The Government Executive Series

eGovernment Leadership: Engaging the Customer



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foreword

This report is the fourth in our eGovernment Leadership series. Since the publication of our first report in 2000, the eGovernment landscape has changed significantly. We have seen the initial promise of eGovernment evolve into sophisticated visions which have resulted in government services being made available online. Our report has also evolved to keep pace with these changes.

In this report, eGovernment Leadership: Engaging the Customer, we aim to help government leaders chart their future paths more effectively. Drawing on a broader and deeper base of research than ever before, we map out the current eGovernment landscape—a picture far different than 12 months ago. Administrations are now asking the question, "What does it mean to be effective in eGovernment?" There is broad adoption of the view that the real value in eGovernment is that it helps the government deliver enhanced services to citizens and businesses.

In our 2002 report, eGovernment Leadership: Realizing the Vision, we identified the tendency to treat citizens and businesses like customers and to introduce Customer Relationship Management (CRM) techniques to government service delivery. This year, we saw the trend expand. Government executives are becoming more comfortable with the use of the term "customer" and the fact that the principles of CRM apply to their organizations. In fact, we take the idea of the relationship between CRM and eGovernment a step further in this report: CRM principles form a basis for sound eGovernment.

The goal for eGovernment now is to tailor service delivery to meet citizens' needs, as opposed to approaching it from the government side. At the same time, there is growing understanding among executives that the services offered through eGovernment should be those that deliver the greatest value to citizens and businesses. As a result, governments are becoming more critical in determining which services should be online.

In order to deliver the highest value services online it is essential to pursue four phases of action—first, identifying the right services for the right customers; second, making sure the targeted services are implemented properly; third, ensuring they are being used; and, finally, measuring success within clear parameters.

Improvement in eGovernment services will not come easily for many countries. The measures of success demanded by increasing eGovernment sophistication are much more difficult to implement and track than the traditional availability targets. Moreover, with significant investments being made in eGovernment programs, governments face the considerable challenge of improving take-up of online channels to justify their investment in them.

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Accenture has mapped the international eGovernment landscape for four years. The goal of our eGovernment Leadership Report series is to describe global trends and to provide recommendations for improving online services and delivering innovative solutions. We have seen significant changes during that period.

Just as eGovernment has changed during that time, our approach has also evolved. We have introduced additional avenues of research to continue to provide the most valuable information to our government audience. We have moved from a straightforward ranking of countries on quantitative measures alone in our first year, to last year's inclusion of both quantitative and qualitative research.

This year, we have expanded our data sources to develop our most detailed report to date on global eGovernment. We have augmented the foundation of our research—a quantitative assessment of the quality and maturity of services for both citizens and businesses available through 22 national governments—by assessing additional services. We have expanded the scope of our background research, introduced last year to provide a context for

the results and inform our understanding of eGovernment trends. For this report we have also introduced a qualitative research program into Customer Relationship Management (CRM) trends, to reflect the growing convergence in thinking about CRM and eGovernment among government executives. (Detailed information on the methodology for these components can be found in the Appendix.)

We have gathered the results of all of this research and our analysis into a four-part report. The first section presents our five key findings—the biggest trends we see emerging in the eGovernment landscape.

First, we found that eGovernment progresses through a series of levels, with improvement required year on year just to keep pace with the rest of the world. As governments reach the top of a maturity stage, they hit a plateau, where further progress based on the current course of action is impossible. Moving to a higher stage of maturity requires more than this incremental progress. Governments that do not rethink their eGovernment strategies to focus on ways of adding value will find that their progress has stagnated and they may be overtaken by other more nimble countries.

executive summary

Our second finding is that value is now driving eGovernment visions. Leading governments are emphasizing the need for their eGovernment programs to deliver an earlier return on their investment, through greater service effectiveness for their customers or increased internal efficiency.

Our third finding is that CRM underpins eGovernment. We discovered a growing convergence in thinking about CRM and eGovernment among government executives. As governments rethink their strategies to focus on delivering value, they must also create a customer impact. Administrations are increasingly applying the principles of CRM in their eGovernment initiatives, as a way to reorganize online service delivery around customer intentions.

Our fourth finding is that increasing take-up is a priority. The potential benefits of eGovernment—improved service, greater efficiency and potential cost savings—will not be realized if usage of the services is low. Governments are finding themselves confronted with the challenge of low usage and the need for innovative methods of driving take-up. There is a push to break through take-up thresholds; once a certain critical amount of business is transacted online, rapid take-up is possible and real benefits then accrue.

Finally, our fifth finding is that new eGovernment targets are needed to match the new objectives of the programs. Governments are discovering that meeting the service availability targets they have set for themselves in the past does not necessarily correlate with meeting their current objectives of greater effectiveness and efficiency from their eGovernment programs.

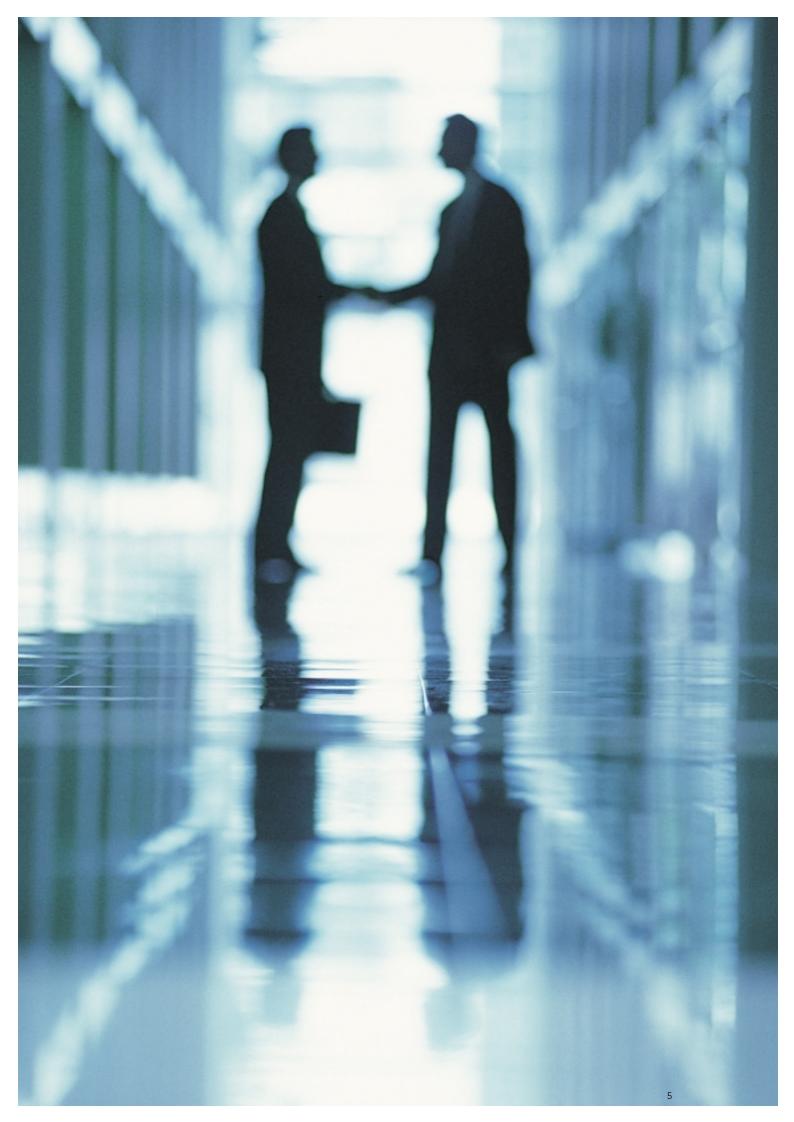
In section two of this report, "The Way Forward," we present our recommendations for each step of a successful eGovernment program. To move forward

in light of these findings, governments must pursue four phases of action—identifying the right services for the right customers, implementing services properly, increasing take-up of services and measuring success. These recommendations are based on leading practices we saw in individual countries, as well as Accenture's own experience with clients delivering innovative eGovernment solutions. Taken together, they provide a map for developing an eGovernment program that delivers return on investment.

In section three of this report, "Innovative Practices in eGovernment," we outline leading practices from across five different industry types we surveyed: Revenue and Customs; Postal; Human Services; Immigration, Justice and Security; and Education. These best practice examples highlight what can be achieved. Government executives facing comparable challenges can learn from the successful initiatives of their international counterparts.

Finally, we conclude the report with individual overviews of the state of eGovernment in each of the 22 governments we surveyed, drawing together our results and conclusions in the context of each country.

Our aim in this approach is not just to describe the international eGovernment landscape but to help government leaders chart their future paths more effectively. We provide our recommendations for delivering innovative eGovernment solutions based on our work with clients and examples of leading practices we have seen. We hope this report will guide governments in their efforts to advance their eGovernment programs to the next level of maturity.





The eGovernment landscape has changed significantly in the 12 months since our last report. Leading administrations are no longer focusing on getting as many services online as possible. They are now asking what worthwhile eGovernment means. Governments have broadly adopted the idea that online services must deliver a return on investment. They realize that the critical benefit of eGovernment is improved service delivery. eGovernment has to create a customer impact.

Our objective was to identify the progress governments have made in the past 12 months in bringing their visions to life, to identify who the new leaders are, to find which countries were making the greatest progress and why, and to highlight the trends emerging in eGovernment. Our approach of integrating multiple streams of research data—both quantitative and qualitative—has given us a more comprehensive picture than ever before of the true state of global eGovernment today.

Five key findings emerged from our research:

- eGovernment matures through a series of plateaus.
- Value drives eGovernment visions.

- CRM underpins eGovernment.
- Increasing take-up is a priority.
- New eGovernment targets are needed.

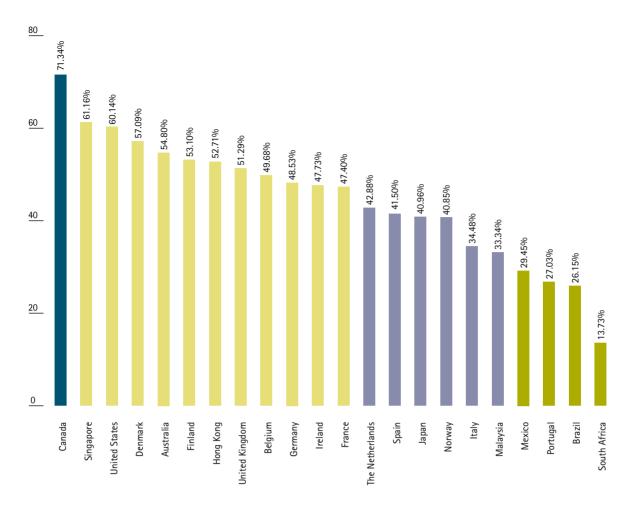
The sections that follow expand on each of these major findings.

eGovernment matures through a series of plateaus

Progress toward greater levels of eGovernment maturity has continued across the group of countries, with the leaders remaining unchanged for the third year in a row—Canada, Singapore and the United States (see Figure 1).

The increase in overall maturity continues across the countries this year at an average rate of 8 percent, slowing slightly from previous years. The continual growth of all the countries means that governments need to continue to make progress each year just to maintain their position in the rankings; standing still is not an option. The steady pace of improvement makes it very easy to get left behind and much more difficult for a country to jump ahead to a higher level of

Figure 1. 2003 overall maturity score

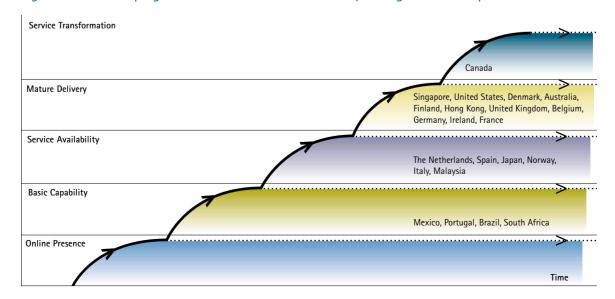


maturity. In cases where such a jump has been made—such as Belgium, for example—it is because of the implementation of wide-ranging initiatives that show evidence of learning the lessons of other countries' experience.

This year we found evidence that eGovernment development progresses through stages of successive

plateaus, as illustrated in Figure 2. We have identified five distinct eGovernment maturity stages. Four can be observed based on the progress of countries since we published our first report in 1999: Online Presence, Basic Capability, Service Availability and Mature Delivery. There is also evidence that Canada is taking the first steps toward the next evolution, Service Transformation, this year.

Figure 2. Countries progress toward eGovernment maturity through a series of plateaus.



2003 key findings

Figure 3. Characteristics of the eGovernment maturity plateaus

Plateau	Characteristics	Recommended Actions
Online Presence	 Information published online Few services available, provided by early adopter agencies Early infrastructural investment by these agencies 	Identify quick winsFocus on high-volume repetitive servicesBuild infrastructure
Basic Capability	 Central plan created and a legislative framework developed Infrastructural developments around security and certification Broad online presence Quick-win transaction capabilities implemented Revenue-generating sectors lead the way Other agencies learn the lessons of the early adopters 	 Articulate vision Agree clear targets Build framework for service provision Encourage agency cooperation
Service Availability	 Basic portals Driving to make as many services as possible available as quickly as possible Broad targets in place Some sophisticated transaction capabilities implemented Some cross-agency cooperation Initial customer focus 	 Create and empower central agency or individual to direct initiatives Structure service provision around customer needs Develop transactional capabilities
Mature Delivery	 Intentions-based transactional portals Service clusters Value added approach—do more with less Clear ownership and authority—CIO or central agency Intra-agency relationships and collaboration across different levels of government where appropriate Deep strengths in services that have proven to add value Move from blank availability targets to customer service objectives 	 Identify high-value services and focus on them Involve customers in the process Develop a consistently high standard of implementation Market the services
Service Transformation	 Improved customer service delivery is the vision Take-up of services is a key measure of success eGovernment is no longer a separate initiative but part of wider service transformation Multichannel integration Organization, process and technology changes across agencies 	

What broadly characterizes each plateau is a common set of achievements and objectives driven by similar concerns and challenges—although different countries will prioritize their objectives differently. Figure 3 outlines some of the common characteristics at each plateau.

Assessing the results over the last few years, we find that at the start of each stage countries make large steps and, often, rapid development. As each plateau is approached, the barriers to further progress become apparent and the rate of development slows. For a country to move up a stage of maturity, it needs to do

Canada's relentless drive to eGovernment improvement

Canada has been a consistent leader in progressing from plateau to plateau of eGovernment maturity. In 2000, the first year of our study, it was among the top four leaders: countries that had reached the Basic Capability plateau and were regrouping for a jump to the next stage of maturity. In 2001, Canada made quite a big jump, progressing rapidly through the Service Availability stage and making first steps on the way to the Mature Delivery plateau. In the process, it moved from fourth to first position. By the time of our 2002 study, Canada had reached a Mature Delivery plateau and begun to see its closest challengers closing the gap. It had developed a consistently high standard of implementation and was unlikely to make any more progress without a rethinking of strategy.

Now, Canada is pulling ahead again, the only country having made the first steps toward Service Transformation. Canada shows signs that it has ingrained leading-edge practices, specifically, involving customers in service development and identifying and focusing on high-value services.

Canada's success is built on a relentless drive to improve. Michelle d'Auray, Canada's CIO, explained the process, and her outlook on the future of eGovernment in Canada this way:

"While Canada recognizes that its Government On-Line (GOL) initiative has made significant progress, we know that our eGovernment journey is far from over. We are positioning ourselves for the 'next wave' of GOL, which we think is part of a much broader service transformation agenda to better serve Canadians across all services and delivery channels. With this in mind, GOL must now push the limits of integration, act as a catalyst for cross-departmental and cross-jurisdictional service delivery improvements, and serve as a platform to initiate and accelerate change—change in how government relates to citizens, how we manage information in business processes, in all aspects of human resource management and in IT infrastructure investment strategies. That being said, our challenge is to deliver on our 2005 commitment and meet our client-centricity and sustainability and objectives, while keeping an eye on the bigger transformational opportunities, as Canadians' and governments' priorities shift."

something different. Italy is an example of this principle. The country made strong strides in CRM over the past year to propel itself four places upward in the rankings into a new stage of eGovernment maturity. Key among Italy's citizen-centered initiatives is its newly launched portal (www.italia.gov.it), based on citizen needs. Just over a year ago, Italian government websites offered little more than brief descriptions of agency structures and responsibilities. There were few services offered and no citizen focus. Today, many of the sites are customer focused, friendly and appealing, providing information and services and links to further help.

Taking the next step in maturity requires a reevaluation of objectives and results in a change of approach. Once this step has been taken, past achievements are taken for granted and future challenges loom large. Developing new objectives to meet these challenges positions the government to take the first steps to the next plateau, and the pattern begins again. The average time interval between plateaus is two to three years.

Among the countries we surveyed, Canada is the clear leader (see Figure 1) and has increased the gap over its two closest challengers, Singapore and the United States. Canada's increase in Overall Maturity

was 11.48 percent, as opposed to 6.72 percent for the United States and 2.28 percent for Singapore. Two years ago, at the time of our 2001 report, Canada was also a clear leader relative to these countries. It was the first government to place its citizens and businesses at the core of its strategy. It focused on target groups and matched appropriate services to those groups. It was the first country to begin the journey from Service Availability to Mature Delivery. Last year Singapore and the United States closed the gap as their delivery matured rapidly and Canada consolidated its service delivery. This year Canada again shows signs of taking the first steps toward the next plateau and realizing that further service delivery improvements will require service transformation (see sidebar: Canada's relentless drive to eGovernment improvement).

Like Canada last year, Singapore and the United States have reached a level that makes further progression more challenging. Singapore is a particularly good example of a country that has reached a maturity plateau and a leveling off of improvement. Having enjoyed an eGovernment leadership position for several years, it finds its progress slowing noticeably. Consequently, it is losing ground both to the world leader, Canada, which has taken the next

2003 key findings

step to maturity, and innovative and fast-moving challengers such as Denmark and Belgium. While it continues to score highly, Singapore is at a stage where it needs to reconsider its current approach if it wants to improve. Canada went through this regrouping process at different times in past years.

Meanwhile, the group of countries behind Singapore and the United States, including Denmark, Finland, Hong Kong Special Administrative Region (SAR)-China and Australia, has gained significantly. With the example of the leaders to follow, these countries have had a clearer roadmap for their initiatives. In 2002, these countries and a number of others had reached the Service Availability plateau; a cluster of 10 countries had an Overall Maturity score between 40 and 45 percent, but then there was a large gap of 9 percent to the countries (Canada, Singapore and the United States) that had already embarked on the journey toward Mature Delivery. Now, as a result of the different rates of progress and the reaching of plateaus by the leaders, there is an even spread of countries between 47 and 61 percent, which is approximately at the maturity level of last year's leaders.

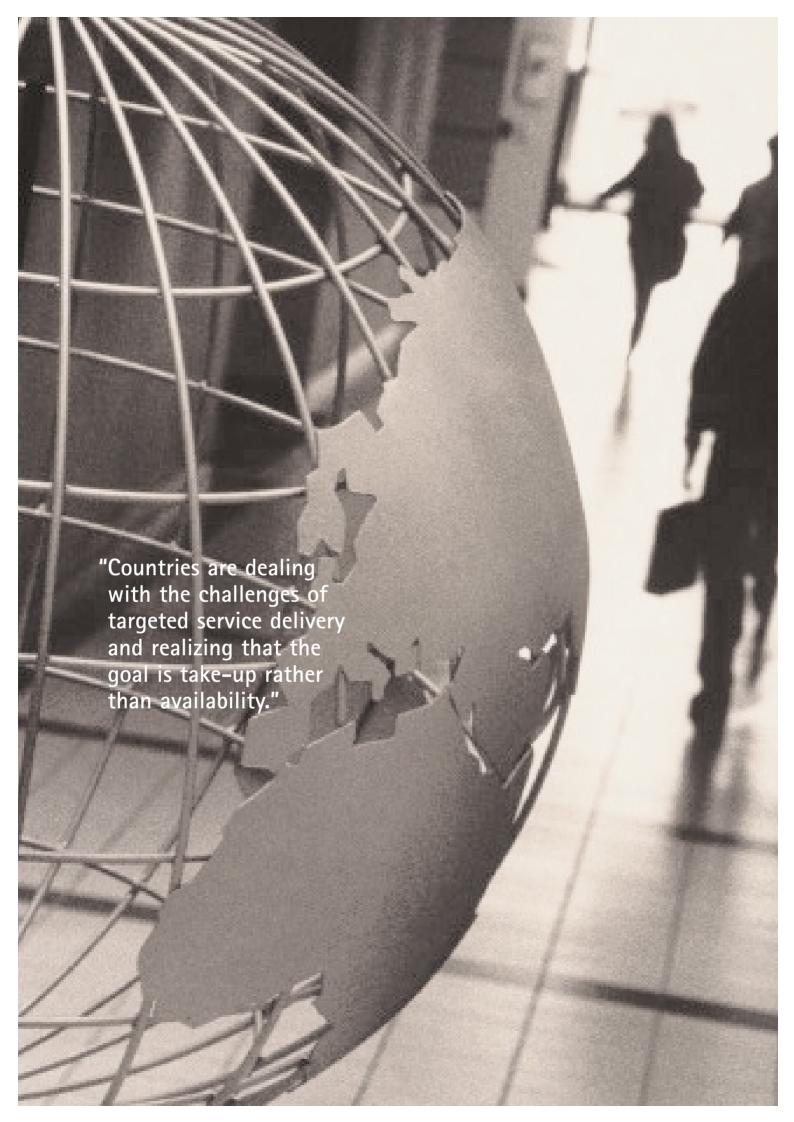
Led by Denmark, with a 12.69 percent increase in Overall Maturity, these countries are dealing with the challenges of targeted service delivery and realizing that the goal is take-up rather than availability. For example, some agencies in the United Kingdom have made subtle but significant amendments to how their targets are articulated, building in customer service and value-driven dimensions in addition to availability.

This year, a new set of countries is clustering around 40 percent Overall Maturity. The countries at this level last year have all made good progress, while the progress of one or two of the countries with scores in the next level of maturity has been fairly stagnant. These countries, including The Netherlands and Spain, have reached the Service Availability plateau and are finding it difficult

to take the next step. Looking back to 2001, the leading countries had pushed beyond this 40 percent plateau. At this level, countries have the online service capability and are in a position to focus on targeted service delivery.

At less mature stages of eGovernment, the yearover-year pattern is the same as described earlier. For example, Italy and Mexico-relatively immature countries last year whose progress this year has been above average—are catching those ahead very quickly. Mexico experienced the highest improvement in Overall Maturity score, with a 16.92 percent increase; Italy achieved the third highest growth in Overall Maturity, with a jump of 13.63 percent. Italy and Mexico were both also among the top four countries in terms of largest increases in CRM scores, with jumps of 15.46 and 15.19 percent, respectively. The strong achievements of the countries in these less mature categories point not only to the difficulty more mature countries have in making potentially transformational improvements as they progress but also the rapid gains that can be made in eGovernment programs once the basic infrastructure is in place.

The least mature countries in our survey this year fall within the category of Basic Capability. The plateau point for this maturity level is at approximately 25 percent overall maturity. There was a cluster of now leading countries around this level in 2000—including Canada, Singapore and Australia. These three countries were reassessing their vision at this plateau when our first survey began. In 2003, Brazil and Portugal look to have passed through this phase and now have solid foundations for progression toward the next level of maturity, Service Availability. Meanwhile, the focus on continued infrastructural development in South Africa positions them well for progress in the future.



2003 key findings

Value drives eGovernment visions

As leading governments reach a plateau of eGovernment maturity, they are reevaluating their visions of online service. For most, that means a shift to the idea that their eGovernment programs should be driven by considerations of value.

By value, we mean effectiveness and efficiency of government service. Effectiveness implies government achieves its intended outcomes, while efficiency implies government improves the way it does business. The true value of eGovernment is that it helps government deliver enhanced service to citizens and businesses and makes government operations more efficient.

When we asked government executives about the factors driving the development of their service initiatives, cost rated second to last (see Figure 4). While increased efficiency through performance gains can still enable governments to manage costs more effectively, this is not the primary driver of an eGovernment program but a further benefit.

This rethinking of eGovernment programs coincides with a change in attitudes outside of the agencies and people responsible for developing these programs. The once unconditional support for eGovernment programs is being replaced by growing demand for return on investment.

Traditional thinking about eGovernment had many governments working to get as many services online as possible, as quickly as possible. As one executive stated, "For eGovernment, worldwide, people initially

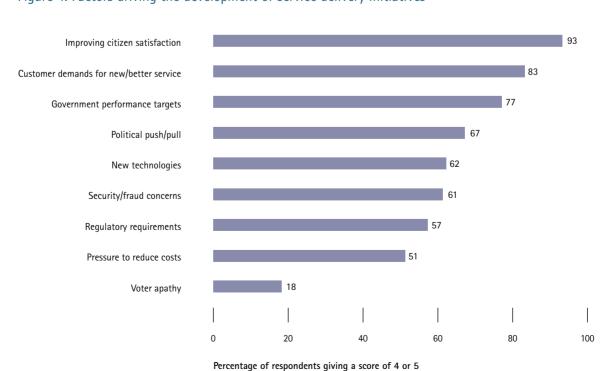


Figure 4. Factors driving the development of service delivery initiatives

measure very much to what extent you are putting your services and information online." Agencies have been driven by the pressure to get services online, but the public is now noticing that this approach has not worked. For example, the United Kingdom has set priorities of number of services online for several years and has recently come under fire in the press for "blank" targets.

As eGovernment programs mature, executives are now thinking in terms of how their initiatives can deliver value for their investment. Among the executives we surveyed, eGovernment is most widely expected to produce a return on investment in terms of streamlining internal processes (more efficiency). It is also widely believed that eGovernment will provide a return in terms of public image enhancement and improving ease of access by customers (more effectiveness) (see Figure 5). Streamlined processes and better service means that, ultimately, eGovernment is a real way to "do more with less."

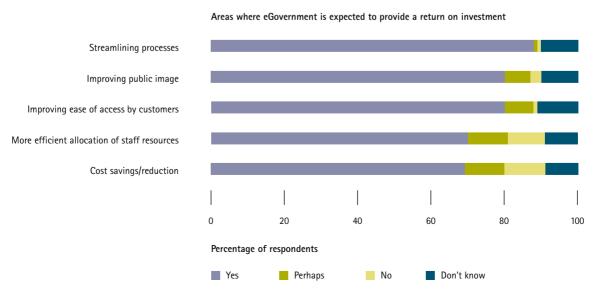
As illustrated by Figure 5, governments are realizing that eGovernment does not deliver cost savings, at least not initially. In fact, it can increase service delivery costs because it requires initial outlays to build supporting infrastructure. These costs are only recouped over time and only if online channels become preferred by a critical mass of users. Implementing online services means adding new channels of delivery; other channels still need to be maintained. That is not to say cost savings will never materialize. There is a path that governments go through, where online services are started and over time volume is transferred to them. As services

are delivered through the online channel, resources focused on traditional service delivery methods can be focused elsewhere and, eventually, cost savings can occur.

Some governments have found that putting highvolume services online frees resources to concentrate on higher value activities. These governments can now redirect the effort that had been expended on manual data entry and resolving basic inquiries toward higher value processes. For example, Australia is rolling out a program to provide automated passport checks using facial-recognition technology. The new SmartGate kiosk scans passport photos and compares them with the faces of travelers. Once the system is fully rolled out, members of the public will be able to choose to use the 10-second photo-matching entry system. Facilitating gate procedures for low-risk frequent travelers allows airport employees to focus on less routine cases while also improving the service provided.

In another example, the Italian Ministry of Finance and Treasury allows users with a secure PIN to complete tax forms and pay taxes online. Broad-scale automation has allowed the Ministry to provide additional support to specific user groups, such as assistance to help the disabled file their tax declaration. If the online information is insufficient, the site allows the user to book an appointment to clarify a specific need or resolve the problem. The employees spend less time on the routine queries and can devote more attention to cases where their assistance is required.

Figure 5. eGovernment is now expected to provide a return on investment in a number of different areas.



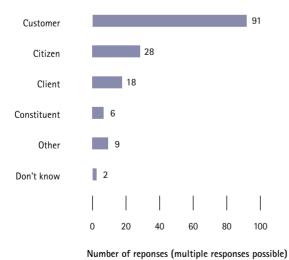
2003 key findings

CRM underpins eGovernment

In our 2002 report, we identified a growing tendency to treat citizens and businesses as customers, focusing on the quality of service delivery through the use of new channels rather than cost reduction. We identified an increasing awareness of the potential benefits to agencies of using the CRM techniques adopted by private enterprise. The basic principles (see sidebar: What is CRM?) translate well to governments seeking to promote citizen-centric government as well as more effective relationships with business. In 2003, we take this idea one step further and suggest that CRM principles are at the core of good eGovernment. In the words of one executive: "eGovernment is the technique to keep customers in touch with us while CRM is the aim."

Figure 6. Governments are becoming more comfortable with using the term "customers" to describe those they serve.

What name do governments give to the people they serve?



Most government executives agree that CRM is important. They support the government's desire to improve service delivery by focusing on customer satisfaction as a major contributor to the citizens' desire to comply with what is demanded of them and to improving the perception of government generally.

Figure 6 illustrates that the government executives we surveyed are becoming more comfortable with the use of the term "customer" and the implied willingness to apply the principles of CRM to their own organizations.

Superior service is the key strategic imperative for 92 percent of executives surveyed (see Figure 7), and eGovernment is top-of-mind for these executives when they think about service delivery. In fact, as Figure 4 showed, superior service ranks well above cost reduction as an imperative, indicating agencies' willingness to invest to win the benefits associated with satisfied customers—albeit within the usual budgetary constraints.

When executives were asked of their plans to improve their agencies' service delivery processes, most focused on electronic service delivery. Many of them specifically mentioned multichannel delivery, a key CRM principle. A number of respondents referred to providing more services on the Internet and to setting up a portal as a single point of entry for integrated services as top priorities in their improvement plans. Thus, eGovernment and CRM progress are the priorities for service initiatives being implemented today.

eGovernment solutions being implemented today are primarily initiatives to improve service delivery through making access and interaction easier. Executives expressed a strong interest in making eGovernment systems more accessible, with increased numbers of physical and telephonic access points. At the same time, they acknowledged the existence of

What is CRM?

Customer Relationship Management (CRM) is a capability that allows government to dramatically improve its relationship with its customers through reorganizing services around customer intentions. It allows agencies to create an integrated view of the customer and use this information to coordinate services across multiple channels. CRM provides governments with a set of tools and techniques that enable intelligent interactions:

- Based on information/insight about the characteristics, needs and preferences of customers.
- Encompassing all channels of interaction.
- Embodying a comprehensive history of the previous interactions with each customer.
- Encouraging customers to use the most appropriate channel.
- Enabling agencies to meet their objectives of improving service, reducing costs and improving program effectiveness.

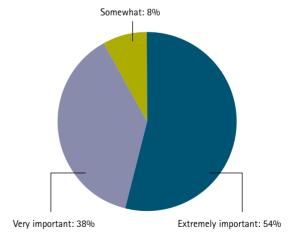
CRM constitutes a more comprehensive, methodical approach to providing services than would traditionally have been pursued in separate, ad hoc ways.

the "digital divide," or the gap between technology "haves" and "have nots," as a greater challenge given their requirement to deliver universal service to all. "I think we should be pushing out our services to customers, making information readily available to them and having a 24/7 customer service," explained one executive. "The focus here is on providing customers with the information when they need it and not when we feel they need it. Thus, it will be more on self help for the customers as they know where to get certain information once we make the channels more known."

While there is a strong focus on improving service, agencies are far from abandoning themselves to a "service at any cost" way of thinking. They want to improve service first and foremost, with the clear idea that while a robust eGovernment program will involve more investments up front, it will lead to costs savings over time.

Figure 7. Superior service is the key business imperative for government executives.

Importance of superior service as a business imperative compared with other imperatives



2003 key findings

Increasing take-up is a priority

The potential benefits of eGovernment, improved service, greater efficiency and potential cost savings will not be realized if take-up of the services is low. Some leading countries already enjoy high take-up of their online services. In countries where delivery is fairly mature and there is a strong CRM focus, we see evidence that citizens want to use the service. In Canada, for example, the Government On-Line (GOL) site published statistics from a survey of citizen attitudes toward doing business online with the government. The statistics showed that Canadians want online delivery, with 77 percent of Canadians thinking that the Internet will improve how they receive services from the government of Canada; 78 percent believing that GOL makes the government more innovative and 73 percent believing that putting services and information online is a good use of tax dollars (www.gol-ged.gc.ca). Statistics available on the Nielsen/Netratings website bear out this positive attitude. A snapshot summary of the top 10 websites in Canada during a one-month time period showed Canada's federal government site as the sixth most accessed site in the country, with a reach of 21 percent. Other mature, CRM-focused sites, including the US FirstGov.gov site and Australia's federal government site, also appeared on their countries' top 10 lists.1

Once take-up barriers to eGovernment services have been broken and certain thresholds have been achieved, dramatic increases in take-up rates are possible. The US FirstGov.gov site, launched in September 2000, saw remarkable increases in take-up from 2001 to 2002. In the wake of the September 11 attacks, the site became a reliable source of accurate, timely and comprehensive information, resources and services available during the crisis. As a result of this surge in

usage from 2001 to 2002, the number of unique visitors to the site jumped from 6.8 million to 37 million. Hits nearly doubled over the same time period, from 77 million to 149.4 million.

In most countries, the trend of slow initial take-up followed by rapid growth is seen most clearly in more mature eGovernment services. Revenue agencies have historically been among the first in the public sector to deploy new technology, because of the relative ease of establishing a business case for faster revenue collection and increased compliance (see sidebar: Revenue agencies show dramatic take-up of online services once usage barriers are broken). Not surprisingly, frequently the most advanced instances of eGovernment service delivery we found fell under the area of revenue. We observed that while initial take-up of these revenue services may be slow, it can increase rapidly once a critical threshold has been crossed, with great benefit to the agency. The resultant efficiencies accrued as take-up increases give revenue agencies the opportunity to refocus resources on delivering a highly effective personalized service and reducing the costs of compliance.

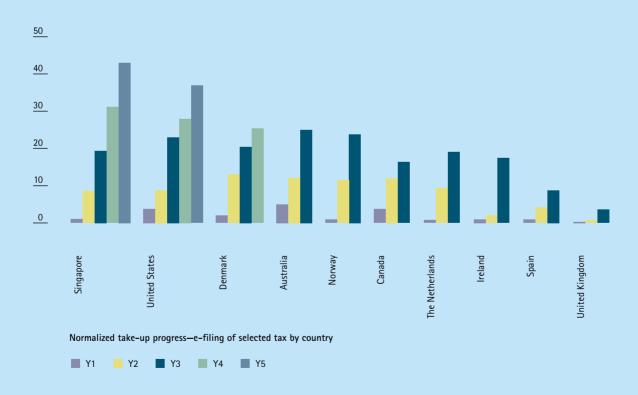
While the level of current eGovernment usage varies across countries, increasing take-up continues to be a concern for all governments. Some governments are building their business cases for future eGovernment investments on usage points: if the benefits of eGovernment are driven by high volumes, then achieving a critical mass of users online must be a priority. A report released in February 2003 on the progress of the eEurope Action Plan 2002 describes how barriers must be removed and take-up encouraged to translate the achievements so far, establishing a framework for the knowledge economy and bringing people online, into true benefits.

At the time of writing, statistics provided on the Nielsen/Netratings website (www.nielsen-netratings.com) included snapshot summaries of top 10 websites used in different countries for particular months. For Australia, the latest statistics came from January 2003; for Canada, from March 2002; and for the United States, from the week ending February 16, 2003.

Revenue agencies show dramatic take-up of online services once usage barriers are broken.

Governments are increasingly moving taxes online with strong success. Initially usage may be low, but once a critical mass of early adopters has been reached, dramatic progress is possible. The evidence from countries with high levels of usage suggests that it can take up to three years to reach an e-filing level higher than 10 percent. However, once this initial barrier has been breached, rapid growth continues, with an annual doubling of numbers achievable.

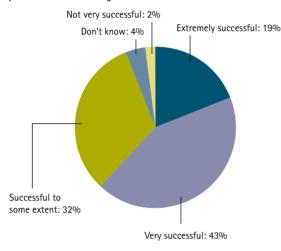
Revenue agencies can set their sights high when looking at the potential for e-filing. Many agencies set initial targets of 50 percent, which now look low. Increases in uptake lead to a corresponding elimination of low-value manual processes, for example data entry and exception handling. Online support for customers can result in basic inquiries being handled in a self-service manner. This potential has profound implications for the allocation of resources in revenue agencies, with staff being freed up to focus on activities such as managing compliance and providing better service.



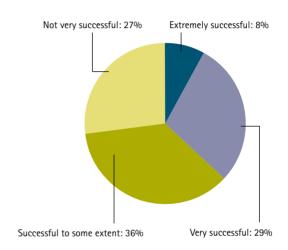
2003 key findings

Figure 8. Effectiveness of organizations in achieving their targets versus their service delivery objectives

How successful organization has been to date in meeting performance-related targets



How effective organization has been in meeting key objectives



Percentage of respondents

Percentage of respondents

New eGovernment targets are needed

The measurements of eGovernment success in the past were often just availability targets. Many governments were caught up in a wave, wanting to move with the times—and moving as quickly as possible to keep pace. Until very recently, the online world was viewed as a mirror to the offline world, and most countries focused on getting as many services as possible online.

Availability targets (such as EU benchmarking targets, for example) spurred progress and satisfaction at first, but countries that have clung to these targets have seen their progress stalled. This approach, focusing on the quantity of services online rather than the quality of those services, has contributed to the poor levels of take-up. Most of the government executives we surveyed conceded that the public has little awareness of eGovernment services and often have no

practical experience with them. Consequently, governments are beginning to measure their success less by simple availability online than by more value-added measures, such as usage online.

Executives recognize that the targets they set in the past are not matching their current objectives. While they consistently have met their targets, implementing according to these targets has failed to produce the benefits they desired. Eighty-four percent of the respondents in our CRM survey stated that they had service delivery targets, and, of those, 62 percent stated that they had been extremely or very successful in meeting their targets. At the same time, only 37 percent of the respondents thought that their organizations had been very effective in delivering any of their service delivery objectives (see Figure 8). Clearly, the targets originally set are no longer meaningful measures of success for these organizations.

Current targets have outlived their usefulness for many governments. These governments are realizing that a particular set of targets can drive progress to a certain point, but as they reevaluate their action plans, they need to change their targets to match their new objectives.

Looking ahead to uCommerce

For the past few years, we have tracked the emergence of ubiquitous government: new forms of interaction enabled by such technologies as wireless, television, voice and silent commerce. The term ubiquitous is used because interactions and transactions will be possible anywhere and at any time, unconstrained by power lines and telephone wires. These new technologies are expected to have a greater impact in both the public and private sector than "traditional" eCommerce.

Last year, our research found scant evidence of the use of uCommerce in government. Over the past 12 months, uCommerce has not grown significantly in the public sector; what we have seen is the development of niche applications with transformational potential. In Germany, for example, one recently introduced uGovernment service for businesses is the value-added tax (VAT) registration number via wireless application protocol (WAP). The German Federal Finance Office has set up a new service for the exchange of goods between business partners in the European Union. Participants who want to make sure that their business partner in the receiving EU Member State has a VAT registration number can check this information online simply and rapidly by WAP-enabled mobile phone.

We still view uCommerce as having potentially strong take-up for government interactions, particularly as wireless communication technologies proliferate and become cheaper and faster. We expect countries that have broadly embraced wireless technologies, including Finland and Japan, to be leaders in this regard.

Planning for successful eGovernment

While mature eGovernment service delivery holds the promise of real benefit for both governments and customers alike, the leaders in charge of developing plans for maturing their countries' eGovernment programs typically have had to seek out successful examples on which to model their own practices. To help our readers in their own planning and implementation, we have broken down the elements of successful eGovernment programs into four distinct stages: identify the right services for the right customers, implement services properly, increase take-up and measure success. In the next section, "The Way Forward," we consolidate leading practices from our research and our own experience into a recommended action plan for each of these stages. Taken together, these recommendations provide a map for developing an eGovernment program that will deliver real return on investment for governments.



In order to add value either through increased effectiveness or efficiency, leading governments are recognizing that eGovernment cannot just be a duplicate channel for the same service, but that it must add a service dimension—such as convenience, accessibility, rapid response, or control over personal information and the flow of the transaction process—not available through existing channels. Now governments are determining which services should be online, focusing on those that deliver the greatest value to customers.

To deliver this added value service, governments must work through a four-step process:

- 1. Identify the right services for the right customers.
- 2. Implement services properly.
- 3. Increase take-up.
- 4. Measure success.

In this section, we provide our recommendations, based on leading practices identified in our research and through our experience, for moving forward at each of these four steps to an effective eGovernment program.

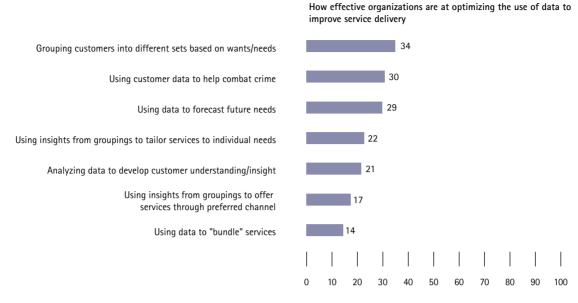
Identify the right services for the right customers

Identifying the right services for the right customers is the first step of successful eGovernment. To develop effective eGovernment initiatives, governments must think from a customer-centric perspective, understanding who their customers are and what they want. They must then focus on providing online services that offer the biggest potential for return on investment to both governments and customers, while avoiding the simplistic (and costly) approach of putting all services online. This process builds on the principles of CRM. It will move governments away from a service model of disjointed services that may be convenient for governments to provide, to one that builds customer-managed relationships that ensure customers receive consistently differentiated and, wherever possible, personalized service.

Think from a customer-centric point of view.

Governments traditionally have delivered online services based on their own organizational structures. Services that were delivered offline under the domain of a particular agency remained

Figure 9. Governments are not very effective at optimizing the use of customer data to improve service delivery.



Percentage of respondents rating themselves as either effective or highly effective

housed on that agency's website during the early stages of eGovernment. To access a service, a customer needed to know which agency provided it—a fact that was not always intuitive.

As governments look to deliver more value through their eGovernment programs, they must start by trying to understand their customers' points of view. Customers seek government services based on trigger events; eGovernment services should be organized accordingly. To create a customer impact, governments must provide answers in the way customers ask questions—from the perspective of what is happening within their own frames of reference. eGovernment is the ideal forum for providing this new service dimension. Without the constraints of physical locations, distinct workforces and long-standing culture barriers that have impeded integration or reorganization, eGovernment services can be organized according to a customercentric point of view far more easily than can be done in the offline world.

Understand who your customers are.

Thinking from a customer perspective begins with understanding who your customers actually are, at some refined level of detail. From our research, we have seen evidence of a trend toward basic segmentation in eGovernment. Governments are targeting broad groups of users, namely businesses, citizens and employees, in their service delivery approach. While governments understand that these different groups have different eGovernment needs and specific services need to be targeted

appropriately, the segmentation approach must now be taken a step further.

What needs to happen is a move from one-to-many (broadcast) service to one-to-one service. This move is not about simple personalization of websites; rather, it is about matching services and the structure of services to make it easier for one individual to do business with the government. To bring service to that level of customization, a government needs a more refined picture of its customer base than broad segmentation provides. This picture comes from analyzing information about customers to gain insights into their needs and practices.

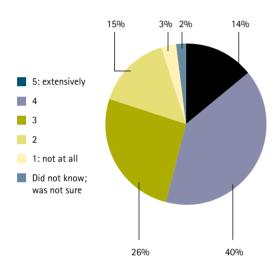
However, the majority of agencies we surveyed concede that their ability to optimize the use of data in improving service delivery is poor. As Figure 9 illustrates, agencies are most effective at grouping broad sets of customers together. As the segmentation process becomes more sophisticated (for example, "analyzing data to develop customer understanding/insight"), these agencies rate themselves as much less effective.

Governments have a wealth of available information about who it is that they serve. Now they need to develop a detailed picture of their customer base through more precise segmentation and begin tapping into that information and tailoring services to yield better service and greater efficiencies from extended service channels.

the way forward

Figure 10. Governments frequently involve customers in creating and developing their customer service initiatives.

Extent to which government agencies involve customers in creating and developing customer service policies/initiatives



Know what your customers want.

Current eGovernment best practice is moving toward a model of proactively identifying what may help the customer and what might be useful rather than simply reacting to customer requests. Governments that use customer consultations are taking the most direct route to customer insight—learning what they want by asking them directly. Overwhelmingly, the government agency executives we interviewed claimed to involve customers in creating and developing customer service policies or initiatives (see Figure 10).

The trend is recent. In the words of one executive we surveyed: "This is a big change from what we did previously. We used to say, 'Here is a new product, what do you think of it?' Now we have what we call Creative Retreat, we put a whole group of people... into a room together and talk through what they want...this is definitely new for us—to say, 'What would you like to see?'"

As shown in Figure 11, what is even more telling is that those agencies that consider themselves more successful at improving their service quality are also more likely to have consulted extensively with their customers. These results are not surprising. Governments that ask their customers what they want while developing service initiatives are more likely to deliver a final product that hits the mark.

Part of the process of knowing what your customers want should come as a follow-on to more refined segmentation. With a more granular view of their customer base, governments can then tap into available data about these segments to determine how service can be improved or what channels could be employed more effectively. Governments can also derive more benefit from their growing practice of consulting with customers while creating and developing service initiatives, by starting out with the appropriate segment for their consultations.

No matter the route to this customer insight, however, the end result should be differentiated services optimized for the characteristics, needs and preferred channels of each individual constituent.

Focus on services that offer the biggest potential return.

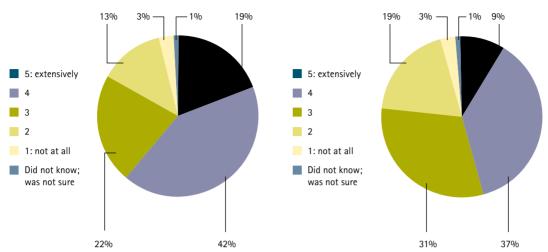
The traditional, simplistic approach of putting everything online as a mirror to the offline world is a poor use of government resources. The recommended approach is to deliver high-quality service in areas that have the biggest potential for return on eGovernment investment. With a clear understanding of their customers' wants and needs, governments are in a better position to begin offering services that offer the highest potential value to both government and customer. These are the services that from a government perspective are high volume or high cost and from a customer perspective are high "cost" in terms of money, aggravation or time, or which deliver significant added value.

Figure 11. Governments that involve customers during service development activities are more likely to consider themselves successful afterward.

Extent to which government agencies involve customers in creating and developing customer service policies/initiatives

More successful at improving service quality

Less successful at improving service quality



Target high-volume and/or high-cost services.

One of eGovernment's biggest potential advantages is in becoming the channel for routine interactions with citizens and businesses. Because so many of businesses' interactions with government are routine and high volume, driving the manual processing out of them holds great potential for radically improved efficiencies and economies of scale on both sides. The many hours spent manually processing paperwork for such government-to-business interactions as tax filing and license renewals can be redirected toward handling nonroutine requests, following up on noncompliance or introducing new services.

With citizens as well, high-volume interactions are excellent candidates for online delivery because they can deliver cost savings for government and a better experience for citizens. This is one reason why revenue services are frequently an initial target of eGovernment initiatives focused on the citizen. For example, the US Internal Revenue Service (IRS) aims to have 80 percent of individual taxpayers filing online by 2007, for a potential savings of \$170 million in processing. From the citizen's perspective, e-filers get their refunds twice as quickly as those using paper returns—in as little as 10 days when they choose to have their refunds directly deposited into their bank accounts. As opposed to manual filers, e-filers never have to make photocopies of their paperwork and never have to make a trip to the post office. As an added benefit, they also get confirmation that their returns have been received by the IRS, something manual filers do not know until they receive their refund or their payment is returned.

Implement services properly

Implementing an effective national eGovernment program begins with empowered, centralized leadership with a framework for decision making. As a country progresses through eGovernment maturity stages, the right governance model becomes progressively more important for making the step changes that are required to break through plateaus to higher levels of maturity. What also becomes critical is a model for breaking down government silos so that integration of services can occur. Only then can the benefits for government truly begin to be realized through streamlined processes and enhanced service to customers.

eGovernment requires clear central leadership.

Wide-scale eGovernment maturity requires clear leadership—either through an individual or through a central coordinating body.

Clearly there are examples where an individual agency can provide outstanding eGovernment service developed under its own strategy. In fact, these agencies may provide models of best practice for other departments in the government to follow. For governments as a whole, however, separate exemplary agencies will not add up to the cohesive approach that will drive forward true value-added eGovernment for citizens, businesses and government alike.

In 2002, we placed some emphasis on the rise of the CIO in central governments. Some leading countries—the United States and Canada among them—brought in an individual to coordinate the

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development of their eGovernment programs and are clearly having success. In an alternate approach, some countries have delegated the task of coordination to a central body—either a department or a separate agency. Denmark, for example, has made excellent eGovernment progress under the guidance of its Digital Task Force. This group works closely with the Ministry of Finance and the Ministry of Science, Technology and Innovation to coordinate the country's eGovernment program from both the business strategy and technical implementation sides. The high marks Denmark received in our rankings were due in part to its consistency across a broad range of measures, a reflection of this strong commitment to whole-of-government planning and implementation.

The responsible government person or agency must have not only the responsibility for implementing eGovernment but the authority to do so as well. For example, in the United States, Mark Forman has veto power to stop new eGovernment projects from being implemented if they are redundant or do not fit into the larger eGovernment vision of the country. The central eGovernment leadership role must be more than a figurehead or the program as a whole will flounder.

eGovernment leadership needs a framework for operations.

An eGovernment implementation strategy requires clearly defined value drivers. Improved service delivery and more effective government is achieved by analyzing four criteria, illustrated in Figure 12, to identify how value is most effectively created by each element of the eGovernment program.

Three of these criteria concern the delivery of service to specific customer groups:

• **Government to business.** Does the project simplify business processes? Does it streamline high-volume and/or high-cost processes?

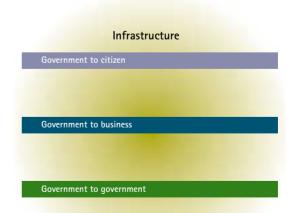
- **Government to citizen.** Will the program be predictive of citizen needs? Does it reduce bureaucratic interactions for the citizen?
- **Government to government.** Will the project lead to greater efficiency? Does it free resources for redeployment?

The government also has the responsibility, to its agencies and the general economy, for creating a better environment for more effective delivery of services. The final criterion enables value creation:

• **Infrastructure.** Does the project make best use of infrastructure? Does it improve infrastructure? Does it facilitate others to supply higher value services?

The weight given to these factors will be determined by leadership, based on the government's own vision and strategy. Leaders can examine potential eGovernment initiatives to see how they will deliver value for each of the service delivery criteria or facilitate infrastructural progress. This evaluation allows initiatives to be prioritized relative to one another for maximum return on investment. More

Figure 12. Four criteria help governments analyze whether the elements of their eGovernment program create value.



importantly, it makes it possible to build a solid business case for eGovernment investments. This is a critical element that has been missing from many eGovernment programs as governments raced online to avoid being left behind.

eGovernment programs should be evaluated based on the extent to which they improve the effectiveness or efficiency of government services, using these criteria. Programs that adequately fulfill these criteria will withstand public scrutiny and lead to rational development. This more disciplined approach to eGovernment—questioning the value of every project implementation—will also fuel the continuous reevaluation of strategy needed to jump to higher levels of maturity.

"Think big, start small, scale fast" still applies.

Once the right leadership and framework for action are in place, the best approach to actual implementation is to start with individual services before moving on to a more wide-ranging program. Testing must also be done in the right way. Governments need to target their initiatives in areas that are most likely to be successful. For several years we have seen the pattern in which those governments that made the most impressive developments were the ones that implemented according to this "think big, start small and scale fast" approach—articulating a vision, identifying an area where results can be demonstrated quickly and building momentum from that point. This approach will mitigate risk and provide the greatest opportunity for quick learning.

Once government makes a strategic decision to offer a specific service online, it should ensure that the service is planned carefully to deliver the utmost benefit. Rather than retrofitting later, the full business functionality for the service and potential integration points should be planned from the beginning, with technology considerations built in at the onset. That way, when individual pieces are linked together under the broader umbrella of a national eGovernment program, they will be primed from a technological standpoint for integration, and they will each still deliver a meaningful experience for the customer.

Break down government silos.

Governments should look for opportunities to encourage collaboration/integration across agencies where appropriate. This will offer the greatest opportunity for increased operational efficiencies and more cohesive, intuitive service delivery processes for citizens and businesses alike. The central authority should consider developing a service-based framework for identifying collaboration/integration opportunities. Collaboration can be on a number of levels:

- Provision of similar services by a range of organizations. For example, Australia's Centrelink links available benefits based on a customercentric point of view and delivers payments and service on behalf of 10 client government departments.
- Provision of similar functionality. For example, agencies can collaborate in building a common payment or security platform or in using common online technology for applications forms.
- Provision of infrastructure to enable crossagency service. For example, e-Boks in Denmark is a private company that allows citizens to receive and store official documents by e-mail through a free, secure electronic mailbox. Various government agencies and private companies (for example, banks, insurers and telephone companies) have signed up for the program.
- Reduction in the number of citizen touchpoints. For example, in Finland a change of official address can be notified either to the post office or the population register; the other agency is then informed automatically. The citizen has to take only one step.

Increase take-up

As described in our research findings, increasing take-up is one of the key goals for mature eGovernments. The potential benefits of eGovernment—improved service, greater efficiency and cost savings—will not be realized if take-up of online services remains low. Critical take-up thresholds must be reached to make an eGovernment implementation worth the investment.

Governments must start their implementations with the services that have the highest value and the greatest chance of take-up. Governments must also remove barriers to access and make it more worthwhile for citizens and businesses to receive the service online than through a different channel.

Start with businesses and follow with citizen services.

To develop an eGovernment program that delivers the highest return on investment, the services that are first implemented should be the ones targeted at businesses. Our research showed that online services targeted at businesses tend to have higher usage than those targeted at citizens and, consequently, deliver the highest value.

Take-up is higher among businesses because the benefits of online interactions with government are much more obvious. The case for eGovernment can be made as tangible to the business as it is to the

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government (see the sidebar on opposite page for an example of a strong business case for eGovernment for government and business alike). Businesses typically have more regular interactions with government, through tasks such as regular remittance of taxes and license renewals. Reducing paperwork for these tasks is undoubtedly attractive. Businesses also are more likely to have computers and Internet connections, which means access is less of an issue than it is for many citizens. Finally, businesses' needs are more easily categorized.

In contrast to businesses, citizens' motivations and expectations in dealing with the government are far different. Their assumptions are driven by privatesector experience, and, as such, they vary considerably. In general, citizens have fewer interactions with government and would prefer streamlined interactions with less "wait-in-line" bureaucracy. The infrequency of citizens' interactions with government means that there must be an extremely compelling reason to move away from the mode of interaction with which they are familiar. Therefore, beginning eGovernment implementations with citizen services is a poor choice. The factors working against take-up from the onset leave no room for governments to have a learning curve in implementation. There is a lower likelihood of success and a much greater chance of criticism. Starting with business services is more likely to lead to initial successes, which provide tangible support for further developments in both the business and citizen side of eGovernment.

Consider targeting intermediaries.

Online services for intermediaries are excellent candidates for successful eGovernment implementation. Intermediaries are individuals or businesses that provide services to citizens; as such, they begin with a higher likelihood of online service take-up. Intermediaries also provide fewer government touchpoints for citizens, which means targeting services that promote the use of intermediaries holds great potential value for improving citizens' experience as well. Many governments are recognizing that fact and expending effort on improving online services for intermediaries.

Intermediaries, such as tax agents and accountants. have been targeted by revenue agencies for some time, but the potential is much broader. For example, the most recent service implemented by Ireland's Revenue Online Service (ROS) is vehicle registration tax (VRT). Launched in November 2002, the VRT collection mechanism on the ROS site allows car dealers and distributors to file the required forms to register a new car. The service was made available countrywide on a pre-arranged basis. ROS involved key users early in the process and sent mobile training centers equipped with the latest multimedia PCs to deliver on-site training of customers free of charge. The aim was to ensure broad take-up among these private-sector intermediaries, and, since its introduction less than six months ago, approximately 40 percent of all new car registrations have used the online service. On some days as many as 60 percent of all new cars in the country were registered on the service. The immediate target is to increase the filing from the present rate of 40 percent of car dealers and distributors to 80 percent.

What makes ROS such an interesting case is that the Irish government began by targeting specific intermediaries, accountants and agencies, first. The government's success with these intermediaries led it to expand the program to include other intermediaries, car dealers and distributors. That move was also successful. The ROS example points up the potential in pushing eGovernment programs to intermediaries in other areas. For example, governments may target construction firms with programs to manage permit processes for building or remodeling a home. They may target hospitals, with programs to manage issuing birth certificates, ID cards or social security cards for newborns. Similar opportunities exist through the legal profession and estate agents for house purchases and title transfers.

Consider bundling services.

Although individual agencies can offer exemplary eGovernment service, to move to a higher level of eGovernment maturity governments need to think about new models of customer service delivery, such as integrating service across agencies and combining

A strong business case for eGovernment services

The Australian Business Register (ABR) of the Australian Tax Office (ATO) was designed to make it easier for businesses and all levels of government to interact using a unique identifier. This system, which can be accessed via telephone or Internet, facilitates simpler, faster and cheaper business interactions with government using the ABN as one number for seamless transactions with a variety of government agencies. It provides instant electronic access to ABR data and transactions, allowing businesses to do such functions as check and verify information (such as the Goods and Service Tax registration status of other businesses for ordering and invoicing) and register for Pay As You Go withholding. Businesses can access their own ABN details and update them as required.

As a result of this system, the ATO has reduced the average time to register a business from 15 days to as little as 15 minutes. According to Greg Dark, ATO assistant commissioner, "Less than a year after its launch, nearly 80 percent of all new business owners have chosen to use our new electronic system. The program enables us to provide more and better services to Australian businesses, eliminates red tape and provides a proven platform for future advances."



government services with private-sector offerings. There are many benefits to bundling services. If governments can bring users into eGovernment through targeted services, these users are more likely to branch out into usage of other, nontargeted online offerings if they are bundled closely together.

The Canada Benefits site (www.canadabenefits.gc.ca) is an excellent example of the benefits of bundling services to citizens and government alike. An unemployed individual visiting the Canada Benefits site to file for employment insurance will find a wealth of tools for job searching, links to government jobs and information on skills development and alternative careers. Bundling services with the private sector also provides for higher potential impact from each interaction with the government. For example, Hong Kong SAR China's marriage licensing site (www.esdlife.com/wedding) combined a number of government services with offerings from the private sector to create a one-stop wedding shop for citizens. Citizens can get a marriage license, change a postwedding mailing address, book a photographer and purchase other private-sector services through the same site. The government manages the amount and type of private-sector

information allowed on the site. Meanwhile, the model enhances citizen service and self-funds its own maintenance through the advertising fees.

Put incentives in place.

To get customers to use online services, governments must make it worthwhile for them to do so. Incentives are a powerful way to encourage eGovernment take-up. Although not in widespread use, some countries have latched onto the technique. For example, a number of countries offer or are considering offering extended deadlines for filing tax returns online. The Inland Revenue Authority of Singapore introduced a scheme to encourage taxpayers who knew how to e-file via the Internet to help their friends or family members to do so. The helper would get an additional chance in a drawing for cash prizes.

To drive take-up of its Electronic Service Delivery offerings, the government of Hong Kong SAR offers free IT awareness courses, free public computers with Internet connection, assistance devices and software and a central fund for personal computers for people with disabilities.

the way forward

Market the eGovernment services.

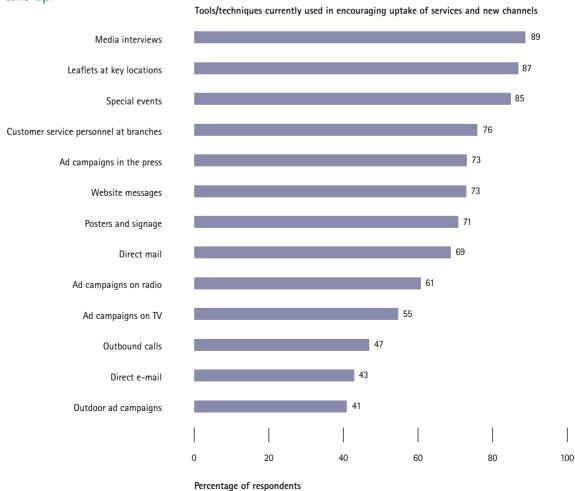
Globally, we are seeing a shift from little or no marketing to some agencies using established marketing techniques. When we surveyed executives about their agencies' marketing techniques, the three most widely cited marketing channels were media interviews, special events (booths, etc.) and leaflets at key locations. These are the more traditional avenues for government (see Figure 13).

Governments perceive that the most effective technique for marketing their services is the frontline customer service personnel at agency offices. For all other techniques listed, fewer than half the respondents rated them as effective or highly effective. Clearly, governments have room to grow in their

marketing effectiveness. Interestingly, techniques more commonly used by the private sector, such as direct e-mail, outbound calls, ad campaigns on the radio and website ads, are less prevalent among agencies but are among the ones that executives rank as most effective (see Figure 14).

Within agencies, marketing is still seen as very difficult to do, as it has never been part of the organizational mindset. Many agencies simply do not recognize the value of marketing. Although the majority of governments have much progress to make in marketing, we found some examples of governments using the techniques extensively. In Singapore, for example, the government is introducing a number of publicity and promotion programs to improve low take-up, such as

Figure 13. Governments continue to rely most heavily on traditional means of encouraging service take-up.



coverage by broadcast and print media through press releases and press briefings; road shows and exhibitions to showcase e-services; advertisements on radio, public transport, newspapers, magazines and posters; and handbooks, flyers and other marketing collateral.

Remove barriers to eGovernment.

If users perceive that doing business with government online is difficult, the eGovernment program will fail, no matter how valuable the services might be or how much marketing is done to encourage take-up. Every step required to use an online service is a potential barrier, and even small barriers can turn away users from the channel, leaving them unlikely to return. Make online services easy to use: organize information as simply as possible and remove unnecessary steps. For example, online forms can be prepopulated with known information. The eGovernment service must adapt to the user and help should be available at the point of need through a variety of channels, such as phone numbers, e-mail addresses or online tutorials.

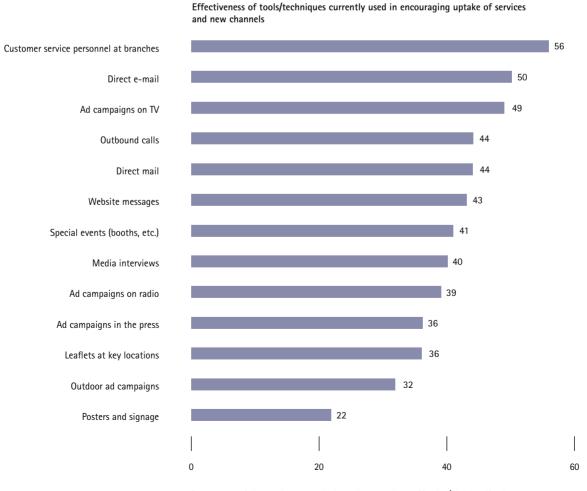
Put the right infrastructure in place and ensure access.

A number of countries we surveyed are making improved online access a top priority for their

eGovernment programs. Many countries are investing in a robust national technical infrastructure, with a focus on introducing broadband, even into remote areas. As part of its commitment to the creation of a knowledge economy and generating economic growth, for example, Portugal has made broadband access a top priority. Two of Singapore's stated eGovernment priorities for 2003 and 2004 are to continue to deliver accessible quality e-services and to ensure that technology for eGovernment interactions is affordable and widely available. The national agenda revolves around accessibility and a multichannel approach through broadband and wireless.

Governments must also ensure that the online channels they develop are accessible to any who want to use them. For example, the United Kingdom launched touch-screen Jobpoint kiosks in 2002 as part of the Jobcentre Plus (formerly Employment Service) modernization program. The kiosks are being installed in every Jobcentre in Britain, a number of supermarkets, prisons and even pubs, replacing outdated vacancy display boards and allowing free access to every vacancy held by every Jobcentre in Britain. In the United States, Department of Motor Vehicle kiosks in shopping malls allow users to renew their car registrations conveniently.

Figure 14. Governments rank modern marketing techniques as most effective in encouraging take-up of services.



the way forward

As governments put services online and provide avenues of access, they must also provide strong customer service support at the introduction of new online services to ensure that small barriers of confusion do not become major impediments to take-up.

Address citizens' privacy concerns.

To deliver new models of customer service, agencies will have to share information—a political sticking point in the past. While issues of privacy are still a challenge, governments today seem more of a mind to tackle them.

The principles remain the same as we have reported in years past. Public confidence is key; governments must guarantee security of personal information. To do so, privacy legislation is required to govern the exchange of information. For example, in the United Kingdom, to deal with citizens' concerns about how their information is used, new legislation regarding privacy and data was introduced within the past 12 months. The Directive on Privacy and Electronic Communications was adopted in July of 2002 for implementation by the end of October 2003. The Directive will update current rules on data protection and privacy in the light of new technology, with new requirements for transparency in the use of cookies and similar devices and for opt-in consent for unsolicited commercial e-mail, except in the context of existing customer relationships.

Potential technological avenues for governments to explore to protect information include digital signatures and biometrics to establish unique, irrefutable proof of identity and security and encryption techniques to guarantee safe transfers of information and money. Some countries have already led the way in using these technologies, setting examples for other countries to follow. For example, Germany was the first nation to give digital signatures the same status as written signatures. The standard has since been modified and embraced on a European basis.

Measure success

The final component of any successful eGovernment program must be measuring how well the program is progressing against its objectives.

Articulate objectives and set appropriate targets.

As many countries' eGovernment initiatives have been under way for several years, it may seem unusual to advise governments to articulate their objectives for the overall program. However, once these objectives have been clearly defined, governments will be in the position to answer the question, "Are our eGovernment objectives being met by the course of action we are taking?" For many governments, a lack of consistent focus and consistent data makes it a difficult question to answer. One thing, however, is clear. As described on page 18, government executives are expressing the sentiment that meeting existing targets does not necessarily correlate to meeting objectives.

With that understanding comes a move away from broad availability targets. However, the shift in emphasis from measures of provision to measures of effectiveness complicates the issue for governments. One executive assessed the situation this way: "We have quantitative targets which we are good at meeting, but we are not as good at either setting or meeting quality-based targets."

Measures of effectiveness are harder to track than measures of volume. Governments must ask themselves continually, "How do we know we are providing the quality service that we say we are providing?"

Identify useful measures and techniques.

Not surprisingly, measuring progress has had varied success from country to country. In our survey, we found no strong consensus about the appropriate ways of measuring progress. Each country has slightly different approaches. A significant number of respondents said their agencies did not have specific methods for measuring success, even as many recognized this point as a failing.

Of the techniques respondents cited, customer satisfaction surveys are the most commonly used measure of service delivery success, followed closely by the average time taken to resolve requests (see Figure 15). Several respondents suggested that it is easier to track usage rates and use quality measures in a call center environment, but much harder via other non-call center interactions.

Other techniques used included actual service achievement versus pledged standards, qualitative feedback (sometimes actively sought), numbers of people served (by channel), number of complaints or compliments received, balanced scorecards for each employee, take-up levels in target groups and even media reaction.

Clearly, there is no cohesive idea about what the correct measure of effectiveness is, although some countries do appear to be on right track. The UK government has set out its method for measuring Electronic Service Delivery (ESD) until 2005, requiring departments to submit their e-business strategies and ESD reports every six months. This process was put in place to ensure the Office of the e-Envoy always has the latest snapshot of developments and future plans. The government of Canada has developed a sophisticated performance measurement framework for its initiatives that encompasses three main outcomes—citizen/client-centered government, better/more responsive service, and capacity for online service delivery. It uses a Common Measurements Tool (CMT) developed to measure client satisfaction for in-person services that has been adapted for telephone and Internet-based services to ensure consistency across delivery channels.

Implement ongoing measurement processes and changes based on findings.

The solution for governments, then, is to choose some combination of measures that most closely mirrors the objectives they are trying to achieve and to learn from the leaders who have put such measures into effective use. For example, part of the government of Norway's ongoing plan for measuring progress is to actively benchmark other countries in key areas of IT policy.

To ensure that they continue to improve the quality of service they offer customers, many agencies are proactively seeking feedback from their customers. This largely involves customer satisfaction surveys but also includes monitoring inquiry/request-processing times, number of calls handled and other measures. There are two ends of the customer input spectrum: a significant number of agencies do not collect any formal evidence of effectiveness, while a few use a whole series of performance metrics or balanced scorecard to rate effectiveness.

The findings from these measurement processes must then be used to inform changes to the overall program. eGovernment is not a static program that can be put in place and left alone. Governments must develop a way to initiate and manage changes that lead to continuous improvement. No matter what techniques are used, the process must be an ongoing one. It is the continuous improvement process that drives a country to the top of a maturity stage and ultimately propels it past a plateau to a higher level of maturity.

The importance of measurement should not be underestimated. Measuring success shows what is working, points out areas needing improvement and ultimately leads to service improvement and cost savings.

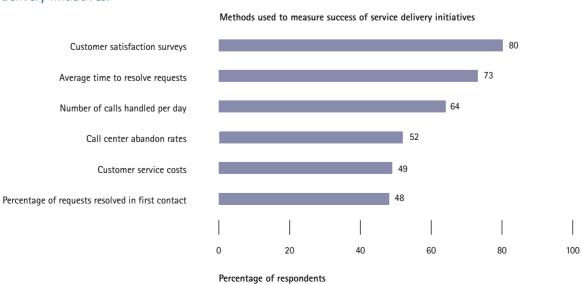


Figure 15. Governments are using a variety of techniques to measure the success of their service delivery initiatives.



Last year's *eGovernment Leadership* report introduced comparisons between similar agencies by identifying leading eGovernment practices in key government areas. This year we continue our look at trends and innovation across five areas: Revenue and Customs; Postal; Human Services; Immigration, Justice and Security; and Education. In general the agencies highlighted last year continue to provide leading-edge services. However, rather than repeat information we concentrate on agencies that have further developed their services

About as

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Taxos

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or those that have only recently begun to deliver an excellent online service.

Revenue and customs

Agencies in the revenue and customs areas have the responsibility of income generation for the government and the challenge of encouraging or enforcing compliance. The selection of innovative examples included here shows the range of online services offered to fulfill this responsibility and



www.ccra-adrc.gc.ca www.ros.ie

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meet these challenges across a variety of business and personal taxes, customs and regulation.

Revenue agencies continue to lead the way in the provision of eGovernment services. Agencies that made the right early investments are beginning to reap the benefits. Their successes have encouraged other administrations to follow suit. For revenue agencies, the impetus for change comes from pressures to accelerate both revenue collection and compliance levels and to improve service. This has pushed the leaders to move additional services online and use innovative ways to drive up early usage. As a result, the industry is characterized by continuous improvement.

The Canada Customs and Revenue Agency (CCRA) website (www.ccra-adrc.gc.ca) was included as a best practice example last year and has been further improved since then. The CCRA has identified businesses as a key user group and targeted services to assist them in meeting their fiscal obligations and receiving their entitlements. In the past year the CCRA has responded directly to the particular needs of these users, from improving the organization of information on the website to offering more channels for filing their returns and paying their taxes. NETFILE is a new Internet-based filing service that allows certain business customers to file their returns for Goods and Services Tax/Harmonized Sales Tax directly over the Internet. This new service complements the direct deposit payment option using electronic banking, and the site provides links to the websites of participating financial institutions that allow payment electronically.

As many agencies have provided an online service for some time, general conclusions can be drawn from take-up patterns. Although initial usage may be low, once a critical mass of users is established rapid growth is possible. The evidence from countries with high levels of usage suggests that there is a barrier at about the 10 percent usage level. Once this initial barrier has been breached, dramatic

through this barrier as early as possible. Some agencies have achieved this by targeting key users with their initial service provision.

For example, Ireland's ROS (www.ros.ie), Vehicle Registration Tax (VRT), described on page 26, has

increases are achievable. The challenge is to break

For example, Ireland's ROS (www.ros.ie), Vehicle Registration Tax (VRT), described on page 26, has quickly broken through this 10 percent barrier. Vehicle registration is a three-return process completed by vehicle distributors and dealers. All three returns can be completed online, and an account querying system allows users to view their revenue accounts as a means of managing cash flow to cover their latest registration tax bill.

Services offered by their respective revenue agencies contribute directly to the improvements in overall score by Italy and Mexico. The website run by the Italian Ministry of Finance and Treasury (www.agenziaentrate.it) provides a service to both citizens and companies, allowing customers with a secure PIN to complete tax forms and pay taxes online, in agreement with selected banks. A particular feature of the site is its customer-centric approach. It provides information on a wide range of registration and payment issues and support to specific customer groups, such as assistance to help the disabled file their tax declarations. If this information is insufficient it also allows the customer to book an appointment to clarify a specific need or resolve a problem. As well as its primary functions, the site provides additional services to add value for users. These include the checking of VAT registration and codes of companies based within the European Union, a range of services to companies that want to fulfill legal requirements for registering their employees, registration of real estate rent contracts and tools for calculation and payment of vehicle taxes.

The Mexican Tax Administration Service (SAT) is an application provided by the Mexican Ministry of Finance at www.sat.gob.mx. The service's website is aimed at fostering and modernizing the current



www.agenziaentrate.it

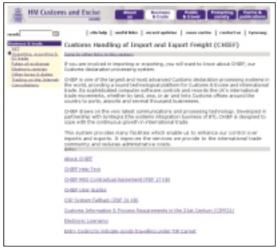


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tax administration by allowing taxpayers to file their tax statements electronically in an easier, less labor-intensive process. The SAT service is organized around users' needs, providing them with guidelines for carrying out the transaction successfully, as well as alternative ways to deal with queries. In an important move, the government has established private banking institutions as intermediaries to provide services online so that the full tax payment transaction can be done using the Internet.

In the customs area, the United Kingdom has made some significant advances with the launch of the Customs Handling of Import and Export Freight



www.hmce.gov.uk/business/importing/chief/chief.htm



www.webreg.dk

(CHIEF) system on October 27, 2002. All freight companies now have to use this system (www.hmce. gov.uk/business/importing/chief/chief.htm), thus ensuring that everything is done online. CHIEF is one of the largest and most advanced customs declaration processing systems in the world, providing a sound technological platform for customs and excise and international trade. Its sophisticated computer software controls and records the United Kingdom's international trade movements, whether by land, sea or air and links customs offices around the country to ports, airports and several thousand businesses. The traditional system was a very laborintensive paperwork system for the international freight companies. The new streamlined system offers some practical benefits to these companies, creating efficiencies that save them time and money.

Another area that has benefited from the improved efficiencies that an online service can offer is the management of the regulatory framework governing company operation. In Denmark the Danish Commerce and Companies Agency (DCCA) offers an online facility (www.webreg.dk) for registering new companies and making changes to existing company details (address, accounting year, auditors, board of directors and management), eliminating paperwork. Take-up of the service has been good, with one-third of all amendments made to company details now reported using the service, and the numbers are continuing to rise.

A second example from Canada illustrates how these efficiency advantages can be taken a step further and supplemented by targeted marketing and incentives. The Canadian Corporations Directorate's Electronic Filing Centre (strategis.ic.gc.ca) allows businesses to file various documents (such as incorporation or annual returns) electronically. The executive is offered the convenience of filing from the office or from home seven days a week, 24 hours a day. Online submissions reduce delivery costs by eliminating traditional delivery expenses and delays. In addition, immediate acknowledgment of filing is received as electronic submissions enable the Corporations Directorate to offer expedient processing with either same-day or next-day turnaround.



http://strategis.ic.gc.ca

These advantages are further supplemented by a financial incentive, because the fee for online filing for federal business incorporation is CAD\$200 rather than the regular fee of \$250.

The business case for revenue and customs agencies to develop online services remains compelling, and now there is evidence that the payback can be accelerated. Learning the lessons of other agencies and targeting the services at the right customers with the right incentives means that rapid progress is possible.

Postal

Many postal agencies have had to adapt very quickly to the commercial necessities brought on by competition. As a result, the leading practices are often very innovative. Postal agencies have capitalized on new technology not only to improve their traditional services but also to develop new higher value service offerings. Last year we identified key areas of eCommerce opportunities that provide a new role and/or extended business opportunities for generating increased revenue. Postal agencies are offering added value to businesses in the areas of supply

chain and messaging services and to citizens as a secure and trusted eService. These have been accompanied by automated and enhanced customer interfaces. In this report we have identified best practice examples from the customer-facing services in these areas that encapsulate the principal opportunities in the postal industry.

Canada Post Corporation (CPC) provides a wide range of business and citizen services. CPC positions itself as a trusted partner for both private enterprise and other government agencies with a comprehensive range of business services (www.canadapost.ca) that demonstrates CPC's understanding of and response to the concerns of its target customers. It has continued to enhance its offerings to business this year with extra features, such as a new online account management application through the Online Business Center. This service makes it simple for businesses to view their account activities online, up-to-date and accessible 24 hours a day. Although initially built specifically for commercial customers, anyone with a customer number can access the application. In the government arena, CPC offers a comprehensive range of what it calls Election Solutions, services that manage the secure flow of information required to manage an election, by stressing the traditional competencies of the postal agency and its position as a trusted eService provider.

Many postal agencies have taken advantage of new technology to develop entirely new messaging services. One example is "hybrid" mail solutions, which combine the advantages of electronic and traditional mail and offer great flexibility to customers. Norway Post (www.posten.no) offers such a service to customers who have set up accounts online. In addition to allowing customers to send and receive secure e-mails, change addresses and stop post arriving to their addresses for a period of time, users of eBrev can choose whether they want their letters to be sent electronically or on paper.



www.canadapost.ca



www.posten.no

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Similarly, La Poste in France provides Maileva (www.maileva.com), which remotely transforms a user's files into hardcopy mails and dispatches them in the desired form. An advantage of this particular service is that a history of all sent mail is available for future reference.

In the area of providing secure and trusted eService, many agencies offer customers a safe channel for the payment of household bills. Australia Post has taken this common service online on a large scale (www.postbillpay.com.au). It commercially launched the Electronic Bill Presentment and Payment service (EBPP) in October 2000, and more than 170 billing companies currently offer this option to customers. The reach of the service has been significantly increased to target market segments by making Post Billpay available through cobranded portal websites



www.maileva.com



www.e-boks.dk

(ninemsn billpay and MYOB EzyBillpay). MYOB makes the service available to its 300,000 mainly small business customers, and ninemsn is Australia's leading Internet portal with more than 4 million unique users per month.

The position of the postal agency as a trusted eService provider is taken further by an innovative service in Denmark. Post Danmark facilitates a range of electronic transactions with its e-Boks service (www.e-boks.dk). e-Boks offers a safe infrastructure for sending, receiving and storing electronic documents for all Danes. A citizen can choose to receive bills, government documents and other official correspondence through e-mail instead of by post. These official documents are stored in a central location, called the "e-Boks," which can be accessed using a PIN. Critical to the success of this service is a wide range of participating organizations and high take-up by individuals. Post Danmark owns onethird of the specialist Danish electronic document firm e-Boks. This is a vital factor in encouraging participation and take-up because of Post Danmark's status as a trusted service provider.

Postal agencies are also in a strong position to collaborate with other government service providers. In Finland the legal requirement to notify a change of address to a magistrate, who enters it in the Population Register, is made easier by Finland Post (www.posti.fi). The online service that facilitates this is run jointly with the Population Register Centre, and notifying a change of address on either of these



www.postbillpay.com.au



www.posti.fi



www.poste.it

sites simultaneously informs the other organization. Security is managed by requiring the use of a Finnish Electronic ID card.

As a concluding example, the range of services offered by Poste Italiane in Italy, one of the countries that improved significantly this year, is illustrative of the current state of the postal market. The Poste Italiane website (www.poste.it) provides many of the services referred to here, from hybrid e-mail to physical letter and payment of bills for various utilities and subscriptions. Poste Italiane also provides a range of banking services for customers, such as payments, bank transfers and investment funds. Specific services are targeted at business customers in the area of mass mailings and marketing tools. The site is rich, efficient, easy to use and appealing. The emphasis is on the customers and providing them with a variety of value-added services in a secure environment based on the latest technologies in each area.

Human services

Human services agencies are responsible for ensuring the social welfare of citizens. Their primary services are geared toward providing support, advice, benefits and payments. In the current environment of economic uncertainty and a rise in unemployment levels, there is a continuing focus on these agencies. Their general objective is to provide a higher quality service at a lower cost to citizens and businesses. The challenge is often managing disparate resources and initiatives.

Last year we wrote about a number of examples in the area of employment, and this year there is no shortage of new examples or improvements to services that were already leading edge. In 2002, the Japanese Ministry of Health, Labor and Welfare saw a 450-percent increase in take-up of their online job information service, Hellowork (www.hellowork.go.jp), which lists jobs registered across Japan. The service has been continuously improved since its launch in 1999 with a comprehensive array of options available to job seekers. They can search for job openings and access information on how to apply for job training subsidies as well as find the latest data on the labor market and on a variety of related matters. Detailed information is provided for each job opening, and company names and addresses are also open to job seekers on the Internet. A related site, Shigoto Joho Net (www.job-net.jp), using the Hellowork information and operated by a public-private partnership. allows job seekers to search relevant information nationwide using their mobile phones.



www.hellowork.go.jp

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www.jobs.gov.hk



www.mohr.gov.my/NASApp/jcs/util/jsp/index.jsp

As well as providing a complete service for job seekers and employers, the Interactive Employment Service (IES) in Hong Kong (www.jobs.gov.hk) attempts to bridge the digital divide by providing kiosks in job vacancy centers to make the more than 10,000 vacancies per month posted on IES instantly available at the point of need. A similar service is offered by Jobcentre Plus in the United Kingdom, which is installing touch-screen Jobpoint kiosks in Jobcentres in Britain to replace outdated vacancy display boards, allowing free access to every vacancy held by the Jobcentre network in Britain as well as vacancies from European employment service agencies and other third-party agencies.

The Job Clearing System (JCS) is one of the applications offered by the Electronic Labor Exchange (ELX) in Malaysia (www.mohr.gov.my/NASApp/jcs/util/jsp/index.jsp). Employers can use the JCS system to seek out future employees and to publish job



www.canadabenefits.gc.ca

vacancies. Vacancies can be posted on the site immediately by completing an online form, and the ELX provides support for users who encounter problems in using the services, including a telephone and e-mail helpdesk.

The Canada benefits site (www.canadabenefits.gc.ca) was recently launched and offers a "whole of government" approach to benefit provision. Information provided is both national and regional and across a range of departments and agencies. Users can access the information in a variety of customerfocused ways, such as by personalizing the benefits finder to their own needs or searching for general information by life stage or role. There is also an A–Z index of benefits. The site provides details of each benefit and how to go about getting these benefits in each given situation, as well as links to the more detailed information offered by the authority responsible. A variety of transactions can be completed online at a sophisticated level.

Centrelink (www.centrelink.gov.au) in Australia, delivers a variety of programs and payments across three tiers of government and 16 different agencies. The site makes a point of stressing its customercentric approach, encouraging feedback and using that feedback to make the site more useful. The service is designed to make it easier to explore all the potential programs and payments available. A high-profile access option is "First Visit," which



www.centrelink.gov.au



www.sociale-zekerheid.be

explains all the starting points and guides novice users. Other features include access to publications and information in a wide range of languages.

Employers in Belgium have direct access to data held by the social security administration through its website (www.sociale-zekerheid.be). Since the first of January 2003, employers are legally required to register the beginning and end of employment electronically, and the Déclaration Immédiate Onmiddellijke Aangifte (DIMONA) service allows employers to complete these registration transactions online. Acknowledgment of receipt is sent automatically, immediately after completion of the declaration, leading to a more efficient registration process. Every employer can check and correct the personnel register online, so they no longer need to keep a paper-based personnel register and they have interactive access to other relevant social security data. Now that the infrastructure has been established, the social security administration plans to make additional transactions available to both employers and citizens over the coming year.

Immigration, justice and security

Our research in the areas of immigration, justice and security shows a general but not significant improvement across the range of services investigated. For the immigration and security areas, new systems in reaction to the increased focus on security and antiterrorist measures are only beginning to be introduced, and it seems likely that significant changes as a result of the events of September 11, 2001, will only be seen in future years. There is increased focus on biometrics, with a number of pilot applications in operation, and this is likely to be a key growth area.

The Department of Immigration and Multicultural and Indigenous Affairs in Australia offers an online visa application process (www.immi.gov.au/e_visa/visit.htm) to foreign nationals from 32 countries. The site is organized according to user needs and also contains an informative online tutorial. Once an application has been made online, applicants are given a lodgment number so they can track progress using the Internet. The online service offers a full end-to-end transaction that allows foreign nationals to apply and pay for many commonly sought Australian visas. The online solution has reduced turnaround time from days to hours and reduces the amount of paperwork on the citizen's side.

A bilingual application tracking service is offered by the Immigration and Naturalization Service (INS) in



egov.ins.usdoj.gov/graphics/cris/jsps/index.jsp



www.immi.gov.au/e_visa/visit.htm

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the United States (https://egov.immigration.gov/graphics/cris/jsps/index.jsp). The website provides online access to the current status of immigration benefits applications submitted to an INS Service Center. Using the application receipt number assigned by the INS, customers (and their representatives) can have around-the-clock and immediate access to this case status information. The information is updated regularly throughout the business day, and, if any action is taken regarding an individual's case, the change will be reflected online within a few minutes. The information is integrated with an automated phone system, INS Direct, where case status information can also be found.

In the area of justice, existing organization boundaries continue to be an obstacle to the implementation of "integrated justice," the seamless application of justice processes across the multiple agencies involved, for example, police, courts, prisons and probation services. The emerging trend in this area is the development of standards to facilitate the sharing of justice-related data between separate agencies.

Police and courts agencies worldwide are beginning to move in the direction of increased public access. With courts in particular, a wide gap exists in the level of eGovernment initiatives. Some countries have moved to advanced electronic filing systems and paperless courts, but many other countries have not yet developed services in this area.

A particularly innovative solution in the justice arena is offered by Singapore. Built on the infrastructure of their electronic filing system (EFS) the Supreme Court in Singapore has developed an eLitigation solution that has transformed the paper mill of a traditional court into an integrated and connected paperless system (www.lawnet.com.sg). Using Short Message System (SMS) text messaging, lawyers now get information on court hearings



www.lawnet.com.sq

without the need to make telephone inquiries to the Supreme Court Registry, and the CaseWatch service provides information, via e-mail alert, relating to any court action in which a lawyer has registered an interest. The EFS databases can be accessed remotely and in the City Hall building via wireless Local Area Network (LAN), with a smart card-based authentication system. A further development has seen the use of consumer Internet protocol videophones in the Supreme Court's Technology Courts, making it possible for lawyers to appear in court without physically attending. The virtual court solution is designed to integrate all aspects of the process and revolutionize the courtroom. Its success is evident in its take-up rate, with more than 315 law firms subscribed to the system and more than 82 percent of court documents e-filed to-date.

It is important to emphasize that this survey measures customer-focused online services and does not reflect integration efforts being undertaken by various governments across the immigration, justice and security sector. A significant amount of investment is being made in technology infrastructure for networking and sharing information more quickly and easily, changing the way information is obtained, stored and shared.

Education

Many of the innovative applications of new technology in the delivery of education services are provided below the national government level and as such have not been assessed by this research. However, some interesting examples of leading practices are available at the central administration level, particularly in the area of providing support to teachers.

In the United Kingdom, teachers can access curriculum and lesson plans covering all areas of the National Curriculum online using TeacherNet (www.teachernet.gov.uk). It features more than 1,000 lesson plans and a unique search engine to help pinpoint an exact requirement. This search engine, called the Teachers' Assistant, is a focal point of the site and provides an easy way to search for information and to move quickly to exactly what teachers require. The simplicity is important because some teachers are not yet fully comfortable with the Web. The site also offers career advice, professional tips and easy access to government policy and documentation.

Curriculum Corporation (www.curriculum.edu.au) is an independent, not-for-profit organization owned by the Australian Ministry for Education and offers project management for the school sector. The site offers an online service to increase educators' information and communications technology (ICT) literacy and support the development of online communities. A key component is a modular online tutorial, aimed at novice Internet users but structured so that more experienced users can pick and choose topics to increase their skills. The tutorial takes advantage of eLearning principles such as task-based exercises and learning by experience. Longer-term support is provided by a moderated online discussion group, a directory of electronic resources and links to education systems and other discussion groups.

The edu.Library in Singapore (www.moe.gov.sq/ edumall/edu_library/edu_library_home.htm) focuses on integrating technology into the educational experience. There is no need to register for this service, and it is clear and easy to use. All of the materials are given star ratings depending on how useful they are. There is a recommended software list and a database of Internet sites for use in the local curriculum. Other useful websites for learning are also recommended. In addition, the site offers a library of more than 300 e-videos covering a range of subjects and supplemented by a website called WEBBITs that provides lesson ideas specially designed around some of the e-videos. Extracts of lesson ideas from Teacher's Guides can also be accessed through links in the e-video collection.



www.teachernet.gov.uk



www.curriculum.edu.au



www.moe.gov.sg/edumall/edu_library/edu_library_home.htm



www.kennisnet.nl/po/leerkracht/index.html

In The Netherlands, Kennis Net (www.kennisnet.nl/po/leerkracht/index.html) offers a variety of education services to teachers and students. Teachers can use the online community to communicate with other teachers. A wide range of resources is

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provided, from materials to help with a teacher's professional development to supplementary teaching aids in a variety of formats. There is a repository for lesson plans, and it is possible to identify best practice examples from across the country. In addition, homework, assessments and tests can be created, completed and submitted by students and graded by the teacher online.

Apart from these teacher support examples, in many countries aspects of the administration of third-level education are managed centrally. University applications and student loans are two such administrative functions where innovative online practices exist.

In the United Kingdom, applications to university are managed by the Universities Colleges Admissions Service (UCAS—www.ucas.com). "Apply" is a secure, Web-based, online application system that comprises separate sections, one for the student completing applications and one for the staff who will accept forms, add references and submit applications to UCAS. It is available to applicants through participating schools, colleges, careers or Connexions offices or through British Council Offices that have

registered to use this facility. UCAS supplies these centers with the Web addresses, a username and password to access the software. The Centre then chooses a "Buzzword" unique to that Centre which will identify them and any applicants applying through them. Using the system allows staff to view the progress and content of an application as soon as the applicant has registered. Students are supported by automatic validation of important details, such as date of birth and course codes.

The State Education Loan Fund in Norway (www.lanekassen.no) is responsible for the management of student loans. It offers online services that assist with the original application for a loan and with the ongoing management of the loan once received. The Nettsøknad service was launched in 2002 and makes it possible for students to apply for student loans and financial aid. The service is fully automated, and, once an application form is completed online, an online receipt is provided. The Nettsvar service allows users to check the status of the application for financial aid and the current value of personal student loans, as well as to manage account information.





www.ucas.com