Forums for Electronic Government Scholars: Insights from a 2012/2013 Study

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Abstract

Once an academic study domain has accumulated a certain volume of domain-specific knowledge, a number of outlets emerge as preferred outlets for publication. Electronic Government Research (EGR) is no exception. After developing for some 15 years from its early beginnings in the late 1990s, this multi-disciplinary academic domain appears to have reached exactly this point. With an active researcher community numbering in the hundreds worldwide and a body of over 5,500 peer-reviewed manuscripts and books in the English language alone, EGR has grown past its infancy into a discernible and reputable academic endeavor in its own right. While the Electronic Government Reference Library (EGRL) provides a comprehensive account of the peer-reviewed EGR literature, the preferences of publication outlets had not been studied. This study closes this gap, and it provides clues for assessing the reputation and quality of scholarly work

in EGR, which is highly relevant for decisions in tenure and promotion cases.

Keywords: Electronic Government, EGOV, EGR, Forums for Scholars, Publication Outlets, Outlet Reputation, Conference Quality, Journal Quality, Ranking, Tenure and Promotion Criteria, Electronic Government Reference Library, EGRL

Introduction

"*Where should I publish my scholarly research?*" is the opening question in Hardgrave & Walstrom's 1997 ranking of forums for MIS scholars (Hardgrave & Walstrom, 1997, p. 119). Put another way, the question could also be framed as, "Which outlets in published academic work are most renowned and most highly regarded for employing standards of excellence?" or, "What is the perceived quality of the various forums?"

In every academic domain of study these questions, or variations thereof, become burning and at times even vexing whenever scholars seek appointments, tenure, and promotion. Other domains and disciplines have long established and updated pertinent recommendations based on peer rankings and other indicators (Bharati & Tarasewich, 2002; Campbell, Goodacre, & Little, 2006; Dame & Wolinsky, 1993; Garand, 1990; Hardgrave & Walstrom, 1997; MacMillan, 1991; Olson, 2005). In EGR, it appears, the first study of this kind is due, since the domain has significantly grown, and tenure and promotion committees need trustworthy and authoritative input in their decision-making processes. However, before considering a study of this kind in EGR some questions need to be addressed, such as "why does an interdisciplinary study domain like EGR need a list or even ranking of preferred outlets for publication?" or "what do we gain from domain-specific rankings?" Said differently and more provocatively, "do such rankings

do more harm than good?" and "do such rankings help define, or rather limit a domain?"

Rankings have certain known deficiencies, for example, the reduction of multiple and diverse factors into a single dimension (the apples and oranges dilemma), and, hence, the problem of potentially false precision, when producing composite scores from diverse inputs. However, despite their known problems the more severely damaging effect might not lie in the rankings themselves but rather in their uninformed use and schematic interpretation.

As a case in point, publication outlet rankings in Management Information Systems (MIS) had produced an ultra-short list of two so-called "elite" journals (Dennis, Valacich, Fuller, & Schneider, 2006). For receiving tenure and promotion in the 1990s and way into the first decade of the 21st century, at many schools MIS candidates had to land one or two publications in these "elite" journals. When these demands were upheld in practice and considering the limited amount of publishing slots in these two outlets, simple arithmetic demonstrated that the discipline had made it impossible to promote a sufficient number of young academics to even compensate for retirees in that discipline, let alone grow the scholarly community–an almost classical self-defeat.

Another side effect from rankings, which was also observable in the MIS case, is the potential limitation of scholarship to a relatively narrow interpretation of the study domain's scope, its stance, and its accepted standards of inquiry. If the top-ranked forums allow only for a narrow understanding of what is in scope and what is not, or, if the epistemological stances promoted by the top-ranked outlets tightly constrict the type and predication of contributions as well as the standards of inquiry, then a self-enforcing

feedback between rankings and top-ranked outlets can indeed have limiting effects on the scholarship of a domain or field.

We hold that these pitfalls have been (and may continue to be) avoided in EGR for several reasons: (1) EGR is a multidisciplinary domain that has benefitted from the cross-fertilization among and between the researchers from various home disciplines; (2) unlike other academic disciplines, EGR has demonstrated its relevance to practice time and again, and, hence, its raison d'être is not questioned inside academia, nor outside; (3) the editorial policies of the leading EGR outlets are pluralist with regard to epistemological stances and standards of inquiry, which is reflective of the diversity of research contributions from various fields; and (4) the understanding of senior academics involved in EGR is appreciative of the inclusive and multidisciplinary approach to studying EG-related phenomena.

Therefore, the purpose of this contribution is to determine how active EGR scholars perceive and value the publication and conference outlets (forums) in EGR. While this undertaking implicitly offers an indirect assessment of the perceived quality of EGR forums, it is also intended to provide guidance for promotion and tenure cases in EGR.

In its design this study has followed avenues similar to those taken by previous studies in other domains such as sociology (Cronin, Snyder, & Atkins, 1997), psychology (Over, 1978), or management (MacMillan, 1991; Olson, 2005) and management information systems research (Walstrom, Hardgrave, & Wilson, 1995) . In particular, we replicated in part the study design and instrument introduced and used by (Hardgrave & Walstrom, 1997) study. However, beyond the need for authoritative rankings of academic forums

when seeking appointment, tenure, and promotion, the ranking of publication outlets also serves other purposes such as identifying appropriate outlets for publication, studying the stream of research in a particular field, determining the direction of editorial work, shaping the identity of a study domain, and informing acquisition decisions in libraries among others (Walstrom, et al., 1995).

Like other recently emerged areas of academic study EGR is a multi-disciplinary endeavor and not a discipline in the traditional sense (Scholl, 2007); major contributors to EGR are scholars with a disciplinary training in the fields of Public Administration, Management Information Systems, Computer Science, Political Science, and Information Science among others. The accepted standards of inquiry vary across those fields, so do the criteria for promotion and tenure; furthermore, some fields are multi-disciplinary study domains themselves. However, no single field can claim majority ownership to EGR or even comprehensive coverage of the study domain, and with the exception of occasional special issues and workshops EGR topics have rarely been a focus in most of the major outlets of the participating disciplines (Scholl, 2007).

From the perspective of those contributing disciplines, EGR is a special topic and a niche of that disciplines' research. For EGR scholars seeking tenure and promotion in single discipline-oriented environments, for example, such as Management Information Systems, demonstrating the quality and impact of their EGR work to their promotion and personnel committees might pose a potential problem unless evidence is provided for the acceptability and equivalency of quality standards applied to EGR research, which also motivated this study.

Over the years several outlets have emerged accounting for the rapid growth of EGR (see Table 0). Around the turn of the millennium new conferences or new conference tracks rather than journals served as the main venue for presenting and publishing EGR. The North American dg.o conference (1999), the European EGOV conference (2002), and a minitrack (2001) at the Hawaii International Conference on System Science (HICSS) were among the first new and visible outlets for EGR. For quite some time conferences were more frequently used for publication than journals, and the main conferences have maintained a high appreciation among EGR scholars to this day. The first new academic journals dedicated to electronic government appeared around by the mid-first decade of the 21st century. Gradually, also previously established journals such as *Government Information Quarterly* (Elsevier) and *Information Polity* (IOS Press) began expanding their scope ever so slightly and increasing the number of published manuscripts from the emerging domain of EGR.

<<Insert Table 0 about here, (or, better) in the appendix>>

In 2005, the publicly accessible Electronic Government Reference Library (EGRL) (http://faculty.washington.edu/jscholl/egrl/ -- accessed on 8/18/2013) was created, in which the peer-reviewed, English-language literature of the EGR domain has been recorded and semi-annually updated ever since (Scholl, 2009, 2010a). The purpose of the EGRL has been "to improve the quality of e-Government (EG) research and publication…," "to provide authors and reviewers access to the body of current academic knowledge, provide keyword searches to better inform research, and provide acceuracy and reliability in citations" (http://faculty.washington.edu/jscholl/egrl/purpose.php -- accessed 8/1/8/2013). The EGRL has been a unique resource for the study domain, since

it represents a comprehensive account of the domain's English-language-based body of peer-reviewed academic knowledge. For this study the EGRL has served as an important point of departure and reference, providing exact quantitative information, for example, about most frequently used forums in EGR. While it might have been possible to infer and calculate the scholarly publication preferences from the number of entries in the EGRL at least in part, it was important to determine the perceived quality, academic weight, and rank order of forums as explicitly seen by the domain's scholarly community.

The manuscript is organized as follows: First, we present our research questions followed by the description of study design and methodology. Then, we present our findings for each forum group, which we discuss in the succeeding section. Finally, we present our conclusions and recommendations along with future avenues of research.

Research Questions

Research Question #1

Conferences have played and are still playing an important role in presenting and discussing current electronic government research. While quite a number of special-topic meetings and conferences have emerged, it has not been studied what relative importance and value the various conferences carry in the view of the scholarly community dedicated to EGR, which leads to

*Research Question **RQ #1***: *What is the relative value/weight/rank of the various academic conferences used for presenting electronic government research?*

Research Question #2

While not identical to the value of conferences, the value of proceedings is closely related to the value of the respective conference itself. However, some conferences split up their proceedings which makes it harder to determine the perceived value of the respective proceedings. So far, it has not been studied what relative importance and value the various conference proceedings carry in the view of the scholarly community dedicated to EGR. Therefore,

*Research Question **RQ #2***: *What is the relative value/weight/rank of the various conference proceedings used for publishing electronic government research?*

Research Question #3

EGR is presented in both dedicated electronic government journals as well as journals not dedicated to EGR. Until now, it has not been known what relative importance and value the various journals carry in the view of the scholarly EGR community. Hence,

*Research Question **RQ #3***: *What is the relative value/weight/rank of the various journals used for publishing electronic government research?*

Methodology

Sample and Data Collection

Sample. Previous research had estimated the size of the core group of most active and prolific EGR scholars at 55 worldwide, whereas the inner EGR community was found to number in the mid 200's and the extended EGR community at around 700 individuals

(Scholl, 2009, 2010a). The EGOV listserv (egov-list@uw.edu) membership roll as well as the Electronic Government Reference Library (EGRL, version 8.5, 2012) provided the main sources of information allowing for the verification of academic background and for survey-participant selection. The EGOV listserv had been formed and launched in 2011 based on the author list derived from the EGRL. By merging and cross-compilation with various conference participant lists as well as via desk research, email addresses were verified and matched to author names. After its launch, a relatively low number of originally invited EGOV listserv members unsubscribed from the list. Ever since its launch the listserv has been open to new members via self-enrollment. When this study was conducted the EGOV listserv membership list contained 1,132 entries, 882 of which contained email addresses of persons with a verifiable academic background and an active involvement in EGR.

Instrument. The Web-based questionnaire contained a total of nine questions with required responses to the first eight questions. Question #9 provided a non-mandatory entry mechanism for specifying and rating outlets not listed as choices and for providing general feedback. Questions #1 to #5 inquired about the academic position, the greater geographical area, the primary and secondary academic disciplines, and the top-three sub-areas of EGR-related interest. For all questions, pre-configured responses could be selected including "other" for choices not listed. Question #6 interrogated about the perceived quality of eighteen pre-specified conferences. This list was derived from conference entries in the EGRL and from the list of top-two conferences in the major disciplines contributing to EGR. Question #7 inquired about the perceived quality of five pre-specified conference proceedings as found in the EGRL. The categories of evaluation

for both conferences and conference proceedings were adopted from (MacMillan, 1991) and (Hardgrave & Walstrom, 1997) and used in questions #6 and #7:

1 = No value to the e-Government study domain
2 = Little value to the e-Government study domain
3 = Valuable to the e-Government study domain
4 = Very valuable to the e-Government study domain

In question #8 we asked for the assessment and ranking of journals. We mainly identified journals from the EGRL, but also consulted the 2011 ISI Web of Knowledge's Journal Citations Report for further entries of non-EGOV journals. We arrived at a list of seven journals dedicated to EGR and a list of 27 journals of other disciplines with no particular focus on EGR. Again, we adopted categories of evaluation from (MacMillan, 1991), (Walstrom, et al., 1995), and (Hardgrave & Walstrom, 1997) and presented for each of the 34 journals the answer choices as follows:

1 = Not appropriate as an outlet for publication in the e-Government study domain
2 = Appropriate as an outlet for publication in the e-Government study domain
3 = Significant as an outlet for publication in the e-Government study domain
4 = Outstanding as an outlet for publication in the e-Government study domain

In the statistical analysis we would have greatly preferred using a truly symmetrical scoring scale with a neutral midpoint. However, for consistency purposes we finally opted in favor of the replication of the aforementioned previous studies with regard to their conference and journal-related scoring scheme. However, we assigned negative values to evaluations indicating "no value" (conferences) or "not appropriate" (journals), which were mirrored by the positive values of "valuable" and "appropriate" evaluations in absolute value. That notwithstanding, still like in the earlier studies (e.g., Hardgrave &

Walstrom, 1997), the higher the value of a positive evaluation, the more increased the means over-proportionally.

Data Collection. Between mid-November and early December of 2012 emails were sent worldwide to the 882 scholars identified as described above, explaining the purpose of the study and inviting recipients to take the survey providing prospective participants with an individualized electronic link to the Web-based survey. A week apart, a total of three reminders were sent. The results were electronically recorded and automatically coded in a fashion for immediate use in SPSS.

Limitations. First, we would like to recognize that survey-based research in general introduces the problems of participant self-selection and non-response, which might skew the results. Second, we understand that in the rankings of forums a response bias might play a role, that is, respondents would likely rank those forums higher, in which they have published, than those, in which they have not published. We would finally like to recognize that using the EGRL and EGOV listserv for selecting the survey participants might have also impacted the results. This approach reached out to the wider scholarly community engaged in EGR. Instead we could have considered to selectively approach the heads and deans of MIS, IS, Public Administration, Computer Science departments and schools and other academic institutions for this survey (as it has been done in other forum-related studies). However, we felt safe in the assumption that EGR might not have risen to sufficient visibility and recognition among these disciplines and administrative leaders due to its relative novelty and its multi-disciplinary nature, which would have rendered those results questionable. When reaching out to the wider scholarly community, we controlled for academic rank and seniority. As discussed in detail in the

next section, the response rate from the senior and most prolific EGR scholars in the domain was very high, which despite the outlined limitations gives us some confidence in the robustness of our approach.

Findings

General Overview

A total of 206 completed responses were received, that is, a response rate of 23.4 percent was attained. Due to the tightly controlled environment of this targeted Web-based survey, all responses were usable. Participants needed between 9 minutes and several days to complete the survey. While the overall response rate was acceptable (and even a little on the higher side for an electronic delivery mode), this study's credibility and weight rests on the fact that over 80 percent of the most senior (in terms of academic rank, that is, associate and full professors) and most prolific (that is, with more than 10 entries in the EGRL) EGR scholars participated in it. The breakdown of academic positions in the sample revealed that a relatively high percentage (29.1%) of EGR scholars hold non-tenured (mostly research-oriented) positions. Also, quite a few doctoral students took the survey (14.1%). However, the majority of responses (56.8%) came from tenure-track faculty (tenured and untenured). In the following we use this group as an embedded control group. We assume that this group has a particular vested interest in the rating and rankings of forums. For that very reason we also assume that the ratings of this embedded control group help better understand and qualify the overall results. Detailed results are shown in Table 1.

<<Insert Table 1 about here>>

While the results for primary disciplinary backgrounds of EGR scholars (see Table 2) seem to suggest that the majority of scholars have either Computer Science or MIS backgrounds (51.46%), followed by Public Administration and Political Science backgrounds (23.3%), only a small fraction of EGR scholars (6.8%) is skilled in just one and the same primary discipline. In other words, despite the disciplinary breakdown shown in Table 2, the vast majority of EGR scholars appear to be cross-trained in more than one academic discipline.

<<Insert Table 2 about here>>

With regard to geographic provenance the vast majority of survey participants (79.6%) came either from Europe and the UK (54.9%) or from North America (24.8%). The strong participation from Europe and the UK is noteworthy. As can be seen in the next section it had an impact on the ranking of forums. In absence of better knowledge regarding the geographic distribution of the EGR scholar population worldwide, it is unclear whether or not the strong European participation has caused a bias in the results, or not.

<<Insert Table 3 about here>>

Ad ***RQ #1***: (*What is the relative value/weight/rank of the various academic conferences used for presenting electronic government research?)*

Much like in other emerging domains before, conferences have played a very important role in the evolution of the domain. In the first decade of EGR's unfolding conferences were the primary venues and preferred over journals for presenting research in EGR (Scholl, 2010a). More recently and with the advent of EGR quality journals, EGR

conferences have lost their almost exclusive standing, however maintained a very high reputation relative to journals (also, relative to the lesser standing of conferences in other disciplines). Conferences have remained the preferred forum for presenting novel topics in EGR, which is indicated by the growing number of conference papers, new topical areas, and rising conference attendance (Scholl, 2012).

Following previous studies we ranked the conferences by mean, median, and mode (Hardgrave & Walstrom, 1997; Walstrom, et al., 1995). Using medians and modes provided additional information for the grouping of conferences rather than relying on mean scores alone. We also used the number of responses and the score sums as indicators of a forum's "popularity" (Bharati & Tarasewich, 2002). In Tables 4 and 5, the results for the whole sample as well as for the sub-sample of tenure-track faculty are shown. As pointed out before the results for the tenure-track sub-sample were included, since the sub-sample plays the role of an embedded control group. It helped reveal some slight, however important, differences compared with the entire sample. As outlined before, since tenure-track scholars have a vested interest in choosing publication forums most conducive to their own tenure and promotion, it was reasoned that this particular control group adds an important check to the overall picture of the rankings and their validity.

In both rankings, the entire sample and the tenure-track scholars, the EGOV Track at the Hawaii International Conference on System Sciences (HICSS EGOV) came out on top. In terms of popularity, HICSS EGOV led the next conference in line (IFIP EGOV) by 21% and 30% (tenure-track) in responses and in score sums (561 to 463 and 309 to 233, respectively in the sub-sample). While mean, median, and mode were equal between

HICSS EGOV and IFIP EGOV over all, the tenure-track sub-sample showed a clear distinction in terms of mean, mode, and median in favor of HICSS EGOV over IFIP EGOV. In terms of popularity, the dg.o conference actually ties IFIP EGOV overall and led over it by 14.1% in the tenure-track sample. As Figures 1 and 2 reveal, HICSS EGOV is ranked higher than IFIP EGOV in North America and the rest of the world, while the rankings between the top-two conferences are reversed in Europe. It can be inferred that the more than 2-to-1 ratio of responses from Europe over those from North America and the over 2.5-to-1 ratio of responses from Europe over those from other parts of the world (except North America) has generally skewed the results in favor of European forums, and IFIP EGOV, in particular.

<<Insert Table 4 about here>>

<<Insert Table 5 about here>>

<<Insert Figures 1 and 2 about here>>

Hence, the top-tier of EGR conferences comprises three annual conferences. While HICSS EGOV has a distinct lead over the other two conferences and can be seen as the top conference in the domain, IFIP EGOV and the Digital Government Society's dg.o are part of the top-tier of the three conferences in EGR.

The EGOV Track at ECIS, the IFIP ePart conference, ECEG, ICEGOV, and the EGOV Track at AMCIS were all ranked in the second tier of EGR conferences. While the rankings of second-tier conferences slightly differed between the overall and the tenure-track samples, they were clearly distinct from the lower ranked conferences in terms of both popularity indicators (numbers of responses and sum of scores).

Some EGR-specific conferences such as ICEG, EGOVIS/EDEM, and the EGOV Track at PACIS were not highly rated by survey participants. The same holds true for non-EGR-oriented conferences such as ICIS, the Academy of Management, ASPA, and others. It was noteworthy that some special-topic EGR conferences such as CeDEM and MeTTeG received very few mentions and no rankings from survey participants.
In summary, EGR comprises three distinct tiers of academic conferences. The top-tier comprises of the HICSS EGOV, IFIP EGOV, and DGS's dg.o conferences.

Ad ***RQ #2***: (*What is the relative value/weight/rank of the various conference proceedings used for publishing electronic government research?*)

Conference proceedings have a prestige of their own, which at times can differ from the reputation of the respective conference they document; in particular this can be the case, when a conference employs more than one publication outlet as is the case with, for example, the IFIP EGOV and the IFIP ePart conferences, whose full research papers are published in Springer's Lecture Notes in Computer Science while work-in-progress papers, workshop and project reports, and posters are published by Trauner Druck.
The instrument listed six proceedings, four of which represent the top tier (ACM, IEEE, Springer, and AIS) in the entire sample as well as in the tenure-track sub-sample. Trauner and ACI proceedings were rated significantly lower than the other proceedings and placed into the second tier. Participants did not specify additional proceedings.
Interestingly, the IEEE proceedings, although highly popular in terms of number of mentions and sum of scores ended up with a lower mean than the other three top-tier conferences in the entire sample, while arriving in second place in the tenure-track sub-

sample (see Tables 6 and 7).

<<Insert Table 6 about here>>

<<Insert Table 7 about here>>

In summary, according to the rankings in both the entire sample and the tenure-track sub-sample, ACM, IEEE, Springer, and AIS proceedings form the top tier of conference proceedings in EGR.

Ad ***RQ #3***: (*What is the relative value/weight/rank of the various journals used for publishing electronic government research?*)

As said before, during the domain's infancy (1998 through 2005), journals did not play a major role in publishing EGR work except for occasional special issues and a trickle of contributions published in already established journals such as Elsevier's *Government Information Quarterly* (GIQ), IOS Press's *Information Polity* (IP), and Wiley's *Public Administration Review* (PAR), among a few others. However, some established journals such as GIQ and IP began allotting more space to EGR topics over the years. Around the mid of the first decade of the 21st century, also dedicated EGR journals began to appear (Scholl, 2010a):

- *Electronic Journal of e-Government* (Academic Publishing) in 2003;
- The short-lived *Journal of E-Government* (Haworth) in 2004, later renamed to, repurposed, and continued as *Journal of Information Technology and Politics* (Taylor & Francis);
- *Electronic Government: an International Journal* also in 2004 (inderscience);
- *International Journal of Electronic Government Research* (IGI Global) in 2005; and

- *Transforming Government: People, Process, and Policy* (Emerald) in 2007.

Ever since its first appearance the annual rate of EGR publications has risen, and with this increase also the overall capacity of full articles published in dedicated EGR journals has gone up (Scholl, 2010a, 2012). As Table 8 reveals, the annual volume (2012) of full articles in EGR-dedicated journals has reached the amount of 213. Interestingly, some journals provide a larger capacity, for example, *GIQ* with almost a third of the total, and along with the *Journal of Information Technology and Politics* (JITP) and *IP*, these three journals provide three fifths of the annual full-article capacity in EGR-dedicated journals.

<<Insert Table 8 about here>>

In terms of the perceived value and quality of EGR-dedicated journals as forums for e-Government scholars, both the entire sample and the tenure-track-scholar sub-sample show similar rankings. With regard to popularity, that is, number of responses/evaluations, sum of scores, mean score, median, and mode, *GIQ* leads all other journals by a significant margin in both the entire sample as well as in the sub-sample. In other words, GIQ is seen as the premier journal for publishing EGR (see Tables 9 and 10) forming the top-tier of dedicated e-government journals in and by itself.

At some distance, a group of four journals comprises the second-tier of journals dedicated to EGR: *Information Polity* (IP), *Transforming Government: People, Process, and Policy* (TGPPP), *International Journal of Electronic Government Research* (IJEGR), and *Journal of Information Technology and Politics* (JITP). Their rank order differs between the entire sample and the tenure-track sub-sample. While IP maintains a top rank in the second tier in both, JITP, while at the bottom of the second tier in the entire sample, holds

second place after IP in the sub-sample. It is also remarkable that IJEGR with a relatively modest mean score has a solid overall lead in the second tier in terms of popularity (highest number of responses/evaluations and highest sum scores in both the entire sample and the sub-sample).

The other two journals, *Electronic Government: an International Journal* (EGaIJ) and the *European Journal of E-Government* (ECEG) form the third tier of dedicated EGR journals.

<<Insert Table 9 about here>>

<<Insert Table 10 about here>>

Journals with no particular focus on EGR play a secondary role in the study domain; while the annual volume of full articles in EGR-dedicated journals amounts to over 200, the entire volume of EGR-related full articles ever published in non-dedicated journals amounts to just 333 (see Table 11). When assessed by the number of full EGR-related articles, the most popular outlets are the *International Journal of E-Governance* (84 articles), *Public Administration Review* and *Social Science Computer Review* (45 articles each), and the *International Journal of Public Administration* (30 articles).

<<Insert Table 11 about here>>

However, the perceived value and quality of journals not dedicated to electronic government differs to a significant extent from those journals' popularity. Interestingly and as a case in point, *MIS Quarterly* ranks third in the list of "other journals," also is the most frequently mentioned "other journal," has the second-highest sum of scores, and

even a mode of 4 in the entire sample; yet, with one publication per decade measured over two decades that journal has not demonstrated any particular interest in public administration-related research. Two public administration journals top the list based on the entire sample as well as the tenure-track sample, *Public Administration Review* (PAR) and *the Journal of Public Administration Research and Theory* (JPART), see Tables 12 and 13. In the same tier of seven journals also rank another public administration journal (*International Journal of Public Administration* (IJPA)) along with three MIS journals (*MIS Quarterly* (MISQ), the *European Journal of Information Systems* (EJIS), and the *Information Systems Journal* (ISJ). Also in this tier we found Inderscience's *International Journal of E-Governance* (IJEG), which has published the highest number of EGR articles among all non-EGR-dedicated journals.

In the tenure-track sub-sample, the top-tier comprises PAR and JPART, which form the top-tier of "other journals" followed by a second tier of journals comprising EJIS, MISQ, *Administrative Science Quarterly* (ASQ), and the *Journal of the Association for Information Systems* (JAIS). The rankings for ASQ and JAIS are remarkable, since until this study was completed ASQ had never published any EGR-related article, while JAIS had published only three EGR-related articles. Also, it is noteworthy that IJPA and IJEG, two "EGR-friendly" forums, which made it into the top-tier of the entire sample, were placed outside that top-tier in the sub-sample. *Social Science Computer Review* (SSCR), which is one of the top three most popular "other journals" in terms of published EGR-related articles was not ranked near to the top-tier of "other journals," which will be considered in the discussion section.

Other forums do not play any significant role in EGR (including highly prestigious

journals of other disciplines such as *Information Systems Research* (ISR), *Communications of the ACM* (CACM), both MIS, *Organization Science* (OS), *Academy of Management Review* (AMR), *Academy of Management Journal* (AMJ), all organizational and management sciences, the *Journal of the American Society for Information Science and Technology* (JASIST) in Information Science, or *Human-Computer Interaction* (HCI) in Computer Science/HCI).

<<Insert Table 12 about here>>

<<Insert Table 13 about here>>

In summary, the EGR-dedicated journals are distinct in their perceived value, weight, and rank; three tiers have emerged with *Government Information Quarterly* as distant top journal in the domain. A group of four other EGR-dedicated journals form a solid second tier. Other journals, not dedicated to EGR, play some role in EGR; however, the overall volume of EGR studies found in those other outlets is moderate. Perceived value and weight of those other journals and their effective popularity in terms of published EGR work do not match up in many, if not most, cases and in cases are inversely proportional (for example, ASC, MISQ, OS, and ISR, and also SSCR).

Discussion

General Observations. The relatively high response rate to this non-anonymous Web-based survey (23.4%) allows to interpret the results presented above with some confidence, in particular, since over 80% of the most prolific EGOV scholars participated in it. While the scholarly EGR community has grown over the years producing a multiyear volume average of over 400 peer-reviewed contributions every year, so far the

choice of the appropriate forums for publication had to be based on personal preferences, hearsay, or other criteria rather than on a peer assessment of forum reputation and ranking. With this study solid ground for an informed decision is established. Now value, weight, and rankings of EGOV or EGR[1] forums can be determined from two angles: (1) the publication numbers and their distribution as recorded in the EGRL (Scholl, 2012), and (2) the results of this survey, which reveal EGOV scholars' perspectives on and perceptions and preferences of forums for publication in this study domain. With a few exceptions (discussed in more detail below), the hard data derived from the EGRL and the rankings derived from the survey do match up, which further adds to the confidence into this study's results.

The annual volume of peer-reviewed publications (multi-year average of 400+) in EGR breaks down into two almost evenly large groups (conference and journal publications), while a far smaller number of EGR publications are found in chapters of edited books or as monographs. In EGR, both conferences and journals seemingly play important roles and do not fall into a hierarchical scheme that would prefer conferences to journals, as is the case, for example, in Computer Science, or, the other way around, journals to conferences as in the cases of, for example, Public Administration or MIS. This way, all forums in the first and second tiers of EGR have gained a reputation of publishing excellent quality, or good quality, respectively, which consequently makes these forums premier outlets for scholars seeking tenure and promotion.

In this context it is noteworthy that EGR has not been characterized as a new "discipline" nor as a new "field" with so-called "reference disciplines," from which it has emanated or departed, but rather as a multi-disciplinary study domain, which accumulates a distinct

body of knowledge in and by itself, also benefitting from and shaping the various intersections of participating disciplines (Scholl, 2007, 2010b). Along these lines EGR also feeds back to the traditional disciplines as many EGR publications in "other," that is, non-EGR first- and second-tier outlets show. EGR scholars seeking tenure and promotion within one of the traditional disciplines contributing to EGR may sometimes find it somewhat harder to make their cases, when solely held up against the rules of that particular discipline, than those EGR scholars working in multi- or interdisciplinary environments that foster scientific pluralism. Yet, to both groups this study provides evidence with regard to the relative quality of publication forums in EGR.

Conference Ratings. According to the count in EGRL v8.5 the total annual volume of papers in conference proceedings amounted to 52.2 percent (or 333) of the entire volume of 638 EGR manuscripts published in 2012 (Scholl, 2012). As outlined before conferences were instrumental in establishing the study domain and have maintained their strong position as forums for presenting EGR, which particularly is reflected in the results for the three top-tier conferences (HICSS EGOV Track, IFIP EGOV, and DGS's dg.o). All three top-tier conferences have both a multi-disciplinary and multi-topical orientation and serve as forums for presenting the whole spectrum of EGR. These conferences also have global reach, although differences in regional appreciation were evident. The three top-tier conferences have a share of 104 full research papers representing 31.2 percent of all conference papers in 2012 (Scholl, 2012). The second tier (EGOV track at ECIS, IFIP ePart, ECEG, ICEGOV, and the EGOV track at AMCIS) while still multi-disciplinary comprises forums with a special emphasis, for example, the EGOV tracks at ECIS and AMCIS on information systems, ICEGOV on developing

countries, and IFIP ePart on policy and systems aspects of inclusion and participation. Other conferences including DEXA EGOVIS/EDEM, the EGOV track at PACIS, and the pre-ICIS SIGEGOV meeting (MIS) were ranked significantly lower than the top two tiers. Special-topic EGR conferences such as the Conference for Democracy and Open Government (CeDEM), the International Conference on Methodologies, Technologies and Tools enabling e-Government (MeTTeG), or the annual conference of the European Group for Public Administration (EGPA) with its EGOV study group, or other regional or special-topic EGR conferences received too few mentions and ratings to be ranked. Other conferences (non-EGR) are not seen as valuable in the context of EGR.

Number and Age of Conferences. Twelve annual conferences are dedicated to presenting EGR including five EGOV tracks and one special interest group at major systems conferences, while seven EGR conferences are self-standing, that is, not attached to a larger venue. With regard to their ages it seems not coincidental that the top-tier conferences (HICSS EGOV established in 2001, IFIP EGOV/2002, and DGS's dg.o/1999) are among the oldest and longest-running conferences in EGR.

Proceedings of Conferences. The top-tier conferences use different publishers: HICSS EGOV proceedings are published by IEEE, IFIP EGOV proceedings are issued by Springer in the Lecture Notes in Computer Science series, and the proceedings of dg,o appear in the Association of Computer Machinery's digital library. All three proceedings have been ranked in the top tier. However, this only holds for the full-paper portion of the respective proceedings. For example, in the case of IFIP EGOV, which uses a different outlet (Trauner Druck) for publishing work-in-progress research, posters, and workshop reports, the secondary proceedings have not received a high rating. Interestingly, while

the proceedings organized by the Association for Information Systems (AIS) were ranked in the top tier, the respective conferences, for which the AIS organizes the proceedings (ECIS, AMCIS, and PACIS), were not. This is an inconsistency most probably attributable to what we call a "halo effect", that is, that the rankings of some outlets might have been influenced by those outlets' standing in other disciplines and contexts.

Journal Ratings. What the HICSS EGOV Track is for conferences, that is, the top forum of the top-tier, *Government Information Quarterly* is for journals. GIQ might be even more elite and unique in this regard than the HICSS EGOV track. Only two non-EGR journals (PAR and JPART) might be considered part of an extended top-tier of journals (when emphasizing the tenure-track ratings). Otherwise, GIQ would form the top tier by itself. While this speaks volumes about the great appreciation and high standing of this journal in the scholarly community, it also shows that EGR might be overly focused on one particular forum (which may unduly constrain the future growth and development of the study domain). Other journals, and in particular, the four second-tier forums *Information Polity* (IP), *International Journal of Electronic Government Research* (IJEGR), *Journal of Information Technology and Politics* (JITP), and *Transforming Government: People, Process and Policy* (TGPPP) mostly showcase an excellent quality of published work; however, in terms of visibility and appreciation among the scholarly community they clearly lag behind the sole true top-tier journal. For all practical purposes (for example, space limitations, dependency on one editorial group, time and topical constraints) it would be in the best interest of the community if at least two journals rose in rank to the top tier, or for the third-tier journals to move up to second tier given the overall sharp increase in EGR activity. In 2014, the International Journal of Public

Administration in the Digital Age (IJPADA) will enter the field of EGR-dedicated journals, and a future replication of this study will show how the field of EGR journals developed.

As mentioned some "other journals" are in relatively good standing among EGOV scholars, at least in terms of second-tier outlets, that is, *Public Administration Review* (PAR), the *Journal of Public Administration Research and Theory* (JPART), *MIS Quarterly* (MISQ), *Administrative Science Quarterly* (ASQ), *European Journal of Information Systems* (EJIS), the *Journal of the Association for Information Systems* (JAIS), *the International Journal of Public Administration* (IJPA), the *International Journal of Electronic Governance* (IJEG), and the *Information Systems Journal* (ISJ). With the exception of IJEG, the listed journals are either traditional public administration journals (PAR, JPART, ASQ) or traditional MIS journals (MISQ, EJIS, JAIS, and ISJ). As mentioned above, for some of these forums a huge discrepancy was observed between the journal's relatively high ranking among EGR scholars and the journal's actual relevance to (and interest in) EGR. For example, MISQ and ASQ, two flagship journals in their respective disciplines, have either never or extremely rarely published any EGR-related work. It might be inferred that such high ratings also represent another kind of halo effect, by which EGR scholars have unconsciously projected the reputation of these journals in their respective home disciplines into EGR. In practice, these two journals (along with a few similar cases, for example, *Information Systems Research* (ISR), the *Academy of Management Review* (AMR), the *Academy of Management Journal* (AMJ), or *Organization Science* (OS)) have no practical impact on, no demonstrated interest in, and no relevance to EGR, and vice versa.

In contrast (see Table 11), some forums in the category of "other journals" such as the *International Journal of Electronic Governance* (ICEG), *Social Science Computer Review* (SSCR), the *International Journal of Public Administration* (IJPA), *Journal of Enterprise Information Management* (JEIM), *Administration & Society* (A&S), and the *Journal of the American Society for Information Science and Technology* (JASIST) have obviously not appeared as viable outlets for publication on the radar screen of a larger audience of EGR scholars. The quality of these journals and their standing elsewhere might warrant at least a ranking in the second tier of EGR forums. Again, also in the cases of these journals a higher visibility to a larger EGR audience might translate into higher ratings in the future. However, it also falls to the editorial leadership of these journals to make the case with EGR scholars.

Number and Age of Journals. Except for GIQ and IP all journals dedicated to EGR are only a decade old or younger at the time of this writing. Like with conferences the longer established forums appear to have a greater standing in the scholarly community of EGR than the younger outlets. While GIQ and IP expanded their editorial scope to include EGR topics in a multi-disciplinary fashion, other journals took a more focused approach putting an emphasis on information systems (TGPPP and IJEGR) and policy and political science in the context of technology (JITP). As argued before, the study domain would benefit from at least a couple more "native" EGR journals in the top tier. This might work best, if the multi-disciplinary nature of the study domain is more emphasized besides the respective foci. In the category of "other journals" except for ICEG all journals have long track records in other academic contexts and disciplines, and EGR is a potentially interesting topic, however, on the sidelines. With the scheduled arrival of

another dedicated journal (IJPADA) in 2014, the study domain has a sufficient number, and a sufficiently diverse number, of quality outlets spread over several tiers so to represent the domain at excellent and good levels of academic quality.

Other deliberations. Once a study domain determines the rankings of its forums, academic departments and schools and their promotion committees tend to specify certain requirements of quality and productivity to be met for tenure and promotion. Worldwide a growing number of scholars are specializing in EGR, and departments and schools increasingly establish and fill positions dedicated to EGR. To both stakeholder groups this study will be instrumental for measuring quality of research and annual productivity. However, when doing so some caution is advisable. To illustrate let us tentatively assume a tenure and promotion rule would require from an untenured EGOV scholar to publish per annum two manuscripts at top-tier forums and another two at, at least, second-tier outlets including forums not dedicated to EGR but ranked here as first or second tier. Tenure and promotion would be granted to a scholar who demonstrated having met these requirements every year for six years in a row. Please note that this "2/2" rule is not suggested to be the golden rule for EGR tenure and promotion, although some departments and schools appear to have used it. In order to determine the total worldwide annual capacity for successful tenure and promotion cases, we first need to determine the number of publication slots per tier. This number can easily be calculated on the basis of EGRL v8.5 data (Scholl, 2012). The total number of publication slots amounts to 193 in the top tier and to 183 in the second tier of forums. Since these numbers represent the total publication capacity of the first two tiers, for which also senior scholars compete, let us further assume that about 50 percent of publication slots at

conferences and 30 to 33 percent of publication slots at journals can realistically be claimed by pre-tenure/pre-promotion scholars. As can be inferred from Table 14, under the "2/2" tenure and promotion rule the system would currently allow for approximately 39 successful tenure-and-promotion cases worldwide every year.

<<Insert Table 14 about here>>

While this capacity intuitively appears neither too high nor too low at the time of this writing, it might soon become a limiting factor if the study domain continues to grow at current rates. Since first-tier forums cannot dramatically increase their volumes (with this journal being a case in point), in particular current second-tier and third-tier outlets need to improve both their quality and publication volume in order to advance their rankings and enter the next higher tier. Also, some forums might need to systematically and seriously work on their visibility and reputation.

Conclusions and Future Research

This paper set out to substantially narrow and even close the important gap of knowledge with regard to the widely accepted, appropriate, valuable, and most highly reputed forums for publication of electronic government research (EGR). The study approached the task from two angles: (a) based on the Electronic Government Reference Library (EGRL) of peer-reviewed EGR-related research in the English language, and (b) via a detailed survey of the EGR scholarly community. Based on data from both sources, important insights were derived from this study.

In a nutshell, in the course of fifteen years of research, EGR has accumulated a body of knowledge comprising over 5,500 peer-reviewed contributions in the English language

alone. The study domain is a multidisciplinary endeavor with worldwide several hundred scholars with various and mostly multiple disciplinary backgrounds combining disciplines such as public administration, political sciences, computer science, management information systems, information science among others. The study domain has developed high-quality forums in the form of conferences and journals, which have an equal standing in the domain. The top-tier conferences comprise three annual conferences with a global reach, (1) the EGOV track at the Hawaii International Conference on System Sciences followed by (2) the IFIP EGOV conference, and (3) the dg.o conference of the Digital Government Society. With regard to journals, *Government Information Quarterly* (GIQ) represents the top tier of journals followed by a second tier of four journals. Also some non-EGR journals contribute to and are interested in the study domain of EGR.

Among the challenges for this vibrant and rapidly growing multi-disciplinary domain of EGR are (a) the need for a "thicker" first- and second-tier of journals, (b) the need for better visibility and recognition of some "other journals," which are interested in presenting EGR, while (c) the high standards and reputation of the first- and second-tier forums need to be maintained and strengthened.

Future research will update this study and particularly try to assess the changes in perception of quality and quantity among and between the various forums and formats presenting EGR. It will attempt to better understand the current tenure and promotion practices for EGR scholarship around the world.

For that undertaking and unlike many, if not most other, study domains, EGR is in the

splendid position to be able to assess the quality and productivity of scholars as well as those of outlets from two different angles, the "hard data" found in the EGRL and the repeat survey representing the perception of quality and importance as seen by the scholarly community. This two-pronged approach greatly improves the confidence in the results of such study.

However, we would nevertheless like to close with a note of caution: Beyond the outlined inherent limitations of this study and its results, we would remind the reader of the potentially detrimental and unwise uses of findings like ours. In some more narrowly organized disciplines than the multi-disciplinary domain of EGR the creation of "baskets of journals" with a few "elite journals" on top has done more harm than good. We would not like to lead this vibrant domain of study into the same trap. Electronic government research has produced a number of high-quality and excellent-quality outlets. Not all outlets cover the whole domain but rather are more specialized. While their rankings might come out lower in studies like ours, they might be a far better fit for some scholarly research than the broader but more highly ranked outlets. In tenure and promotion cases, the schematic interpretation of our findings might not serve the purpose nor do the candidate justice. However, when used with due restraint, our findings will help identify adequate publication outlets in EGR and also inform tenure and promotion committees about the range of publication opportunities in electronic government research.

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