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MANAGING E-GOVERNMENT: VALUE POSITIONS AND RELATIONSHIPS

Public sector managers take much of the responsibility for selecting, commissioning, implementing and realising benefits from information technology projects. However, e-Government initiatives often suffer from complexity, vision failure, lack of goal clarity and insufficient commitment. These problems may stem from value traditions that are deeply engrained in managers' cultural environments, but not always in harmony with each other. A first step towards working with value complexity is to understand it; we synthesise a model of value positions for e-Government derived from major traditions in the public administration literature. Four value positions relevant to e-Government together with their IT assumptions are identified; they reflect the ideals of professionalism, efficiency, service, and engagement. A qualitative investigation of Danish local authority managers displays both value congruence and value divergence. The interpretive study results in a theoretical model that combines value positions and relationships, and the model's implications for researchers and practitioners in focusing successful e-Government initiatives are outlined.

Keywords: e-government, value, local government, public administration, bureaucracy, New Public Management, IS management

1 INTRODUCTION

Understanding the success and failure of IT initiatives has a long history in information systems (IS) research (Lyytinen and Hirschheim, 1987, Rockart, 1982), and the factor approach (critical success factors, critical failure factors, barriers) has become prominent in e-Government research. Though the reasons for e-Government success or failure are complex and vary from situation to situation, factor studies consistently emphasize the role of management and leadership. Managerial success factors for e-Government include: the importance of management support (Altameem et al., 2006, Pardo and Scholl, 2002, Borman and Janssen, 2013), leadership (Kumar and Best, 2006, Altameem et al., 2006), clarity of vision (Luk, 2009, Garson, 2006, Altameem et al., 2006) and the development of shared common objectives (Gauld, 2007, Lam, 2005). It is suggested that IT implementation is made more complex in the public sector by relatively complex decision-making and accountability systems, together with a plurality of stakeholders with many differing objectives (Almarabeh and AbuAli, 2010). Managers must therefore respond to a wider variety of goals and challenges (expressed by multiple salient stakeholders) than in the private sector. For example Gauld (2007) studies the failure of a hospital system in New Zealand, noting the prevalence of organisational and political complexities, long and difficult decision making, and mixed messages from policy makers in the public sector. Gauld argues that addressing these problems requires the creation of 'common objectives across the various stakeholders…. from the outset.' Luk (2009) demonstrates the impact of leadership (the articulation and promotion of vision and strategy) on the outcome of an e-stamping project in Hong Kong. Establishing and maintaining a clear sense of purpose is difficult in environments that are characterized by

idolisation of technology, technophilia, managerial faddism and Lomanism (accepting exaggerated salesman's accounts of the capability of technologies) (Gauld and Goldfinch, 2006). Thus for Almarabeh and AbuAli (2010), the most important questions for e-Government managers revolve around the creation and articulation of common purpose and a common direction: Why are we pursuing E-government? Do we have a clear vision and priorities? What kind of e-Government are we ready for? Are we selecting Egovernment projects in the best way?

A promising research avenue for the investigation of e-Government purpose and vision has emerged in the study of values (Persson and Goldkuhl, 2010, Bannister and Connolly, 2014). Values express underlying purposes and motivations that are more enduring and deeply rooted than project goals. Studying the values embedded in perceptions of IT projects is a way of understanding their superordinate goals, irrespective of what may be written in the project document for political ends. Co-ordinating stakeholders' basic values in the execution of a project may be an important route to success. Value represents the "worth, utility, or importance of an entity" (Esteves and Joseph, 2008) - that which is "considered a good (worthy of striving after) without further justification" (Sikula, 1973), thus subjective phenomena. Dewey (1939) described values as "ends-in-view:" the organising principle or superordinate goals for component activities, serving as the criteria for evaluation of those activities, formulated and reformulated as those activities produce results. Values refer to desirable goals which people strive to attain (thus a motivational construct); however they transcend specific actions and situations (Schwartz, 1994, Dewey, 1939). They may guide the selection or evaluation of actions, policies, people, and events, serving as standards or criteria. Values are beliefs that are tied to emotions and perceptions, often forming systems of value priorities (Schwartz, 1994). Jørgensen and Bozeman (2007) make an inventory of 72 public administration values which Rutgers (2008) expands to over a hundred, commenting that the sheer number of possible relevant values is overwhelming. A variety of different categorisation schemes are proposed (Dobel, 2007, Hood, 1991, Jørgensen and Bozeman, 2007, Van Wart, 1998) with some overlap but little agreement (Appendix 1), and often without substantial empirical or theoretical support. An assumption is usually made that the values described are *congruent* – that they form a unified, coherent and synergistic platform that is definable. However, more recent contributions understand values in public administration as plural, ambiguous, hybrid and overlapping (Van Der Wal and van Hout, 2009). Hybrid organisations, for example third sector organisations dealing with both public and private sectors, often contain stakeholder groups with inherently incompatible value systems. Values can be competing, clashing and contradictory (Rutgers, 2008), and espoused values should be distinguished from values-in-use (Schein, 2004) - which makes empirical substantiation difficult. In these contributions, values are primarily understood as *divergent*.

In the e-Government context, Bannister and Connolly (2014) define values as modes of behaviour that are generally held to be right, and argue that they underlie all forms of transformation. We develop a different, but related focus on values as ends-in-view that are tied to assumptions about how information technologies benefit good governance, or increase impact. These assumptions (which are seldom addressed in the public administration literature) can be characterised as technology frames (Orlikowski and Gash, 1994). Bannister (2002) identifies six

citizen-centric complementary categories of value for information technologies in public administration (foundational/efficiency, policy formulation, democratic, service, internal, and external). In the context of the evaluation of transformative government, Bannister and Connolly (2014) propose a three part taxonomy: duty-oriented, service-oriented and socially-oriented, but provide no empirical justification. Other researchers provide different categorisation schemes that, as in the case of the public administration literature, overlap, without reaching agreement (these are summarised in Appendix 2). Two approaches to studying value are emerging; either they are grounded in previous value studies, and seek to provide more appropriate lists or categorisation schemes, or they take their starting point in mainstream public administration theory (the approach recommended by Yildiz (2007) that we also follow. Persson and Goldkuhl (2010), for instance, identify a core set of values articulated by Weber (1947) which they term traditional bureaucracy, and contrast them with New Public Management (NPM) values. They regard E-government values as a synthesis of these value positions. To date, e-Government value studies share a congruent understanding of values; they do not seek to explore tensions and contradictions. However recent studies of e-Government initiatives also point to values as a potentially divergent; for example Hellberg and Gronlund (2013) identify seven conflicts in an implementation project rooted in the re-operationalization of basic values.

This short analysis suggests the following challenges for values research in information systems. Research should be rooted in appropriate mainstream theory (public administration theory is an obvious candidate for the e-Government area), but should also demonstrate grounding in empirical data. Researchers could move away from the search for the perfect categorisation scheme, for example the idea that a complete list of values with an objective correspondence to an external reality is a desirable or feasible goal, and instead focus on the subjective experience of identified stakeholder groups. Research may take the perspective that values may be in competition with each other, and investigate the role of technology in value choices and competition, rather than assuming that it is purely an implementation mechanism. In the present study, we examine values and their relationships articulated by managers in local authorities in Denmark. Denmark traditionally performs well in comparative surveys of e-Government performance[1]. Danish public administration is characterised by thick government and a relatively consensual and technologically advanced society. Danish local authorities are relatively de-centralised (they commission and manage their own IT systems, for example) and are not merely the executive wing of central government. The 2007 structural reform ensured local authorities of sufficient size to cope with the increasing complexity of the many tasks accruing to them during the consolidation and expansion of the welfare state. Local authorities are entrusted both with a large part of the operation of the Danish welfare state – with primary education, day care for children, social welfare and care of the elderly as the most important examples (Kjær et al., 2010) - and a great deal of autonomy in how to organise them. Senior managers are key figures in the drive to

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[1] http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan038848.pdf

digitalisation. Responding to Bannister and Connolly's (2014) call for research into how public values affect, and are affected by, information and communication technologies, we address the research questions:

- How can the values of public managers in respect to e-Government initiatives be theorised?
- How are these values related?

We investigate the values embedded in major trends in the public administration literature over the last 15 years and derive four value positions (the professionalism ideal, the efficiency ideal, the service ideal and the engagement ideal) that are highly relevant to e-Government concerns. We develop a case study (using content analysis as the primary analytic tool) that also allows us to assess congruence and divergence in the value positions of managers. We develop a theoretical lens for value positions and their relationships, and discuss its implications for theory and practice.

2   VALUE IDEALS AND PUBLIC ADMINISTRATION THEORY TRADITIONS

In this section, we analyse the values behind different theoretical traditions in the public administration literature (bureaucracy, New Public Management, Public Value Management, New Public Service), which also reflect the historical development of the field. The analysis is organised around four recurrent ideals in the literature: professionalism, efficiency, service and engagement. We show how the traditions share some convergent values but also develop divergent values, and outline representative values associated with the four ideals at the end of each section.

The professionalism ideal: the emergence of the bureaucratic state

Weber (1947) describes how economic purposive rationality (capitalism) replaces religion as the driving force of society, bringing with it the superior organisational form of bureaucracy. Remnants of feudalism, such as public offices awarded by the aristocracy and used for the accumulation of personal gain, are swept away, and the apparatus of the state becomes a professionalised machine. Bureaucracy is characterised by six principles (Weber, 1947):

- fixed jurisdictional areas ordered by rules, laws, or regulations
- the principle of hierarchy (structures of superior and subordinate relationships)
- management of the office through written files
- occupation of offices based on expertise and training
- full-time career employment of personnel who are compensated
- administration of the office according to stable rules learned through training.

Bureaucracy is underpinned by a belief in legitimate authority expressed in patterns of normative rules, and the right of those elevated to authority to issue commands. The professionalised bureaucratic organisation exhibits: "optimised precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs" (Weber, 1947). Bureaucracy also offers unparalleled objectivity (casework according to calculable rules and without regard for person) in the carrying out of administrative functions and thus promotes equity: equality before the law. Dealing objectively with complexity

and specialisation requires a detached expert, a trained professional official who can both understand the regulations, and administer them in a fair way where there is (inevitably) a need for discretion. Weber described bureaucracy without idealising it; he recognised many difficulties inherent in state bureaucracies. They tend to expand, and to preserve and extend their own power, making them a form of domination, which turns the public into clients. They do not necessarily recognise or act for the public good, especially where this might conflict with the underlying regulatory system. However, the ideal of public sector professionalism is still associated with traditional bureaucratic values. Dobel (2007) identifies them as: framing decisions by law and authorised policy, demanding good information for decisions, creating accurate durable records, building durable and competent institutional capacity, and impartially serving all citizens. He calls them foundational values since they go largely unchallenged in democratic western countries, even where other aspects of the bureaucratic tradition are contested. They are represented as "keep it fair and honest" and "keep it robust and resilient" in Hood's (1991) prescriptions. We summarise these values as:

- Durability: professionalism expressed as ensuring a robust, resilient and competent public service, backed by a secure and accurate public record
- Equity: professionalism expressed as honesty, fairness, objectivity and impartiality in dealing with civil society
- Legality: professionalism expressed as framing decisions by law and authorised policy
- Accountability: professionalism expressed as traceable responsibility for legitimate actions, authorised though the chain of command, and documented in the public record.

The efficiency ideal and the virtues of the private sector

Civil service traditions associated with Weber's account of bureaucracy became gradually discredited in the 70s and 80s and understood as wasteful, static, overstaffed and unresponsive (the modern vernacular usage of the word 'bureaucratic'); "plagued with excessive rules, bound by rigid budgeting and personnel systems, and preoccupied with control………. ignoring citizens, shunning innovation, and serving their own needs" (Denhardt and Denhardt, 2000); in short 'broken' (Gore, 1993). A new value tradition arose derived from the perception of superior efficiency in private sector management practice. Boston (1991) characterises the central doctrines of New Public Management (NPM) as

> "[an] emphasis on management rather than policy; …a reliance on quantifiable output measures and performance targets; …the development of new reporting, monitoring, and accountability mechanisms; the disaggregation of large bureaucratic structures; …..a preference for private ownership, contracting out, … private sector management practices such as ... the development of corporate plans (and) performance agreements, the introduction of performance-linked remuneration systems; a general preference for monetary incentives rather than non-monetary incentives such as ethics, ethos, and status; a stress on cost-cutting, efficiency, and cutback management." (Boston, 1991)

Much attention in the public arena was captured by the related Reinventing Government movement (Osborne and Plastrik, 1997, Osborne and Gaebler, 1992). This emphasised entrepreneurial government promoting competition between service providers, where many services are privatised and citizens (redefined as customers) exercise

choices governed by their individual economic well-being. Government's role is to catalyse all sectors (public, private, and voluntary) through market forces to proactively solve their communities' problems, rather than to enforce the law or to (necessarily) provide services themselves; they are driven by their goals (missions), not by their rules and regulations. Instead of being content with administering budgets effectively, government institutions should actively seek ways of increasing their revenue, and monitor performance outcomes. Government officials become entrepreneurial managers with the freedom to galvanise bureaucracies into action in the same way that managers in industry (supposedly) can. In summary, the Reinventing Government movement prefers "market mechanisms to bureaucratic mechanisms" (Osborne and Plastrik, 1997). Efficiency-oriented NPM values are identified by Hood (1991) as value for money, private sector style leadership, performance review, and a role for the market. Hood (1991) encapsulates this ideal in his injunction: 'keep it lean and purposeful,' and points out that the measures of public sector efficiency in this tradition are primarily economic. Some aspects of New Public Management and the Reinventing Government movement quickly became controversial, but the efficiency ideal remains firmly entrenched in public management. Representative values are:

- Value for money: implying the elimination of waste and lean service provision

- Cost reduction: implying the reduction of cost per output unit

- Productivity: implying the increased output per economic unit

- Performance: implying the quantitative monitoring of outputs with the aim of improving performance

The service ideal and the creation of public value

NPM provoked a strong backlash, with one reaction concentrated on defending traditional bureaucratic values. Moore (1994) deplores the "precedence of economically-based values over legally-based values." Focus on entrepreneurial independence for government officials risks undermining the rule of law and accountability for actions: willingness to bend the rules is a double-edged sword in government (DeLeon and Denhardt, 2000). Privatisation risks eroding bureaucratic values (impartiality, fairness, objectivity) and replacing them with commercial values. The 'business is best' prejudice is dismissed by Goodsell (2004), who finds little empirical evidence for the proposition that businesses consistently perform better than government. Basing public policy on the cumulative market effect of self-interested service consumers rests on the (dubious) assumption that the market determines public value better than the political process. Redefining, citizens as customers, risks creating inequalities based on ability to pay, undermines the public welfare function of government, and ignores the democratic role of the citizen. Many of these concerns underlie the development of new value positions centred around Public Value Management (PVM) (Moore, 1994, 1995). In the public service tradition, government officials respond to a higher calling to serve the public interest. The ethos of office (Du Gay, 2000) - the vocation of public service incorporating an ethical commitment to act in the public interest - allows government to act forcefully, morally and accountably, and distinguishes government from politics or business. Since the public interest is not always easy to define or recognize, public sector managers are charged with the duty of searching out

and implementing public value. The institutions of government should respond to civil society's shared cumulative assessment of what it values, while respecting fundamental liberties and working to "block efforts by narrow factions to coerce …... the public interest" (Miller, 1989). The public servant thus has a special responsibility to listen to the voices of citizens, to be responsive to what is said and to "find and articulate a general or common interest and to cause government to pursue that interest" (Frederickson, 1991). This responsibility extends beyond the duty to execute the policy decisions of politicians. Commitment to the public interest also extends to respect for individual citizens: attending to the legitimate interests and expectations of citizens wherever government is in contact with them: citizen-centricity. Moreover, in Moore's account of public value management, public managers have not only a responsibility for articulating public value but a political function in mobilising support, legitimacy and co-production through advocacy, negotiation and leadership: networked governance (Stoker, 2006). Public value management, while not rejecting the professionalism and efficiency ideals, also emphasises consensus building, collaboration, and networked leadership. The ideal of public service is inherent in Weber's account of bureaucracy, (the career bureaucrat offers his allegiance to the state), and developed by the Reinventing Government movement as citizen-orientation – where the customer citizen chooses in the service marketplace. However the service ideal is central to PVM, partly because civil society primarily recognises the value generated by government through its interactions with government; that is, through the portfolio of services that are delivered. Key representative values are:

- commitment to the public interest expressed through public service
- citizen centricity: respect for the interests of individual citizens
- service level and quality: the provision of service which meets the expectations of citizens

The engagement ideal and the promotion of liberal democracy

In Public Value Management, achieving public value is dependent on good relationships between citizens and government and the building of shared agendas and consensus, but remains primarily the responsibility of public managers. Denhardt and Denhardt (2007) go further, defining a New Public Service (NPS) based on relationships of trust with empowered citizens, the creation of shared interests and shared responsibilities through collective efforts and collaborative processes: engagement. Here service is redefined in its democratic context: serving the public interest means engaging with civil society in order to co-produce it. The rationale for engagement with civil society is found in accounts of liberal and deliberative democracy. Government has an important role to play in the public sphere (Habermas, 1989): the deliberative environment in which public opinion is negotiated. Dialogue between civil society and public servants defines and re-defines the public interest. Public administrators, argue Denhardt and Denhardt (2000) have a 'central…..role in helping citizens to articulate the public interest…..and must work to ensure that citizens are given a voice in every stage of governance, not just in electoral politics'. Where the engagement of citizens is lacking, managers should work to create active citizenship. Government "shouldn't be run like a business" they assert "it should be run like a democracy" (Denhardt and Denhardt, 2000). The ideal of engagement with civil society builds on values of citizen-centricity and community empowerment

from New Public Management and the political engagement of Public Value Management. Dobel (2007) summarises this ideal as the commitment to require maximum transparency and public reasons for actions, to seek inclusive participation and engage the diversity of society, to maximise citizen participation, to engage and respond to citizen deliberations and to respect citizens and honour rights in treatment and process. Key engagement values are:

- Democracy: engagement with civil society as an important link in the democratic process
- Deliberation: engagement with civil society through co-formulation of policies
- Participation: engagement with civil society through shared responsibilities in decision making

Table 1 summarizes the four ideals of professionalism, efficiency, service and engagement and compares their interpretation in four public administration theory traditions: bureaucracy, New Public Management, Public Value Management, and the New Public Service.

	Bureaucracy	New Public Management	Public Value Management	New Public Service
Professionalism: providing an independent, robust and consistent administration, governed by a rule system based on law	*dominant ideal: understood as the central focus of management*	taken partly for granted, but largely regarded as leading to inefficiency	taken as given	not in focus
Efficiency: providing lean administration which minimises waste of public resources gathered from taxpayers	understood as the end product of professionalism	*dominant ideal: understood in economic terms as the central focus of management*	understood as an enabler in the provision of public value	rejected where it implies a commitment to the values of business
Service: maximising the utility of government to civil society by providing services directed towards the public good	not in focus – service understood as the personal commitment of the bureaucrat	understood as the provision of customer choice – may be privatised to ensure efficiency	*dominant ideal: understood as the manager's duty to create public value*	an important focus – redefined around the co-creation of policy
Engagement: engaging with civil society to facilitate policy development in accordance with liberal democratic principles	not in focus	not in focus	limited to engagement in the facilitation of networked governance	*dominant ideal – engagement with civil society as the kernel of democracy*

Table 1. Ideals for public managers and their role in four traditions of public administration theory

3 THEORETICAL LENS: FOUR VALUE POSITIONS FOR MANAGING E-GOVERNMENT

This section investigates the role of the ideals of professionalism, efficiency, service and engagement in the management of e-Government. The management of E-government is a specialised form of public administration as it involves responsibility for the deployment of IT. Managers take various responsibilities for the formulation of IT policy, the development, implementation, and administration of IT systems, various IT related services, relationships with suppliers and related organisational reorganisations and realisation of benefits. In these tasks, values (ends-in-view) are associated with understandings of the purposes of e-Government initiatives, which are dependent on assumptions about what information technology is for, what it can do, and how it should be used. These assumption sets are described by Orlikowski and Gash (1994) as technological frames. Technological frames are 'cognitive structures or mental models held by groups or individuals..........collective cognitive elements that individuals draw on to construct and reconstruct their social reality.........that concern the assumptions, expectations and knowledge they use to understand technology ...... this includes not only the nature and role of the technology itself, but the specific conditions, applications, and consequences of that technology in particular contexts' (Orlikowski and Gash, 1994). For example, technological frames in IS research portray IT as a labour substitution, productivity, information processing or social relations tool, or as an embedded system or as structure (Orlikowski and Iacono, 2001). In the e-Government field, Snellen (2005) identifies three principal roles for IT: supporting economy of implementation, supporting public service provision, and supporting democracy. Four value positions are developed, based on public administration ideals. We define a value position as:

- a dominant ideal
- located in a public administration tradition
- expressed by set of representative values
- with their associated assumptions about e-Government purposes
- based on a technological frame

where the five elements are internally consistent.

3.1 The professionalism ideal and e-Government

The professionalism ideal is focused on providing an independent, robust and consistent administration, governed by a rule system based on law, resulting in the public record that is the basis for accountability. Key representative values are durability, equity, legality and accountability. These reflect many of the bureaucratic values identified for e-Government by Persson and Goldkuhl (2010), and a mixture of socially-oriented and duty-oriented values in Bannister and Connolly's (2014) impact assessment taxonomy. The role of e-Government is to provide a flexible and secure digital public record, and support standardised administrative procedure. The technological frame accompanying this understanding is IT as infrastructure (Ciborra, 2000), which can also be related to Orlikowski and Iacono's (2001) conceptualisation of IT as an embedded system and as structure. Computerised information systems carry the modern public record, and support, sometimes enforce, due administrative process. They

constitute an information infrastructure of databases and document management systems that faithfully enact the regulatory system in silicon and magnetic charges, and encourage its standardisation. In the e-Government field, these values manifest themselves in work on (among other things) citizen identification (Otjacques et al., 2007), data security (Paquette et al., 2010), accountability, interoperability (Otjacques et al., 2007), architecture development, infrastructure and IT governance (Meso et al., 2009)

3.2 The efficiency ideal and e-Government

The efficiency ideal concerns providing lean and efficient administration that minimises waste of public resources gathered from taxpayers. Key representative values are value for money, cost reduction, productivity, and performance. In the e-Government context, Bonina and Cordella (2009) call these values managerial values, and Persson and Goldkuhl (2010) associate them with NPM, whereas Kim and Kim (2003) refer to the cost-efficiency model. Bannister (2002) puts these values squarely at the centre of his account of e-Government values, calling them foundational values. Efficiency has been the central e-Government ideal in attempts to rationalise, streamline, and transform government; Snellen (2005) argues that IT's original role in e-Government was 'the enhancement of the internal effectiveness, efficiency, and economy of the executive functions of public administration.' This is associated with a technological frame where IT provides automation (Zuboff, 1985); a labour substitution or productivity tool (Orlikowski and Iacono, 2001).

3.3 The service ideal and e-Government

The service ideal involves maximising the utility of government to civil society by providing services directed towards the public good. Key representative values are public service, citizen-orientation and service level and quality. In the e-Government field, (Bannister and Connolly, 2014) identify service-oriented values, Chircu (2008) refers to the service ideal as social value, whereas Grimsley and Meehan (2008) simply call it public value. Scott et al. (2009) list a series of e-Government benefits seen from a citizen's perspective. E-Government's role has been to improve the availability, accessibility, and usability of government services by providing them online. Snellen (2005) describes this role as the application of IT to the "improvement of the quality of public services to the citizens, as customers, clients, citizens, and subjects." Snellen (2005) describes the application of IT to "improvement of the quality of public services to the citizens, as customers, clients, citizens, and subjects." In the e-services literature, which spans both private and public sectors, IT is framed as a service enabler. IT offers many opportunities to support service delivery over the internet, and increasingly, through mobile services. In this technological frame IT is an information processing tool (Orlikowski and Iacono, 2001), changing the way citizens communicate with service deliverers. It is also a productivity tool, but seen through the eyes of citizens and businesses, rather than government. E-government service improvements typically include better access, avoiding travel, shorter response times, better access to information, online applications and transactions, special provision for disability, online advice, automated benefits payment, and cost savings for citizens.

3.4   The engagement ideal and e-Government

This ideal focuses on engaging with civil society to facilitate policy development in accordance with liberal democratic principles; thus articulating the public good. Key representative values are democracy, deliberation and participation. In the e-Government field, Bannister (2002) acknowledges at least part of the democratic value (as citizen access to information, transparency and flexibility), while portraying policy making as an internal administrative concern. Chircu (2008) describes political value as the enablement of democracy, transparency, accountability, social justice and liberty. The role of e-Government in engagement is to support deliberative interactions with the public and the co-production of policy – 'to support the involvement of citizens in democratic policy making.' (Snellen, 2005). E-government literature is increasingly preoccupied with the engagement ideal: for instance in work on e-participation and e-democracy (Sæbø et al., 2010). Linders (2012) studies digitally enabled citizen co-production, and Bertot et al. (2012) investigate the use of social media to connect with citizens. A framing for technology for this position can be found in the social networking literature: technology is the facilitating media - a social relations tool (Orlikowski and Iacono, 2001).

Table 2 summarises the four e-Government value positions.

	Professionalism ideal	Efficiency ideal	Service ideal	Engagement ideal
public administration tradition	providing an independent, robust and consistent administration, governed by a rule system based on law, resulting in the public record, which is the basis for accountability	providing lean and efficient administration which minimises waste of public resources gathered from taxpayers	maximising the utility of government to civil society by providing services directed towards the public good	engaging with civil society to facilitate policy development in accordance with liberal democratic principles; articulating the public good
representative values	durability, equity, legality, accountability	value for money, cost reduction, productivity, performance	public service, citizen-centricity, service level and quality	democracy, deliberation, participation
e-Government purpose	provide a flexible and secure digital public record and support standardised administrative procedure	streamline, rationalise and transform public administration around digital technologies	improve the availability, accessibility and usability of government services by providing them online	support deliberative interactions with the public and the co-production of policy
technological frame for IT	infrastructural: IT securely carries the bureaucratic record in accordance with the law and allows its faithful reproduction; encourages or enforces compliance with the rules	automation: IT increases performance and reduces costs through automation of administrative tasks	service enabling: IT extends the range, availability and quality of services for citizens	networking facilitation: IT underpins communicative interaction between governments and citizens

Table 2. Four value positions for e-government

4 RESEARCH APPROACH

4.1 Research strategy

This study forms part of a three-year research project investigating IT management in the public sector funded by the Danish Research Council (Rose et al., 2012) involving 14 researchers and 10 local authorities. Since the investigation concerns managers' values (subjective phenomena that are influenced by history and culture, and negotiated within a social context) the research adopts an interpretive stance. This approach recognises the socially constructed nature of subjective phenomena such as ideals, perceptions, goals and beliefs, and is an accepted research paradigm in information systems (Myers, 1999, Walsham, 1995a). Heeks and Bailur (2007) recommend the use of a broader range of research traditions, to incorporate more critical realist, social constructionist, and critical research into the e-Government area. Interpretive researchers recognize that the subjective phenomena they study are local, transient and emergent, and bound to the constructions of the individuals and groups studied.

Interpretive theoretical lenses are carefully argued and justified both from theoretical principles and from patterns observed in data, but do not claim a one-to-one correspondence to a single objective reality. The study adheres to well-known principles for interpretive research laid out by Klein and Myers (1999): *the hermeneutic circle, contextualization, interaction between researchers and subjects, abstraction and generalisation, dialogical reasoning, multiple interpretation* and *suspicion*.

In choosing a case-based research strategy (Walsham, 1995b), the authors recognise the exploratory nature of the research questions, the subjectivity and interpretive flexibility of the value concept, the context-specific nature of the phenomena investigated and the evolutionary nature of value positions. Yin (1994) considers case-based research suitable for exploratory studies and early theory development of the type undertaken within this study. Carroll and Swatman (2000) outline broad organising perspectives for a case: a group of people, organisation, process or information system. Here we study a group of local government managers with significant responsibilities for digitalisation; instead of the more traditional narrative account we offer qualitative content analysis of managerial discourse captured by us and documented in conversations and texts. Discourse is closely identified with social practice because of the implied relationship between discursive events and the situations, institutions and social structures that frame them. Discourse is both conditioned by social practices and constitutive of them (Wodak and Fairclough, 2004).

4.2   Research Design

The research design can be characterised as an adaptation of the structured-pragmatic-situational approach advocated by Pan and Tan (2011). They suggest two cycles (a framing cycle and an augmenting cycle) comprising eight activities: access negotiation, conceptualizing the phenomenon, collecting and organizing the initial data, constructing and extending the theoretical lens, confirming and validating data, selective coding, ensuring theory-data-model alignment, and writing the case report. Figure 1 gives our adaptation.
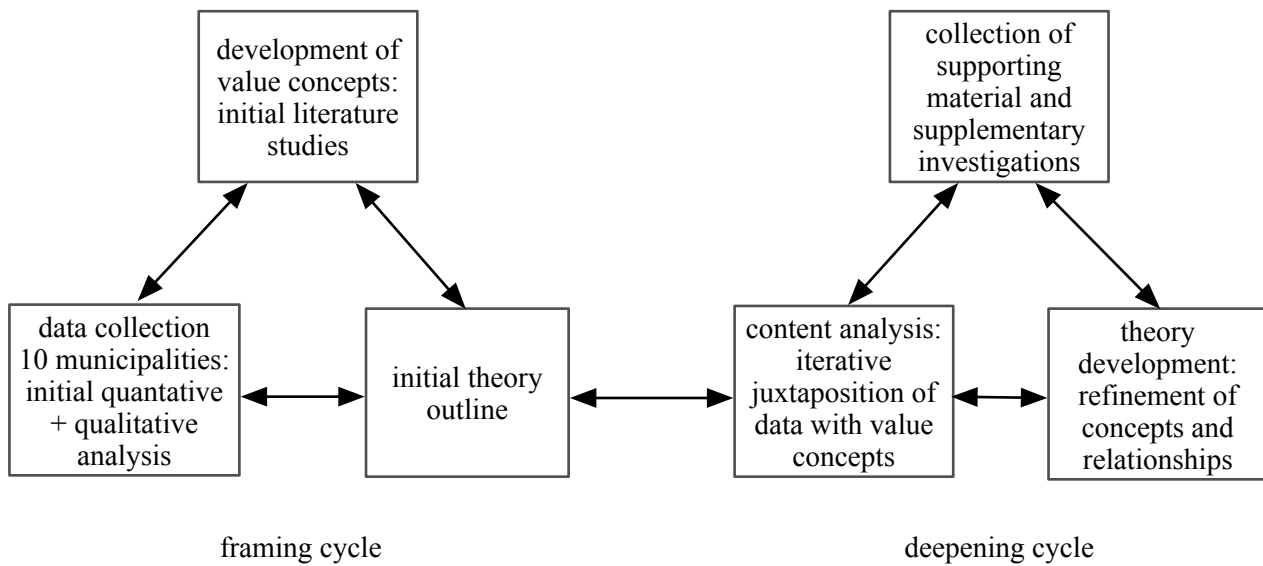
Figure 1: Research design (adapted from Pan and Tan (2011))

Access was negotiated as part of the research project. The framing cycle consisted of three activities: data collection and analysis, development of the value focus through literature studies, leading to an initial outline of the theoretical lens. The data collection procedure followed the normative prescription of Fiedler (1978) for doing fieldwork research of this nature. We collected data from 10 of Denmark's 98 local authorities (kommuner), covering all of the major regions. The selection included small (population 40,000) and large (315,000) authorities, rich and poor, rural and urban and with both mature and immature e-Government provision. Semi-structured interviews were conducted the senior managers responsible for the digitalisation programs, the chief executive officer (CEO), the chief information officer (CIO), and the citizen service manager (CSM): in total, 30 interviews of 1-1½ hours (see Appendix 3). Interviews were conducted face-to-face in a neutral setting to avoid disruption. The interview protocols (Appendix 4) had open-ended questions focusing on their management practices, challenges, priorities, goals, organisation, decisions, context, and strategies related to IT and digitalisation in their municipality. This constitute a wide variety of material relating to managers' ends-in-view and their contexts and cultural settings. Open-ended questions allowed us to explore manager's values–in-action through their evaluative (discourse-relative) statements, (particularly those regarding gaols and objectives, the logic of decision making and reasons for actions), rather than explicit rationalized statements of what they value, which would inevitable take on a cautious and political character. A backup descriptive questionnaire survey was also undertaken. The project members undertook initial qualitative and descriptive statistical analysis and prepared two practice reports covering broad descriptions of the managers' ends-in-view as described above. As the value theme emerged we conducted initial literature studies into the public administration and information systems literature and prepared an initial sketch of the theoretical lens. The theoretical sketch was compared with the results of the two practice reports, and initial reflections on the framing cycle are published as Rose and Persson (2012).

In the deepening cycle we collected additional material and learned from supplementary investigations, conducted detailed content analysis, and developed the theoretical model. Additional material collected included the local authorities' digitalisation strategy documents - the formal declaration of the purposes and goals of the managers in the local authorities, representing the espoused values of the managers. These facilitate the operation of *the hermeneutic circle* - alternating between global (strategy document) and local (managers interview responses) - and the principle of *suspicion* - do the espoused values of the strategy documents correspond to the values-in-action embedded in the interview responses (Schein, 2004)? Consideration of the *subject-researcher interaction* included an examination of unconscious bias in the original questionnaire; whether the social construction of the interviews affected the subsequent elicitation of values (it did slightly bias towards efficiency values). Additional data was collected from five-whole-day focus groups, six large seminar meetings, and internal work documents and many informal conversations. A feedback workshop was held with representatives from the municipalities in which the emerging theoretical framework was evaluated. An unusually high degree of *contextualisation* was available: seven action research activities within the municipalities conducted by the project's researchers - some aspects of these are recorded in Rose et al. (2012). Great care was taken to ensure that the primary and secondary data collected converged on similar findings (Jick, 1979), bearing in mind the accumulated array of evidence. Content analysis (Krippendorff, 2004) of the transcribed interviews and IT strategy documents was conducted using NVivo. Care was taken to operate the principal of *dialogical reasoning* by separating first order concepts (ends-in-view as expressed by research subjects) from second order concepts (the theoretically derived value concepts used by researchers to explain the patterning of the first order data) (Van Maanen, 2002). The content analysis identified evaluative statements pertaining to e-Government value. Evaluative statements represent the subjects' *multiple interpretations:* discourse-relative (more or less transparent) statements about desirability and undesirability, what is good and bad (Fairclough 2003). Some statements explicate the desirable and undesirable, while others evaluate in terms of probability, comprehensibility, utility, frequency, etc. (Graham 2002). We used theoretical (second order) codes for values and value positions derived from the framing cycle, supplemented by open coding. Many first order codes were developed around four value positions, which closely reflect empirical statements, but these were simplified and summarised by iteration with the theoretical material, to leave the theorised positions parsimonious, concise and distinct. However care was taken to respect the qualitative content analysis tradition (working directly with the textual statements) and frequency analysis of codes plays only a minor role in this study. Relationships (Table 3) were identified through analysis of all cases of co-occurring value positions in the empirical data. Theory development proceeded through *abstraction and generalization*; first generalizing from value concepts to theory, and then generalizing from empirical description to theory (Lee and Baskerville, 2003). Theoretical value concepts and relationships were refined by multiple iterations with the data using the principal of increasing parsimony - removing marginal cases and merging similar types of relationships. Empirical quotations and examples in the article represent key reference points in understanding patterns in the material.

5 VALUE CONGRUENCE AND DIVERGENCE: LOCAL GOVERNMENT IN DENMARK

Danish digitalization strategies have been ambitious, and Denmark consistently ranks amongst the leading nations in e-government, rated 6th for e-Government and 13th for e-participation according to comparative studies carried out for the United Nations (2010). Local authorities initiate and manage many e-Government projects within the strategies and frameworks devised by central government as well as implementing centrally driven projects. Local authorities are required to interact with a bewildering array of stakeholders, including several ministries (predominantly those concerned with finance), parliamentary commissions (such as national auditing, the technology committee, and the data-monitoring committee), local authority organisations (the association of local authorities and the local authorities' IT association) and IT suppliers. The supplier market is now deregulated and competitive tendering is partly enforced, but KMD (Local Authorities Data), the former monopoly supplier, retains control over many central legacy systems. It follows that the municipality managers' work concerning e-Government is not simple. The top managers responsible for the digitalisation programs include the chief executive officer (CEO), the chief information officer (CIO), and the citizen service manager (CSM). They respond to a wide variety of demands, initiatives and strategies, in a complex network of relationships (both internal and external), with equally complex accountabilities. Managers must remain within frameworks established by law and regulations, whilst responding to the demands of politicians and (less often) citizens. They maintain and develop large portfolios of systems and services (and renew the IT infrastructure they depend on) in cooperation with a variety of IT suppliers in a developing market. They manage digitalisation through a landscape of diverse specialisations, complexity, indifference and occasional resistance or hostility.

The interviews with managers and IT strategy documents display all four value positions for e-government, where values are juxtaposed in both convergent and divergent ways. First, we contextualise the value positions with examples from the empirical materials and explain how these examples include evaluative statements that reflect specific value positions. Then, we examine the relationships between value positions expressed by managers.

5.1 Value positions of Danish managers

This section presents the four value positions for e-Government as held by top managers in Danish local government. We analyse typical situations from the interviews that exemplify aspects of the framework summarized in Table 2. Examples were chosen to show the inherent complexities of value positions in managing IT in a local government setting.

5.1.1 The professionalism ideal

The Danish local authority managers reflect the professionalism ideal by providing an independent and consistent administration, governed by a rule system based on law, resulting in the public record, which is the basis for

accountability. In the following example, a CIO is concerned that the governing rule system implemented with IT adheres to current legislation at all times:

> "I'm very conscious that we must continuously focus on the legislation governing these IT systems ... not many [IT] suppliers know what kind of task it is to report to the national archive... they view personal data legislation as less important. They definitely don't rank it with public administration legislation even though it should be viewed as just as conclusive ..."
>
> (Interview 22, CIO)

The CIO refers to IT systems that supply the national archive with data and thus exemplify an infrastructural framing of IT. The representative values (durability, equity, legality, accountability) go largely unchallenged; however, the example shows how IT suppliers may inadvertently threaten them, forcing the CIO to restate his professionalism ideal. The value position is expressed through the evaluative statement "not many suppliers know what kind of task," implying that knowing (how to represent the bureaucratic record in IT systems in accordance with the law) is of high importance (valuable). "Should be viewed just as conclusive" implies that the professionalism ideal involves following all the legislation, not just a convenient subset. The public official points out the he is in a better position to interpret the historical development of law and its relationship with policy, and to make sure that the IT infrastructure correctly embodies these interpretation, than the technology developers. He also implies that this may not happen without his vigilance.

5.1.2 The efficiency ideal

The Danish local authority managers demonstrate an enduring efficiency ideal for digitalisation by focusing on providing lean and efficient administration that minimises waste of public resources. However, as with the other ideals, there are also challenges to the pursuit of efficiency. One CEO engages with private IT suppliers and partners to ensure efficiency in the pursuit of increased revenues:

> "they [IT-suppliers and partners] know things about us they don't always tell us: where we are too expensive – where we are too stupid. In a really close collaboration they reveal more and more about where we are stupid and ask "why don't you do things in this way" so we can focus on it. We are very aware of the business case, because when a department wants a new IT system there is no end to the potential benefits – they can save four people. In the old days, they used to say, 'it didn't work out – in the end we couldn't'. But now there's a final report on the implementation – how did we achieve these things and where are the savings? " (Interview 23, CEO)

The example shows how a CEO values the business perspective of external suppliers, which can help improve the organization. The CEO implies that his administration is, in places, inefficient (expressed powerfully as "expensive" and "stupid") in contrast to the businesses the partners are used to. The technological framing of IT is as automation (Zuboff, 1985), or a labour substitution or productivity tool (Orlikowski and Iacono, 2001): in this example to "save four people". The CEO notes that departments may argue for new IT systems based on the efficiency ideal, but not deliver the expected value for money. Thus, he is "very aware of the business case" (a managerial tool adopted from the private sector and equated with a focus on efficiency) to enforce the productivity

framing of their IT systems all the way to organisational implementation, where "the savings" need to be reported explicitly.

5.1.3 The service ideal

The Danish local government authorities reflect a service ideal for IT and digitalisation that involves maximising the utility of government to civil society by providing services directed towards the public good. An example of the service ideal is shown by a CEO's focus on citizen centricity:

> "Internally, a huge amount of work involves trying to put oneself in the positions of users, politicians, and citizens. ... Before, we had had an inside-out perspective – from our own world, our own belly button. Now we try to get an outside-in perspective and see what actual requirements and wishes are coming from the outside. That is not something you just do over night, but I think we have come a long way in the IT department with employees and managers increasingly trying to understand what the external requirements are. Schools, for example, are not just full of complainers; it really is important to them that their exams in May take place electronically."

> (Interview 29, CEO)

The CEO presents the service ideal for e-government as a matter of achieving an "outside-in perspective" within the IT-department to understand user needs to get a firmer grasp of the public good. The important beneficiaries are "users, politicians, and citizens" who should be serviced according to their "actual requirements and wishes" rather than the municipal managers' and employees' "inside out perspective". The IT department should understand themselves not just as technical specialists, but as service enablers within (for example) the municipal schools, and service providers for external stakeholders like citizens. The provision of standardised national testing electronically, over the schools' networks and computers, illustrates the technological framing of IT as an information processing tool (Orlikowski and Iacono, 2001). IT extends the range, availability and quality of service for citizens (in this case school children). The CEO emphasises the role of the IT-department's managers and employees in realising the values of citizen-centricity, service level, and quality in collaboration with other service areas such as the schools in the municipality.

5.1.4 The engagement ideal

The Danish local authority managers display a concern for the engagement ideal for digitalisation in accordance with liberal democratic principles. The need to engage with civil society is reflected by a CIO:

> "... every municipality offers the same electronic solutions for self service and so forth. We emphasise the things that are special in our municipality, and the citizen involvement part, which is different from nearby municipalities. We talk a lot about involvement and want to make a website – actually not just one but a complex of things - where our digital communication meets the citizen where the citizen is. That is, not on

[municipality].dk, or borger.dk [the standardised municipal and national portals, Ed], but all kinds of strange places. Then we want to present them with something that is relevant to our local citizens."

(Interview 28, CIO)

The CIO approach IT and digitalisation as an opportunity to support "citizen involvement" by deliberative interactions with the public: "digital citizen communication". The technological frame is conceptualized as networking facilitation with multiple access points, "a complex of things" that enable communicative interaction between governments and citizens. Technology is recognised as a media for social relations (Orlikowski and Iacono, 2001) – "where the citizen is". The communication should be citizen-driven, where the criteria is relevance to the citizen (rather than following the municipality's agenda); this may create engagement through shared interests and collaborative processes.

5.2   Relationships between value positions

The four value positions for e-Government were not only evident among the local government officials and IT strategy documents as individual ideals but often also mutually related in different ways. Value positions could be *congruent* or *divergent.*

5.2.1   Congruent value relationships

Value positions were often presented as congruent, involving positive mutual reinforcement effects. The value relationships could be *causal*, a *prerequisite*, a *side-effect*, or *synergetic*. The *causal* relation implies that achieving one value will inevitably give rise to another value. For example, the service improvements that make citizens' lives easier, followed by citizen engagement (in the limited sense that they begin to use the services offered to them), will lead to citizens serving themselves (instead of being served by the public administration). This will inevitably (but through largely unspecified mechanisms) lead to resource savings for the administration (administrative efficiency). One CIO causally relates citizen centricity and efficiency improvement in this way:

"I strongly believe that sometimes thinking of the citizens makes it easier for us. That is, if it (IT systems) becomes better for the citizen it becomes easier for us. We try to maintain this in the vision for our digitalisation strategy." (Interview 4, CIO)

Another congruent relation is the *prerequisite,* the assumption that the achievement of one value initially requires the fulfilment of another. The *prerequisite* relation between engagement and service ideals is assumed in an IT strategy document:

"Citizen involvement (*the engagement ideal*) and self-service are a prerequisite for understanding external (citizen) demand, and thus being able to respond with integrated services (*the service ideal*), (Aabenraa, strategy document)

In this IT strategy document another *prerequisite* relation is that administrative efficiency is necessary (in times of retrenchment) (1) in order to maintain the present level of service, or (2) to concentrate resources on weaker citizens, or (3) because public sector resources should be focused on personal service and care (the opposite of providing services online).

The congruent relationship as a *side-effect* implies that the pursuit of a value may additionally cause another value. In one example, a citizen service manager (interview 24) argues that IT costs money in the short-term, but leads to rationalisation (*the efficiency ideal*) – it might (or should) also have some service improvement benefits (through an unspecified mechanism).

The *synergetic* variant of the congruent relation is that two or more values are entangled in mutually dependent achievement. A CIO claims a synergetic relation between the service and efficiency ideals in a case of IT as automation and service improvement:

> "it's both better for the citizen and for the administration that they can order a health insurance card on the net. The citizen can do it when and where they choose (*the service ideal*) whereas the kommune reduces its administration costs (*the efficiency ideal*). Both sides benefit." (interview 4, CIO)

5.2.2 *Divergent value relationships*

Value positions were at times presented as divergent - involving negative mutual effects through the relationships *competing*, *negating*, and *transformation*. *Competing* relationships assume opposition between values – often because their implementation involves competition for finite resources. Such *competing* relations among value positions may be associated with intergroup relations in the organisation, personifying the efficiency ideal on one side and the professionalism and service ideal on the other side, as in this example:

> "Central administration emphasises savings (*efficiency ideal*) through automation, whereas the various local authorities emphasise 'soft' values: quality and service (*service ideal*). Savings mean organisational change – but it's a lot easier to turn on a new IT system than to change people's work routines - or fire them."
> (Frederikshavn, strategy document)

This IT strategy suggests that digitalisation benefits should focus either on raising quality or cost savings – the implication being that you don't get both at the same time. New IT systems, it further argues, should have a business case with a cost-benefit analysis, but even systems targeted at service improvements need to be justified by a cost-benefit analysis. Exceptions are systems that are mandated by change in the law or the leadership. In this example, the primary role of IT is as automation (efficiency ideal) and service enabling IT is also justified through the efficiency ideal. The infrastructural role of IT (professionalism ideal – keeping up with the law) is here presented as an unavoidable commitment, even if it doesn't result in cost-savings.

The *negating* relationship implies that achieving one value may end another value. A citizen service manager argues that the professionalism ideal of (legality in ensuring data protection) negates their opportunity to rationalise in accordance with the efficiency ideal:

> "it's a dilemma - we want to rationalise as much as possible, but some limitations make it impossible……the data protection act is a good example of that." (Interview 24, CSM)

In another example, a CIO (Interview 19) argues that providing transparent case information, and improving service levels and engagement negate administrative efficiency by generating many additional enquiries from

citizens that administrators need to respond to. Thus, IT networking facilitating deliberation (engagement ideal) is seen as undermining the performance values of the efficiency ideal.

In the *transformation* variant of divergent relationships, one value may eventually turn into another value. For example, a CEO (interview 20) states that one service improvement concerns access of basic information to pupils in schools – both children and their parents can see class schemas, and student action plans, or even get an SMS reminding them of a parents' meeting. This can turn into an efficiency saving if parents stop ringing and writing to the school for information, and download it themselves. Here a service ideal for the IT system transforms into an efficiency ideal.

5.2.3 *Value relationships summarised*

Table 3 summarises distinct relationships among value positions in the empirical data.

Value positions are	Relationship	Defined by
Congruent	Causal	Achieving one value will inevitably give rise to another value
	Prerequisite	The achievement of one value initially requires the achievement of another
	Side-effect	The pursuit of a value may additionally cause another value
	Synergetic	Two or more values are entangled in a mutually dependent achievement
Divergent	Competing	Values are in mutual opposition (often because they compete for finite resources)
	Negating	Achieving one value may end another value
	Transformation	One value may eventually turn into another value

Table 3. Relationships between value positions.

6 VALUE POSITIONS AND THEIR RELATIONSHIPS

We argue value positions in terms of the cultural traditions they reflect, the central values that are embedded in those traditions, an overall mission or aim, and the vision of how IT should be deployed in furthering the mission (frame). We also identify two fundamental relationships for value positions, congruent and divergent. Figure 2 shows a representation of this model in the e-Government area. Four distinct value positions for e-Government were defined in Table 2. The professionalism ideal is rooted in Weberian bureaucracy that has securing the digital record at the heart of its mission, and understands IT as the infrastructure for modern government. The efficiency ideal focuses on rationalisation, the streamlining of government through automation with information technology. The service ideal aims to maximise the utility of government for its citizens by the provision of electronic services. Finally, the engagement ideal promotes policy deliberation with citizens, using the communicative and networking potential of IT. We distinguish four congruent relationships (causal, prerequisite, side-effect, and synergetic) and three divergent relationships (competing, negating, and transformation).
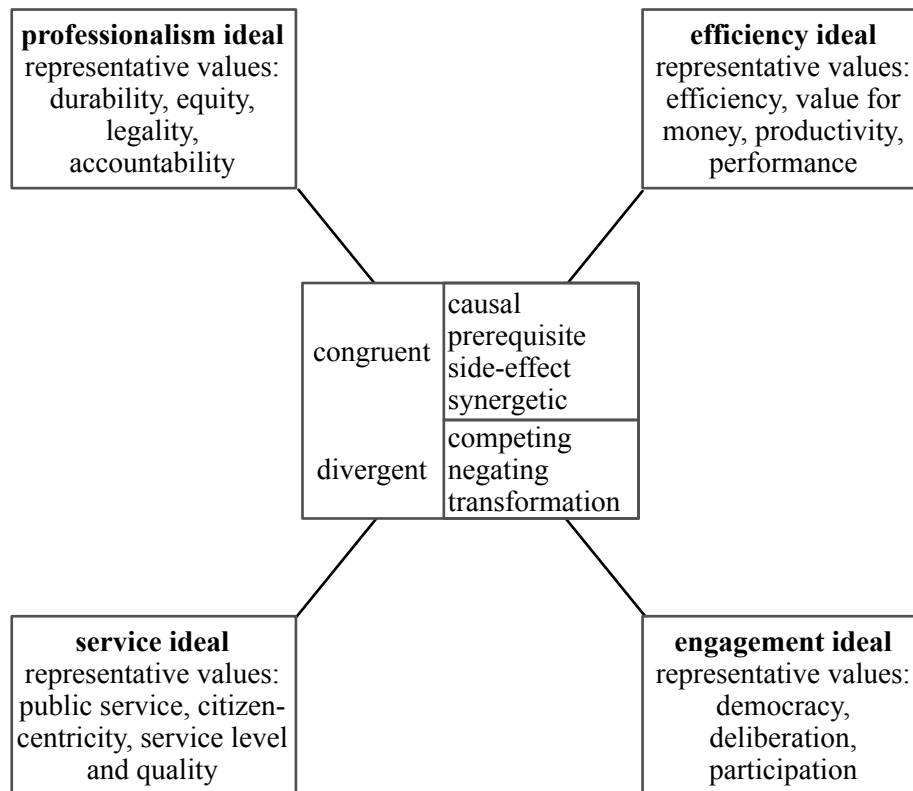
Figure 2. Value positions and relationships for e-government

Since many values can be related to many other values in many different ways the model carries the implication that value positions in public management may be complex. Values (ends-in-view) are all understood as positive – desirable goals. However, accommodating different values in an e-Government initiative may imply many trade offs and compromises, especially where the means of achieving those goals is IT – which is expensive to install, maintain and update. Maintaining the professionalism ideal by improving infrastructures, securing data archives, focusing on citizen security, and implementing legal changes is professionally necessary, but does not necessarily carry any efficiency gain – it may just be expensive and unavoidable. Providing e-services that improve the experience of government for citizens and businesses is also expensive; these may also provide an efficiency gain, but usually only where accompanying organisational changes are made and other channels closed. E-services that are built on top of legacy systems in an ad-hoc way pose security threats and architectural challenges, and may compromise the bureaucratic ideal. Extensive implementation of e-services and e-participation may privilege digital natives and compromise the equity value. Engaging with citizens and non-governmental organisations is expensive in many ways besides the provision of suitable IT systems, and may slow down the decision-making process in government. The outcome may be an increase in social capital, a form of capital that is difficult to accommodate with our current understanding of the efficiency ideal. Managing and prioritising different goals may involve unavoidable speculation about what may happen in the future, especially if one desirable end is consequent upon another, or if the benefit is dependent on widespread public take-up of the change. The model thus opens up many value prioritisation questions for discussion.

7   DISCUSSION

Values and the public administration literature

In this article we further value studies by focusing on a less-developed aspect of the value concept: overall purpose or ends-in-view. End-in-view are those states or behaviours held valuable, and this focus allows a coupling to more common managerial terms: visions, missions, purposes, goals, objectives. Following this logic, values form the enduring socially agreed backdrop for purposive action, explaining why managers may prefer one course of action to others. In this pragmatist setting, values are not moral absolutes but emergent, situationally adjusted juxtapositions of means and ends. This focus complements investigations of values as characterisations of the ethos of the public sector (Jørgensen and Bozeman, 2007, Van Wart, 1998) or of a particular trend in public sector management (Hood, 1991), or as ethical principles (Dobel, 2007). It aligns with current discussions of public value (Moore, 1995) and their application in e-Government (Cordella and Bonina, 2012), in as much as the values engrained in managerial cultures in the public sector cannot be disentangled from managers' efforts to discover and pursue public value. Some of the public administration literature discussed in this article is both normative and contentious: asserting which values managers should strive towards whilst promoting value positions which are clearly in disagreement with other trends and contributions. The fundamental disagreements of this literature make it surprising that many researchers adopt a congruent view of values (Hood, 1991, Bannister, 2002, Dobel, 2007) – harmonious taxonomies and categorisation schemes where values are assumed to be compatible. This is possibly enabled by a pronounced tendency to discuss values without any empirical frame of reference. We incorporate more recent understandings of the value landscape as contentious and competing (Van Der Wal and van Hout, 2009, Rutgers, 2008) and systematise both congruent and divergent relationships. Our approach is more descriptive than normative, analysing the complexity of the value landscape that managers must negotiate, and the difficulties that may result, without taking a stand on which of the values should predominate. It lies in the nature of the value concept that each value and value positions is, individually, held desirable; however it is less clear that all values supplement all other values, or that value confusion translates into successful e-Government initiatives.

Values and the e-Government literature

The study of value in the e-Government context differs from the wider discussion in the public administration literatures. Ends-in-view in e-Government are implemented with information technologies, which ties e–Government values to assumptions about IT can, or should do: technology frames. It is easy to understand how IT should promote the efficiency ideal (this is a common mantra of politicians who expect the implementation of IT in government to reduce budget deficits by automating manual tasks). It's harder to understand how IT should support the public sector values of personal integrity and honesty suggested by Jørgensen and Bozeman (2007). These considerations distinguish public administration value studies from e-Government studies, and makes it logical to ground accounts of e-Government values in theoretical understandings of what technology achieves in the public sector - in our case the (fairly typical) understandings of Snellen (2005). We supplement his work, however, by adding an infrastructural frame for IT associated with the bureaucratic ideal. The relationship between value and IT

is acknowledged by Bannister and Connolly (2014) as they estimate which public sector values IT is likely to impact, and in what degree. Rather than adopt their approach of grounding their work in previous categorisation schemes of values, we choose the complementary strategy of Persson and Goldkuhl (2010) and root our work in major theoretical traditions of the public administration literature. However, our analysis of these traditions is updated to include developments in the last 15 years, and we advance the argument of value divergence (which is only hinted at in their work), and theorize both congruent and divergent values.

Relationship to IS

The most common approach to understanding IT success and failure in the IS literature has been the factor approach. Factor approaches suggest causal relationships between organisational conditions, which are present or absent, and outcomes such as success or failure. The study of managerial values suggests an alternative approach, which is rooted in the way IT initiatives are socially constructed. Technological frames (Orlikowski and Gash, 1994) articulate the expectations that stakeholders construct for what IT will accomplish. Studying how technological frames are incorporated in value positions offers insight into how managerial objectives for IT initiatives are constructed. Another simplified causal relationship which is often assumed in the e-Government value literature is IT impact – the implementation of IT systems causes positive impacts on values such as efficiency (Bannister and Connolly, 2014). The current study aligns better with structurational and socio-material accounts of technology – technology is both constituted by social practice and constitutes social practice (Orlikowski, 2000, Orlikowski, 2007).

Values and the role of e-Government managers

Factor studies indicate managers have an important role to play in the success of e-Government initiatives, particularly with respect to support, leadership, clarity of vision and the development of shared common objectives. The research indicates that the creation, articulation and maintenance of common purpose and direction are managerial responsibilities, which are often neglected. However, few studies to date have focused on why this might be complex to achieve. Our empirical analysis demonstrates a complex picture of legitimate values, positions and relationships not revealed in previous studies. All the value positions we theorise were evident in the managers' discourse. However, the analysis also revealed complexity: value positions were related in both congruent and divergent ways. Some values were perceived as synergistic, others as being in conflict with each other. For managers, value complexity may lead to difficulties in articulating personal values, and formulating policies and strategies, which display consistent values. Policies and strategies may be constrained by particular technology frames – for instance the assumption that the primary role of technology is to improve administrative efficiency. Value complexity also implies colleagues and other stakeholders with different value positions and a need to appreciate and accommodate their legitimate perspectives. It may also make it difficult to maintain a common focus and commitment during IT implementations, and to target the realisation of appropriate benefits after implementation.

8 CONCLUSIONS

In this article, we posed the research questions:

- How can the values of public managers in respect to e-Government initiatives be theorised?
- How are these values related?

In response, we identified four major value positions in e-Government derived from the public administration literature, and incorporating managerial perceptions of IS. These were summarised in Table 2. We established that these positions could be found in managers' discourse through empirical analysis. In addition, the empirical analysis helped us to provide a precise characterisation of the relationships between values and between value positions, which can be found in Table 3. Figure 2 combines these theoretical contributions in a summary model of value positions and relationships. Managers carry much of the responsibility for the success of e-Government initiatives, and the study explains the value complexity that they must negotiate in order to lead effectively. The contributions of the article are to:

- develop a new perspective of values as ends-in-view, thus linking them to the goals and objectives of e-Government initiatives
- root E-government values in major trends in public administration theory
- argue for distinct, internally consistent value positions in the light of those trends
- integrate relevant assumptions about the purposes and uses of IT systems in the value positions
- show that the value positions can be identified in the discourse of managers with particular responsibility for e-Government
- illustrate value complexity by demonstrating that value positions can exhibit both congruence and divergence in the perceptions of managers
- specify different types of congruence and divergence

Our work has several limitations. We focus on managers, but other important stakeholders also have related value positions. Value complexity also involves the study of the value positions of street-level government employers, IT providers, businesses, voluntary organisations, citizens, and politicians. It is also possible to connect the perception of value more directly to civil society expectations and levels of satisfaction than we have attempted. Discussions of value in public administration can, and perhaps should be connected to politics, but we have not had this focus. We accept that researchers may observe other relevant value positions and relationships in public sector organisations, in addition to the managerial positions theorised here. The Danish context may not be generalizable to other national contexts, particularly those with very different administrative traditions, or those at different stages of technological development. Public administration theories do not provide deep insights into the relationship between public sector values and the technologies used to implement them; work remains to be done in this area. A further limitation is that our study and method does not focus on drawing causal inferences – the argument that managers' formulations of purpose have an impact on the success of e-Government initiatives is based on the work of earlier researchers and not directly investigated here.

8.1   Implications for research

E-government researchers may use the framework to analyse many kinds of empirical situations involving purposeful action, and to generate multi-faceted accounts of purpose that go beyond simple efficiency and transformation rhetorics. They may like to broaden and deepen our account of value positions, and investigate them from the perspectives of other relevant stakeholder groups. They may also incorporate our contributions into normative accounts of how to design and manage large IT projects in the public sector. IS researchers may transfer and adapt the model of values, positions and relationships to account for many managerial complexities in working with IS strategy development, strategy alignment, business cases, project management, and benefits realisation. The work can also serve to familiarise IS researchers with theory trends from public administration which are appropriate for many IS studies with a public sector context. Many new research avenues are opened. Future research directions may include:

- the value positions of other relevant e-Government stakeholders
- value positions and relationships in the formation of goals for IS projects, and their transformation during projects
- the interaction of value positions and technology frames - how do managers' perceptions of technology possibilities affect their value positions (their ends-in-view) and vice versa?
- the effect of value congruence and divergence between major stakeholders on the outcomes of projects (one hypothesis may be that value divergence among major stakeholders has a negative effect on project outcomes)
- how value complexity in IS projects may be managed to maximise the chances of success
- whether value complexity in private sector organisations resembles that of public organisations, or whether are there different organising principles?

8.2   Implications for practice

The central implication of the study of value complexity will be how managers can address the many issues of purpose and scope that prove difficult in IT initiatives, contributing to the poor record of outcomes in this area. Working with value positions can help in the design and evaluation of projects that provide multiple favourable outcomes for major stakeholder groups – win-win situations. Managers focused on budgets, with a traditional view of IT as automation can use our formulations to help balance their goals and objectives, and develop complementary understandings of the uses of IT. They may also seek to balance their own value traditions with political expectations. Our contributions can be used as a sensitising device to help understand the goals of other stakeholders, or contribute to problem analysis in failing projects. They may be used as a building block in the development of project evaluation and benefits realisation. They may also help expose empty rhetoric in the formulation of goals and objectives, or the careless juxtaposition of divergent values, and help make explicit limited or stereotypical assumptions about the uses of IT. Many of these issues also have societal implications: politicians are responsible, in the last resort, for policy decisions concerning the use of technology in public organisations, and their communities for assessing whether these policies are acceptable. These functions help

determine the value landscape in e-government, and involve the reconciliation of many conflicting value positions through political choice. Thus, for managers responsible for e-Government programmes, working with values may help to:

- Articulate their own value positions and relate them to values embedded in e-Government policies and strategies
- Understand how assumptions about the nature and use of IT might influence the formulation of policies and strategies
- Understand inherent tensions and trade-offs in the goals and objectives of initiatives caused by value divergence
- Understand and work with the value positions of other e-Government stakeholders
- Fashion initiatives which respond to the value positions of multiple stakeholders, thus increasing their chances of success
- Select e-Government initiatives which respond in a balanced way to a multiple value positions as part of a portfolio
- Maintain and promote a clear articulation of purpose during the implementation of initiatives as a way of ensuring continuing commitment
- Define and realise targeted benefits after implementation

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Conflicts of Interest Statement

No conflicts of interest are registered.

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