



BACKGROUND PAPER:

IMPLEMENTING E-GOVERNMENT IN OECD COUNTRIES:

EXPERIENCES AND CHALLENGES

E-GOVERNMENT

Introduction: the case for e-government in OECD countries

1. E-government is defined by the OECD as “the use of information and communications technologies (ICTs), and particularly the Internet, to achieve better government” (from OECD The e-Government Imperative, 2003). This definition focuses attention on why countries are implementing e-government rather than on the ICT tools themselves. Faced with the pressure of increasing government performance while being responsive to citizens needs, OECD countries have realised that e-government goes beyond the simple exercise of putting information and services online, and can be used as **a powerful instrument to transform the structures, process and culture of government and make it more efficient, user-oriented and transparent.**

2. OECD countries have identified a number of reasons for embracing e-government as a means of reforming public administration and achieving broader policy objectives. E-government can help improve efficiency in government and improve online access to information and service quality, enabling the delivery of services to citizens and businesses on their terms and at their convenience, rather than following the logic of internal government structures.

3. E-government acts as a driver in speeding organisational change, including facilitating greater teamwork, flexible working arrangements and remuneration, and enhanced knowledge management practices. E-government can also help build trust between government and citizens, by enabling citizen engagement in the policy process, promoting open and accountable government, and helping to prevent corruption.

4. E-government can help achieve specific outcomes in key policy areas (e.g. online information can help boost use of an educational or training programme) and ICT is expected to contribute to broad policy objectives (e.g. the use of ICT can contribute to other economic policy objectives by reducing government expenditures through more effective programmes, improving business productivity through administrative simplification, and promoting the information society and ICT industry).

Challenges to e-government implementation: experiences from OECD countries so far

5. While e-government has emerged as a powerful tool for modernising government and achieving the goals set in governments’ reform agendas, its implementation has posed a number of challenges, both internal and external, for countries that are committed to grasping its benefits. **This section looks at the challenges that OECD countries have had to face and solutions that have been implemented to overcome them.**

6. **External barriers** to e-government often concern breakdowns, missing components, or lack of flexibility in the government-wide frameworks that enable e-government. These barriers cannot be overcome by agencies alone, but need to be resolved through concerted efforts from other actors (e.g. in central administration). The result of these barriers can be an inability to achieve a whole-of-government perspective in e-government implementation. 1) *Legislative and regulatory barriers*, 2) *financial barriers* and 3) *digital divide* can impede the uptake of e-government.

7. The success of e-government initiatives and processes are dependent on government’s role in ensuring a proper **legal framework** for their operation. The lack of legal equivalence between digital and paper process can impede the take up of e-government. As of 2005, 28 of the 30 OECD countries have passed legislation recognising digital signatures, though a much smaller number have actually introduced

legislation beyond a pilot phase. Most OECD countries have committed to breaking up such barrier by removing the legislative obstacles that impede e-government development.

Box 1. Recognition of e-government processes in Norway

The Norwegian Government has taken an active role in setting up a legal framework for e-government implementation by breaking up legal and regulatory barriers to the provision on online services. These initiatives build on a tradition of rigour in legislative simplification, and extensive review and repeal of laws and regulations in order to simplify and reduce administrative burdens imposed on citizens and businesses. Through the *eRule Project*, the Government, has undertaken a review of all laws and regulations in order to identify and remove obstacles to electronic communication. A number of amendments to the Public Administration Act have been introduced to allow the recognition of electronic documents and adoption of electronic business processes in government (e.g. electronic notification of administrative decisions after gaining approval from the recipient). As a result of legislative amendments, the word “written” as an administrative requirement for communication is now interpreted as a technologically neutral term, encompassing both electronic and paper forms.

Source: E-Government Studies: Norway (2005)

8. Looking at the OECD countries’ experience also shows that the complexity and lack of clarity of regulations and requirements on agencies can be a major barrier for e-government, as they increase the cost for agencies to collaborate and join up information and services. Another barrier is the presence of existing public management frameworks based on the assumption that agencies work alone (e.g. in terms of performance management, accountability frameworks) which can also act to inhibit collaboration and information sharing between organisations. Finally, privacy and security legislation and practices need to be put in place before online services can advance.

9. In many OECD countries existing **budgetary arrangements**, which are based on vertical or silos funding structures, act against efficient e-government. While they provide financing for individual projects, they do not recognise the specific need of certain e-government projects, especially those involving long term funding requirements and collaboration across agencies. In OECD countries a number of solutions have been taken to encourage horizontal collaboration going from provision of central funding (Canada) to co-ordination of funding resources (Italy).

Box 2. Breaking up budgetary barriers: examples from Canada

In Canada, as part of the Government Online Initiative (GOL), central funding has been used to support horizontal co-operation among federal departments and extends into other jurisdictions. The ability to transfer incremental funding into departmental accounts has permitted the government to look for collaborative opportunities, sometimes more complicated and expensive up front, but which clearly promise an eventual return on investment stemming from the savings achieved by offering some common solutions, systems and infrastructure to link departments that need them. It has also allowed the government to insist on high standards of documentation, governance and reporting. The centralised approach has accelerated the successful delivery of Internet-based services, including in departments where tight discretionary budgets did not allow for the early introduction of such capabilities. There is now a large and growing network of key personnel who co-operate outside of departmental boundaries and stimulate the efficient sharing of best practices, technical tools and key lessons learned.

Early projects were carefully screened by interdepartmental review committees and successful projects received appropriate central funding. In most cases, this central funding covered only part of the project’s total cost, with the balance contributed by sponsoring departments and their contributing partners.

Source: The e-Government Imperative (2003)

10. OECD governments are also increasingly required to base their investments and organisational decisions on evidence of value rather than on unproved assumptions. Demonstrating the “business case” for e-government and assessing the return on investment has become essential to justify the

implementation of e-government initiatives. Experience in OECD countries has shown that, while few countries have started measuring the benefits for e-government to governments and users (e.g. citizens and businesses), those who have (e.g. Australia and US) report positive outcomes. OECD countries currently utilise a variety of methods to evaluate e-government projects, including both economic and non-economic assessments methods (such as benchmarking and capacity assessment). Despite the differences in methodology, there is a consensus that more cost benefits analysis of e-government can help better target scarce funds, build support and political will for e-government and decrease the risk of failure.

11. The **digital divide** is an important barrier to e-government, in that people who do not have access to the Internet will be unable to benefit from online services. In OECD countries a growing number of people have access to the Internet, but there are still large numbers who do not. Governments in OECD countries have implemented a number of policies to break up the digital divide, including those focused on increasing access and marketing of online services, and strengthening ICT education and skills.

Box 3. Current strategies to reduce the digital divide in Mexico

The Mexican government clearly recognises the importance of reducing the digital divide, and the e-Mexico initiative is helping to improve access to ICT, particularly in remote and rural areas. The government is making a considerable effort to target the digital divide by creating additional Digital Community Centres across the country. These Digital Community Centres are targeted towards people, who do not have access to ICT, and they provide assisted access to the Internet as well as information on education, health, economy and government at all levels. Among the services available at the Centres are information about governmental transactions, job vacancies and general information from federal agencies. The fact that these Community Centres are facilitated is important, as it allows people to use the Internet regardless of their education level and local language.

In addition to the facilitated provision of services, one of the stated goals of these Centres is to “empower entire communities through the use of ICT”.¹ Users can also interact directly with one another, trading and sharing experiences and solutions to problems through the formation of citizens’ networks without government mediation. The e-Mexico initiative provides a large number of digital community centres, and there were 3200 such centres in 2003, 7200 in 2004, and the government hopes to have 10,000 of them by 2006.

Source: OECD E-Government Studies: Mexico (2005)

12. Breaking up external barriers and establishing an overall framework is an important step in meeting common e-government challenges. However, experience from OECD countries shows that a number of important **internal challenges** to e-government implementation remain even once all of the appropriate frameworks are put in place. These challenges involve ensuring that a common understanding and sense of mission is shared across all levels of government and ensuring the necessary leadership to accomplish this. It also requires improving co-ordination and collaboration, clarifying public private partnerships, ensuring that government officials have the necessary skills and tools to carry-out their mission, monitoring and evaluating success, and engaging in partnership with the private sector.

13. A common **vision** is essential to e-government as a means to engage and co-ordinates agencies and gain support from political leaders. In OECD countries, most organisations have a vision statement that is either linked to political commitment at a higher level or is dependent on a general manager or the head of an ICT unit with sufficient determination and resources. Experience from OECD countries indicates that a government-wide vision helps to tie e-government initiatives to broader strategic and reform objectives. It can help promote inter-ministerial co-ordination, ensure balance and fairness, and help to stay the course over a number of years. In order to be understood and accepted throughout the organisation, the vision needs to be communicated across government.

¹ Ministry of Communications and Transportation and e-Mexico National System: www.e-mexico.gob.mx.

14. The development of e-government in OECD countries demonstrates that having a vision is not sufficient to ensure the success of initiatives. **Leadership** is needed at all levels of organisations to translate the vision into programmes and action plans, to motivate people, to create incentives and opportunities for change, and to encourage collaboration and ensure co-ordination of initiatives. In some OECD countries political leadership has had an important role in shaping and backing e-government initiatives, and ensuring high level co-ordination of e-government.

Box 4. Korea: the role of the leadership in e-government

Until recently, individual ministries in Korea had carried out the implementation of e-government without any co-ordination among departments. After an initial phase of uncertainty due to internal resistance to change, a non-standing committee with both government and non-government members was created and co-chaired by a civilian member and the Senior Secretary to the President for Policy and Planning. The committee met the requirements of ministries, in particular the Ministry of Information and Communication and the Ministry of Government Administration and Home Affairs who had previously debated its optimal structure.

The committee became the key e-government co-ordinating body. The committee's ability to bring about inter-departmental co-operation largely depended on the leadership role of the President, the powers afforded it to co-ordinate between ministries, the personal networks of the committee members and the goodwill and integrity of members. Its non-threatening status and overarching role facilitated early progress, which also led to greater respect and participation from ministries. In Korea, high-level leadership has enabled the committee to stand above ministerial conflicts and promote an environment of co-operation.

Source: The e-Government Imperative (2003)

15. Experiences from OECD countries demonstrate that agencies providing e-government services cannot operate in isolation and **co-ordination** is needed for successful e-government implementation. Until recently, e-government initiatives in many OECD countries were driven by individual agencies and ministries within government seeking solutions to help meet their individual mandate. This was a positive development, since it led to the wide digitisation of information and services, but it also raised new challenges. The cross-cutting nature of e-government requires central commitment to ensure co-ordination of action to ensure interoperability, avoid duplication, ensure coherent action in a range of crucial areas, such as security and privacy protection, and provide the framework and capacity for seamless services. Experience in OECD countries shows that governments have increasingly moved from considering e-government as a single function of government to recognising the need for mainstreaming e-government into overall efforts to improve government (e.g. in Australia AGIMO, a semi-autonomous body responsible for e-government has recently been incorporated in the Federal Department of Finance and Administration to strengthen e-government co-ordination).

16. Whole-of-government structures can play an important role in steering and co-ordinating e-government implementation across government, in providing a framework for collaboration across agencies, and in keeping e-government activity aligned with broader public administration agendas. Approaches that have been adopted include committees of agency heads and senior officials. The roles of such body vary, from purely advisory and information sharing, through to policy development and implementation oversight.

Box 5. Ireland: peer review as a co-ordination mechanism

To ensure co-ordination and implementation of the e-government agenda across all departments and public agencies, a series of instruments has been put in place. A high-level cross-departmental group of senior officials (Assistant Secretaries from the Information Society Implementation Group) promotes and monitors the e-government process across the Irish public sector.

Source: The e-Government Imperative (2003)

17. Seamless government services require different agencies to work closely together. OECD countries have taken a number of steps to improve **collaboration** in the delivery of e-government services. At the level of information provision, for example, agencies have started collaborating for the establishment of online government portals. In OECD countries the challenges in the move to a multi-channel delivery strategy are pushing agencies to move from technical collaboration to co-ordination based on all-of-government business and ICT architectures, service delivery policies and standards, content development, and the co-ordinated acquisition of ICT services and equipment.

Box 6. Wilma: Information System for processing migration cases in Sweden

Wilma, the Web-based Information System Linking Migration Authorities, is a new IT support tool shared by Swedish authorities involved in processing migration cases. These authorities are the Migration Board, diplomatic missions (embassies and consulates general), the police border units and the Aliens Appeals Board. The purpose of Wilma is to process information concerning individuals, cases, documents and decisions. IT support allows it to embrace the entire chain, from application for a visa or residence permit at the diplomatic mission to a decision in the case and any appeal. IT support will also promote more efficient monitoring of entries and exits.

The development of Wilma is part of the broad changes aimed at rationalising the multi-authority process affecting the work of diplomatic missions. The improvement involves a basic strategy for applying a holistic approach to developing process-oriented methods. In addition to IT support, the new measures include the development of various forms of collaboration, skills development, strengthening of resources in the form of migration officers posted overseas, a central help desk, improved information, improved follow-up, etc.

Source: The e-Government Imperative (2003)

18. OECD countries have realised that developing **human capacity** and skills are essential to support e-government development. ICT skills are not only needed to ensure e-government development, but have become a new general skill, like literacy and numeracy, and governments have implemented a range of policies to promote the acquisition of basic and advanced ICT skills across the society.

19. The **skills** required for e-government are not simply technical, as general managers need broad skills to engage in e-government decision making. Necessary skills include a basic technical understanding (IT literacy), but also an understanding of information management and the information society. Managers must be able to lead (and not to be led by) the organisation's IT department and outside partners, and must be able to integrate the organisation's ICT strategy with its broader goals. A major challenge in OECD countries is to overcome the view, still held by employees and managers, that e-government skills are technical matters best left to specialists. OECD governments have made efforts to identify skills gap and put forward policies to strengthen skill assessment and development across government.

Box 7. UK: eEnvoy and information skills map

The Office of the E-Envoy in the United Kingdom has outlined a skills map as part of the UK Online Strategy to prepare UK government agencies for e-government adoption. The E-Envoy has defined seven areas for skill development: leadership, project management, acquisition, information professionalism, IT professionalism, IT-based service design and end-user skills.

The E-Envoy has produced a skills assessment toolkit to determine the e-readiness of each agency. The toolkit has been used for departments' self-assessment to gain an understanding of the skills required for planning, implementing and delivering e-government services. The assessment identifies the skills available internally through in-house technology and information professionals and identifies skill gaps that may need to be addressed by expanding staff or outsourcing.

Source: E-Government Imperative (2003)

20. **Engagement with private-suppliers** has been an integral feature of government use of ICT. OECD countries have realised the benefits of public-private partnerships such as access to skills and products and sharing of financial risk associated with large IT projects. However, the more comprehensive and innovative the partnership arrangements, the greater the likely challenge to existing frameworks. OECD countries' experience indicates that there are a number of challenges governments have to face in partnering with the private sector, such as balancing the flexibility of the partnership arrangements and the preservation of the accountability towards citizens, defining and ensuring the control on output specification, building up the capacity for managing such partnerships. The experience from OECD countries shows that, while progress has been made, these challenges can still present important barriers to successful partnerships.

Box 8. Denmark: Innovative partnership arrangements

There is limited experience with digital projects in public-private partnerships in Denmark. Therefore, both the public and private sectors have been interested in discussing together what is important for forming a successful partnership. Public-private partnerships are often used for complex projects in which knowledge from both the public and private sectors needs to be combined. While the goal must be clear from the start, the solution is most likely to be developed in partnership. This is a challenge and requires both the private and the public organisation to be ready to engage in a close partnership.

The dialogue has led to a joint document, which emphasises three themes:

1. The importance of managerial involvement in setting the project goal, clarifying existing work processes, deciding the space for restructuring and ensuring an overall efficient set-up.
2. The need to improve the efficiency of the public sector. It is important to establish a business case in order to get return on the investment. Furthermore, it is essential to agree on common goals and get the incentives right to achieve them, internally as well as for the partner.
3. To have the necessary flexibility to develop the solution, it is important when calling for tender and writing the contract not always to indicate a specific solution for the project but to concentrate on essential goals and requirements. The use of options can give the flexibility necessary to change that results from an ongoing dialogue.

Source: OECD E-Government Imperative (2003)

Looking at the future: e-government and transformation

21. The old certainties (i.e. "more online services are always better") are today replaced by more difficult and complex challenges that OECD countries have to face in realising the benefits of e-government. E-government has to move on from being a disruptive change driven by central or specialist groups to being intrinsic to the way governments work in the future. OECD countries have identified a number of challenges that governments currently need to address in order for e-government to deliver on its promise of better government.

22. OECD countries have realised that better government is simply more user-focused e-government where services and interests are aligned with citizens and business' needs. In bringing this vision of government closer to users, governments may need to re-think government organisational structures and processes in order to better meet individual needs and realise efficiency at whole-of-government level. At the same time, user-focused e-government will require ensuring that users are able to interact with government at their convenience regardless the channel they use. The OECD forthcoming report, E-Government for Better Government will look at these challenges and on how countries are coming to look at ICT use in government as being a **tool for better government**, taking into account the lessons that OECD countries have learned as they have pioneered e-government initiatives.

23. The challenges OECD countries have to face represent the different steps in the **transformation** of government through ICT. The OECD uses the word “**transformation**” to indicate a more holistic view of government where agencies think and act beyond traditional organisational and service boundaries in order to be able to address the needs and concerns of users of government. In this model, information flows, rather than hierarchies, determine how services are delivered. Processes across governments are aligned, interoperable and efficient. Services are tailored to, and anticipate the needs of users. Information is secure and reused rather than repetitively collected.

24. This world does not yet exist, but multi-channel service strategies are beginning to establish service and enterprise architectures that demonstrate the role that ICT can play in enabling better communication across government, increased data interchange, and simpler and more efficient use of information regardless of how services are provided. This nodal form of government, supported by changes in cultures and attitudes, holds great promise for better government and provides an ideal against which to measure current e-government efforts in OECD countries.

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