

KNOWLEDGE TRANSFER IN E-GOVERNMENT

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1. Knowledge Transfer and Innovation

Innovation of Government is an urgent demand and so Knowledge Transfer on successful e-Government projects has attracted major attention. There is high interest in assessing model cases of projects, in using such good/best practice cases, in considering the feasibility of transfer, and in spurring an organisational learning process. Best/good Practice became to an often used and well-known word with the aim to support building better e-Government solutions.

In this paper only some aspects are given, for more we refer to the collected volume [12] edited by one of the authors. In that book various contributions highlight the theme knowledge transfer in e-Government from different point of views: case studies relate to developed and developing countries; analyses include the policies in diverse countries; model projects refer to various settings on national and international level.

2. Europe Gets a Vision on the Knowledge Society

One has to see the high interest in the greater context of European policies on Information /Knowledge Society. The EU has established a vision and started strategies for the Knowledge / Information Society in general and e-Government in particular. For EU policy on the matter of Information Society the Lisbon agenda was the starting point. There was an initial phase starting 2000 when the EU launched two Action Plans eEurope 2002 [1] and eEurope 2005 [2] which generated a positive momentum for the short term development of the Information Society. The main focus in the initial stage has been to create the precursors for the development of Information Society. Concerning Government this meant that the main interest is on rapidly bringing online public services with readiness and availability.

At mid-term progress was evaluated – known as the Kok report [3]. The reviews were critical and the Lisbon agenda was re-launched. The 2005 Spring European Council has set a new start as well as new objectives named i2010. The three key objectives of the Information Society strategy i2010 are the following [4]:

- A Single European Information Space offering affordable and secure high bandwidth communications
- World class performance in research and innovation in ICT by closing the gap with Europe's leading competitors

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- An Information Society that is inclusive, provides high quality public services and promotes quality of life

3. E-Government Action Plan

This general strategy was moulded in an eGovernment Action Plan [4]. According to these concepts under the name “Accelerating e-Government in Europe for the Benefit of All” the i2010 Government Action Plan was developed. The importance of measurable impact of e-Government was stressed. In addition, the i2010 Government Action Plan defined five framing objectives:

1. *No citizen left behind*: advancing inclusion through e-Government so that by 2010 all citizens benefit from trusted, innovative services and easy access for all;
2. *Making efficiency and effectiveness* a reality – significantly contributing, by 2010, to high user satisfaction, transparency and accountability, a lighter administrative burden and efficiency gains;
3. *Implementing high-impact key services* for citizens and businesses - by 2010, 100% of public procurement will be available electronically, with 50% actual usage, with agreement on cooperation on further high-impact online citizen services;
4. *Putting key enablers in place* - enabling citizens and businesses to benefit, by 2010, from convenient, secure and interoperable authenticated access across Europe to public services;
5. *Strengthening participation and democratic decision-making* - demonstrating, by 2010, tools for effective public debate and participation in democratic decision-making.

The literature on ICT for Government is vast and so few citations follow as a general reference - inclusive the conference proceedings of the annual EGOV-Conference Series: [6], [7], [9], [10], [11], [12], [13], [14], [15];

4. Evaluation - a Policy Goal Growing in Importance

In the above-mentioned objective of participation (item 5) the fact of growing interest in Public Governance is mirrored. Reason is that a permanent e-Transformation of Government has opened up entirely new ways for Public Governance. The term Governance encompasses all governmental tasks such as jurisdiction, legislation and execution (administration). One could also state this with other words: the whole scope of administrative action and the connected political processes.

Such a view is a cybernetic feedback model of governing: the “control cycle” includes democratic deliberation, policy formulation, citizen involvement, the execution of policies and evaluation. No wonder that particular issues have risen in appeal such as it is the case with evaluating governmental work. Here one may note the ongoing interest in awards and rankings. In some way ideas from the Sixties are recalled created by political cybernetics.

With a strong accent put on measuring the issue of good/best practice has grown in importance. In the EU substantial work in evaluation has been performed. It has been handled mainly within competitions because competitions are a usual way to find high quality candidates, which can be used as model. Just two examples: the Speyerer Quality Awards for German-speaking countries, eEurope Awards at the European level.

But the most famous competitions in eGovernment is the second mentioned one - eEurope Awards², which took place 2003 in Como³ and 2005 in Manchester⁴. In this line there is an ongoing eEurope Award competition to be presented at Lisbon⁵ in fall 2007. It has to be noted, that the aim of such competitions and awards exhibition is broader more than connecting model cases. They are valuable for networking, motivation, awareness building and knowledge exchange.

5. Process and Criteria for Competitions

This issue will be demonstrated on hand of the eEurope Awards in eGovernment. They have been set to recognise innovative initiatives in the field of eGovernment and to promote good/best practice. The eEurope Awards were organised by EIPA⁶ and meant competitions with a handling of several hundred cases. Best cases are identified by an independent panel of experts. So the 2005 competition required many remote evaluators, two consensus meetings reuniting a core jury quasi in conclave for some days and at the end a great event exhibiting fifty cases and declaring four winners. One of the authors has served in the expert team of both competitions.

Such competitions need a lot of effort but are sure to get visibility and recognition. These projects are also selected for exhibition and presentation during a prestigious Ministerial e-Government Conference⁷. The following evaluation criteria were applied: innovation, effective management, real practical results, impact, relevance and transferability.

As example for the criterion “relevance” the following facts earn high points: an innovative and ambitious approach to tackling a serious problem, an exemplary project development, accurate documentation, a sound engineering approach and compliance with significant e-Government-strategy goals.

The aspect “impact” some features can be clearly identified and qualified or quantified. First to speak on a qualitative basis one has various features: accountability, openness, transparency and accessibility to services, provision of information to citizens, etc. Also special features such as improved quality of life for specific user groups merits high marks. Such groups may include the disabled, the elderly, the unemployed, minority groups, low-income households, the young, the rural population, etc. Then, there are also quantitative measures. So for external impact one has to cite up-take, user feedback, satisfaction, while internal impact is given by factors such as resources, throughput, and claims statistics. Cost savings or having more time for clients stand for benefits realisation.

6. Problems in the Application of Model Cases

Presenting case studies is only the starting point but here a big rift opens – there is a big gap between publicity and visibility in competitions and actual usage of the cases. However, even though the concepts under-lying good practice solutions can be copied, their implementation takes place in a certain context. The context is shaped by the prevailing forces and institutional traditions of a given administrative culture.

² <http://www.e-europeawards.org/>

³ <http://europa.eu.int/idabc/en/document/1469/330>

⁴ http://europa.eu.int/information_society/activities/egovernment_research/minconf2005/index_en.htm

⁵ <http://www.epractice.eu/index.php?page=fix&p=3&menu=2>

⁶ The European Institute of Public Administration in Maastricht

⁷ Conferences on the eEurope Awards: 2003 Lake Como, 2005 Manchester.

In transferring knowledge several problems in arise. The following four aspects find special attention and they are considered in the subsequent sections:

1. Selecting model project cases suitable for the own project
2. Going ahead with organisational learning
3. Using several transfer mechanisms
4. Having a framework for insight in the feasibility of a project

7. Selecting Model Project Cases

Problems in selecting and using model cases occur - here some examples:

- Information resources: First tapping the available information resources is necessary. Commonly information comes as an abstract documentation such as information about existing projects. Examples are the eEurope Awards Competitions but also new practice compilation for e-Government established by the EU⁸. Here a word on the distinction between the notions Best Practice and Good Practice. Some say that only cases scrutinized in competitions deserve the adjective best, others are less strict. The authors think one can see this in a relaxed mode⁹.
- Selection of the right model project: This task is not an easy one, as users starts with a bewildering diversity of cases. There are many successful projects and they cover a wide scope. Glossy descriptions may fool you, quite often the decisive factors, which make a certain application a success in certain project, are not communicated along with the official documentations. So often it would be necessary to investigate which kind of influence a concrete project environment. Especially, no feedback on problems is given as people are afraid of telling about their mistakes in a project.
- Transferability: A model case is a project that provides a valuable and sufficiently detailed list of advice which can be given to others in e-Government. This criterion circles round the two questions: who can learn and what can be learned. Also differences in cultural, social and political backgrounds have to be considered in judging a model case.
- A general limitation: At this point a general caveat on the limits should be added – even having broad basis of model projects can not help in any case. Reason is that regarding model cases means backward-looking; in regarding the past one may miss the needs of tomorrow. As an example, the authors list some emerging issues that they see as underrated in present projects: using multimedia for citizen contacts; supporting negotiation, consensus-building and group decisions; systems handling emergency cases.

8. Turning to Organisational Learning

This means transferring knowledge quickly and efficiently throughout the organisation. Thus, knowledge is regarded quasi flowing in a continuous act and the ensemble of knowledge workers is involved:

- *The conference as catalyst*: In any case – the awards event per se provides an excellent learning mechanism. Many experiences at the conference on shared learning arise around e-

⁸ http://europa.eu.int/information_society/activities/egovernment_research/gpf/cases/index_en.htm

⁹ "Best Practice" can be seen as a terminus technicus for cases noteworthy to be studied as examples. In that view the notion "Best" ceases to be a real superlative, it may not even be an elative: only just technical speaking and some politeness.

Government diverse matters. This learning situation includes the attendees, the finalists themselves and a wider audience of professional specialists.

- *Participation of staff*: Achieving a good project design needs an active and broad involvement of the relevant actors. An open mind is important as well.
- *More learning than replicating*: Mere transposition is likely to fail. Designing individual systems cannot be substituted by copying successful projects. So feasibility of transferring is to be considered for each individual case. Ideally a model case study shows that the underlying principles can be adapted by others, may be used as inspiration and give a basis for further development.
- *Case studies spur learning*: Given these facts case study act as catalyst to bring in organisational learning. In praxis several modes of learning have to be blended comprising individual learning, learning by communication and the use of knowledge repositories.
- *Mere documentation will not suffice*: Personal expertise is sought after and the model case should offer some support. The capability of help and advice becomes important. Finally, the abstract concept of knowledge supply and demand may become concrete in personal working relationships. This is the case in such instances when mentoring is offered by experienced institutions.

9. A Range of Transfer Mechanisms

As a consequence of these considerations one sees that collections of model cases cannot be the unique transfer mechanisms. It is important to supplement transfer with several other transfer means such as:

- *Knowledge transfer conferences*¹⁰: Here institutions with high differences of experience come together; transfer from institutions with mature experience to those with less experience is intended. Such outspoken transfer conferences have a particular agenda: cases studies, good practice collections, policies and strategies for improvements.
- *Learning journeys*: They give participants the opportunity to explore first-hand innovative governmental programmes and their implementation – often in the form of organized on-site visits.
- *Vendor neutral transfer space*: Not to forget such activities as conventional professional seminars on. They are very efficient if a well-defined particular topic has to be learnt such as a new IT-tool.
- *Involving facilitators and mentors*: Human experience is a key factor. Facilitators and mentors can act either in a group (virtual and face-to-face) or in the relationship of twinning projects.
- *Twinning projects*: This is a rather particular mechanism involving a special relation between two institutions. This creates an intensive learning situation with the more advanced one acting as mentor.

10. A Framework for Deliberating Feasibility

In assessing a proposed application project a framework may help deliberating the feasibility in aspects. It puts a proposed system in the context of experiences gained from good practice. Here a

¹⁰ As an example the authors have organized the Eastern European e|Gov Days in cooperation with the Austrian Computer Society and Easter European Partners (Eastern European e|Gov Days in Budapest and in Prague).

list is given sketching some important factors of such a framework – for more details on the factors we refer our paper [5].

Firstly, objectives come in: Promoting the economy, Providing internet access, Offering services to citizens, Involving citizens in participation;

The list continues with factors on strategies: Having a vision, Change management, Develop strategic thinking, Adopting a holistic view, Involving the stakeholders, Cooperation with the actors;

Further the main elements come under consideration: Actors, Design decisions, Structures and resources, Funding, Technology, Legal setting;

11. On Conclusion Two Citations

We will conclude with two citations first quoting the official report [8]: The cases submitted for the 2005 Awards demonstrate that:

- The momentum for transformation of public services is still increasing;
- Re-organisation is at least as important as new technology;
- It is important to make sure that citizens and businesses are benefiting; and
- Quantification of benefits is possible.

The Commissioner Viviane Redings opened the Manchester Conference with the following sentence: “We are starting to see benefits from Europe’s investments in e-Government over the last few years, but we need to be more active in learning lessons from each other and getting the benefits of scale from adopting common approaches across borders.”

11. References

[1] EUROPEAN COMMISSION (EC), eEurope 2002, An Information Society for All: Action Plan prepared by the Council and the European Commission for the Feira European Council, Brussels: EC, <http://www.unige.ch/iued/wsis/DOC/436EN.PDF>, 2000.

[2] EUROPEAN COMMISSION (EC), eEurope 2005, An information society for all: An Action Plan to be presented in view of the Sevilla European Council, COM (2002) 263 final, Brussels: EC, http://ec.europa.eu/information_society/eeurope/2002/news_library/documents/eeurope2005/eeurope2005_en.pdf, 2002.

[3] EUROPEAN COMMISSION (EC), Facing the Challenge: The Lisbon Strategy for Growth and Employment. Report of the High Level Group chaired by Wim Kok, Brussels: EC, http://ec.europa.eu/growthandjobs/pdf/kok_report_en.pdf, 2004.

[4] EUROPEAN COMMISSION (EC), i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All, COM (2006) 173 final, Brussels: EC, <http://ec.europa.eu/idabc/en/document/5763/254>, 2006.

[5] GIEBER, H., LEITNER, Ch., ORTHOFER, G., TRAUNMÜLLER, R., Taking Best Practice Forward, In: Larson, C., Digital Government: Advanced E-Government Research and Case Studies, in print, 2007.

[6] GRÖNLUND, A. (ed), Electronic Government: Design, Applications and Management, Umea University, Sweden, IGI Publishing, ISBN: 1-930708-19-x, 2002.

[7] LEITNER, C. (ed), eGovernment in Europe: The State of Affairs, presented at the eGovernment Conference in Como, EIPA, Maastricht, 2003.

- [8] LEITNER, C. (ed) et al, Transforming Public Services: The Case for the eGovernment Awards, EIPA, Maastricht, 2005
- [9] WIMMER, M., SCHOLL, H.J., GRÖNLUND, A., ANDERSEN, K. (eds), Electronic Government. Proceedings of the 5th International Conference EGOV 2006, Krakow, Poland, September 2006, LNCS: #4084, 2006.
- [10] WIMMER, M., TRAUNMÜLLER, R., GRÖNLUND, A., ANDERSEN, K. (eds), Electronic Government. Proceedings of the 4th International Conference EGOV 2005, LNCS # 3591, Springer Verlag, Heidelberg et al, ISBN 3-540-28466-4, 2005.
- [11] WIMMER, M., TAMBOURIS, E., Online One-Stop Government: A working framework and requirements. In: Roland Traunmüller (ed.): Information Systems: The e-Business Challenge. Proceedings of the 17th World Computer Congress of IFIP in Montreal, Kluwer Academic Publishers, Boston et al, pp 117 – 130, 2002.
- [12] TRAUNMÜLLER, R. (ed), Knowledge Transfer for eGovernment. Seeking Better eGovernment Solutions, Schriftenreihe Informatik 20, Trauner Druck, Linz, ISBN 3-85499-177-0, 2006.
- [13] TRAUNMÜLLER, R.(ed.), Electronic Government. Third International Conference EGOV 2004, Zaragoza, Spain. August/September 2004, Springer LNCS #3183, Heidelberg, 2004.
- [14] TRAUNMÜLLER (ed.), Electronic Government. Second International Conference EGOV 2003, Prague, September 2003, Springer LNCS #2739, Heidelberg, 2003.
- [15] TRAUNMÜLLER, R., LENK, K. (eds.). Electronic Government. First International Conference. EGOV 2002. Aix-en-Provence. France. September 2002. Springer. (ISBN: 3-540-44121-2), 2002.