems, 2002. **11**(4): p. 283-295.
14. Damsgaard, J. and K. Lyytinen, *The Role of Intermediating Institutions in the Diffusion of Electronic Data Interchange (EDI): How Industry Associations Intervened in Denmark, Finland, and Hong Kong*. Information Society, 2001. **17**(3): p. 195-210.
15. DiMaggio, P.J. and W.W. Powell, *The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields*. American Sociological Review, 1983. **48**(2): p. 147-160.

16. Røvik, K.A., *Knowledge Transfer as Translation: Review and Elements of an Instrumental Theory*. International Journal of Management Reviews, 2016. **18**(3): p. 290–310.
17. Czarniawska, B. and B. Joerges, *Travels of ideas*, in *Translating organizational change.*, B. Czarniawska and G. Sevón, Editors. 1996, Walter de Gruyter & Co.: Berlin. p. 13-48.
18. Czarniawska, B. and G. Sevón, *Translating organizational change*. de Gruyter studies in organization ; 56. 1996, Berlin: Walter de Gruyter. 284.
19. Latour, B., *The Powers of Association*, in *Power, Action and Belief: A New Sociology of Knowledge*, J. Law, Editor. 1986, Routledge and Kegan Paul: London. p. 264–280.
20. Pries-Heje, J. and R. Baskerville, *The translation and adaptation of agile methods: a discourse of fragmentation and articulation*. Information Technology & People, 2017. **30**(2): p. 396-423.
21. Rogers, E.M., *Diffusion of Innovations*. 5 ed. 2003, New York: Free Press. 551.
22. Czarniawska, B., *A Theory of Organizing*. 2009, Cheltenham: Edward Elgar. 153.
23. Wæraas, A. and J.A. Nielsen, *Translation Theory 'Translated': Three Perspectives on Translation in Organizational Research*. International Journal of Management Reviews, 2016. **18**(3): p. 236-270.
24. Ansari, S.M., P.C. Fiss, and E.J. Zajac, *Made to Fit: How Practices Vary as They Diffuse*. The Academy of Management Review, 2010. **35**(1): p. 67-92.
25. Greenwood, R., R. Suddaby, and C.R. Hinings, *Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields*. The Academy of Management Journal, 2002. **45**(1): p. 58-80.
26. Sahlin, K. and L. Wedlin, *Circulating Ideas: Imitation, Translation and Editing*, in *The SAGE Handbook of Organizational Institutionalism*, R. Greenwood, et al., Editors. 2008, SAGE: London. p. 218-242.
27. Swanson, E.B., *Consultancies and Capabilities in Innovating with IT*. Journal of Strategic Information Systems, 2010. **19**(1): p. 17-27.
28. Kelemen, M., *Too Much or Too Little Ambiguity: The Language of Total Quality Management*. Journal of Management Studies, 2000. **37**(4): p. 483-498.
29. Wæraas, A. and H.L. Sataøen, *Trapped in conformity? Translating reputation management into practice*. Scandinavian Journal of Management, 2014. **30**(2): p. 242-253.
30. Qu, S.Q. and D.J. Cooper, *The role of inscriptions in producing a balanced scorecard*. Accounting, Organizations and Society, 2011. **36**(6): p. 344-362.
31. The Danish Ministry of Finance, *The Danish Ministry of Finance, Act no 552 about applications, notifications, information, requests and proclamations to the public authorities*, The Danish Ministry of Finance, Editor. 2014.
32. Local Government Denmark, *Business case for project concerning digital planning application*. 2013.
33. Local Government Denmark, *Economic potential for Gradual Plan III*. 2013, Local Government Denmark (KL): København. p. 1-54.
34. Yin, R.K., *Case Study Research: Design and Methods*. 5th ed. 2014, Los Angeles: SAGE. 282.

35. Flyvbjerg, B., *Five Misunderstandings About Case-Study Research*. Qualitative Inquiry, 2006. **12**(2): p. 219-245.
36. Kvale, S. and S. Brinkmann, *Interview : introduktion til et håndværk*. 2nd ed. 2009, København: Hans Reitzels Forlag.
37. Holsti, O.R., *Content analysis for the social sciences and humanities*. 1969, Reading, Mass.: Addison-Wesley. 235.
38. eGOVERNMENT strategy 2011-2015, *Den Fællesoffentlige Digitaliseringsstrategi 2011-2015*. 2012, The Danish Agency for Digitisation, Digitaliseringsstyrelsen: København.
39. Local Government Digitalisation Strategy 2010 – 2015, *Den Fælleskommunale Digitaliseringsstrategi - 2010 – 2015*. 2010, Local Government Denmark: København.