How is Digitalization Legitimised in Government Welfare Policies? An Objectives-Oriented Approach

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Abstract: Digitalization is associated with structural changes in society, and a variety of policies on the topic have emerged on different levels of government (EU, national, regional, local) in recent years. Research suggests that government policies on digitalization are often overly optimistic about the transformational effects of technology. Hence, there is a need to scrutinise such policies. The purpose of this paper is to examine how objectives are expressed in digitalization policies in the welfare sector. To do so, an objectives-oriented approach is utilised to analyse four Swedish welfare policies. A directed content analysis was conducted using a theoretical framework based on five types of objectives from decision theory. The results reveal that common objectives in the policies studied were to change the status quo or use the people involved (citizens and healthcare staff) as a point of departure. At times, the policies combine goals of increased efficiency and better care, with a discourse that makes digitalization resemble a strategic goal (in itself). Moreover, few alternatives to digitalization presented in the material studied. Hence, although a range of actors is presumed to be part of changing the status quo, the results suggest that these actors have little choice due to a lack of alternatives to the prescribed path towards a digital welfare society. The results of this research have implications for both theory and practice. The absence of alternatives ought to be considered in future policy making. An interesting area for further research is to investigate how these policies are enacted in practice.

Keywords: Digitalization, Welfare, Policy, Decision-Making, Objectives

1. Introduction

Digitalization is associated with structural changes in society (Brennen and Kreiss, 2016), and a variety of policies on digitalization have emerged on different levels of government (EU, national, regional, local) in recent years. The rationale for these policies has been subject to research. Schou and Hjelholt (2019) studied Danish digitalization strategies from 2002 to 2015 and found that the strategies were built on an ideal citizen associated with certain needs. Elsewhere, the need to prioritise market-led values and technological perspectives over human needs has been discussed (Mansell, 2010). Buhr (2017) stated that, while significant research has focused on productivity and

economic growth or the risks for labour markets, little research has been conducted on the in-depth effects of digitalization on the welfare state. Toll et al. (2020) argued that such policies are often characterised by (over-)optimistic assumptions regarding the value associated with technologies such as artificial intelligence (AI). Hence, there is a need to scrutinise such policies from different perspectives. This paper discusses this subject using decision theory and objectives as a theoretical framework.

Sundberg and Larsson (2017) investigated decision-making in e-government theory and practice and suggested that e-Government may benefit for further research on the topic. Decision theory involves the study of descriptive, prescriptive and normative approaches to how decisions are and should be made (Eisenführ et al., 2010). Although we make decisions regularly from a young age, few people are formally trained in decision-making (Keeney, 2004). A central component in decision theory is objectives (e. g., Keeney, 1996 and Eisenführ et al., 2010). In a structured decision process, the decision-maker faces several objectives (or alternatives) and must choose one over the other based on their preferences (Eisenführ et al., 2010).

Against this backdrop, the purpose of the present paper is to examine how objectives are expressed in digitalization policies in the welfare sector. The study was conducted as a policy analysis in the Swedish policy sector using the objectives formulated by Eisenführ et al. (2010; see Section 2). In doing so, this paper contributes to the research on the motivations behind the digitalization of the welfare sector.

2. Analytical Framework: Types of Objectives

In this paper we argue, in line with Eisenführ et al. (2010), that objectives are important parts of policy documents. By studying objectives in digitalization policies we expect to gain insights in narratives of what is considered important in a future society. As we will describe in this section objectives can be of different types, and by studying these types we expect to achieve an understanding of how digitalization is legitimized in Swedish welfare policies. As explained by Sundberg and Gidlund (2017), decision theory and e-Government research share several features, such as a focus on values, stakeholders and issues related to assessment and evaluations. Hofmann et al. (2020) presented a comprehensive framework for analysing and comparing e-Government (digital government) policies, in which goals are an important feature. In this paper, an objectives-oriented approach is used as an analytical lens.

Eisenführ et al. (2010) stated that an objective is not something that can be found; rather, it is generated through the thought process. A decision-maker must be aware of how the object in mind was generated, particularly before making an important decision. Theses authors provided a framework consisting of the following themes: shortcomings of the status quo, comparison of available alternatives, strategic goals, external guidelines and the people involved (see Table 1).

Table 1: Type of objectives

Type of objective	Description
Shortcomings of the status quo	The objective is generated through a wish to change an existing condition.
Comparison of available alternatives	When considering a set of alternatives that differ from each other, an objective is generated by choosing the option that is important for the specific case (Eisenführ et al., 2010). Keeney (1996) highlighted the importance of alternatives in a decision-making situation.
Strategic goals	Strategic goals are goals that an organisation pursues. A goal is identified as important based on which values are most important to the decision-maker. Keeney (1996) identified strategic objectives as the ultimate objectives based on the fundamental values of an organisation or decision-maker.
External guidelines	These guidelines are usually established by superordinate divisions that the subordinate entities in the organisation must follow. An objective is, therefore, generated through external guidelines.
The people involved	The decision-maker should ask themselves who will be affected by a certain decision and what objectives the people involved may have. Essentially, this type of objective involves stakeholder-centred approaches. As the public sector consists of a range of heterogeneous stakeholders, previous research has adapted stakeholder theory (Freeman, 2010) to the e-Government field (see, e.g. Flak and Rose, 2005).

In the present paper, these five types of objectives are used as a lens through which four Swedish welfare policies are analysed.

3. Method and Materials

In this paper utilises a document analysis of national policies that focus on welfare or healthcare in Sweden. These policies are presented in Table 2. As stated by Hasselblad and Sundberg (2020), digital technologies are a means of enabling a (future) welfare society, but the logic behind this development consists of conflicting and, at times, contradicting rationalities. The policy analysis was carried out using five types of objectives presented, and the policies were chosen, as they a) offer

narratives of the welfare society and b) target a large range of actors, which may make them important as a basis for decision-making regarding investments of fiscal funds.

Table 2: Policy name and publishing organisation

Policy name (translated)	Publishing organisation	Policy#
Artificial intelligence possibilities for welfare	Swedish Association of Local Authorities and Regions (SALAR)	1
AI and automation for first line of care	Inera AB	2
Vision E-health 2025	Ministry of social affairs and SALAR	3
Automation of work	SALAR	4

The analysis was conducted through a directed content analysis (e.g., Wei & Watson, 2019 and Hsieh & Shannon, 2005). A directed content analysis uses existing theory to guide the researcher (Wei & Watson, 2019) and enables key concepts and variables to be identified (Hsieh & Shannon, 2005). In this paper, we used five types of objectives. When reviewing the policies, the objectives were identified and coded to the certain types presented by Eisenführ et al. (2010). The presence of certain objectives in a policy was analysed using an interpretative methodology based on 'how' it was described. For example, if 'the people involved' was used as an objective, we identified how they were represented in the text, particularly in relation to other frequently mentioned objectives (e. g., what kind of action space do these stakeholders have?).

4. Results

4.1 Shortcoming of the Status Quo

In policy #1, there was no mention of a shortcoming of the status quo. Policy #2 was based on a demographic challenge. This challenge puts pressure on the healthcare system in Sweden via the number of elderly citizens increasing while the working force decreases:

> *'Swedish healthcare stands before big challenges with an aging and increasing population while retirement and savings in the healthcare sector decreases the personnel count. In just a couple of years, fewer health and social care workers will need to be able to help more citizens' (p. 6)*

This issue was also mentioned in Policy #3 and #4. Policy #4 stated the possibilities created by artificial intelligence (AI) and automation must be utilised for the welfare sector to continue to function optimally in future. The policy describes a need for change in organisational and work processes using technology while prioritising the need to be able to handle future competency requirements.

4.2   Comparison of Available Alternatives

No alternatives were identified in Policies #1, #2 and #3. For example, AI was not compared with other alternatives in Policy #1. In Policy #4, no comparisons were made. Creating sufficient new jobs was ruled out, as the healthcare sector would require need 166% of the total new jobs created yearly in Sweden.

4.3   Strategic Goals

No strategic goals could be identified in Policy #1. In Policy #2 it was difficult to distinguish between means from ends. The value of efficiency, better service and self-care frequently mentioned as part of the need to create better healthcare in future when faced with demographic challenges. A similar motivation was noted in Policy #4:

'To be able to offer continued good welfare, also when the demographic challenges increase, municipalities, country councils and regions need to take advantage of this potential' (p. 36)

In policy #3, the main strategic goal was as follows:

'By 2025 Sweden shall become the best in the world when it comes to utilising the possibilities of digitalization and E-health in order to facilitate for humans and reach a good and equal health and welfare' (p. 8)

There was also a call to achieve higher equality for all citizens in terms of healthcare, with higher efficiency noted as a factor in achieving this.

4.4   External Guidelines

No external guidelines could be identified in Policies #1, #2, #3 and #4. An overarching external guideline relevant to this research was mentioned in Policy #3, which expressesed the government's ambition to be the best nation in the world in terms of digitalization.

4.5   The People Involved

All four policies highlighted the people involved. Policy #1 named citizens, patients and personnel. Two general themes in how the people will be affected emerged: (i) AI provides increased efficiency to save citizens and personnel time and (ii) AI facilitates higher quality services that are more accessible or easier to use.

'Several hospitals use and develop systems for advanced decision support for doctors. Support like this improves both for patients and the healthcare system. When the diagnosis can be made quickly and with greater sharpness it saves both human suffering and money' (p. 9)

'The system with administrator robots increases availability of the citizen, which will increase service and increase autonomy. The system also makes the administration process more efficient and will free up time for the administrator' (p. 10)

Policy #2 detailed what citizens and personnel want, similar to the ideal citizen discussed by Schou and Hjeholt (2019). The policy explained how, in the future, there will be more self-care, and

the citizen will increasingly use AI. Policy #3 referred to citizens, special groups, personnel, users, patients and clients in its discussion of the e-health strategy for 2010. Further, it identified three main groups: individuals, personnel and decision-makers. Policy #3 also states that there is a need for more involvement with entrepreneurs and the science community. Policy #4 had similarities with the other polices that referred to welfare sector individuals (e.g., patients, users, clients and personnel). The main group referred to in the policy was personnel. The policy often discussed how AI or automation could help personnel either via decision support or by automating tasks to free up their time.

5. Discussion

As shown in Table 3, two frequently mentioned objectives in the studied policies were 1) a will to change the status quo through greater use of technology to tackle future demographic challenges associated with an ageing population and 2) the use of 'the people involved' as a point of departure. The frequent mention of stakeholders was interesting, as the policies did not mention any alternative than to embrace technologies such as AI.

Table 3: Findings

Type of objective / Policy #	Policy #1	Policy #2	Policy #3	Policy #4
Shortcomings of the status quo	-	A demographic challenge	A demographic challenge	A demographic challenge
Comparison of alternatives	-	-	-	-
Strategic goals	-	To foster greater efficiency and better service	To become a world leader in digitalization	To provide better care
External guidelines	-	-	To become a world leader in digitalization	-
The people involved	Citizens (patients), healthcare staff (doctors, administrators)	Citizens (patients), healthcare staff	Citizens (special groups, users, patients, clients, individuals), healthcare staff (decision-makers)	Citizens (patients, users, clients), healthcare staff

Extracting clear, strategic goals from the policies proved challenging during the research. The goal of improved healthcare was mentioned, along with the hope of increased efficiency using digital technologies. Moreover, Policy #3 emphasised Sweden's goal to be the best nation in the world for e-health, which resembled the country's national goal to be the best nation in the world at reaping the benefits of digitalization. Sweden's national goal could be interpreted as an external guideline that fuels Sweden's strategic goal to be a world leader in e-health. However, these goals are problematic, as they are expressed in a way that makes the use of digital technology sound like a goal in itself; this made it difficult to separate means from the ends in the material studied.

It is interesting to examine the action-space the stakeholders mentioned in policies on welfare people have when different objectives are combined. In several of the policies the people involved were mentioned in relation to demographic challenges, reduced resources and increased demand, all of which require technological solutions to improve efficiency for personnel. Personnel must focus their time on tasks that technology cannot perform, while the citizens and users will demand more from welfare, such as smarter solutions to obtain care or help. This is in line with Schou and Hjelholt's (2019) ideal Danish citizen. Returning to personnel, there is no clear need or want from this group, and the objective to use technology to free up their time appears to be projected onto them rather than expressed by them.

To conclude, a range of stakeholders is frequently mentioned in the policies; however, these people do not appear to be significantly involved in formulating objectives. Instead, their wants and needs are projected onto them, and they are left with no choice but to utilise the new technologies. At the same time, two of the policies are driven by future demographic challenges.

6. Conclusion

The purpose of this paper was to investigate how objectives are expressed in digitalization policies in the welfare sector in Sweden. The present analysis of four Swedish welfare policies highlighted how common objectives in the studied policies were to either change the status quo or use the stakeholders (such as citizens and healthcare staff) as a point of departure when formulating objectives. At times, the policies combine goals of increased efficiency and better care, with a discourse that makes digitalization resemble a strategic goal (in itself). Moreover, few alternatives to digitalization presented in the material studied. Hence, although a range of stakeholders is presumed to be part of changing the status quo, the results suggest that these actors have little choice due to a lack of alternatives to the prescribed path towards a digital welfare society.

These results contribute to existing research on digital government policies and may also be of practical use to policymakers, who can use them to devise alternatives in future digitalization policies. In the policy analysis we have found objectives that portray digitalization as a strategic goal in itself, as well as objectives that projects certain (technological) needs and wants to a citizen and government employees. By disclosing these findings, we believe this study has the potential to generate an increased awareness among policy makers about the use of objectives in welfare policies on digitalization. An important issue left unanswered in these policies is how they should be translated into practice. How do policies that appear to narrow the action space for actors rather

than enabling it through alternatives and a variety of views guide decision-making regarding digitalization? Hence, policy enactment represents an interesting subject for further research to explore.

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