

# A Review of Reviews About e-Government: What are we not Doing?

Tim Turner

School of IT&EE, UNSW@ADFA, Canberra, Australia

[tim.turner@adfa.edu.au](mailto:tim.turner@adfa.edu.au)

**Abstract:** The field of e-government has been so named for about the last fifteen years, although some definitions of e-government extend its heritage back to the 1970s. But where is the field up to? What issues are being explored? What has been established as a central body of knowledge in this field? This paper reviews the reviews of e-government that have been published thus far. The paper discovers that the field is still young enough that the reviews do not adopt consistent approaches, do not draw from an agreed resource of publications, and investigate the field from different perspectives. Consequently, little can be said definitively about where e-government is. Furthermore, this review identifies that crucial sources of e-government ideas and direction are not considered at all. This is particularly problematic because the resources not considered—government reports and strategies and publications of international consulting firms—are frequently the only resources applied by practitioners in the e-government field.

**Keywords:** e-Government; literature review; definition of e-government; research

## 1. Introduction

An important starting point when attempting to contribute to a field of research is to understand where the field is: its core topics and issues, relevant research methods, whether directions are apparent in the field, and most importantly, where the gaps in understanding are that might offer a place for a contribution to be made. In established fields of knowledge, reviews of the field are regularly published, usually by leading thinkers in the field, to consolidate understanding across the field. In those fields of knowledge that are still being established, the arrival of reviews of the field is a first indicator of reflection; an initial sign of maturity. E-Government is a field of research that is still young, immature, emerging; or so say the reviews that have arrived in recent years (Andersen & Henriksen, 2005; Brown, 2005; Grönlund, 2004, 2005; Grönlund & Horan, 2004; Helbig et al., 2008; Norris & Lloyd, 2006). This paper reviews the reviews published recently to consolidate their findings and identifies gaps in the reviews that specifically ignore the heritage of e-government. The review of reviews leads to a conclusion that e-government may necessarily remain an applied field, one that ought to be led by practitioner demands and not struggle to retreat to a purely academic pursuit of knowledge.

## 2. The reviews

The majority of reviews of the e-government field that are considered were written over 2003 – 2005 (although published slightly later), with the latest conducted in 2007 (Helbig et al., 2008). Four represent surveys of information systems (IS) literature using different sources for data. Professor Åke Grönlund, a long-standing authority on e-government, is the primary author of two of the reviews (Grönlund, 2004; Grönlund & Horan, 2004) both of which are based on a survey of conference publications that he undertook in 2003. (Grönlund published a third review article (Grönlund, 2005) but it was a blend of the two considered here and offers no additional insights for this work.) Two other surveys (Andersen & Henriksen, 2005; Norris & Lloyd, 2006) were collaborative work using academic journals as sources for research papers to review. Neither review crossed the same areas of work. The fifth is a 'reconnaissance survey' of the field of "international digital government" research (Helbig et al., 2008) that looks at digital government research from a multi-jurisdictional point of view. The survey drew on 29 journals, nine conferences, and the websites of ten research organisations (Helbig et al., 2008). The final review (Brown, 2005), from the public administration literature, did not use empirical analysis. Nevertheless, it presents a useful review of e-government at the time.

Grönlund (2004) notes that e-government started as a practitioner concept and that only a few conferences and journals were (at the time) dedicated to e-government. After introducing the range of possibilities, Grönlund selects three major academic conferences to use as a source of e-government research papers for his assessment; two are European and one International. From this source, he selected 170 papers and codified them on dimensions of rigor and relevance. His coding was internally validated by five independent reviewers coding 25 of the papers.

Andersen and Henriksen's (2005) approach was to solicit a list of published academic research from two major citation databases (Social Science Citation Index and ProQuest Direct) using a few synonymous search terms and filtering results for those published in peer-reviewed scholarly journals. (It should be noted that these databases do not index most IS journals.) They excluded articles with a primarily technology focus, book reviews, editorials to special issues, and contributions to conference proceedings. Of 167 articles identified in this way, the list was randomly limited to 110 articles, which were then read by at least one of the authors. The authors correctly note that this survey sample was limited in scope and depth and biased by English-language only sources. They also note that they made no attempt to assess the quality of the papers (accepting the journal publication process as sufficient) and that their classification scheme may be imperfect.

Norris and Lloyd (2006) use online article databases and keyword searching to identify over 100 articles published in peer-reviewed scholarly journals—"the 'gold standard' that defines the scholarship in a field" (Norris & Lloyd, 2006, p. 41). They then eliminated articles that "merely represented authors' ruminations or speculations (no matter how well considered) about e-government" (Norris & Lloyd, 2006, p. 41) leaving only articles that contained empirical data and analysis of that data. Is this a bias of the authors: if you can't count it, it's not real? Norris and Lloyd did not investigate papers published after 2004 because of the arrival of four journals on the subject of e-government during 2005; they wanted to establish an initial baseline (Norris & Lloyd, 2006).

Helbig and colleagues (Helbig et al., 2008) reviewed research in "relevant journals and conferences published in English in print and online from 1994 through 2006" (Helbig et al., 2008, p. 26). They drew on two published libraries of citations, one compiled by the North American Digital Government Society from a systematic scanning of "traditional journals in information systems, public administration, and public policy, as well as references from special issues on e-government in other journals" (Helbig et al., 2008, p. 27). These references were supplemented by publications in e-government conferences or conference tracks. All research had to be peer or editor reviewed. The other library was from the Special Interest Group on e-government of the Association of Information System, maintained by the Copenhagen Business School. The combination of the libraries, with the removal of duplicates, identified over 2,000 unique citations. By further research, particularly through the citations index EBSCO, the team added a further 40 references. Intuitively, this probably represents a close approximation of the total academic field at the time.

In short, all surveys of published e-government research are drawn from different, largely non-overlapping sources. The reconnaissance study possibly touched the whole academic field, but then deliberately reduced its field of interest to a unique view in this set of reviews. This suggests that combined they represent a comprehensive survey of the literature, however, the various constraints and restrictions that the authors note limit just what perspective is being considered. Also, the lack of an overlap means that the consistency of analysis between reviews is difficult to judge.

"There is evidence of a persistent myth that not much has been published on e-government and that e-government still appears to be in its infancy" (Andersen & Henriksen, 2005, p. 27). They cite Grönlund (2004) as the source of the claim, but have looked elsewhere to make this determination. Norris and Lloyd support Grönlund's view that e-government research is 'young'. Grönlund defined maturity as "a critical amount of methodologically sound examination of relevant issues, be they related to technical quality, user understanding, extent and qualities of use, or other" (Grönlund, 2004, p. 7). While this definition does not provide a scale of maturity against which to measure, the implication in an assessment of immaturity (youth) would be in a lack of critical mass and/or methodologically-sound research; Grönlund (2004) focuses on the methodologically-sound element. The difference in the parameters of journal papers versus conference papers and the variety of keywords used for identifying papers may be sufficient to warrant the difference in the findings of maturity of these surveys. There is a real possibility that together the reviews are equivalent to the apocryphal story of blind men describing an elephant to each other, each touching a different part of the animal and extrapolating from that alone.

The fifth paper (Brown, 2005) is drawn from the public administration literature. It does not specifically review earlier publications on e-government. The author, David Brown, presents an overview of the e-government field relying on sources for examples, but largely presenting his own view. Norris and Lloyd (Norris & Lloyd, 2006) specifically excluded such papers because they were seen as insuffi-

ciently rigorous. Brown provides a comprehensive overview that adds colour to the skeletal reviews from the IS field and is included here also because he writes from a non-IT background.

### **3. What e-government is**

Most of the reviews offered a definition of e-government, and they were largely aligned, although reaching the similar positions from slightly different perspectives. Grönlund and Horan walk through how various definitions sit within a classical model of society involving politics, administration and civil society, noting that “even though different in scope, the definitions are unanimously socio-technical: organizational change, skills, and technology together are the key to success” (Grönlund & Horan, 2004, p. 721). Andersen and Henriksen limit the definition they use to identify e-government research: “Although the democracy issue clearly is part of e-government, we have focused our review of literature on the administrative and executive domain of government” (Andersen & Henriksen, 2005, p. 35). Norris and Lloyd (2006) do not specifically define e-government, although they imply that it has connections with the Internet drawing historical timelines for the field on the basis of the presence of web sites. Notwithstanding that implied definition, they analyse each of the surveyed papers for a review of the literature on IT and government, as well as other fields that might be relevant to the particular issue under study. Helbig et al (2008) do not focus on the use of IT to support public policy and government operations. They frame “digital government” (a term coined by the US National Science Foundation) as concerning “the intersection of computer and information sciences, social and behavioural sciences, and government challenges and needs” (Helbig et al., 2008, pp. 6-7).

Overall, the reviews preferred a definition of e-government that incorporated not only the direct technological effects of information and communication technologies (ICTs) and approaches, but also the changing role of government in a society that is permeated with ICTs. Brown speaks of “the entire range of government roles and activities, shaped by and making use of ... ICTs” (2005, p. 242). He observes that e-government brings together two primary elements: the environment of ICT that tends to promote new management models “such as client/citizen centricity and single-window convergence” (Brown, 2005, p. 242). The other element is the linking of democracy, governance and public management with the public administration sphere. Grönlund and Horan draw a similar distinction naming the differences e-government and e-governance.

Struggling over a definition of e-government is important, not only to offer a flag around which researchers and practitioners can rally, but, as Grönlund and Horan point out, “different definitions lead to different performance measures [and consequently], also a matter of values. ... clearly e-Gov can be studied with several kinds of values in mind, including economic, social, and political” (Grönlund & Horan, 2004, p. 722). They note that narrower, more technology-oriented definitions and performance measures may actually lead to sub-optimal consideration of solutions; a trap they warn that IS researchers in particular should be careful of, acknowledging the IS tradition of taking a system perspective to research.

In summary, the reviews take the view that e-government is about more than just the application of ICTs in government, or the way the activity within government is or should be changed by those ICTs. The field should include consideration of the role of government in a society that is being changed by the increasing presence and use of ICTs. So, what did the reviews find was being included in e-government research?

### **4. Where the research is found**

In line with its practitioner origins, the reviews point to non-academic avenues for considering e-government. Brown notes that there are several international organisations promoting and/or facilitating e-government:

*“Several UN agencies are actively engaged in developing an international framework for e-government. Supported by General Assembly resolutions, the International Telecommunications Union (ITU) has sponsored the ongoing World Summit on the Information Society (WSIS). The World Intellectual Property Organization (WIPO) has developed internet treaties to support the knowledge economy and the United Nations Secretariat’s Division for Economic and Social Affairs (UNDESA), through its UN On-line Network in Public Administration and Finance (UNPAN), has actively promoted the use of ICTs in public administration world-wide. The World Bank has an active e-government site and*

*the OECD has also actively engaged its membership in experience sharing on e-government, knowledge management and the use of IT” (Brown, 2005, p. 246)*

Helbig et al (2008) specifically identify five international research organisations, and include Accenture as a multi-national pursuing international digital government research. Grönlund and Horan (2004) also acknowledge these international forums mentioning particularly the UN's WSIS and UNESCO's World Forum on the Information Society (WITFOR – World IT FORum) that serve to promote e-government issues at a global level.

Grönlund and Horan (2004) look at academic avenues and note that there are several conferences that focus solely on e-government and several conferences where e-government is a specific theme. They also identify dedicated journals for e-government, specifically e-Government Quarterly (eGQ), the International Journal of Electronic Government Research (IJEGR) and the (then) Journal of e-Government (JEG – now the Journal of IT and Politics, JITP). Norris and Lloyd (2006) identified four journals dedicated to e-government that had commenced by 2005: Electronic Government: an International Journal (EG), the Electronic Journal of e-Government (EJEG), the IJEGR and the (then) JEG. Importantly, Norris and Lloyd (2006) found the majority of their articles in Government Information Quarterly (GIQ), followed by a small range of journals, one or two of which are considered top-ranked, notably: Public Administration Review, Journal of Public Administration Research and Theory, and Administration and Society. The top-ranked journals that saw e-government as important enough to publish prior to 2004 were all in the social sciences (public administration) literature. None of the top-ranked IS journals were present in the sample investigated (Norris & Lloyd, 2006), probably because of a citation bias in the source indexes. Helbig et al (Helbig et al., 2008) classify GIQ as a dedicated digital government journal. They also present a range of journals from other disciplines that publish international digital government research.

The reviews agree that e-government as a concept and as a field of interest arose in the mid-1990s, driven predominantly by practitioners. Andersen and Henriksen (2005), Grönlund and Horan (2004), and Norris and Lloyd (2006) all acknowledge the deeper history of information technology in government stretching back to the 1970s. However, this practitioner-origin appears to be a crucial blind-spot for all the reviews. Despite acknowledging that the definition of e-government is frequently enshrined in the legacy strategies of governments, no review attempts to consider what contribution to the understanding of the field is made in this body of practitioner work. The strategic documents of all those governments acting in the e-government field remain unopened. The treatises on e-government by major consulting firms, that have evolved over time just as e-government has evolved, are not considered even though, as Brown (2005) implies, the international benchmarking of progress is an extraordinary circumstance in a field of research. None of the work done by governments or their consultants is considered by these academic reviewers. Yet, in this author's experience, these are precisely the sources that practitioners use for determining what to do and how to do it.

## **5. What is being researched**

Brown (2005) recounts three major developments that have influenced the complexity and evolution of e-government: the evolution of ICTs and their use within public administration; evolving ideas about appropriate management approaches within government, starting at the ideas of New Public Management and drawing heavily on private sector concepts of efficiency and output orientation; and evolving ideas about the role that government plays, particularly in answering new demands within society brought about by increasingly technology-savvy public and government members.

Brown (2005) claims that e-government has given rise to unique features:

- virtual communities—networks of individuals that would otherwise not exist and that are both more accessible (unlimited by geography, time, etc) and more closed (relying on affinity between members); and
- a specific organisational culture—changes to ministry structures to match changed roles brought on by citizen-centric services and new agencies developed specifically to guide government on matters related to the information economy.

Brown, who does not rely on any particular survey, describes four key areas where e-government has made “clear and lasting impacts” (2005, p. 247) on public administration:

- Citizen-centred service—“Perhaps the single most powerful concept inherent in e-government is client-centred service delivery” (Brown, 2005, p. 247). Brown reiterates that in this mode govern-

ment services should be designed “from the outside looking in” (2005, p. 248) starting at meeting citizens’ needs or helping them meet their civic obligations.

- Information as a public resource—Although records and document management have long been important in government, e-government elevates that importance to be equivalent to human and financial resources. Brown (2005) notes that government’s ability to compel accurate information about virtually every aspect of a citizen’s or business’s life makes its information collections particularly valuable.
- The skills and knowledge needed by public servants to deliver e-government—Not only has the pace of adoption of ICTs in government been staggering but new working models based on networking and collaboration are cutting across traditional hierarchies and silos. The scale and complexity of much ICT use in government has also created difficulties in decision making and led to a greater emphasis on risk management.
- Accountability and management models—“The client-service orientation of e-government changes the relationships between the public, the civil service and elected representatives in practice and raises issues in principle (Brown, 2005, p. 251).

Although Brown (2005) does not directly cite research to support his claims, they are intuitively appropriate and his lack of citation does not mean that there is no research supporting these claims. The reviews discussed next, point to all of these areas of interest being considered in research and the emphasis given by Brown (2005) in the ordering of the points (preserved above) is in line with the attention paid by researchers in the field. (Helbig et al (2008) did not attempt to analyse the research or its quality, simply to categorise it and identify trends.)

The reviews diverge somewhat in their approach to assessing what e-government research is taking place. Grönlund (2004), seeking to assess the field’s maturity, considers the research in the selected conference proceedings for rigor and relevance. He stipulates the need in a scientific field for a common object of study and a set of theories used to understand the general conditions of the field. He says that the object of study, government, is made up of disparate organizations and processes. Similarly, the scope of work of government agencies work varies widely “from road construction to social welfare to schools to railroads to defence” (Grönlund, 2004, p. 178). As a consequence, his view of the field focuses on *how* research is being conducted, or at least, *how* it is being described. His conclusions, discussed below, are not complementary. Norris and Lloyd (2006) adopt a similar approach, reviewing papers for their rigor in particular. They categorised the articles they reviewed on twelve dimensions, ten of which were equivalent to ‘demographics’ for the paper (e.g. year of publication, type of article, discipline of lead author, etc). They included two “more qualitative (and frankly more subjective)” (Norris & Lloyd, 2006, p. 43) dimensions: the adequacy of the literature review, and the support for the paper’s conclusion available within the data and analysis.

In contrast to Grönlund’s (2004) and Norris and Lloyd’s (2006) approach, Andersen and Henriksen (2005) look to what is being considered, what aspects of e-government are being explored. They classify their sample of research into two dimensions: contextual research domains, and domains of impact. Their findings, discussed below, indicate that a very socio-technical view is being taken of e-government; something that Grönlund and Horan (2004) assert is inherent in the definitions of e-government.

It seems that the assertion of immaturity in the field is warranted, although not solely on the basis that Grönlund (2004) uses. The variety of approaches to reviewing the field indicate there is little consensus in what is important and whether the way it is being researched is adequate. Just as the definitions of e-government were perhaps vague or, at least, not overly precise, the range of topics that are considered and published within the field of e-government seems to be wide. Even the keywords used to select articles are influential. Norris and Lloyd (2006) acknowledge including articles that were not found by their keyword grouping but identified by colleagues. Limiting the range to just “e-government”, “electronic government” and “digital government” (as Norris and Lloyd did) leaves out common variants, particularly in the early years of such research, of: “online government” or “government online”, “i-government” (for internet government), and the term “web” being used interchangeably for “internet”.

Andersen and Henriksen (2005) conclude that e-government is a research area without a clear research paradigm. Although their classification segmented research into four classes across two di-

mensions, they claim: “there are more issues that diversify e-government research other [sic] than unifying aspects” (Andersen & Henriksen, 2005, p. 35). As Grönlund notes: “most [conference papers] concern general organizational issues which could well find a place within traditional IS conferences” (Grönlund, 2004, p. 185); i.e. they are not specifically ‘e-government’.

## **6. Survey conclusions**

The reviews that explicitly conducted research paper surveys drew conclusions about the ‘quality’ of the e-government field (from two different perspectives—conferences and journals—as previously noted).

Grönlund (2004) finds that the bulk (90%) of papers presented at the three conferences in 2003 were descriptive (“Describes a phenomenon in its appearance without any use of theory” (Grönlund, 2004, p. 181)) representing a still largely immature field.

Andersen and Henriksen (2005) find that about 70% of papers fall within the domains of capabilities and interactions, which indicates that e-government research is primarily focused on the capabilities of IT applications and IT-enabled interactions between government and citizens or business. Furthermore, “sixty percent of the articles either concentrate on e-service provision or mere conceptualization of e-government rather than indicating outcomes and benefits of e-government adoption” (Andersen & Henriksen, 2005, p. 34). Although Andersen and Henriksen dispute Grönlund’s claim that the field is immature, they do imply that the socio-technical view of e-government is a sign of immaturity given their (and others’) preference for the broader definition of e-government.

Norris and Lloyd (2006) find that the most common study method is case study. They are critical of the collection of case data and similarly critical of some of the data analysis within the papers that they investigate. They also find a tendency for the articles to lack other indicators of academic rigor such as formulation of hypotheses or research questions and testing of such hypotheses or research questions. Norris and Lloyd (2006) save their most critical comments for the adequacy of the literature reviews provided by the articles rating only seven of the 57 articles (12%) as having a ‘strong’ e-government literature review. They forgive some of the earlier articles because of the dearth of relevant articles to review, but do not see an improvement in this element. Furthermore, they note that reviews of literature that support fields from which other ideas arise were better. They do not provide any insight into whether this corresponds with the discipline of the authors. Norris and Lloyd (2006) conclude that the field is indeed still new, still ‘finding its legs’, and they point to the predominance of publications in lesser-ranked journals as an explanation of the weakness of the scholarship in the articles that they reviewed.

In summary, the field of e-government might be seen to be struggling. It does not demonstrate mature research practices (at least according to Grönlund (Grönlund, 2004; Grönlund & Horan, 2004) and Norris and Lloyd (2006)) and it takes a narrow focus on technical implementation matters rather than the broader view of how the role and purpose of government is affected by ICTs (according to Andersen and Henriksen (2005)). If it is to be of interest then, where should the focus be?

## **7. What should be researched**

Grönlund and Horan (2004) suggest that e-government as a field of research may be distinguished by the topics: frameworks and guidance for e-government and e-governance; e-government policies, strategies and implementation; and participation, e-democracy and e-voting. They identify three characteristics of research that ought to be considered “e-gov”:

- “exclusive”—issues that relate only to e-government, possibly because of unique combinations of otherwise not exclusive concepts;
- “government-focused”—the concerns must be about the combination of IT and government; and
- “e-Gov analytical — The role and methods of government need to be discussed in the light of the “e”. What are the implications of IT design and use? Government in its current implementation cannot be taken as a given – because then IT would not matter” (Grönlund & Horan, 2004, p. 723).

Andersen and Henriksen (2005) go to some length to describe what they feel should be contained within e-government:

*“Our proposition is that the domain of government needs to be addressed explicitly to qualify for the e-government label. In our view, the domain of government encompasses one or more of the following features: (1) labor-intensive work processes; (2) a variety of activities within regulation and service provision that only partly can be understood from a single perspective; (3) co-existence of political and administrative rationale along with more anarchical rationalities; (4) high exposure to demand on transparency, accountability and accessibility; (5) the existence of a demand paradox; and (6) strict rules and regulations for expenditures” (Andersen & Henriksen, 2005, p. 34).*

Brown (2005) situates e-government in four domains across which governance and public administration can be divided:

- Jurisdiction of the state and its role in society—here there are matters of promoting economic prosperity and social cohesion in the disruptive environment of new technologies; allowing business to prosper through economies and reach that ICTs provide while ensuring that individuals have the skills to participate and are not excluded through newly created social divisions.
- Legitimacy of the state and relationship with public—here are matters to do with e-democracy and e-governance (e.g. e-voting and public consultations). Similarly, the citizen is more directly connected with the government for information and service provision, which can fundamentally alter the role of politicians as intermediaries. The dual obligation of citizens to provide necessary personal information and for the government to treat that information accountably leads to matter of privacy law, etc. Similarly, electronic commerce requires new laws about contracts, liability, electronic transactions and court access to same, even intellectual property law.
- Operation of the state—how does the administration operate using electronic technologies. This starts with the administration’s relationship with its employees and the tools they are provided and works out to the relationships between administration and citizen and the use of private sector players in service delivery, particularly as increasing citizen-centricity leads to convergence across government and between public and private sectors.
- Relationships with the international environment—the new accessibility of international institutions (government and non-government) and their increased access to the citizenry. “National sovereignty remains a cornerstone of the international system but the context in which it operates and the tools with which it is expressed are altered” (Brown, 2005, p. 244).

A strong common theme among the suggestions is the broadening of what is being considered to meet the scope of the authors’ commonly preferred definition of e-government. The majority of the authors advocate stepping beyond the description and analysis of specific e-government activities or systems into the broader consideration of whether these activities and systems do or might give rise to a new or different focus for government. We should be trying to determine, according to the reviews considered here, whether government has or should fundamentally shift(ed) either because of the opportunities that ICTs present in the way that government is conducted, or because of the need to address emerging needs within the society of which government is an intrinsic part. On the basis of the material considered in the reviews, this is a ‘stretch goal’ for the field!

## **8. Conclusions**

The authors of the review articles considered have a grand vision for e-government: a vision that places the consideration of some of the most important questions about government itself under the microscope filtered by the introduction of essentially pervasive information and communication technologies. Those authors who then considered the published (academic) literature to date must be disappointed. Their findings can only be summarised as representing a “nascent” (Norris & Lloyd, 2006) field, one where not only are the issues considered generally narrow and technology-oriented, but where research methods and approaches are immature and unlikely to promote repeatable guidance for future work.

An important aspect that these reviews reveal by their limits is that e-government is still, and largely ever will be, dominated by practitioners. At heart, e-government is defined, developed, implemented and assessed by government employees, or consultants paid by them, attempting to meet the demands of their elected officials and, through them, the public at large. The reviews of academic literature leave out, by definition, the ideas, directions, issues and expectations of the people who are ‘at the coal face’. E-government is inherently an applied field, just as public administration and information systems (probably the two dominant fields of knowledge that coalesce in e-government) are and

have been. Consequently, ignoring what practitioners are saying about e-government (and this includes consultants to government who are frequently practitioners too) is fraught with peril. Any review that does not assess government published strategies and whitepapers and the publications of (at least) the major consulting firms and think tanks is simply not considering properly the field of e-government. Many academics feel that these practitioner publications lack the rigor of academic research. In some cases they may. However, from personal experience, this author is aware that although proper scientific method may not be common in the development of government and consulting 'research' or position papers, there is thorough and careful research conducted. Certainly, sufficient diligence is shown in preparing the vast majority of these documents that they warrant close consideration, even if appropriate account must be made for political or commercial biases. The academic researchers interested in e-government must recognise that if they are not staying in touch with what practitioners are doing, how and (more importantly) why they are doing it, and where the next 'big problem' lies, they will forever be tarnished with the pejorative epithet "academic"!

## **References**

- Andersen, K. V., & Henriksen, H. Z. (2005). The First Let of E-Government Research: Domains and Application Areas 1998-2003. *International Journal of Electronic Government Research*, 1(4), 26-44.
- Brown, D. (2005). Electronic government and public administration. *International Review of Administrative Sciences*, 71(2), 241-254.
- Grönlund, Å. (2004). *State of the Art in e-Gov Research – A Survey*. Paper presented at the EGOV2004.
- Grönlund, Å. (2005). State of the Art in E-Gov Research: Surveying Conference Publications. *International Journal of Electronic Government Research*, 1(4), 1-25.
- Grönlund, Å., & Horan, T. A. (2004). Introducing e-Gov: History, Definitions, and Issues. *Communications of the Association for Information Systems*, 15, 713-729.
- Helbig, N., Dawes, S. S., Mulki, F. H., Hrdinová, J. L., & Cook, M. E. (2008). *International Digital Government: A Reconnaissance Study*. Albany, NY: Center for Technology in Government. (S. University at Albany o. Document Number)
- Norris, D. F., & Lloyd, B. A. (2006). The Scholarly Literature on e-Government: Characterizing a Nascent Field. *International Journal of Electronic Government Research*, 2(4), 40-56.