

DIFFUSION OF STANDARDS: THE IMPORTANCE OF SIZE, REGION AND EXTERNAL PRESSURES IN DIFFUSION PROCESSES

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Organizational standards or guidelines, although commonly applied in public sector organizations, are rarely studied systematically. We report insights gained here into the circumstances present when organizations adopt standards by studying the diffusion of the Common Language Standard (CLS). Neo-institutional organization theory constitutes the theoretical framework, which highlights the empirical phenomenon that standards occasionally spread extremely rapidly to some – but not all – organizations within the same field. Empirical evidence from quantitative surveys of civil servants and elected officials in Danish municipalities is used to analyse the field and organizational levels. The levels of external pressure and organizational resources are important in order to understand why some municipal organizations have adopted the CLS whereas others have not. We find that the initial source of the standard as well as regional pressure play a strong role, something which contradicts other studies indicating that diffusion from organization to organization is more significant.

INTRODUCTION

Organizational standards occasionally become popular almost simultaneously in many organizations (Røvik 1998); however, 'the mere existence of a standard does not guarantee that it will be followed either by individuals or by organizations' (Brunsson and Jacobsson 2000, p. 8). This article explains the processes in which an organizational standard rapidly spreads to many organizations – though not to all organizations. The empirical focus is on the voluntary Common Language Standard (CLS), which has existed for just six years, but has already been adopted by more than 80 per cent of all Danish municipalities.

The aim of this article is to study the diffusion of standards within the public sector in Denmark. 'Diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system' (Rogers 1983, p. 5). In that sense, 'diffusion connotes the socially mediated spread of some practice within a population' (Strang and Meyer 1993, p. 487). Standards express rules informing actors what to do in

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certain situations (Brunsson and Jacobsson 2000). Standards represent a specific type of rule alongside two other types, for example, norms and directives. Standards differ from norms in terms of their explicitness and by having an evident source. At the same time, standards differ from directives in the sense that standards are not mandatory; rather, organizations can voluntarily adopt them or not. Those issuing standards are unable or unwilling to require others to adopt them, at least by exploiting any formal authority they may possess. Standards represent a kind of set of guidelines or advice for others regarding what they ought to do.

The paper begins by accounting for the diffusion of the CLS in the Danish public sector over a six-year period. We then proceed to explain the processes in which the diffusion of the standard has appeared by empirically testing a number of theoretically generated hypotheses on the background of quantitative surveys (Hansen *et al.* 2004). Neo-institutional theory in organizational sociology is applied to elucidate and discuss the findings. Finally, the implications of the findings are discussed.

'LOCAL GOVERNMENT DENMARK' AND THE COMMON LANGUAGE STANDARD (CLS)

The Common Language Standard (CLS) is offered to the 271 Danish municipalities as a standardized communication tool within elderly care. From the outset in 1996, the purpose of introducing CLS was twofold (Lützhøft 1996): first, to provide a tool for internal documentation of services rendered, work planning, resource control and standardized assistance to the elderly. Secondly, to provide a tool for internal benchmarking between districts within each municipality and external benchmarking between municipalities.

CLS was initially created by Local Government Denmark (LGDK), a meta-organization (Ahrne and Brunsson 2001) which has the Danish municipalities as its members. LGDK is usually considered to have three tasks (Blom-Hansen 2002): first, LGDK lobbies for municipal interests in relation to the state, thereby playing a particularly important role in annual budget negotiations between the Minister of Finance and the municipalities. Second, LGDK is an employer organization negotiating with the different employee organizations which organize municipal employees. Third, LGDK acts as a consultancy. We argue that LGDK also plays a fourth role as a standardizer, that is, the organization establishes rules for its members to follow. In other words, LGDK is also a 'soft' regulatory body (Mörth 2004). LGDK has no legal authority and cannot force its members to follow its rules. Furthermore, the municipalities are not required to be members of LGDK. At present, all 271 Danish municipalities are members with the exception of the two municipalities within the capital of Copenhagen.

The first version of CLS that was ready for adoption was introduced in 1998 in a LGDK publication (KL 1998). Between 1996 and 1998, the CLS

was developed by LGDK in collaboration with seven municipalities and subsequently tested in 18 municipalities. Since 1998, LGDK has provided various courses in CLS. Figure 1 illustrates the year of adoption across Denmark.

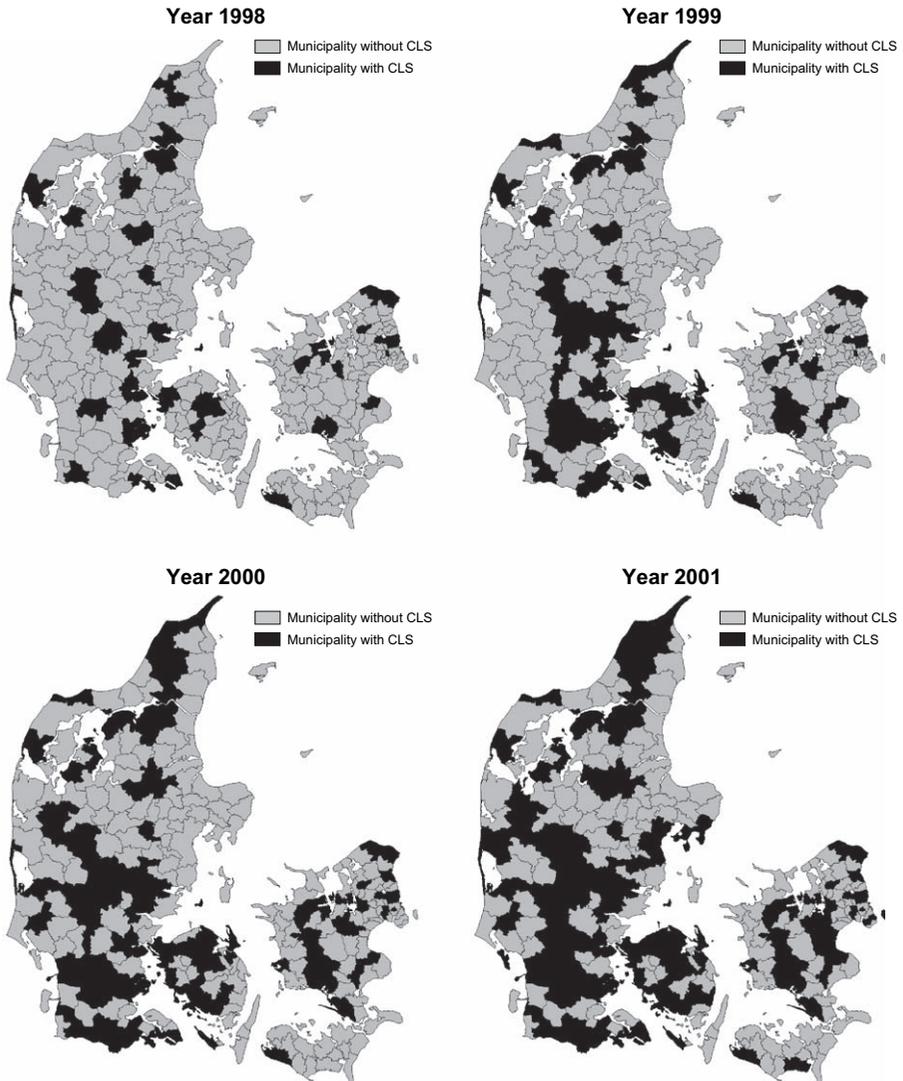
Figure 1 is based on a complete quantitative survey of all 271 Danish municipalities conducted during spring 2004 (Hansen *et al.* 2004). Compared to their European counterparts, Danish municipalities have considerable autonomy in deciding the municipality's tax rate and level of service. Danish municipalities account for approximately 50 per cent of the total public expenditures, amounting to roughly 25 per cent of the GDP and vary in size from 2220 to 500 548 inhabitants. Elderly care, which is in focus in the survey, accounts for 10–20 per cent of total per capita municipal expenditures. The average municipality has 19 879 inhabitants, but since two-thirds of all Danish municipalities have fewer than 15 000 inhabitants, the median municipality has 10 469 inhabitants (<http://www.noegletal.dk>). The municipality is responsible for much of the implementation of the Danish welfare state, for example, childcare, primary education, social security, infrastructure and elderly care (Blom-Hansen 2002b). The municipalities are led by a directly elected municipal council. In our study, questionnaires were addressed to several organizational levels within elderly care in the municipalities. The organizational level used for the analyses is the elected official who was the head of the committee responsible for elderly care, the CEO and the top administrator responsible for elderly care. The response rates for the three groups were 47 per cent, 65 per cent and 72 per cent respectively. Combining the questionnaires at these three different levels provides information for 250 (92 per cent) of the 271 municipalities. The responses are combined so that if the CEO was the respondent who replied, these answers are used. If the CEO was not the respondent who replied, the answers of the top administrative officers are used. If the municipality did not reply, the response from the elected official are used. If there was no response, the municipality is rated as 'missing' in the analyses. The combined file – with each municipality as the unit of analysis – is used in the following analyses.

Figure 1 casts light on several interesting findings. First, the CLS is widespread since 87 per cent of the municipalities used or had decided to use the CLS in 2004. Precisely 17 per cent of the municipalities used the standard but had not politically ratified it; 12 per cent did not apply the standard; 8 per cent did not respond to the survey; and 11 per cent used the standard but did not know whether it was politically ratified or not. A total of 52 per cent used the standard and have politically ratified it. Secondly, the standard has spread reasonably rapidly among municipalities. Within one year, roughly one-third of all municipalities had adopted the standard and, within three years, half the municipalities had adopted it. Thirdly, many – but not all – municipalities have adopted the standard. A fourth finding is that, at first glance, there are apparently some geographical clusters. Thus there

seems to be a pattern in some parts of the country where there is an over-representation of non-adopting municipalities.

NEO-INSTITUTIONAL THEORY: A SOCIOLOGICAL APPROACH

A sociological approach to neo-institutional theory provides a general framework for analysing the empirical findings. In studies of the diffusion process, the concepts of what Meyer (1996) refers to as ‘actors’ and ‘others’ (see also Strang and Meyer 1993) are quite important. In general, an ‘actor’ is defined in terms of being free to choose and capable of acting independently (Brunsson



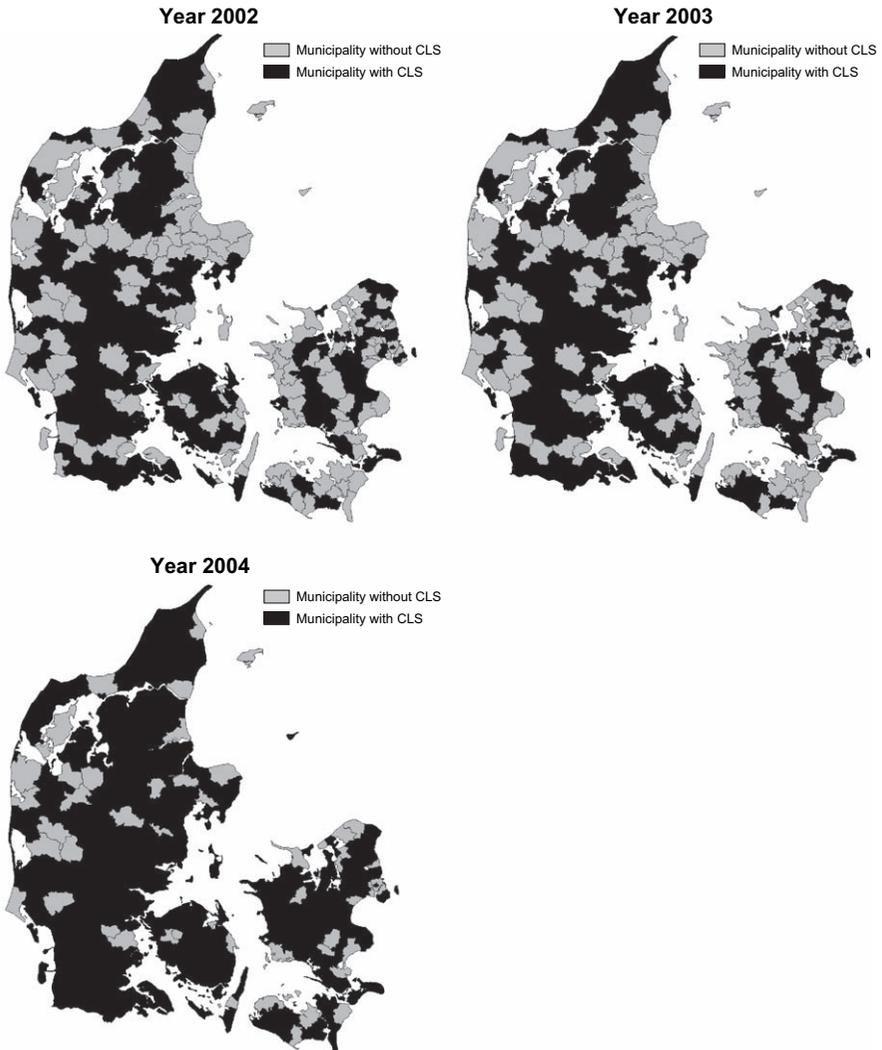


FIGURE 1 *Maps of Denmark: year of adaptation for each municipality*

Note: The 18 municipalities in which CLS was tested in 1998 is shown as black on the maps 1998–2003. On the 2004 map the 18 municipalities are shown as black if they have not disclosed in the survey that they no longer use CLS. Municipalities shown in grey do not use the CLS or in a few cases did not respond to the survey. In 2004 municipalities shown in black include municipalities using CLS, but who did not give a year for adoption. The island of Bornholm is excluded from the map since in 2003 its five municipalities formed a single municipality.

2000, p. 143). 'Others' are understood to develop, promulgate and certify some standards (or ideas or reforms), and ignore and stigmatize other standards (Meyer 1996, p. 244). In the present article, the municipal organizations are regarded as 'actors'. 'Others' are defined as other significant organizations and meta-organizations within the same field. In this particular study,

others are LGDK, which is also to be interpreted as the 'standardizer', as well as other municipalities in the field.

Distinct studies of diffusion pay varying degrees of attention to the different levels of analysis: world society (Meyer *et al.* 1997), society (Friedland and Alford 1991) and field (DiMaggio 1983; 1991; DiMaggio and Powell 1991; Scott *et al.* 2000). The study reported in this article is conducted at the field and organizational levels. An organizational field consists of 'those organizations that, in the aggregate constitute a recognized area of institutional life' (DiMaggio and Powell 1991, p. 64).

Neo-institutional theory assumes that structural processes bring homogeneity of structure, culture and output to a field. Homogeneity is explained by coercive, normative and mimetic isomorphic processes (DiMaggio and Powell 1991), that is, organizations become more alike because they are exposed to the same rules, norms and constitutive beliefs in the field (Scott 2001). It has been argued that this is most evident in the public sector, since public organizations are more vulnerable to institutional pressures than is the case with organizations in the private and non-profit sectors (Frumkin and Galaskiewicz 2004). These institutional isomorphic processes do not imply that organizations are necessarily passive actors in the implementation of standards (Czarniawska and Joerges 1996); rather, organizations adopt a standard by transforming it into something that fits their own context as they 'operationalize', or materialize it into action (Sevón 1996, p. 51). Hence, homogeneity often concerns talk rather than practice (Brunsson 2002).

At least in theory, organizational conformity to organizational standards can be explained as organizations being embedded in a homogenous institutional environment. If individual organizations are to receive support and legitimacy then these organizations must conform to the rules and requirements stipulated by the environment (Scott and Meyer 1991). According to Meyer, the diffusion of standards – what he refers to as organizational forms – is determined by 'the structure and conceptualization of the stratification system of extant organizations' (Meyer 1994, p. 36). Thus, organizational fields are perceived as systems of stratification consisting of elites and successful organizations. These elites and successful organizations become pioneers in the adoption of standards (Walker 1969; Berry and Berry 1999) therefore serving as models for other organizations.

This approach to institutional analysis provides an understanding of the field level processes that is important in diffusion processes; however, it does not take into account the fact that some organizations do not adopt institutional standards. CLS's diffusion also represents a case of homogeneity and diversity. As mentioned above, as of 2004, 12 per cent of the Danish municipalities had not adopted the CLS. Thus in order to fully understand the diffusion process described in figure 1, more than the field level processes must be analysed. The organizations adopting the standard as well as the organizations not adopting the standard require careful study. Moreover, to attempt to discover why the CLS has diffused so rapidly, the

standard itself must be studied. This study includes consideration of both 'actors' and 'others'. The standard requires energy to enable it to spread, and this energy stems from the 'actors' as well as the 'others' in the form of LGDK and other municipal organizations in the field. The empirical analysis is conducted in the sections that follow. First, CLS is studied in qualitative terms. Then theoretical hypotheses derived from neo-institutional theory regarding the role of the 'others' and 'actors' in the diffusion process are tested quantitatively.

CHARACTERISTICS OF THE COMMON LANGUAGE STANDARD (CLS)

The purpose of this section of the article is to analyse the CLS in more qualitative terms. Considering the findings above, it is interesting to examine whether the standard possesses characteristics that can help explain its rapid and widespread diffusion. Meyer (1996) suggests that standards that are more likely to diffuse than others are defined by certain characteristics.

First, standards linked to central rationalistic values travel better than do standards less linked to such highly legitimate goals. These standards develop into what Meyer and Rowan (1991) define as rationalized myths. Thus, standards are presented in a general discourse providing a set of guidelines for organizational forms (Brunsson 1997, 2000b). This discourse also provides arguments in favour of the standard and problems requiring solutions. In the case of the CLS, the standard is presented as a necessary communication tool in order to implement Information Technology (IT) in the field of elderly care. The creation of the CLS took place over a period of time. From the outset, LGDK has been an important actor in connection with the definition of problems (complexity, lack of information, inefficiency) and solutions in the field of elderly care. The integration of IT is regarded as the solution to these problems. IT is expected to provide better information systems and thereby making the work process less complex and more efficient. All in all, LGDK is a very important 'other' in order to set the discourse in context, that is, to define problems and solutions. The discourse relates to extremely rationalistic values concerning, on the one hand, efficiency; on the other hand, better information and documentation connotes efforts towards a better-functioning democracy. Employing the standard then results in a more efficient and democratic organization.

The democratic issue is a second characteristic that renders the CLS more likely than not to diffuse. The CLS can be regarded as a tool for enhancing public transparency and equality before the law. By using the standard, the relationship between the public authority (the municipalities) and the citizenry is quite explicit. The individual citizen can read about the services they are entitled to receive from the public authority (the welfare state). In this way, individuals in different districts within the same municipality can be treated equally, as well as individuals in different municipalities.

A third characteristic relates to the rationalization and formalization of the organization itself as brought about by the standard. Standards proposing more organization, with emphasis on formal roles and less organizing around familial relationships, are thus more likely to become widespread. The CLS represents a case of formalizing roles in the municipal organization. When the communication between the public authority and citizenry is standardized, greater emphasis is placed on the formal roles in both ends of the communication.

A fourth characteristic that ought to be mentioned is the level of abstraction of the standard. If we assume that more abstract standards allow greater space for interpretation and translation to the adopting actors, a hypothesis would be that the standard is then more likely to diffuse (Czarniawska and Joerges 1996). The CLS, however, is not particularly abstract; in fact, in practice, it is an extremely concrete tool. Nevertheless, it allows sufficient space for translation and interpretation. According to LGDK, the CLS is intended to be tailored to local practice (KL 2002).

A fifth and final characteristic is that standards, which are relatively simple to explain and intuitively understandable by and appealing to different organizational levels, are more likely to be widely diffused than standards that do not possess such characteristics (Hansen and Ejersbo 2002). The CLS is often presented as intuitively appealing, emphasizing the need for common concepts in order to enhance the communication between different levels within the municipality.

There seems to be evidence that the CLS possesses certain characteristics that can help account for a notably rapid dispersal among the Danish municipalities. The field level analysis is described in the section that follows.

FIELD LEVEL ANALYSIS

At the field level, the purpose of the study is to scrutinize the role of the 'others' in the diffusion process. First, the role of other municipalities in the field is analysed, followed by the role of LGDK, which is the standardizer and, hence, the initial source of the CLS.

As mentioned above, some organizations are models for other organizations. The crucial question then becomes: which organizations are imitated? Strang and Meyer (1993) distinguish between relational and cultural models of diffusion. The relational model suggests that rates of diffusion will vary according to the levels of interaction between prior and potential adopters. In other words, organizations will be more likely to imitate the organizations they interact with. In the context of Danish local government, there is interaction between the CEOs of the 271 municipalities. The municipalities are informally organized in different regions corresponding to the Danish counties; CEOs occasionally meet to share experiences (Blom-Hansen 2002). Based on this fact, Hypothesis 1 is proposed.

Hypothesis 1: Municipalities imitate other municipalities within the same region.

The fundamental argument behind this hypothesis is that municipalities look to other municipalities in the same region when deciding whether or not they will implement a standard and which standard to implement. Other Danish studies of municipal behaviour within different fields also find that municipalities in the same region tend to copy one another more frequently (Gregersen 2000). As mentioned above, a casual glance at the various maps in figure 1 would appear to indicate a pattern of geographical diffusion. However, a visual depiction of CLS's diffusion does not provide statistical evidence of geographical diffusion since even random plotting of the same number of municipalities each year would provide some clusters of adopting municipalities. Nevertheless, if no clusters emerge on the maps, the geographical diffusion hypothesis could be rejected. The presence of clusters thus provides necessary – but not sufficient – evidence of the geographical diffusion of the CLS. As the final table (table 4 on page 456) will show, it is more likely that a municipality has CLS if a relatively large share of other municipalities also use it. Thus this confirms that there are indeed some geographical patterns of diffusion within the regions.

As discussed above, organizations are embedded in a homogenous institutional environment and organizations – in order to secure legitimacy – conform to the rules of this environment. This argument follows the cultural model of diffusion. In this model, physical interaction is not necessarily a precondition for imitation. Thus, 'cultural linkages generally outstrip direct relations' (Strang and Meyer 1993). The cultural linkage implies that the adopting organizations identify 'others' as a reference group that binds social comparison processes. The main argument is that organizations are likely to imitate organizations they perceive as being similar. The elites and successful organizations are often the origins of the imitation of rules. We therefore expect municipalities to imitate other municipalities that they perceive to be pioneers. Hypothesis 2 is proposed for precisely this reason.

Hypothesis 2: Municipalities imitate other municipalities they perceive to be pioneers.

In order to explore this hypothesis, we asked the CEO in each municipality to rank three other municipalities he or she regards as pioneers in the field of care for the elderly. The answers are shown in table 1. The findings reveal no significant relationship between a municipality's current practice and the current practice of its pioneers. As such, there is no evidence of a relationship between the practice of municipal pioneers and the practice of the specific municipality. However, it should be noted that table 1 lacks a time element, that is, being classified as a pioneer today says little about whether the pioneer was the driving force when initially adopting the standard.

On the one hand, the analysis reveals that the regional factor is important in the diffusion process; on the other hand, the pioneers do not themselves appear to be crucial for this diffusion process. The relational model therefore seems more important than the cultural model in explaining the diffusion of the CLS.

TABLE 1 *Municipalities pioneers and application and CLS (%)*

	CLS municipalities (n = 110)	Non-CLS municipalities (n = 17)
• More than half of the mentioned municipal pioneers have CLS	69	59
• Less than half of the mentioned municipal pioneers have CLS	31	41

Note: Chi²-test shows no significant relationship. The CEO and the top administrative officer in the field of elderly care in each municipality could each mention up to three municipalities they regarded as pioneers within the field. Missing cases are excluded.

In analysing the first two hypotheses, 'others' are defined as other municipalities in the field. We now turn to the LGDK, which is the standardizer and therefore the initial source of the CLS. Henning (2000) argues that standardizers persuade people and organizations to adopt their standards. One way to do this is to try to convince the potential adopters of the standard that they share some common problems and that a given standard can be regarded as a solution to these problems. As mentioned in the previous section, LGDK has played a very important role in setting the agenda for problems and solutions in the field of elderly care. Not only is LGDK the creator and promoter of the CLS, it is also the meta-organization that constitutes much of the institutional environment in the Danish municipalities. Hypothesis 3 is therefore proposed.

Hypothesis 3: The creator of the standard (LGDK) plays a direct role in the diffusion process.

The hypothesis is analysed in table 2. The given standard used in the municipalities is an administrative tool and not necessarily an ideal political case to use as a high profile case (see questions *a* and *b* in table 2). Elected officials are rarely a driving force when deciding whether or not to adopt the standard in question. In this way, the CLS deviates from many other standards, for example 'Management by Objectives', in the Danish municipalities (Hansen and Ejersbo 2002). Another interesting finding is that, according to the CEOs, the carers play a relatively trivial role in the implementation of the standard (see question *d* in table 2). In other words, the street-level bureaucrats do not themselves demand the adoption of the standard.

Of greatest interest are the answers with a significant discrepancy between adopting municipalities and non-adopting municipalities (see questions *f*, *g* and *i* in table 2). Municipalities that adopted the CLS place greater emphasis on the CLS being a requirement for the use of IT. This fact can be interpreted as a technology driven demand for the standard. Without a standardized or common language it is impossible to implement IT solutions in the field. This same argument has been forwarded many times by LGDK. It is safe to say

TABLE 2 *Why did the municipality implement the current standard (mean index value 0-100, n in parenthesis)*

	CLS municipalitie	Non-CLS municipalitiest
a) There was a political wish to do so	37 (188)	35 (23)
b) There was an administrative wish to do so	75 (197)	70 (23)
c) There was a wish to do so among administrators responsible for the provision of care to the elderly	60 (191)	58 (23)
d) There was a wish among the carers to do so	39 (188)	38 (23)
e) The standard was widely used by other municipalities	46 (191)	39 (23)
f) LGDK encouraged the use of the standard	56 (189)	36** (23)
g) External ICT-consultant encouraged the use of the standard	36 (188)	22* (23)
h) Other external consultant encouraged the use of the standard	35 (189)	26 (23)
i) It was a requirement for the use of IT	57 (195)	35* (24)
j) Centralization of the administrators responsible for the provision of care to the elderly required the standard	61 (196)	63 (24)
k) The standard provided an opportunity to create overview of the issue within the municipality	74 (193)	73 (24)

Note: Two CEOs in each municipality were asked. If both CEOs responded to the questions, the mean is calculated. Index values: 100 = very large weight, 75 = large weight, 50 = some weight, 25 = small weight, 0 = no weight, do not know = 50. ** indicates difference at the $p < 0.01$ between CL-municipalities and not * $p < 0.05$. †: "Non-CLS municipalities" means that the municipalities use another standard, usually a standard they have developed themselves.

that it is has been the meta-organizations' primary sales argument (Lützhøft 1996). In this sense it is important not to neglect the importance of LGDK efforts to sell their product (CLS) to the municipalities. Moreover, as mentioned earlier, LGDK has argued that the CLS is a solution to many of the problems in the field of elderly care, and by that argument has encouraged all the municipalities in Denmark to adopt the standard. The analysis reveals that the municipalities perceive this encouragement in different ways. In the adopting municipalities, the encouragement seems to play a greater role than in non-adopting municipalities. This reveals that the meta-organization plays a most

evident and direct role in selling the standard to the municipalities. If they did not, there would not have been a significant difference between the adopters and non-adopters regarding the perceived role of LGDK's encouragement. The importance of LGDK encouragement and the fact that IT is mentioned as important, demonstrates how LGDK has succeeded in convincing the municipalities that IT is the right – or even sole – solution to their problems. Stretching this argument, IT and the CLS are becoming taken for granted and are perceived as a 'need' rather than as a 'choice' (Brunsson and Olsen 1993).

The causal model indicates that IT requirement and LGDK encouragement caused municipalities to adopt CLS. Nevertheless, it could be argued that a reversed causality model is conceivable. That is, that the municipalities adopted CLS, which on the one hand caused the municipality to require IT, and on the other hand caused a strong contact to LGDK, which in turn caused a stronger encouragement from LGDK. Looking at the available data, this reversed causality cannot be ruled out since we lack prior and independent information on all three variables. However, a reversed causality seem unlikely. First, other studies show that LGDK represents an extremely important 'other' in convincing the municipalities to adopt certain standards and CLS is a LGDK invention (Dahl 2006). Second, in the Danish public sector, implementation of IT has been an important issue for many years (see, for example, The Digital Task Force: <http://www.e.gov.dk>). It is likely to assume therefore that IT is a driving force for adopting the CLS. That is, both independent variables seem to exist prior to the demand for CLS.

The field level analysis examines the role of 'others' in the diffusion processes. Testing the hypotheses involved analysing which organizations are important in the diffusion processes. The findings reveal that the standardizer – the initial source – is important, just as much as the municipalities being located in the same region are. In the field level analysis, however, it has not been possible to explore why some organizations adopt the standard and others choose not to do so. The section that follows therefore turns to an organizational level analysis.

ORGANIZATIONAL LEVEL ANALYSIS

This section analyses whether specific characteristics among organizations that have and have not adopted the standard can be identified by analysing whether or not the adopting municipalities systematically differ from non-adopting municipalities. A number of studies have revealed that organization size is important in relation to the adoption of standards, that is, larger organizations are more prone to early adoption (Scott 2001, p. 165). Explanations for this are that large organizations tend to possess greater resources, are more differentiated, and more professionalized; they are therefore more sensitive to environmental change. On the other hand, Brunsson (2000b) refers to a Swedish study that concluded that size was not an important characteristic among reforming organizations. Since the smallest Danish municipalities have relatively few employees with an academic background,

and therefore can be argued to be less professionalized than larger municipalities, Hypothesis 4 is proposed. One argument against Hypothesis 4 is that small municipalities with fewer resources would be more prone to imitate already-existing standards from other municipalities instead of developing their own standard. In other words, municipalities – like organizations in general – encounter complex problems and therefore seek decision-making short cuts (Cyert and March 1963; Simon 1997). One mechanism for simplifying decision making is to consider only those alternatives that are marginally different from the *status quo* (Lindblom 1959). Another simplification mechanism is to choose alternatives that are used in other municipalities; in this case, the CLS (Walker 1969; Berry and Berry 1999, p. 171). Another argument against Hypothesis 4 is based on a term from economic theory: ‘increasing returns’. This argument states that it is more efficient for an organization to adopt already-existing, well-known standards rather than conducting experiments with other, more doubtful, standards (Pierson 2000). In support of this argument, the assumption would then be that small municipalities will be more risk-observant and therefore more likely to adopt the (well-known) CLS. On the other hand, the argument does not consider that even prior to the introduction of the CLS, each municipality already had an established practice of its own, that is, adopting the CLS also entails rejecting the current practice with the loss of learning as sunk costs.

Hypothesis 4: Large municipalities are more likely to adopt the CLS than small municipalities.

In line with the size argument, it is also argued that wealthy municipalities are more likely to adopt the CLS than relatively poorer municipalities. This argument is based on a critique of the increased cost argument and builds on the assumption that adopting standards requires some economic capacity – i.e. learning as sunk costs. The issue of wealth is somewhat related to the size of a municipality since – as mentioned above – large organizations often possess greater resources than do smaller organizations. The following hypothesis is thus proposed:

Hypothesis 5: Municipalities with a large tax base are relatively more likely to adopt the CLS than are municipalities with a small tax base.

Again, as table 4, the final table in the article, reveals, only size plays an independent role since large municipalities are more likely to adopt the CLS than small municipalities. The effect of the tax base is insignificant, a finding that indicates that the relevance of municipalities’ resources in the adoption process must be understood broadly and not in narrow economic terms.

Turning to analyse whether the adoption of other reforms affects the likelihood of adopting the CLS, one assumption often made in institutional analyses is that organizations manage their identity by picking up organizational standards (Sevón 1996; Sahlin-Andersson 1996; Røvik 1998). Standards are conceived of as marks of identification. Threats against organizational

identity will serve as incentives to adopt new standards that are experienced as being in keeping with their self-understanding. By assuming that some organizations have an identity as 'modern' organizations, that is, they do what they can to follow fashionable trends (Abrahamson 1996; Røvik 1996), they will consequently be more prone to adopt the CLS. To assess whether an organization is 'modern' or not, we can study whether the organization has in the past adopted other reforms (fashionable trends). One might therefore expect a positive correlation between the adoption of former reforms and the adoption of the CLS. Furthermore, Brunsson (2000b) refers to a study that demonstrates that organizations can reject a standard on one occasion only to accept a similar standard on another occasion. The argument is that adopting a reform is dependent on when the last reform(s) were adopted. It takes time to implement reforms and, for a period of time, organizations will be immune to other reforms. Reforms are therefore related to a 'reform-cycle', that is, organizations must be 'prepared' in order to adopt a new standard (Brunsson 1997). Reforms are even sometimes seen as obstacles to other reforms (Brunsson 2000). Either way, according to the two arguments, a relationship is expected between the implementation of different reforms and the use of the CLS. Hypothesis 6 includes both arguments.

Hypothesis 6: The fact that municipalities have adopted earlier reforms does not affect the likelihood of adopting the CLS.

Table 3 reveals a positive correlation between how early municipalities have adopted other reforms and the likelihood of adopting the CLS. The conclusion from the findings is clear: the earlier and the more comprehensively a municipality has employed other managerial tools, the more likely it is that the municipality in question has also adopted the CLS. If the analysis only included the degree to which the municipality currently used other standards, no significant relationship was found (the analysis is not shown). Both the arguments supporting the hypothesis thus appear to be relevant. On the one hand, the municipalities that are early-adopters of reforms in general are more likely to adopt the CLS, that is, municipalities following fashionable reform trends also tend to follow this standard. On the other hand, previously introduced reforms must be well-established within the organization before the organization is ready for a new reform process.

DISCUSSION AND CONCLUSION

Table 4's binominal logistic regression simultaneously tests the hypotheses presented in the above in order to discern the strongest explanations. Applying a significance level of 5 per cent, the regression in table 4 reveals that geography, municipality size, LGDK pressure and requirements regarding IT usage are the relevant variables for understanding the processes that affect the diffusion of the CLS. Thus this confirms the bivariate analyses. It follows from the regression that if 1 per cent more municipalities in a region adopt CLS, there is a 1.085 greater chance for the municipality within the region to

TABLE 3 *How long has the municipality used the following management-tool within the sector of elderly care? (mean index value 0-100, n in parenthesis)*

	CLS municipalities	Non-CLS municipalities
a) Outsourcing to private company	36 (202)	24* (31)
b) Order-delivery-model (BUM)	70 (202)	61* (31)
c) Contracts used internally and externally within the municipality	46 (203)	38 (31)
d) Free choice between private and public delivery of 'welfare' services	66 (203)	58 + (31)
e) Joint cooperation with other municipalities	47 (202)	32* (31)
f) Central Visitation Unit	74 (203)	72 (30)
g) Framework Control – each department receives a certain amount which it uses to govern itself	79 (202)	70 + (31)
h) Management-by-objectives (MBO)	74 (199)	68 (30)
i) Benchmarking	44 (198)	31* (31)
j) Value-based management	70 (198)	68 (30)
k) Quality management (e.g. TQM or ISO)	29 (197)	33 (31)
l) Balanced scorecard	26 (196)	23 (31)

Note: Two CEOs in each municipality were asked. If both CEOs responded to the questions, the mean is calculated. Index value: 100 = used for more than four years, 80 = used between 2-3 years, 60 = used between 0-1 year, 40 = do not use but intention to do so, 20 = do not use, 0 = do not use and have no plan to do so, 50 = do not know. ** indicates difference at the $p < 0.01$ between CL-municipalities and not, * $p < 0.05$, + $p < 0.1$

have CLS. If the municipality has more than 10 000 inhabitants, there is a 4.65 times greater chance that the municipality has adopted the CLS compared to municipalities with fewer than 10 000 inhabitants. Finally, the stronger the external pressure from LGDK and the stronger CLS is perceived as being a requirement for the use of IT, the more likely it is that the CLS is adopted by the municipality.

The analyses show that in order to understand diffusion processes it is necessary to take different levels of analysis into account. Standards can possess various characteristics to different degrees that render them more or less prone to diffuse, that is, some standards will diffuse quite rapidly whereas others will spread slowly or not at all. As discussed above, the CLS is based on highly rationalistic and democratic values; as such, it is an instance of the first example.

Moreover, the diffusion process must be understood in a context in which both field level and organization level mechanisms are at stake. The fact that municipal organizations are embedded in highly institutionalized environments plays a crucial role in understanding why organizations adopt standards. External pressure in terms of a regional factor is proven to be

TABLE 4 *Adoption of CLS as a function of isomorphic variables (Binominal logistic regression)*

	Odds ratios	Significance (p-value)
Constant	0.000	0.000
Regional use of the standard (1)	1.085	0.002
Size of municipality (2)	4.650	0.013
Size of tax base (3)	0.745	0.630
Early adopter of tools (4)	1.030	0.185
LGDK encourages to use the standard (5)	1.032	0.004
It was a requirement for the use of IT (5)	1.027	0.002
Nagelkerke R ²	0.361	
Hosmer and Lemeshow's goodness of fit	$\chi^2 = 14.673$	0.066
n	211	
Correctly predicted	90.5%	

Note: The table shows the odds ratios in a binominal logistic regression. Odds ratios equal to 1 indicate that there is a 50/50 change for the municipality using CLS when the independent variable changes. Odds ratios below 1 indicate that this becomes less likely, and odds ratios above 1 indicate that this becomes more likely when the independent variable changes.

1) The percentage of municipalities within the country that has adopted CLS. Range from 62.5% to 100%.

2) 0 = municipality with a population less than 10,000, 1 = more than 10,001 inhabitants.

3) 0 = municipal per capita tax base of less than DKK 125,000, 1 = more than DKK 125,001.

4) Index 0-100 based on all items in Table 3. If 100, then the municipality has adopted all of the managerial tools more than four years ago. If 0, then the municipality has not adopted any and has no plan to do so.

5) These two questions are taken from Table 2. All other questions from table 2 are insignificant.

important. This study also demonstrates that the initial source may play a more significant role than other studies of neo-institutional organization analysis often argue. Other analyses of diffusion conducted within a neo-institutional framework argue that the dispersal of organizational standards takes place through a translation process (Czarniawska and Sevón 1996, 1998). Latour (1986) distinguishes between the diffusion model and a translation model. The former model has three characteristics: first, a standard has an evident starting point. This source is the only supplier of energy for the dispersion of the standard. The prevalence of a standard is thus a function of the power of the initial source. Second, a standard loses its ability to disperse as it moves further away from its source. Third, a standard can be dispersed as long as it is not stopped by strong actors. Thus, the diffusion model explains the dispersion of standards partly on the basis of the power of their initial source and partly by resistance from strong actors.

In the translation model, the energy for dispersion does not emerge from one single source. Rather, the dispersion of standards is 'in the hands of people; each of these people may act in many different ways, letting the token drop, or modifying it, or deflecting it, or betraying it, or adding to it, or appropriate it' (Latour 1986, p. 267). Standards shift in time and space as a consequence of 'the energy given to the token by everyone in the chain

who does something with it' (Latour 1986, p. 267). New energy is released as new actors adopt the standard. These actors do not passively receive the standard; rather, they adopt it actively (Røvik 1998, p. 152). Survival of a standard depends on every actor in the chain transforming the standard according to his or her own agenda. A basic assumption behind this argument is that the power of the initial source is not more important than the power from the subsequent links in the chain of actors (Sevón 1996, p. 51). The findings in this article contradict this assumption. The findings show that LGDK has played a most direct and important role as an 'energizer' in the process and is clearly a more important 'other' in the diffusion process than any other actors in the field. We therefore question the argument that the initial source and subsequent sources are equally important in the diffusion/translation process. This is not always the case. Indeed, we acknowledge a multitude of ways in which organizations encounter standards, ranging from enthusiastic adoption to active translation to resistance (Powell *et al.* 2005).

This study also shows that individual actors play a crucial role in diffusion processes. First, the analyses provide evidence supporting the argument that reform identity and reform readiness are both crucial. Second, the organization size plays a crucial role. This can be interpreted in two ways: first, large organizations require formal rules or even standard operating procedures to a greater degree for what they do (Mintzberg 1983, pp. 124–5). Large organizations are therefore more prone to follow standards that formalize the work in the organization – in this case, such formalization concerns the communication in the field. Furthermore, large organizations have the capacity to adapt in terms of financial and human resources. Cohen and Levinthal (1990) argue that organizational ability to recognize and assimilate new information – what they refer to as absorptive capacity – is a function of prior related knowledge in the organization. An organization's absorptive capacity therefore represents a function of the organization's general knowledge and learning skills (Cohen and Levinthal 1990). Pursuing this argument provides an explanation as to why larger municipalities are more likely to adopt the CLS, namely that such organizations possess more professional employees or knowledge workers, and that this circumstance is a precondition to reform.

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