e-Gov Research Quality Improvements Since 2003: More Rigor, but Research (Perhaps) Redefined

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Abstract. This paper follows up on an earlier study [1] by assessing the nature of 80 papers from EGOV 05 in terms of rigor and relevance criteria. Both studies use the same method and makes comparison between the results. We find that however still focusing overwhelmingly on descriptions and little on theory testing and creation, paper quality appears much better in that references to literature have increased grossly, there are very few dubious claims, philosophical research and theoretical arguments are virtually extinct, and the number of case stories is vastly reduced. However, the number of product descriptions is more than doubled to just over 30 %. The reasons for this are discussed, and as most of these papers are based on EU research funding we propose that an important reason may be the funding mechanism where researchers are employed as helpers in product development rather than critical scrutiny and analysis.

1 Introduction

Grönlund [1] made a survey of 170 papers at three main (2003) Electronic Government (eGov) conferences for the purpose of measuring the maturity of the field as a research area., and at the same time at a general level, the quality of papers. Maturity, we proposed, could be assessed by charting the nature of the research done. A scientific field is usually characterized by not just a common object of study, but also a set of theories which can be used to understand the general conditions of the field. More of theory generating and testing would indicate a more mature field, more of pure description and case story telling would be signs of a less mature field. Paper quality was measured at a cursory level by some rigor and relevance-oriented criteria. In the 2004 study we found that as concerns rigor, theory generation and theory testing were not frequent, whereas case stories (no theory, no data) and product descriptions (no analysis or test) were very frequent. Dubious claims (beyond what is reasonable given the method used) were also frequent, appeared in 29 % of the papers. As concerns relevance, we found that only a few of the cases where theories were either tested or generated concerned the role and nature of government, most concerned general
organizational issues which could well find a place within traditional IS con-
ferences. Further, only 11 papers (of 170) involved shared authorship involving
government practitioners.

On the positive side we found contributions from a number of disciplines, both
social science ones and technically oriented, and international outreach beyond
the North Atlantic shores was good with contributions from some 30 countries.
In this paper we repeat the 2004 study, however so far only with paper from
the (DEXA) EGOV 05 conference, a total of 80 papers, which were classified
by the organizers in two categories published in two different proceedings 30
papers were research papers” and 50 “workshop papers”.

2 Research Questions

Just like in the 2004 study, the basic question asked in this paper is, what
is the eGov field like in terms of what constitutes a scientific fields? This is
operationalized by questions concerning rigor and relevance, with an emphasis
on the former.

Relevance: To what extent is the eGov field distinct from other fields? This
could be assessed by investigating what are the questions asked what (kind of)
theories are used, or sought in an inductive manner? If eGov is indeed a specific
field, at least some of these issues and theories would be different.

Rigor: Depending on the maturity of the field, the balance among methods used
would likely change over time from case stories to more of methodologically sound
examination of relevant issues, be they related to technological quality, user
understanding, extent and qualities of use, or other. A mature eGov field would
also involve many disciplines, certainly public administration and other fields
specializing in government, not only IT-related disciplines by example from e.g
the HCI field. This time we compare the results with the 2004 study to find out
whether there have been changes of any kind. We measure maturity according
to the following rather intuitive model, which is based on the assumption that
research fields mature over time passing through (but never completely leaving!)
roughly the following phases:

Philosophical (“What will the world be like when everyone has a computer?”). As
there are no or few theories in the field and empirical data is uncertain as
the object of study is changing rapidly, studies will at this stage be mainly
speculation based on philosophy, properties of technology, world view, etc.

Anecdotal case stories (“Ma, look what I found”). At this stage there is an
increasing amount of data, but there are still no clear focus in the field so studies
focus on “emerging” features, which may be anything but are usually grounded in
factors like the researchers field of origin, personal interest, and commercial focus
of the IT development. Focus is still on exploration, finding new exciting traits
of the development. The researcher is an Amerigo Vespucci finding new land.

Clustering (grouping according to similarities among cases). At this stage cases
abound and people start looking for similarities. The new continent is found
physically, now we try to understand life on it.