Barriers, Benefits and Conditions for successful implementation of E-Government solutions

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1. A bit about the ICT trends
2. Society needs versus E-Government
5. Challenges
6. E- services demands
7. Constrains, Benefits
8. Implementation Strategies for E-Government projects
9. Future?
What’s was going on?

Digital revolution:
• networks,
• client/server-technology,
• Internet

New terminology:
• new (digital)economy,
• e-government
• e-commerce,
• e-business, virtual market places,
Society needs vs E-Government

One Stop Shopping

Clients asks why they have to go to different organisations for the same topic →
Governmental Supermarket became necessary !!

E- Government

Realisation of ‘Supermarket’ by making use of ICT is realistic and possible

However, its requires enormous willingness, co-operation and co-ordination between different government organisations, and much more...

E-business is also difficult to define, for sure at the beginning, for any company or organization ...
How to define "E-Business"?
E- Government definition

- E-government is the transformation of public sector internal and external relationships through Internet enabled operations and information and communication technologies to optimize government services delivery, constituency participation and internal government processes. (Source: Di Maio, 2002)

- E-government involves a fundamental re-thinking of how technology can improve the very process of government.

It transforms the design and delivery of government services and the relationship with citizens / clients. Agencies must be able to embrace new approaches, which will allow greater flexibility to respond to government priorities and demands for new services.
Ranking of E-government in 2001 - Europe was getting far behind!

Table 1: E-government ranking – top 10 selected countries – 2001

<table>
<thead>
<tr>
<th>Country</th>
<th>% points against assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>57.2</td>
</tr>
<tr>
<td>Taiwan</td>
<td>52.2</td>
</tr>
<tr>
<td>Australia</td>
<td>50.7</td>
</tr>
<tr>
<td>Canada</td>
<td>49.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>47.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>46.9</td>
</tr>
<tr>
<td>Israel</td>
<td>46.2</td>
</tr>
<tr>
<td>Singapore</td>
<td>44.0</td>
</tr>
<tr>
<td>Germany</td>
<td>40.6</td>
</tr>
<tr>
<td>Finland</td>
<td>40.2</td>
</tr>
<tr>
<td>France</td>
<td>40.1</td>
</tr>
</tbody>
</table>


Sponsors of change:

Romano Prodi

Erkki Liikanen
The eEurope 2005 Action Plan from Seville European Council in June 2002 was aiming to develop modern public services and a dynamic environment for e-business. The eEurope 2005 Action Plan was a set of fifteen actions in order to achieve the specific objectives of eEurope and to speed up its progress.

EU i2010 eGovernment Action Plan Accelerating eGovernment in Europe for the Benefit of All, focuses on five major objectives for eGovernment by 2010:

- **No citizen left behind**: advancing inclusion through eGovernment so that all citizens benefit from trusted, innovative services and easy access for all;

- **Making efficiency and effectiveness a reality** – significantly contributing, to high user satisfaction, transparency and accountability, a lighter administrative burden and efficiency gains;

- **Implementing high-impact key services** for citizens and businesses - 100% of public procurement will be available electronically, with 50% actual usage, with agreement on cooperation on further high-impact online citizen services;

- **Putting key enablers in place** - enabling citizens and businesses to benefit, from convenient, secure and interoperable authenticated access across Europe to public services;

- **Strengthening participation and democratic decision-making** - demonstrating, tools for effective public debate and participation in democratic decision-making.
EU initiatives

Digital Agenda for Europe

Pillar I: Digital Single Market

Too many barriers still block the free flow of online services and entertainment across national borders. The Digital Agenda will update EU Single Market rules for the digital era. The aims are to boost the music download business, establish a single area for online payments, and further protect EU consumers in cyberspace.

List of actions:

- Action 1: Simplifying pan-European licensing for online works
- Action 2: Preserving orphan works and out of print works
- Action 3: Open up public data resources for re-use
- Action 4: Wide stakeholder debate on further measures to stimulate a European online content market
- Action 5: Simplifying the distribution of creative content
- Action 6: Protecting intellectual property rights online
- Action 7: Fix a date for migration to Single European Payment & eInvoicing
- Action 8: Revision of the eSignature directive
- Action 9: Updating the eCommerce Directive
- Action 10: Member States to implement laws to support the digital single market
Characteristics of IT systems for E-Gov.

- Interconnection
- Data integration
- E-services access
- Content management metadata.

Predominant features of specifications for e-Government:

- **Interoperability** – only specifications relating to interconnectivity, data integration, e-services access and content management metadata specified,

- **Market support** – specifications have to be widely supported by the market,

- **Scalability** – to changes in data volumes, number of users,

- **Openness** – specifications available to the public,

- **International Standards**.
**INSPIRE Directive** obligations to the EU member states

The Member States of the EU are obliged to establish and operate a network of the following services for the spatial data sets and services:

- **discovery services** making it possible to search for spatial data sets and services on the basis of the content of the corresponding metadata and to display the content of the metadata;

- **view services** making it possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay viewable spatial data sets and to display legend information and any relevant content of metadata;

- **download services**, enabling copies of spatial data sets, or parts of such sets, to be downloaded and, where practicable, accessed directly;

- **transformation services**, enabling spatial data sets to be transformed with a view to achieving interoperability;

- **services allowing spatial data services to be invoked**.
Any demand for E-government / E-Business / E-Services?

- **Already 10 years ago** in Australia 46% of people and > 57% companies make use of e-government services; grow ca. 30% per annum. Similar figures are coming from other countries.

- For 80% Internet users, e-government is the preferred form of access to government services.

- **The challenge** to broader based adoption of e-government services is addressing the barriers. There are still key barriers as; use ability of websites – navigation, incomplete information; visibility and discoverability - finding government services, poor search capability; and online security and privacy.
Any demand for spatial and legal E-services?

Kadaster

In 2006 EC rewarded the NL Kadaster-On-Line (KOL) with the eEurope Award for e-Government 2005 in the category Service Use: citizens and businesses in the center.

Some new figures:
- From 40,000 to >100,000 requests per day,
- From 5000 to > 10000 subscribers
- New type of Clients (e.g. RE Developers, Bailiffs, etc. but also...Tattoo shops, day-care centers for kids, etc.!

Very successful example of NL Kadaster-on-line!
E-technology Development Stages

- **1. Information Level** (E-mail, brochures)
- **2. Marketing** (More Info, Simple Search, Support)
- **3. Business Level of E-commerce** (Interactive Sales, Self-service applications, Marketing, Safe Transact.(billing), E-Communities), services through the WEB)
- **4. New Business (E-B)** (Primer company processes changed by E-B; Full E-Integration: Client <-> Supplier, Client <-> Various institutions(Register), Intermediate functions)
In order to develop broader and more integrated e-government services, agencies must better understand how ICT capability can support their business outcomes. Current management tools and practices usually need to be updated to support this integration.
Recommended Implementation Cycle

- Management Control
- Policy
- Monitoring & Evaluation
- Programs & Plans
- Organisation & execution

E-government Implementations cycle
Various Challenges

- 60-70 % of IT system developments are not successful
- Short development times
- Complexity of the systems
- Various “blood types” by involved organizations
- Lack of professional IT resources
- Overall paper oriented culture
- **Administration boundaries** between parties involved, possible lack of cooperation with external stakeholders
- **Challenge in the re-engineering of the business processes** (80% of profit in this type projects comes from re-engineering, 20% from direct automation)
- Are the stakeholders ready for the proposed solutions?
Potential Barriers

The following are potential barriers in the development of e-services to businesses. How important a barrier are they in your organisation’s opinion?

<table>
<thead>
<tr>
<th>Potential Barriers</th>
<th>Important</th>
<th>Less important</th>
</tr>
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<tbody>
<tr>
<td>Lack of access for SMEs</td>
<td>61%</td>
<td>71%</td>
</tr>
<tr>
<td>Lack of skills of enterprise employees</td>
<td>52%</td>
<td>63%</td>
</tr>
<tr>
<td>Lack of skills amongst administrative staff</td>
<td>63%</td>
<td>69%</td>
</tr>
<tr>
<td>Concerns about security and confidentiality</td>
<td>91%</td>
<td>94%</td>
</tr>
<tr>
<td>High technology set-up costs</td>
<td>69%</td>
<td>63%</td>
</tr>
<tr>
<td>High technology running costs</td>
<td>63%</td>
<td>56%</td>
</tr>
<tr>
<td>Lack of political will and drive</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Lack of co-operation between administration departments</td>
<td>71%</td>
<td>44%</td>
</tr>
<tr>
<td>Resistance to change within administration</td>
<td>64%</td>
<td>81%</td>
</tr>
<tr>
<td>Lack of tangible benefits</td>
<td>49%</td>
<td>66%</td>
</tr>
</tbody>
</table>

Difficulties by E-business

- **Infrastructure is usually available, but the organisations are not (yet) ready for it**

- **It is not only an additional operational business tool, but it requires the mental change of business philosophy by actors involved - therefore is difficult to apply in practice**
Constrains and barriers to use E-technologies from the Users perspective

There can be a number of inhibitors and barriers to use of online services, like the following:

• **use ability** – too many pictures making pages slow to load, ineffective search tools, poor information structure, complexity of site structure, unfriendly terminology and inappropriate service grouping;

• **technology** – such as computers freezing (*browser incompatibility, loading problems*) or the need to download tools, such as Adobe Acrobat, to access services;

• **discoverability / visibility** – including general lack of visibility and *need for promotion* of availability of government services online;

• **skills and/or culture** – the ‘fear factor’, lack of understanding of what’s available, *complexity of finding information, uncertainty about the cost* of using services (either direct or indirect), and loss of control or use the technology;

• **security and privacy** – fear that government is ‘spying on them’, *fear of ‘spam’* from providing email address, *insecurity around passwords*, not wishing to have *history* retained, un subscribing is too hard, and too many passwords needed;

• **for regional users** – slow or unreliable connection, the cost of computers, libraries only being able to provide limited access; and

• **for the indigenous community** – computers not being located where people need them.
Benefits of E-Technology

- The most obvious benefit of e-technology is improving the service to people/clients.

- E-government can also save customers money in the form of faster, easier and more convenient service, better quality and reduced turnaround times, and in some cases a reduction in the direct cost for the service. Ca. 45% had saved money by using e-government. Australian study identified that 10% of people, and 23% of businesses had saved more than $25 per transaction.

- There are also many social benefits valued by citizens including increased community skill and knowledge, and new business and work opportunities.

- E-government can also deliver cost savings to Agencies in the form of speedier transactions and lower (staff) costs.

Potential Benefits

What are the most important benefits you draw from government websites/electronic services for the day-to-day running of your enterprise?

<table>
<thead>
<tr>
<th>Benefit</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved administrative transparency</td>
<td>29%</td>
</tr>
<tr>
<td>Easier access to information</td>
<td>74%</td>
</tr>
<tr>
<td>Can have access to services and information from other Member States</td>
<td>54%</td>
</tr>
<tr>
<td>Facilitates cross-border activities in the European</td>
<td>43%</td>
</tr>
<tr>
<td>Can have access to services at any time</td>
<td>57%</td>
</tr>
<tr>
<td>More efficient than paper methods</td>
<td>34%</td>
</tr>
<tr>
<td>Cost savings</td>
<td>49%</td>
</tr>
<tr>
<td>Requires less staff</td>
<td>11%</td>
</tr>
</tbody>
</table>
Benefits from an Agency point of view

Figure A2.2: Program contribution to benefits – agency view

- Improved service levels
- Reduced costs to citizens
- Public safety
- Improved professional dev.
- Improve community skills
- Improve environmental mgmt.
- New business opportunities
Do we know finally what the E-business does it means for our organisation?

- **R. Junqueiro:**
  - “If you think that the E-business will not affect your organization you’re a fool
  - If you think to know exactly what kind of impact will the E-business have, you’re even a bigger fool”

..Therefore it is difficult to forecast the future..., but at least, we need to be ready for ... the change
Factors affecting benefit realization

Fully realizing the planned benefits and achieving further benefits of e-government require a focus to address factors that will potentially negatively affect benefit realization.

These factors can be the following:

- **measuring and managing benefits** – without a formal regime that includes measurable outcomes, metrics, baselines and accountabilities.

- **articulating clear and achievable benefits** – ability to clearly articulate and communicate the target benefits to own agency and extern stakeholders – and include them in business cases – become increasingly important;

- **managing online complexity and user access** – there is potential for a reduction in benefits because of perceptions about access to and useability of government online programs; and

- **public trust in government online services** – people indicated that, overall, their level of confidence in the security offered by government websites is and must be high or very high.
Various lessons learned

From the case studies it can be concluded that an Agency e-government programs are successful when:

- **executive-level support** has been obtained from the CEO and senior agency staff;
- **agency staff are committed** to the broader concepts of e-government;
- **people wish to deal with government through a variety of channels**;
- **potential awareness** is heightened by promoting the availability of online programs to people;
- **legislation and authentication issues** must be resolved – in some cases, existing legislative requirements in relation to digital signatures are inhibiting development of online initiatives;
- **models for effective inter-agency collaboration** (Registers Integration) should be built and proven; and
- **momentum is maintained through better integration** of enterprise, work, information, application and technology architectures with and among agencies.
Benefits summary

- Improves efficiency of organisations involved
- Decreases the costs
- Creates better customer service (Clients satisfaction)
- Speeds-up the processing of requests (requires BPR and change of organisations)
- Offers the opportunity to avoid data duplication (cost reduction)
- Leads to better standardization
- Creates new products and services
Check list for successful E-Gov. implem.

There is no any checklist that will guarantee 100% success of E-government project development and its implementations, and it will be never available. However, it is important to follow the **10 important conclusions**:

1. There are “many ways how to go to Rome”, 1:1 copy of any good solution does not guarantees the success somewhere else.

2. **Redesign of the working processes** - it is a must, otherwise “the low paper efficiency → low digital efficiency”

3. **Transparency, Knowledge sharing**: learning from own and others mistakes, open communication channels, clear definitions of task and responsibilities, etc. are very crucial elements.

4. **Users/employees involvement**: Involvement of right people from own organization and from the external users is a key element of (also financial) success; The new technology will be very expensive if nobody is waiting for it or will use it!!

5. **Use of the standards**: The interoperability of systems, procedures, solutions, and technologies must be always one of the important process goals. **Also the technical standardization**, like XML, network interfaces and organizational standardization aspects in the project management, strategies, etc. are key success factors.
Check list for successful E-Gov. implem.

6. **Co-operation, Co-operation, Co-operation,**...; E-systems have impact not only on one project, one department, etc. they involve usually the broad scene of various organizations. The **co-operation is also then a key element of a success for improvement of all administrative processes.**

7. **Financing;** There is no ideal financing model for development and implementation of this kind of projects, especially in the public sector. **Business plan, incl. financial part, evaluation of risks and benefits, HRM needs, involvement of “committed group”, etc. are the crucial aspects for financial success.**

8. **ICT Technologies** – these **technologies requiring** applying the **“serving the user principle”;** Also during the system development process; The users need to have easy access to all possible information, e.g. via helpdesk, info-line, etc.

9. **Training of employees/users;** Without a proper user training introduction of any all new technologies will lead to a fiasco. Only well-trained staff is able to evaluate up coming problems, solve them and improve the whole process.

10. **Necessary investment in marketing;** *“Try to image that we are building a virtual city, but nobody settles there”,* there are hundreds of very good ICT projects but nobody knows about them! Therefore, E-Gov. projects need to have sufficient budgets not only for the staff training but also for so-called “public relation” matters!!
Finally

But within this environment sometimes ...
What's next in E-development ??

Using these kind of E-techniques we may communicate even with …

... the God

Who Knows...?
Pen Picture of Author

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