

# Standardized Flexibility: The Choreography of ICT in Standardization of Service Work

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## Abstract

This article is based on a research project that explores the proliferation of information and communication technology (ICT) in public services. Furthermore, the research explores how the enhanced presence of ICT relates to efforts to increasingly individualise the service delivery. It can be argued that enhanced individualisation requires increased levels of discretion and flexibility. At the same time, this flexibility needs to be implemented within a standardized framework to ensure due process and to meet demands for efficiency. As local-level work practices in the public services are increasingly being enabled through ICT, the information systems can thus be seen to offer ‘standardized flexibility’. Hence, the information systems work as both enablers of flexibility and as controllers of the same.

This research explores how this duality manifests empirically at the local-level of the Norwegian employment and welfare services (NAV). It focuses on the interface of the information systems and local-level employees. In this article, I portray the role of the information system, Arena, with regard to how the front-line employees structure and organize their work. This portrayal reveals that the information system reflects an ideal world which is out of tune with local working conditions. The employees are thus facing gaps between the ideals of the system and their actual work context. The main purpose of the paper is to illustrate how the employees deal with this gap; I identify three types of responses and strategies. Moreover, I suggest that the relationship between the information systems and different kinds of local responses may be fruitfully analysed by drawing an analogy with choreography and dancing. The second purpose of this article is thus to outline how the metaphor of choreography may provide a suitable theoretical lens for analysing ICT-enabled standardization of work.

**Keywords:** ICT, Welfare Services, Standardization, Flexibility, Tinkering, Choreography

## Introduction

Several scholars have argued that attempts to improve horizontal integration coupled with increased individualisation and tailoring of services are central characteristics in the contemporary development of public services (Ling 2002, Pollitt 2003, Kernaghan 2005). In this respect, ICT may be seen to be an enabler, as argued by Dunleavy et al. (2006) who proclaim the death of NPM and the rise of 'a digital era governance'. When considering the proliferation of ICT, the label of digital governance would seem appropriate. This article questions, however, a simplified reasoning whereby the increasingly prominent role of ICT is assumed to facilitate enhanced individualisation of public services. It is argued that there is a need to critically examine the actual role of technology on a micro-level to grasp what these transformations entail. Hence, this research is based on a case study of an innovative and comprehensive effort at horizontal integration; the reformation of the Norwegian Welfare and Employment Services (the NAV reform). The focus is on the role of internal digital information systems in these processes of change.

The analysis and discussions of the case material is centred on the tension between flexibility and rigidity. The following dilemma may be sketched out: enhanced individualisation and tailored services require flexibility and room for discretion at the operational level. At the same time, standardization is required to ensure due process and efficiency. By focusing on how routines and the standardization of work practices increasingly are ICT-enabled, the issue of rigidity is brought to the fore. This leads us to the question: how can ICT, which on a certain level entails rigidity, support organisational processes that aim for enhanced flexibility? By exploring this issue empirically in the context of NAV, I draw attention to discrepancies between expectations of the system and local working conditions. The primary purpose of this article is to describe the employees' various responses to this gap. I identify three types of responses; pragmatic ignorance, compliance and adaptation. While the objective obviously is to draw attention to the differences between these three types of responses, I also want to underline the underlying commonalities. Despite of the differences, all three responses can be seen to involve compliance at a certain level.

This brings us to the secondary purpose of this article; to introduce how and why the metaphor of choreography and dance provides a fruitful theoretical lens for analysing ICT-enabled work practices. In regard to my case, this metaphor highlights how information systems are meant to prescribe an ordered, sequential structuring of tasks and how, in this way, the systems enable central management to act and exercise control at a distance (Law 1986, Latour 1987: 219). At the same time, the concept underscores how the decisions and actions of front-line staff should be seen as directed- but not determined- or dictated, by the systems. Hence, I will illustrate how the advisors need to relate to and manoeuvre these

prescriptions even though they might be actually ‘dancing’ to their own rhythm and pace. I will return to how, in my case material, the dancing deviates from the choreography. But I will first account for how the choreography-dance analogy may be used to capture a balanced and dynamic view of the role of ICT in the standardization of service work.

## **Choreography and Information System Research**

In Science and Technology Studies (STS) Cussins (1996) developed the concept of ‘ontological choreography’ to analyse assisted reproductive technology. The parallels to my study lie in how the notion of choreography is used to describe coordination at micro-levels where technology is a central component. The metaphor appeals to me because it connotes that pace, rhythm and the sequential order of steps is vital, and that it is essential that the movements of individual dancers also match the moves of the other dancers. In aiming to understand the role of information systems in structuring and organising heavy workloads at the local level in NAV, these are exactly the issues at play. And, as mentioned in the introduction, while the choreography certainly affects the moves of the dancers, we will see that there is no guarantee that the dance and the choreography will correspond.

At the same time, I draw on the notion of ‘choreography’ to emphasis the role of the ‘choreographer’. A more commonly used metaphor in practice-based information system research is that of technology–text (Latour 1991; Woolgar 1991; Akrich 1992). Different from the technology-as-text analogy, the notion of choreography indicates to a greater extent that someone is ‘pulling the strings’. When comparing technology to texts one assumes that the user has considerable room for interpretative flexibility. It is implied that a text may be interpreted and understood very differently from what the author might have had in mind. Similarly, it is assumed that the users of technology have considerable room to appropriate and use technology in ways that may differ greatly from the designers’ and developers’ intentions. A choreographer, on the other hand, has the ability to direct and influence practices in action; choreography may involve coordination along the way. By framing the empirical ‘stories’ of this article with the choreography metaphor, I would like this to be kept in mind. With the text metaphor, the relationship between the user and the designer or developer of an artefact is stressed. With the choreography metaphor, on the other hand, the role of management as intermediary (Woolgar 1991: 92) is brought into focus. From this perspective, then, it is explored how the information system is used by management to act or exercise control at a distance (Law 1986; Latour 1987: 219).

A textual reading of technology, which stresses the interpretive flexibility involved, relates to other influential perspectives in information system research which focuses on how technology is ‘enacted’ (Orlikowski & Scott 2008) and em-

bedded in ‘situated actions’ (Suchman 2007). Rolland and Monteiro (2012) elaborate on these insights by bringing attention to how patterns of similarity in technological use also develop across different situated contexts. They propose that the concept of ‘trans-situated use’ may be useful to capture such patterns. This concept extends the notion of situated use and highlights the need for moving beyond the ‘unique’ situated singular contexts which has gained more research attention in the past. In the terminology I propose here, Rolland and Monteiro can be seen to develop a vocabulary which captures how similar dances appear in different unique contexts. In this way, they bring attention to how the notion of situated use has gained a strong foothold both empirically and theoretically in information system research. This can be seen to have led to a strong focus on deviating practices, perhaps at the expense of focusing on how and why conformity occurs. I use the notion of choreography and dance in a similar manner to draw attention to how the use of technology departs from but, at the same time, conforms to the expectations of information systems. The best way of explaining what this entails is to look at how it appears empirically. Hence, I commence by outlining the methodological approach of the case study and move on to depict the empirical narrative of this article. The notion of choreography may be kept with us as the ‘plotting’ of these stories (Czarniawska 1999). I will return to the applicability of the concept as an analytical lens in the discussions at the end of the text.

## **Context and Methods**

The empirical point of departure of this article is the reformation of the Norwegian Employment and Welfare Services. This comprehensive reform started with a merger in 2006, of the formerly separate Employment Services and the National Insurance Services. Parts of the municipal Social Services are also integrated in this reformed organization at the local level. NAV is the Norwegian acronym for this new entity. The NAV reform can be seen as a response to a long-held concern that the welfare services suffer from fragmentation and disintegration. Increased horizontal integration has thus been proposed as a necessary remedy (Hvinden 1994; Ministry of Labour and Social Services 2005; Ministry of Social Services 2004). At the local level, so called one-stop shops (NAV offices) have been set up in each municipality. The empirical stories, sketched out in this article, are mainly based on six months of fieldwork in one of these local NAV offices. The fieldwork involved interviews, observation and engagement with employees working as so-called NAV advisors.<sup>1</sup> The data collection was from one department which employed 13 advisors and one department manager. All advisors were interviewed at least once; eight were interviewed twice. Moreover, all department managers and the office manager, five in total, were interviewed. All interviews were semi-structured and recorded.

Furthermore, I participated in and observed various meetings and training sessions held within the department, and I observed daily working routines in detail with the use of ‘shadowing’ (Czarniawska 2007). Part of the fieldwork also involved testing of the information system, Arena. User manuals used with the system also contributed to important data material in the study, along with various training materials. Prior to this six-month period of fieldwork, I had regular contact with NAV, starting with a preliminary study at the beginning of 2009. Naturally, the analysis is also based on government documents outlining the background and framework for the establishment of NAV.

NAV provides a graphic illustration of the predicaments involved in standardizing work practices by means of ICT. The reform is radical and highly ambitious in its attempts to realize goals of horizontal integration and individualisation of services, combined with goals of efficiency. One of the central objectives of the reform has been to ‘enhance client orientation’, which largely allude to increased individualisation and tailoring of services. This means that there is need for flexibility and more room for discretion in local-level work practices. At the same time, this flexibility needs to be constrained to ensure that demands for efficiency and legal principles such as equality of treatment are met. I followed a period of transition at the local-level in NAV during which nearly all work processes became ICT enabled. Having followed this transition, I am able to describe concretely processes which I have termed ‘standardized flexibility’. At the same time, this articulates the dual role of the information systems as being both an enabler of enhanced flexibility and a controller of the same.

## **Presenting the Case**

The information system under scrutiny in the following is called Arena. I will depict how Arena plays a central part in how work is structured at the local level in NAV. This portrayal brings attention to how the ideal work models, as prescribed through the system, largely parts with local practices. We will see how the advisors relate to this gap through various strategies. What these responses have in common is that they do not blame or target the principles or logic of the system. Rather, the advisors are primarily concerned with how they find the work situation to be problematic. Furthermore, working conditions are seen as possible to be altered in order to eventually match the logic of the system. At the same time, some advisors are pressing for changes in the current way of structuring tasks through Arena, though this is met with resistance due to how local management requires uniformity in local work practices.

## **Arena as Organizer**

Arena is an information system that is meant to serve two main purposes. First, it is presented as a tool developed to support follow-up work. The introduction manual explains: 'Through processes and work steps you are assisted to systematic follow-up of users in NAV. By users we mean persons with and without benefits from the national insurance scheme, and employers.'<sup>2</sup> Second, the system is used to administer the financial aspects of various benefit schemes. This double purpose of the system can be seen to reflect the duality of the advisors' position; they are gatekeepers to benefit schemes and have a helper-role in advising and assisting clients. Crudely put, the advisors are set to handle both 'cash and care' (Hvinden 1994).

My research is centered on how Arena functions as a follow-up tool. I focus, in the following, on how the system is meant to provide support for handling a large quantity of cases and tasks. Hence, it is focused on how Arena is meant to provide support in organizing and structuring follow-up tasks. This means that I am less concerned with how the system plays a part in the actual follow-up and interaction with the clients, and more concerned with how the follow-up tasks are planned, structured and organized.

## **The Work Bench**

The entrance point to Arena is called the 'workbench.' The workbench is central in how local-level employees talk about and administer their tasks and daily work. The advisors refer to the workbench as being either tidy, messy or overflowed. Hence, the status of the Arena bench is largely used as a reference point to indicate to what degree they are coping with their work. One advisor explains, for instance; 'The deadlines and stuff is the most important, keeping track of that – keeping your Arena bench tidy.' Another says: 'I'm in a way not at rest until my bench is clean.'

The workbench lists the daily tasks that need to be taken care of, resembling an electronic calendar. The advisor may choose to display the tasks to be completed within a day, a week or a month. Mostly they choose to display the scheduled week. The tasks on display may be automatically generated by Arena or another system, or they could be manually set and rearranged by the users of the system. Hence, the bench is meant to be used to organize the sequential order of tasks to be completed. Each advisor has his or her own work bench to log onto, and the office as a whole has a workbench which provides an overview of all the Arena-tasks at the office, both those which are planned and those which are overdue.

Arena is organized in various 'work processes'. A work process guides the employee through detailed steps to ensure that every necessary aspect of the process is taken care of in correct order, and can be seen to work as a 'script' (Akrich 1992). Some steps may be voluntary and work as a reminder, others are obligatory



and marked with blue. The blue steps cannot be missed if one is to complete a work process. In certain cases, the steps marked with blue need to be conducted in sequential order. A message pops up in the feedback field if one fails to follow the set order. When a step is completed, it is marked with a green tick. When all obligatory steps are completed, and the final step, 'close task,' is conducted, the task is removed from the list of tasks on the workbench.

The user manual urges the users of the system to keep the lists of tasks on the workbench tidy so that the advisors are able to have a good overview of the tasks for which they are responsible. Keeping the list tidy is said to be necessary in order to make sure that the employees know which tasks to work on at what time, to know which ones that may be finalized and removed from the bench, and which ones ought to be shifted to a co-worker's workbench. In order to make sure the bench is tidy, it is said that it is important to remember to close and hence remove tasks, especially regarding follow-up. This is stressed in the following manner in one of the user manuals:

NOTICE! It is important that the deadline date for the task correlates to when you actually plan to do the follow-up. If you are not able to meet the deadline you should change the planned date and give a comment in the commentary field.<sup>3</sup>

This is stressed since tasks may be completed in practice but not actually removed from the workbench. Hence, their presence will then disturb the to-do list because they are not 'ticked off'.

### **The Ideal and the Actual Work Bench**

Structuring the workload in this way seemed simple and reasonable when I participated in training and read through the guidelines in the user manual. When the workbench was filled with actual clients' cases and tasks on the other hand, this neat structure suddenly became more complicated. As most advisors felt that the portfolios of clients that they were set to follow-up far exceeded the time they had available, it seemed difficult to stick to such a strict structuring of the tasks. Hence, at the time of my fieldwork, most workbenches seemed to reveal a rather large gap between the neat and tidy structure that the advisors were encouraged to stick to in the user manual, and the far more messy reality they were set to handle in their daily work. In practice, numerous tasks on the bench were overdue and hence at times creating more chaos than support in attempts to structure the work load. Several explained how they were drastically lagging behind the desired system for follow-up, which was meant to be monitored through the lists of tasks on the Arena workbench. One advisor explains, for instance, in an interview in March, week 12:

We have those lists you know; Arena-tasks. You might have 15-16 that you are to follow-up within one week. And I have been able to take two since Christmas. And that was in week 2. [*i.e. the advisor had been able to handle two follow-up tasks during 12 weeks while the goal was 15 tasks pr week. The advisor can thus be seen*]

*to be 178 tasks behind the schedule.]* I have been able to make two phone calls. The ‘must-tasks’ has otherwise taken up all of my time. As well as people that get in touch.

*Me: But are you not then also doing follow-up tasks?*

Yes, but it’s not systematic. And it might be totally different persons from those we were supposed to follow-up.

When another advisor is asked whether he finds Arena to be supportive in the structuring of follow-up tasks, he explains:

Yes, but what I’m struggling with is this; that you are supposed to have these tasks on Monday, and these on Tuesday – because you are supposed to be able to monitor it like this day by day. But I cannot do that yet, I don’t think anybody else does either. For instance, we might have this chat now, and then we are supposed to have another chat in half a year from now. Then I would set a follow-up date in a half a year. Then when I arrive that morning I will be able to see – now I am going to have follow-up with her again. But I cannot do that yet – I don’t think anybody else is either.

*Me: So, what’s the problem then? Do other things get in the way?*

No, it’s about being able to make it, to be that effective, if that is possible at all. I don’t think anyone is able to either, to be to such a degree [*clapping his hands together*] – to not be lagging behind. But I guess we’ll just have to be sporty. We’ll just have to grit our teeth, or try, it is kind of fun as well.

A third advisor explains how he finds this structuring of follow-up tasks to be stressful:

For me it was like this, I came back from a week of holiday and things were completely chaotic when I got back. The portfolio was kind of upside down – that was the case. So when I managed to gain some control, and then started to pick up old cases then, well, I have been doing this for years, finally it said stop.

*Me: So what’s the solution then?*

Inner peace, [laughing] – big words – to think that this is just a job, adjust one’s expectations. I feel better now. It has a lot to do with stress. And I think Arena in this respect can be quite a stressful follow-up tool because a lot of tasks pop up, which is completely unnecessary. And a messy desk gives a messy mind, and I think in this regard that Arena might be creating a lot of stress compared to the [*manual, my comment*] lists we used in Infotrygd [*another internal information system which is gradually being phased out, my comment*].

Similar concerns are expressed by one of the advisors who sees her own way of coping in contrast to some of her colleagues:

They drown in PC work, and lots of tasks which just by its mere presence is found stressful. Just by being on the bench they make people stressed. Then they also slip up in meeting with clients. Then they fail to do a good job there as well. And I am thinking that is a violation of the working environment act. The employer is ruining its employees.

I am not so bothered. I’m like Teflon, like non-stick, it glances off. I am able to think like this, ok, I have these tasks laid on me, and then I don’t get to do the things I should. But that is not my responsibility. A little unscrupulous. A little Teflon. Sometimes it slips, and then I cry my brave tears and roar. But all in all I am able to



[*she shudders*] – this is not my problem. It becomes my problem because it lands on my bench. But that is a way of visualizing it. But those who are not able to make a distance, they go under.

These quotes illustrate firstly how the advisors find it hard to adhere to the way in which Arena's workbench prescribes a certain ordering of tasks. All advisors working with work assessment allowance reported such large gaps between how tasks ideally were to be organized through the workbench in Arena, and how their work benches actually looked. As indicated, the advisors related to this in various ways. Some only stated that there was a gap but did not seem to perceive this as an actual tension that created stress. Others considered the system as a reason for why it was hard to cope. The team-leader, however, saw this mismatch and the messy workbenches as a central problem for the team as a whole. She elaborated on this in detail when I asked her whether she found that they were using the information systems to structure their workload or whether they felt that the system was structuring the work:

Oh no, now you don't know which buttons you are pushing! How much time did you say you have? I have a lot of opinions on this issue both in an ideal world and a practical world and in every possible way. Arena is fundamentally a management tool, which I am fond of. I believe in Arena as a system, and what it is meant for, but it requires tremendous loyalty from the user of the system when it comes to updating deadlines and monitoring the WAA follow-up according to the week numbers. If you are able to lay the fundamental premises right, Arena will be a good management tool. And I aspire to accomplish that, but I meet a lot of resistance in my team because I know the perceptions out there are very different, or at least a lot more nuanced compared to what I believe in. If we fail to meet that loyalty which the system lays out, then it will totally fail as a support-device. Then it's chaos. Tasks are generated and we are drowning in heavy workloads. So that's the two extremes. We have both in this team, and we have those who are in between.

*Me: So is this a matter of competence?*

Both, it's about competence when it comes to how the system thinks and how things relate, what generates what etc. It is that overall picture, and it is that feeling that the total number of tasks is so huge, so when that disappears, then you are not able to grasp that overview. It's an issue with multiple sides, but these are the major challenges that we are struggling with, and which makes it hard for people to relate to it because you get to that point of disempowerment where you are unable to separate the single, concrete task from the huge mass.

*Me: So to gain that overall insight that you are talking about – is that a matter of a maturation process or is this something which may be gained through training?*

If I could, in an ideal world, hermetically close this team from any other activity for two weeks I would have been able to do a lot. Then I could have taken them through the basics, how it works, what is generated from the various tasks if they are not closed, because these tasks are not coming to haunt us as nightmares. They are actually meant to work as reminders: like, hey hold on, this client has done this and this. He has failed to send his employment status form. What are you going to do? You check if the form has come in one day too late, and then you close that reminder. That's what I call daily must-tasks. Because if not or if the client is back to work for instance – then check it out: what did the client report in the previous form? It might have been 3 months and during those three months there might have been one of

these tasks coming every fortnight, and there are a lot of those. You might end them, then they disappear to you, but they keep popping up again and again until someone deals with it and end the client's case and inactivate it. But if we don't have that understanding of the system, then tasks are just generated.

In line with the reports from the advisors in the team, the team leader recognizes a substantial gap between the unruly workbenches that the advisors try to handle in practice, and the ideal structuring and organization of tasks as prescribed by Arena. She brings forward that the reason why this mismatch occurs is related to an excess of tasks to be undertaken, but more importantly that the advisors lack the necessary overall understanding of how the system works; how various tasks and work processes relate within the system. In her reasoning, partial understanding of how the system works makes it hard to realize the ideal system for the structuring of tasks that Arena is meant to support. Attempting to follow this system half-heartedly is, according to her, not actually an option because it is then likely to create more chaos and distress rather than support. As she says, if this system is to work it requires 'extreme loyalty' from the users. But she argues that this loyalty also relates to competence. She presents a dream scenario in which she would 'hermetically close' the team from any other activity for two weeks in order for the team as a whole to reach that necessary level of insight on how the system works. As this, obviously, was not feasible, she eventually found an alternative way of dealing with the gap between the ideal and the messy arena benches. I will move on to briefly outline this effort followed by descriptions on how the advisors responded to the attempt to minimize the gap. The responses to this renewed attempt to create compliance with the ideal system for structuring tasks articulate further differences in perceptions and ways of dealing with the system.

### **Dealing with the Gap**

During a few calm weeks in the summer, the team-leader managed to 'clean out' the mess on all workbenches as a way of creating a fresh start. This was a renewed attempt to follow the logic of the arena bench in the structuring of follow-up tasks. According to this system, there should be one follow-up task for each client in the portfolio (approximately an average of 200 pr. Advisor). The deadlines for these tasks were set in batches of 15 pr. week, thus the advisors were supposed to handle 15 follow-up tasks pr. week, an average of three pr. day. The actual task could be to schedule a meeting in person or to deal with things over the phone. In cases where the advisor failed to meet the deadline for the 15 scheduled tasks within a particular week, they were to reschedule and hence move the deadline for the task to a suitable forthcoming week. The team leader explains:

I have cleared out all the noise that has been lying there. I have inactivated more than 100 clients from the lists. Now each advisor has 195-250 follow-up tasks, which are supposed to correspond with the number of clients in the portfolios. Each task is supposed to be called follow-up WAA week number so and so.

After the ‘clean-up’ and the attempt for a fresh start, I talked to the advisors about how they saw the current situation and the prospects for this system to work in the future. One of the advisors explained;

It might work since we have tidied up. On my bench 50 to 60 tasks have been removed. But we are not machines. I have 250 clients. If I had 80-100 clients it might have worked, but then I probably wouldn’t have needed this kind of system. With the current work situation, we end up with pleasing the system rather than the clients. We are so occupied with that administrative part. We are actually to follow-up clients with these particular needs in regard to practical measures, but that is not what we do. There is a lot of computer work. And now there will be more. This system [*the use of the arena bench to administer follow-up tasks, my comment*] – it feels like a filing cabinet where you tidy up neatly, and the next day someone has been there and made a complete mess. And I am thinking; that is not going to take up my time.

She explains further that the risk of attempting to adhere to this system is that keeping the bench neat and tidy may take up too much time, at the expense of actually dealing with the tasks and interacting with clients. She generally expresses skepticism for following such a rigid system and seems less stressed than her co-workers when the bench is out of order. She explains further:

Yes, you often sit there and look at it [*the arena bench, my comment*]. But mostly it is up to the person, because this is an endless vicious [*laughing*] no, not vicious, but it is a circle. It never ends. So if you don’t accept that, then you are never done. And I don’t think that way so I don’t get stressed by looking at my work bench. I rather get stressed if I don’t have anything to do – that’s what’s boring. That would be the worst. I don’t get stressed by seeing many tasks.

Another advisor is more convinced that this is a reasonable way to organize follow-up work. She is content that she has been given a fresh start after the clean-up, and optimistic in regard to whether the system will work in the time to come:

This feels really good, to not have things lagging behind, back in time, and a bad conscience. Now we get to handle it. Even though we might have to move stuff which might not be that urgent, this will work well. I feel a bit stressed, and there will be some tough months now, until I can handle this, because I have to finish it in a way. Like this week, I had one day off, and then I had a lot of meetings, and then I get stressed. I have to be done by Friday you know. But I have pulled myself together and I have two tasks left on my bench that I will deal with during the day.

*Me: So then you have been able to do 15 tasks this week?*

Yes

*Me: So do you think this system will work in the time to come?*

I hope so, but I am a little skeptic, or worried because I am to undergo training in sickness benefits at the same time, and I don’t know how many dates I will be handling you know. I’m going to run a real tough system here, and I hope it won’t crack. But I am going to work after these principles, I am, I do not want to go back. It might not be that much better, but I feel that I am in control. If I feel that I have to deal with the old stuff, and in addition the things ahead, then you don’t know where to start. I will have to make some deals and move some tasks, but not seriously far ahead. I try to juggle with a few weeks or so. So it’s wonderful. I want to have a go at it at and see whether it is feasible.

*Me: What will be the main challenge in realizing this?*

It's the meetings, because there are many who want to have meetings. A lot of collaborators and stuff, Psychologists who want to have triangular meetings and stuff you know. But I believe in it, I do. I just have to change my thought processes.

(...)

Because it has almost been like those who have been pushy, they get follow-up. No, thank goodness I say, for this system. I am a control freak. I need control. No, I think this will be good.

### **Calls for Local Adjustment**

Some of the quotes above express both gratitude and optimism towards how the Arena bench may provide support in the structuring and administration of follow-up tasks. This positivity is conveyed in spite of several negative experiences, where this system has tended to create more chaos and distress rather than order. At the same time, other advisors are less enthusiastic and seem more moderately committed to follow this work model. They are concerned that sticking to this rigid structure may lead to a situation where one attempts to keep things tidy just for the sake of it, which in turn may draw attention away from actually carrying out the follow-up tasks. Nevertheless, the advisors did not merely see this as either being a matter of sticking to an unreasonable rigid structure or, alternatively, being submerged by chaos. Some expressed dedication to this way of structuring the workload in principle, but they highlighted shortcomings in the current working of the system. On this basis, they made repeated suggestions for how it could be altered and improved in ways that would make it clearer and more suitable for structuring the follow-up from their point of view.

The advisor, advocating most strongly the need for change in the current system, explains firstly her strong enthusiasm for Arena in general. She finds, however, the current system for the administration of follow-up task on the arena bench to be unsuitable, and has clear suggestions on how the system should be altered:

I have, I think... I'm that kind of person who likes Arena. I have found out that if I meet the person who made Arena, then I have met my twin soul. Because Arena and my head – we work in the same way. I feel that I'm quite alone in that sense. I'm a nerd. And I like these computer programs. I think Arena works really well and I think it keeps getting better (...) But it is just that the number of tasks keep increasing which makes it ever more difficult to do a good enough job in regard to my clients. But when it comes to the technical parts, it keeps getting better. But that's because I like it (...) I think the way in which Arena is arranged is very logical and reasonable. But as I said, that's how it's inside my head. And it makes visible where we slip up in a very reasonable way. If we had been completely up to date and managed all tasks every day, the world had been completely perfect. But as long as we are not, then, well we slip up, but we can't blame Arena for that (...) Arena makes visible the contact we should have had with the clients.

So for some, this visibility may be felt as stressful?

Yes, well what's stressful for me is that we are not allowed to call the tasks what we want. In the old employment services, we named the tasks according to the measures they were enrolled in. And then, if someone were in vocational training the task would say 'vocational training' (...) there is a huge job for us when they are all called follow-up AAP week number XX.

*Me: Because then you don't know which ones that are in vocational training?*

No, then you have to know all 250 and know what they are enrolled in. How to be able to find that out – when we are not up to date? We used to have all those in education, so then we could pick up 'education' and find out which ones would finish that year and call them in for a talk and then close the case. But now they drown.

*Me: But why is there reluctance to make these changes?*

The reason, as I have understood it, is that some mean that it is easier for new people coming in. This is an argument that I in the first place think is idiotic, because if you are new and you don't know anything, then you adhere to whatever it is that you meet, and I don't understand why we are to take into consideration that we might hire someone new in a half a year and we are therefore not going to have a system which works now. I have been quite explicit on that.

*Me: Yes, I remember you mentioning it in the department meeting...*

Yes, I have been very clear on this from the beginning. And now there are increasingly more of those from old rehab were the tasks were just called 'rehab week xx' who see my argument. So now I am just waiting to turn the managers around, and then we will get this sorted out.

*Me: So you don't see any other reasons than this...*

Yes, well you get a uniform bench, it looks neater. And if we were completely up to date, and had none overdue tasks, and we were able to go into one week at the time and then work our way down according to this, then it would probably be reasonable. But we are not doing that. And then it all falls apart, because then we are not able to catch what's actually critical to catch.

*Me: But can't it be that the tasks are not to be called different things to ensure that...*

It gets messy!

*Me: Is that it? It's not to avoid that some things will be given low priority or something?*

Well no, now no one is given priority! And like, we have to give priority to people in different kind of measures differently. Because if some contracts run out then it's over! We never get that person back in there, for instance in regard to subsidized salaries. Those who are in that system, if the contract expires without us noticing and renewing it, then there's the lock on the door, and the administrative unit is happy to get rid of one more. And then the person ends up with disability pension, with lower income, and it falls apart. And we want even be able to catch up on that that until the employer send us a claim and they fail to receive it [*the reimbursement, my comment*].

This concern was a topic that was recurrently on the agenda in department meetings and the like in a period stretching over several months. One of the reasons for the reluctance to follow this more specified labeling of follow-up tasks was that all clients were to be followed-up periodically (ideally twice each year) regardless

of what type of activities in which they were enrolled. By labeling the tasks according to the activities they were enrolled in, it was assumed to be a risk that some clients enrolled in certain programs would be ignored. At the same time, as the advisor pressing for change in the labeling of tasks points out, as the current system largely failed to work, they seemed to face a situation where no one was prioritized. The uniform way of naming the follow-up tasks (which only involved a minor alteration of the standard text that the system generated) seemed conceivable with the ideal pace of follow-up, which, however, was found unrealistic throughout the team at the time of my research. Hence, sticking to this uniform model involved, in a way, a continued trust that the ideal could possibly be realized, eventually. A more specified labeling of the tasks based on the measures that the clients were enrolled in could be seen as a compromise to the promise that all clients were to have some type of follow-up twice each year.

## **Analysis and Discussion**

### **Coping with Discrepancy: Responses and Strategies**

Thus far, I have outlined how the advisors as well as the team manager experienced large gaps between the ideal models for structuring work, as prescribed through use of the Arena bench, and the demanding tasks with which they had to deal. As the quotes from the interviews reveal, the advisors perceived, responded to and coped with these gaps differently. I recognised three main categories of responses and coping strategies: pragmatic ignorance, compliance, and adaptation. The categories represent three ways of relating to the mismatch between the system and the local working conditions.

#### *Pragmatic Ignorance*

The first type of response and strategy recognizes that the prescribed way of structuring tasks was incompatible with the current work situation, characterized by large portfolios and hence heavy workloads. Implied in this response was the reasoning that aiming to follow the system under these conditions would mean that the system would become a goal in itself. The strategy to cope involved in this case an ability to somewhat ignore that the system was out of hand, and relating pragmatically to the tasks that needed to be taken care of, regardless of how this corresponded to the prescribed structure. This strategy involves a lighter commitment or concern for how the system prescribes a structured ordering of the tasks.

#### *Compliance*

The second type of response entailed a way coping which implied more stress. The employees sorting under this category were stressed by the mismatch and were more determined to catch up with the prescribed structure. Hence, they regarded the system as being a resourceful support in principle even though it



seemed to be inadequate with regard to the current work situation. According to this reasoning, the logic of the structuring system was rational and the problems faced were seen to lie in a difficult work situation rather than in the system. Hence, the work situation was seen as intermediate and assumed to be possible to alter to match the logic of the system. This then involved a strategy of aiming to catch up with the prescriptions of the system.

### *Adaptation*

The third perception and strategy entailed recognition that, in principle, the existent way of structuring tasks through the information system was resourceful. It was assumed, however, that minor alterations needed to be made for the system to handle the heavy workloads. The local management met these efforts of adaptation with resistance because they conflicted with the goals of creating uniformity in local routines and work models. Alteration suggested, in a way, a more complex system; the management's perception was subsequently that it would be problematic to implement this as a new uniform model. Hence, multiple individual systems were then expected to develop in the various workbenches, making it harder for managers to get a systematic overview.

### **Choreography and Dance**

We have seen how a relatively strict choreography of local work practices in NAV has been laid down through the information system, Arena. At a certain level, the advisors alluded to this choreography. They found, at the same time, that the speed prescribed was unrealistically high and that it was nearly impossible to keep pace, given the resources they had available. Hence, the choreography was felt to cause distress rather than give guidance. But a more nuanced picture has also been portrayed. The advisors related differently to the strict choreography and how it parted from the actual rhythm and pace at the local level. Three dominant strategies were detected: pragmatic ignorance, compliance and adaptation. The primary purpose was to illustrate and highlight the differences between these three kinds of responses. At the same time, I have underlined a common feature of all three; they do not oppose the principles or logic of the system. Thus, it can be argued that there is an element of compliance rather than resistance in all three kinds of responses. The various responses can be seen as various forms of 'tinkering' (Ciborra 1992; Timmermans & Berg 1997; Mol, Moser, & Pols 2010) rather than resistance. The dance departs from the choreography, but at the same time it recognises and relates to it. In the cases where the choreography is tightened the system can be seen to become more rigid in an attempt to prescribe stricter and more detailed practices. This does not necessarily mean that the local-level employees act according to the prescriptions of the system. On the contrary, from my research it can be assumed that the employees would feel the need to come up with more complex ways of bypassing the system.

Suchman (2007) argues that the programming of interactive computers is based on a fundamental misconception of the relation between plans and situated actions. Suchman observed in detail how her co-workers interacted with a photocopier. This machine was designed with a panel containing an expert help system which was meant to guide the user in how to operate the machine. On the basis of her observations, Suchman analysed shortcomings in the development of so-called artificial intelligence. Basically, her argument is that plans, inscribed in computer programmes do not determine the actions that they project. She argues that, in her case, this was an underlying misconception. This argument does not reject the plan as such, as some critics have asserted (Suchman 2007: 16). Neither does it assume that plans and situated actions are two different kinds of actions, one which is predictable and the other which is spontaneous and random. Still, Suchman brings attention to how there *is* a difference between plans and situated actions, and problems arise in technological development and implementation in cases where this difference is not recognised.

Suchmans' analysis has clear parallels to my study. My case also shows how plans, inscribed in computer programs, differ from the actual situated practices that the plans were meant to guide. In my study, however, I am concerned with how the management uses the information systems as central tools in broader attempts to shape front-line employees work practices. To capture this, I find that the choreography-metaphor is helpful. In my case, the management and the system can be seen to choreograph the front line performances, though the actual dancing might differ. This metaphor brings attention to how the plan is controlled by someone, i.e. management, rather than just inscribed in artifacts as in Suchmans case.

With this conceptualization I also bring attention to the control and disciplining aspects of information systems which have been less focused on information system research. Suchman's 'situated action' can be seen to have gained more attention than the actual role of the 'plans'. This is for instance highlighted by Monteiro and Rolland (2012). They argue that this has created a bias which has led to theoretical inadequacy when it comes to accounting for how common patterns of technological use develop across dispersed geographical settings. They propose the term 'trans-situated use' as a remedy. In a similar vein, I suggest that the notion of choreography is suitable for capturing how information systems play a relatively strong disciplining role in shaping work practices at the local level of public welfare services. This metaphor highlights how dancing, or situated action, may be ad hoc; it is characterized by improvisation but it is not detached from the choreography, or plans. It is stressed that the dancing takes place around plans, with plans being the point of departure, or a meddling co-actor. This approach has parallels with research on standardization processes. It stresses that for standards to work, improvisation is a fundamental and necessary aspect and, in turn, im-

provisation rests on those standards (Timmermans & Berg 1997; Bowker & Star 2000; Ellingsen, Monteiro, & Munkvold 2007).

In this article, I have started to sketch out how and why the metaphor of choreography may provide a fruitful analytical lens for analysing ICT enabled standardization of work. The metaphor is appealing because it accentuates the dynamics involved in the technology-user interface and how time and speed tend to be of crucial importance. This is perhaps especially relevant for public service work, on which this article is empirically based. The metaphor furthermore highlights how information systems play a central part in directing work practices even though the employees might find they own style of dancing and they might stick to their own rhythm and pace. It has been argued that the dancing still departs from the choreography and there is merely a relative distance between these two. By suggesting choreography as a suitable lens for analysing the role of information systems in efforts to standardize work practices, I furthermore provide a way of conceptualizing conformity and the relatively disciplining role of information systems. This has received less attention in practice-based research on information systems. Additional nuances and aspects of the choreography-dance analogy need to be more fully explored elsewhere.

Even though I bring focus to the disciplining role of the information system, and how conformity occurs at a certain level, my case clearly illustrates that there is no one-to-one relationship between the standards prescribed in the information system and actual work practices. The case can be seen to depict a situation in which the user of the system ‘standardizes its practices but does not practice the standard’ (Brunsson, Rasche, & Seidl 2012: 622). The next interesting and important step in this research would be to discuss the practical implications of the enhanced presence of ICT-enabled standardization of work in public services, and how this interacts with parallel trends aimed at increased individualisation of services. This is unfortunately beyond the scope of this article, but the gaps, depicted here, between the ideals inscribed in the information systems and the actual working conditions highlight how employees continuously need to negotiate with the systems. These insights lay a foundation for discussing implications. I would argue that it is pertinent to further explore the complexity involved in such negotiations which draws attention to various kinds of costs involved in ‘standardizing flexibility’ through digital information systems.

## **Concluding Remarks**

There has been increased pressure to individualise public services. This rests on the ability of the service provider to offer service schemes which can be adjusted to the clients’ individual needs. The main concern is about how the services are to meet the clients’ needs rather than the other way around. The latter tends to characterize more standardised schemes and services. More room for discretion and

flexibility at the level of service delivery can be seen to be a prerequisite for increasingly individualised services. Individual adjustment assumes assessment and decisions based on discretion rather than rigid procedures and rules. Public services are, at the same time, bound to follow legal principles and ensure equality of treatment. The development of public services can thus be seen to take the form of ‘standardised flexibility’.

This article has drawn attention to the role of digital information systems as a facilitator of standardised flexibility. It highlights how information systems become an enabler *and* a controller of flexibility. With this as a backdrop, I have explored empirically how digital information systems standardise work practices in an organizational context where enhancing room for discretion and hence flexibility has been a central objective. From the empirical case, it was evident that the prescriptions set in the information systems reflect an ideal world which is distant from local realities. The local-level employees thus face gaps between the prescribed ideals of the systems and their actual working conditions. The employees find various ways of coping with these discrepancies; the main purpose of this article has been to identify and describe three kinds of responses to these gaps.

A second purpose has been to suggest a conceptual framework for these processes which accentuates that actual work practices may deviate from the prescriptions of the system, but only to some extent. I have proposed that the metaphor of choreography and dance is fruitful in this respect because it underscores how work practices may depart from the prescriptions of the system while largely relating to it at the same time. Thus, the work practices can be seen to take place within the choreographed frames of the system. This metaphor provides a way of thinking and talking about compliance and the relative disciplining role of information systems. Extending perspectives and conceptualisations on this subject matter is pertinent since practice-based research on information systems has tended to be more occupied with examples of deviation at the expense of compliance. This article makes a contribution in this respect, and it opens up for further exploration of the nature and the mechanisms of the disciplining role of information systems.

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## Notes

- <sup>1</sup> The title 'advisor' was introduced with the NAV reform and replaced the formerly used 'case worker'. The new title was introduced to stress that the main focus of this position was advising and follow-up work.
- <sup>2</sup> User Manual 'Get started with Arena' (Brukerhåndbok 'Kom I gang med Arena') Version 3 2008 page 2 (*my translation*)
- <sup>3</sup> User manual Arena for the NAV office version (Brukerhåndbok Arena for NAV-kontoret) Version 2, 2010, p 43 (*my translation*)

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