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.

Stephen J. Rohleder
Group Chief Executive—
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Vivienne Jupp
Managing Partner—
Global eGovernment Services

executive summary

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.

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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.

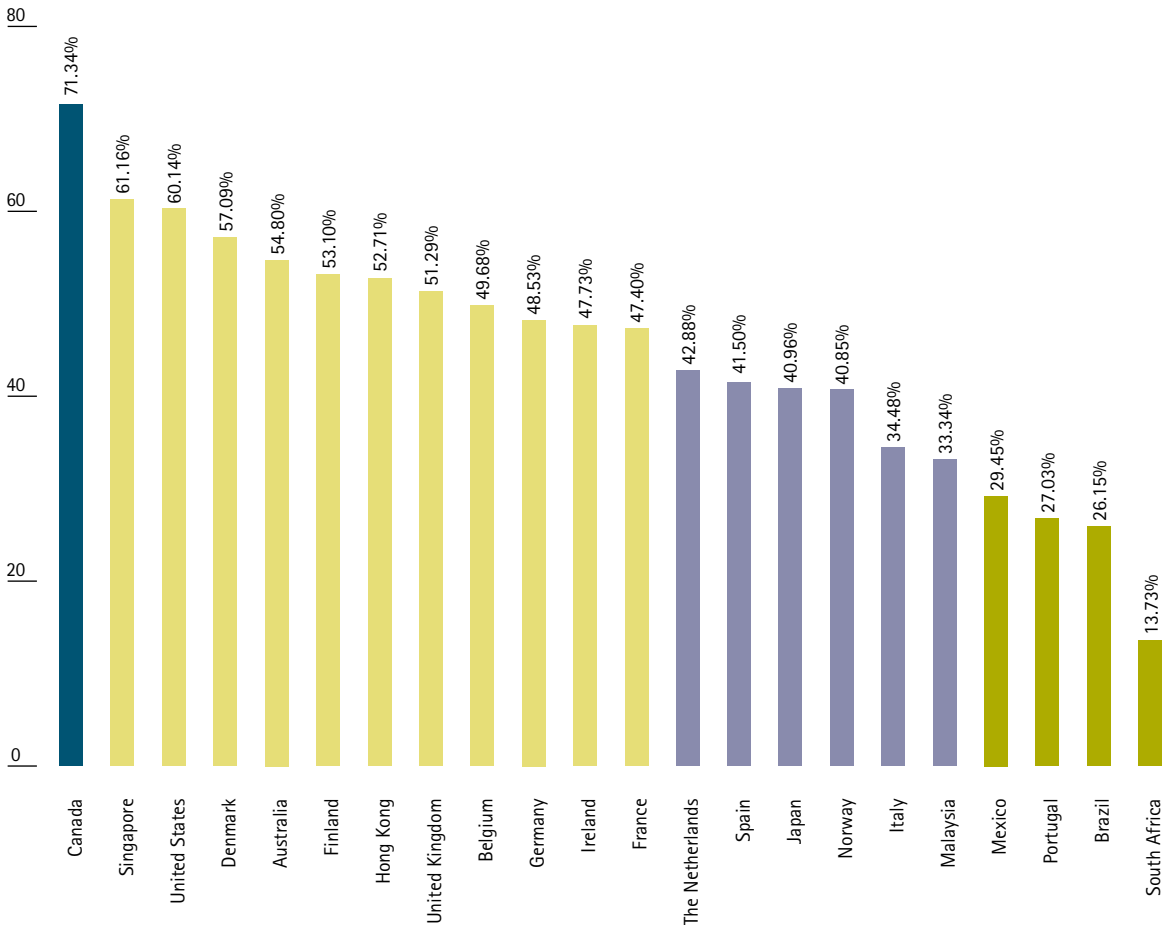
The sections that follow expand on each of these major findings.

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

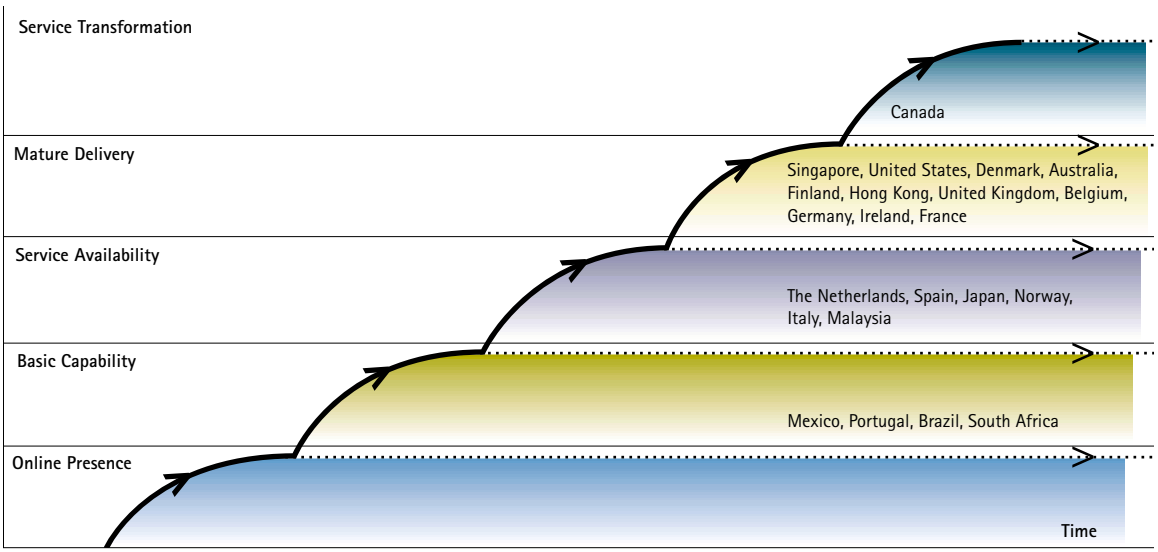
Figure 1. 2003 overall maturity score



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 2000: 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.



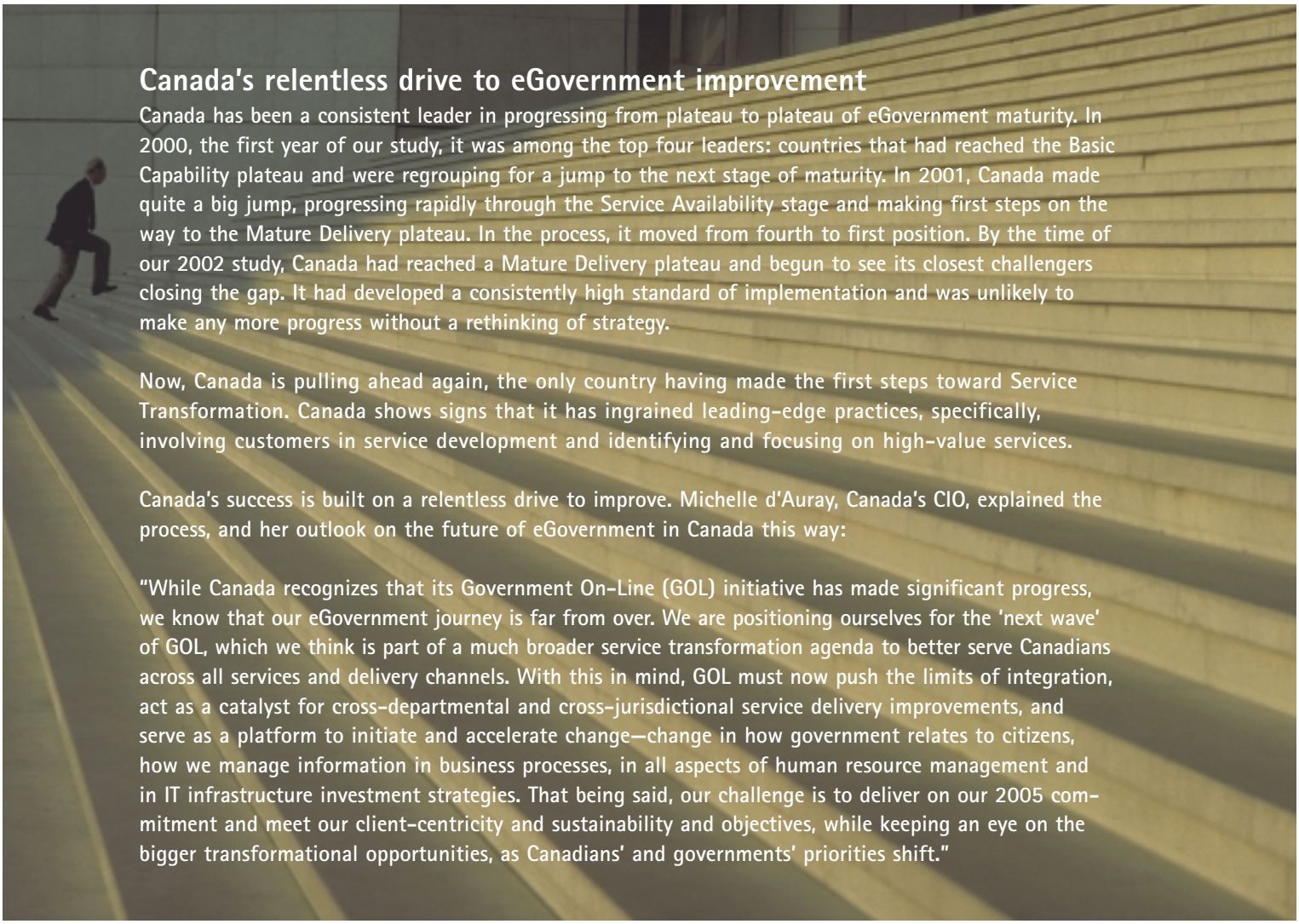
2003 key findings

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 wins • Focus on high-volume repetitive services • Build 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

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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.

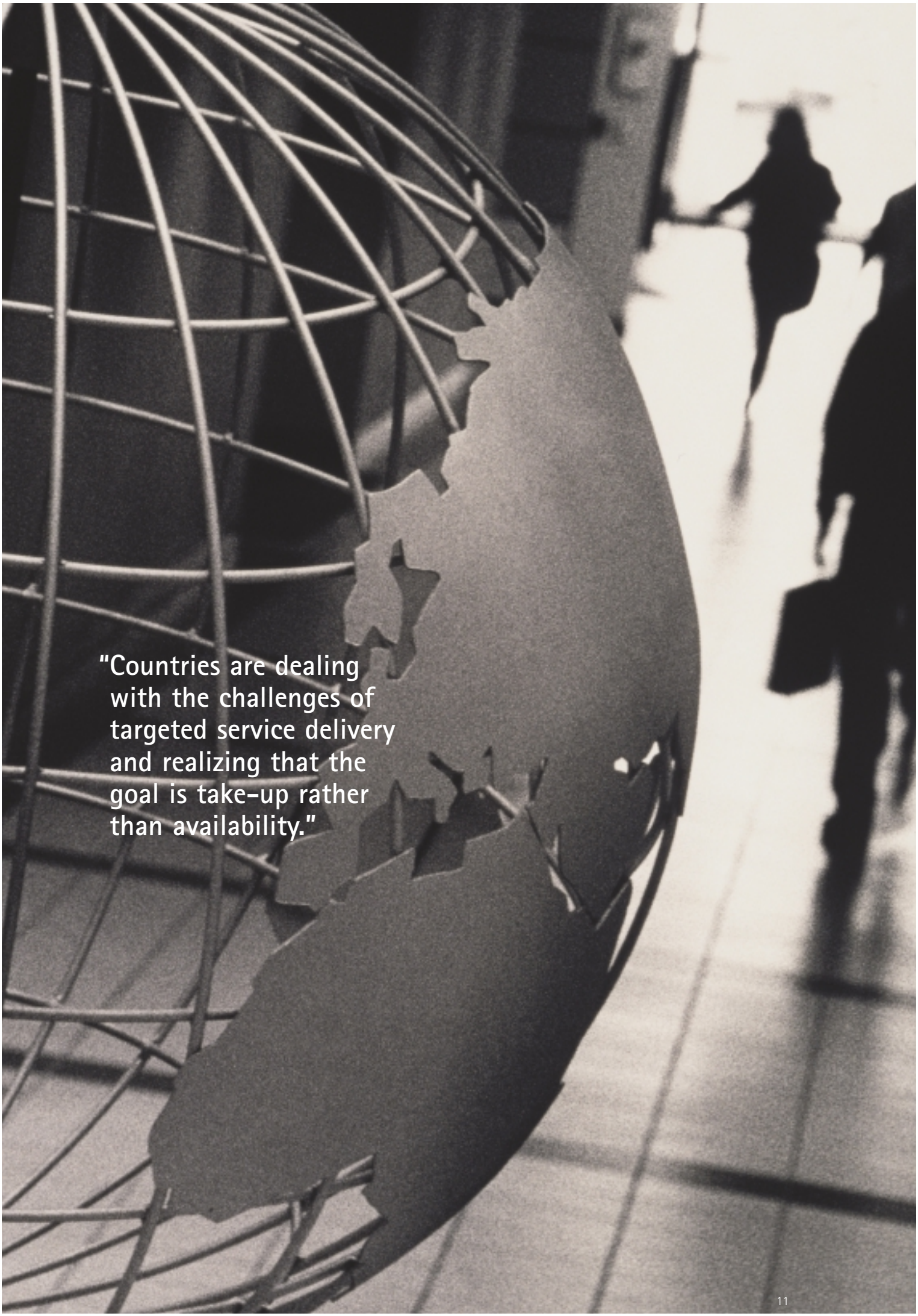
Meanwhile, the group of countries behind Singapore and the United States, including Denmark, Finland, Hong Kong Special Administrative Region (SAR)-China and Australia, has gained significantly. With the example of the leaders to follow, these countries have had a clearer roadmap for their initiatives. 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 year-over-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.



"Countries are dealing with the challenges of targeted service delivery and realizing that the goal is take-up rather than availability."

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.

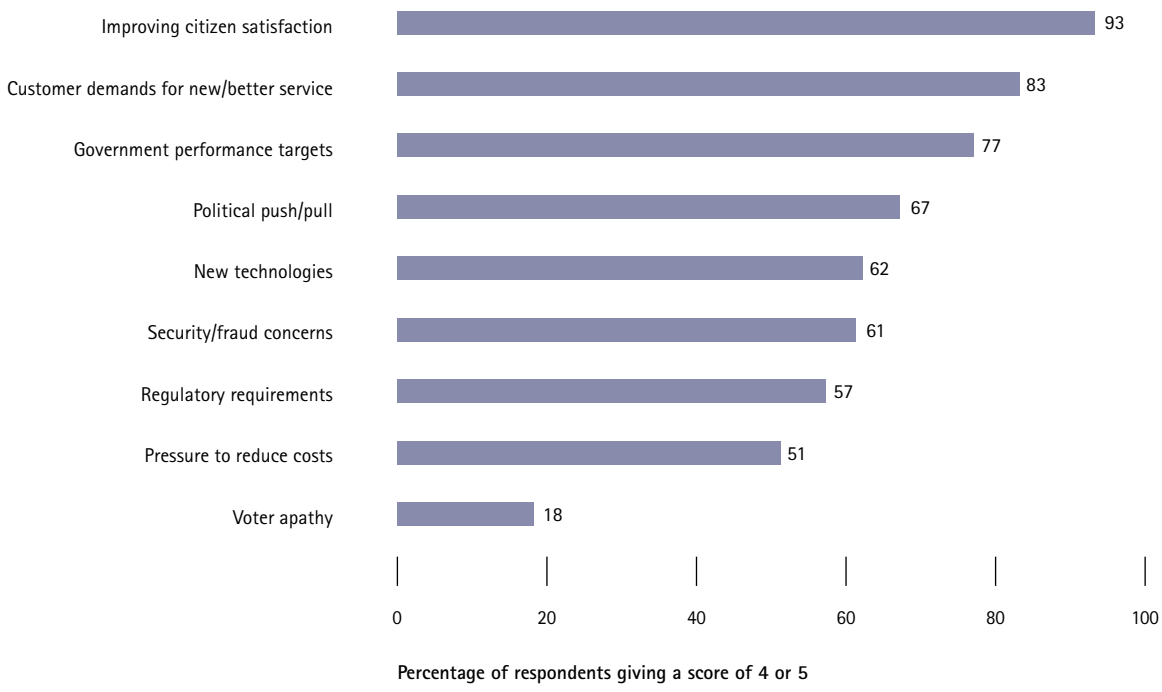
By value, we mean effectiveness and efficiency of government service. Effectiveness implies government achieves its intended outcomes, while efficiency implies government improves the way it does business. The true value of eGovernment is that it helps government deliver enhanced service to citizens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

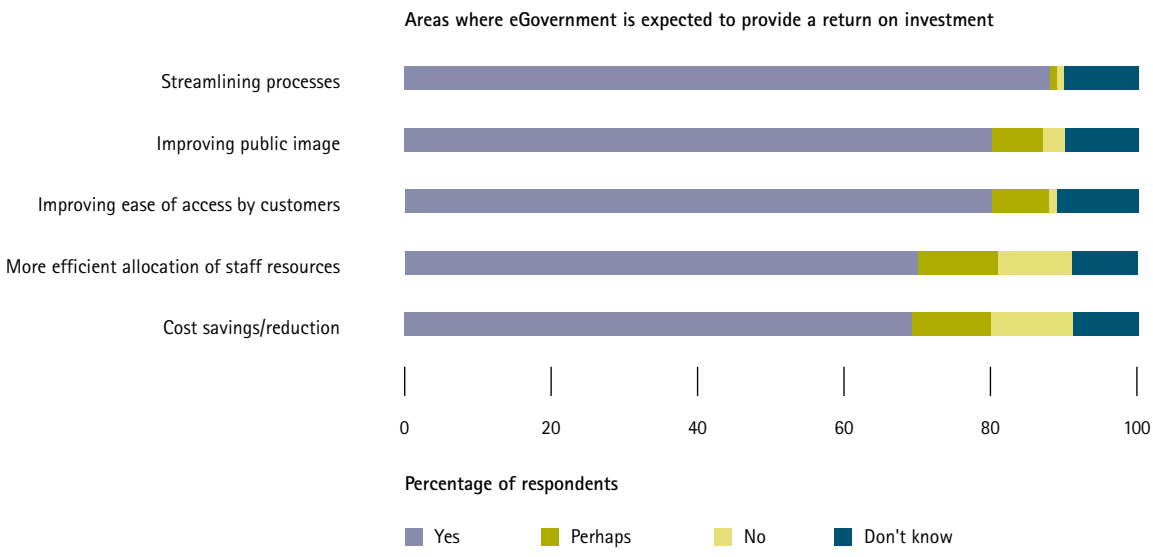
As eGovernment programs mature, executives are now thinking in terms of how their initiatives can deliver value for their investment. Among the executives we surveyed, eGovernment is most widely expected to produce a return on investment in terms of streamlining internal processes (more efficiency). 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 high-volume 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.

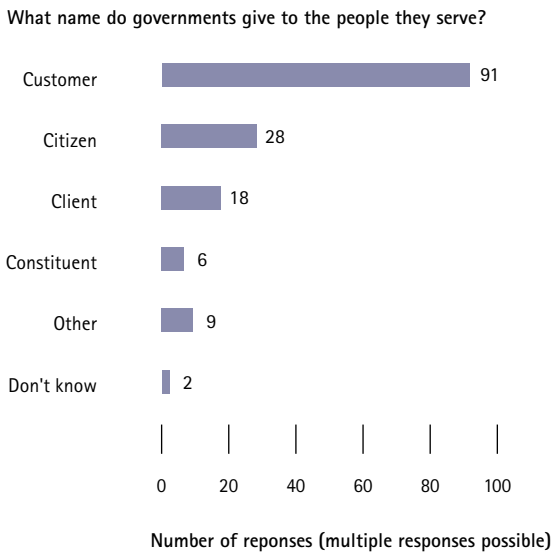


2003 key findings

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.



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.

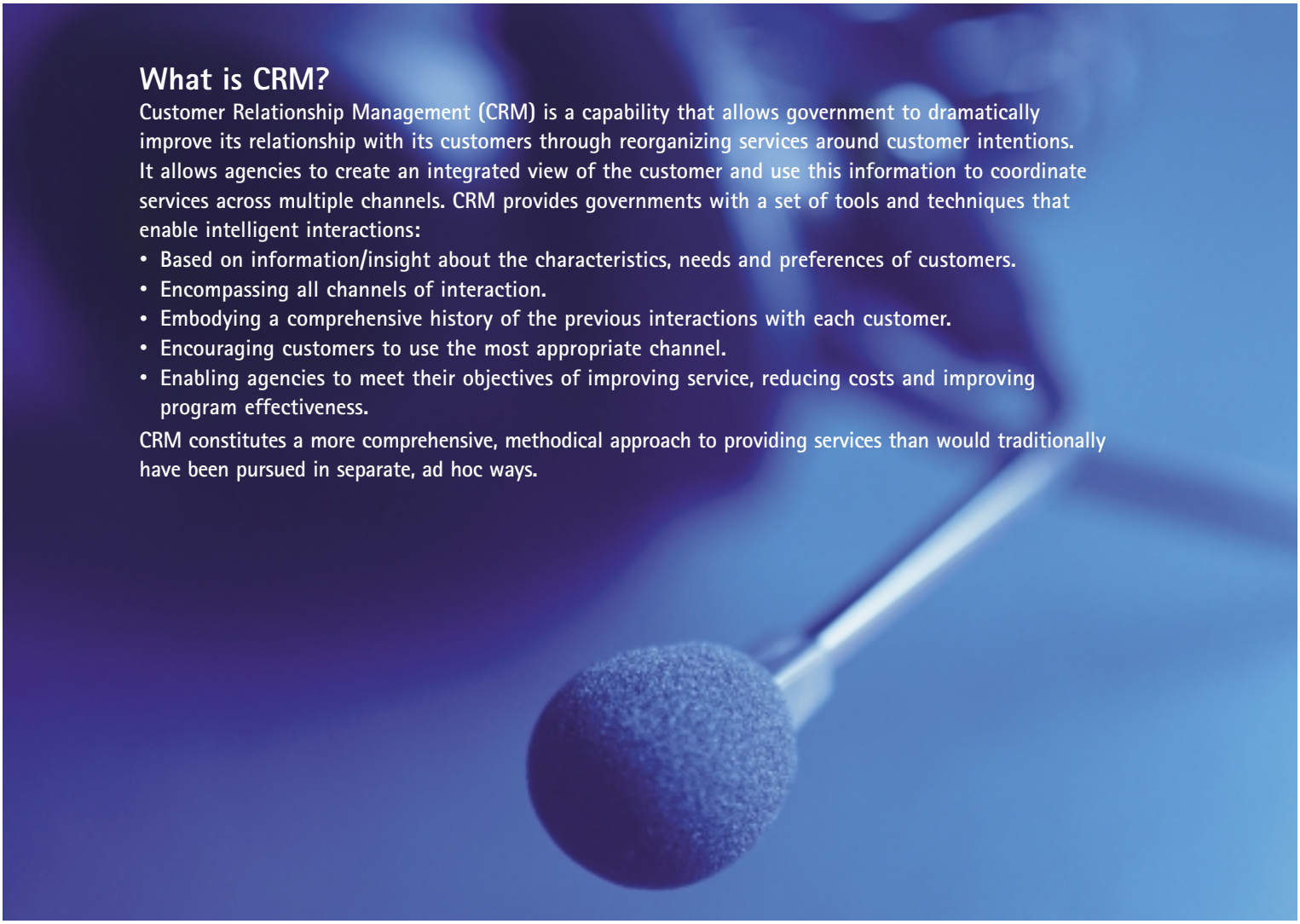
eGovernment solutions being implemented today are primarily initiatives to improve service delivery through making access and interaction easier. Executives expressed a strong interest in making eGovernment systems more accessible, with increased numbers of physical and telephonic access points. At the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

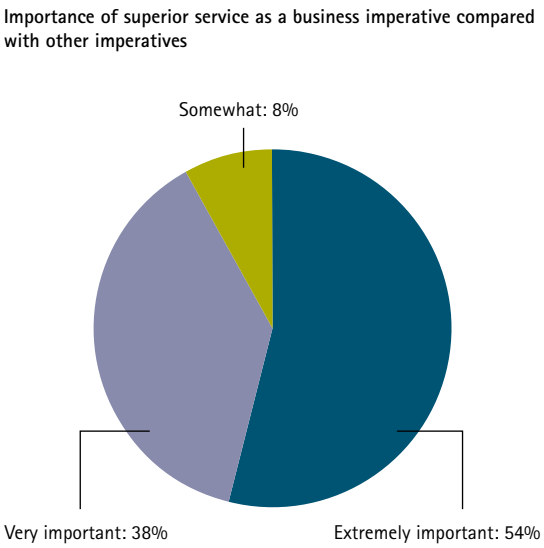
CRM constitutes a more comprehensive, methodical approach to providing services than would traditionally have been pursued in separate, ad hoc ways.



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 cost savings over time.

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



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.

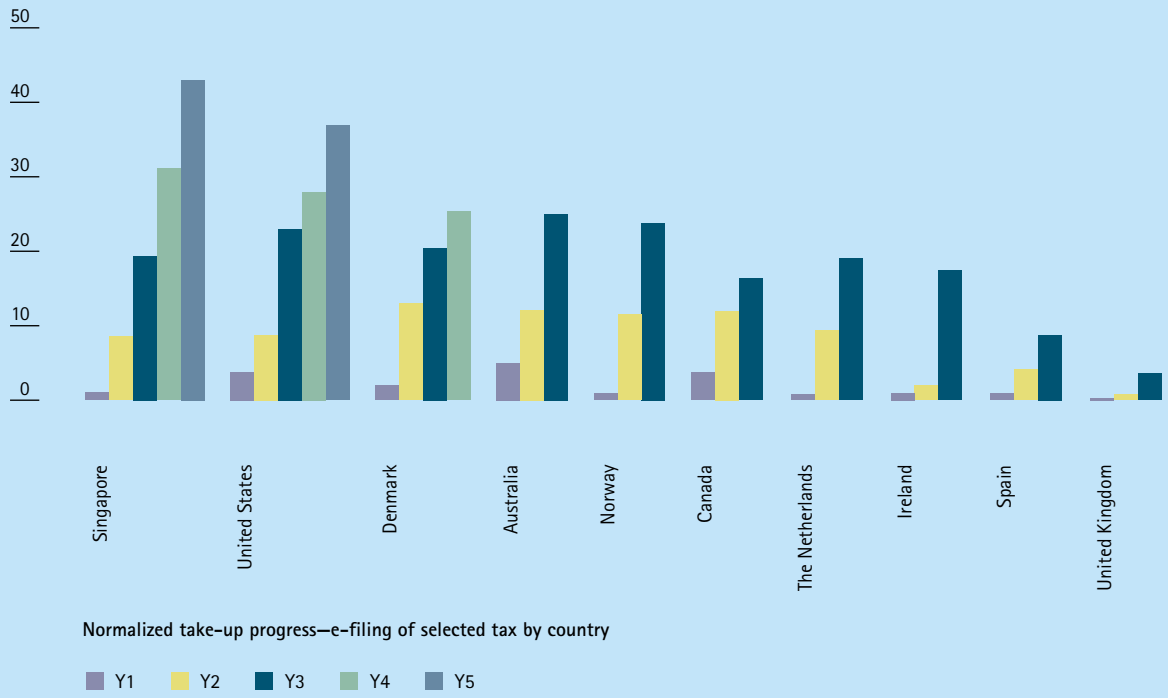
While the level of current eGovernment usage varies across countries, increasing take-up continues to be a concern for all governments. Some governments are building their business cases for future eGovernment investments on usage points: if the benefits of eGovernment are driven by high volumes, then 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.

[1] 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.

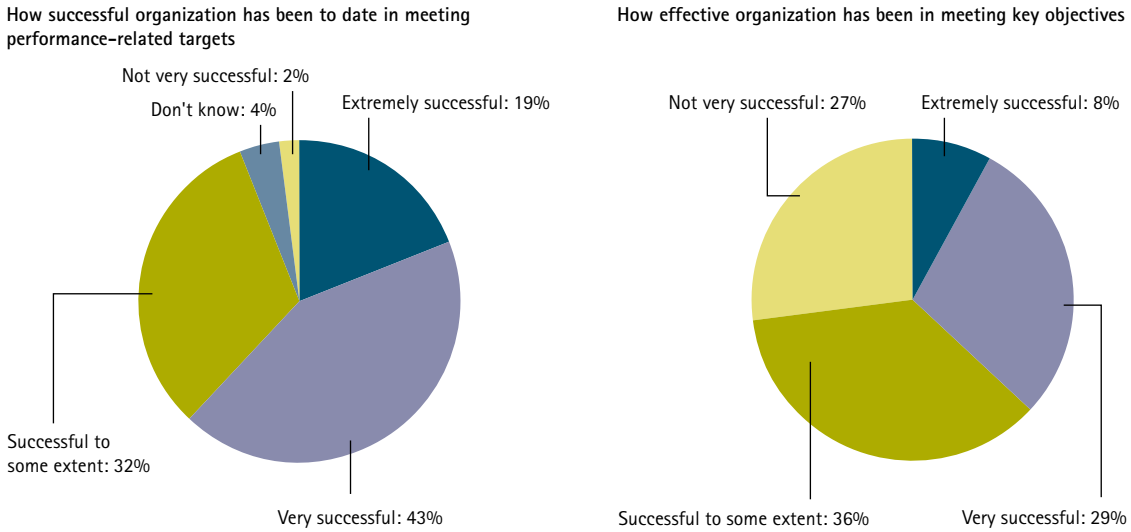
Revenue agencies can set their sights high when looking at the potential for e-filing. Many agencies set initial targets of 50 percent, which now look low. Increases in uptake lead to a corresponding elimination of low-value manual processes, for example data entry and exception handling. Online support 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.



Normalized take-up progress—e-filing of selected tax by country

2003 key findings

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



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.

the way forward

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.

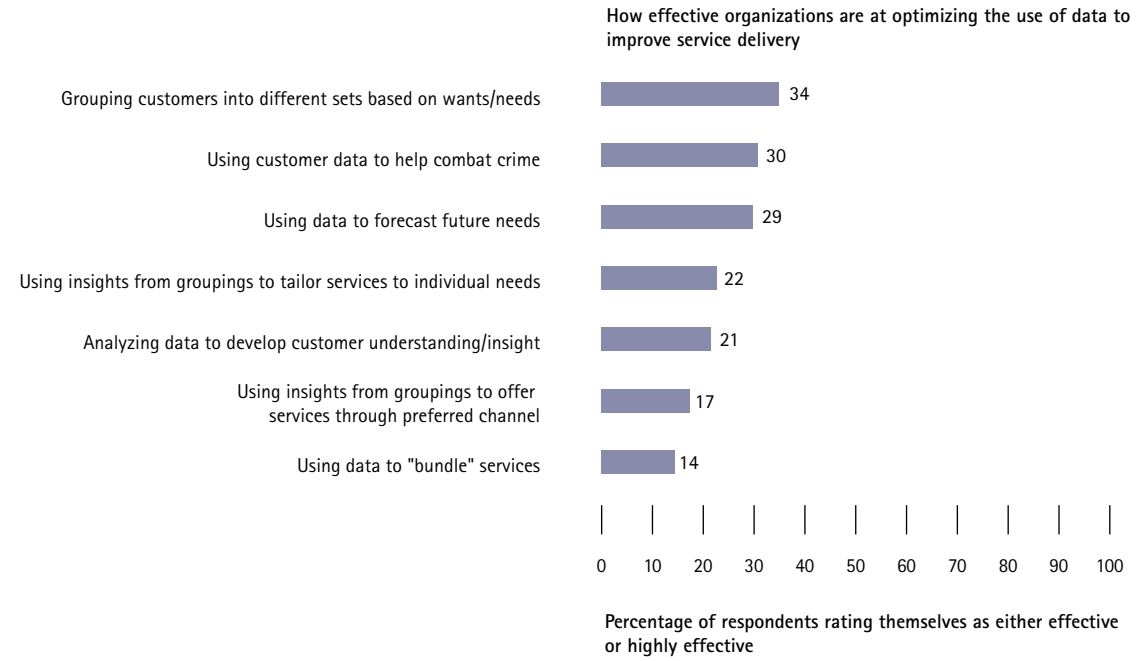
In this section, we provide our recommendations, based on leading practices identified in our research and through our experience, for moving forward at each of these four steps to an effective eGovernment program.

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.



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 customer-centric 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.

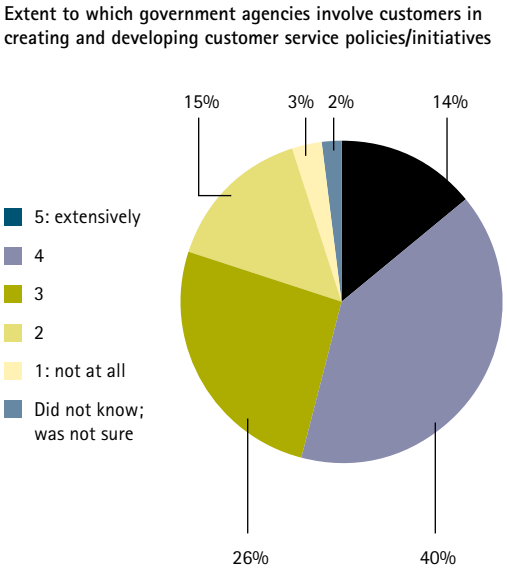
What needs to happen is a move from one-to-many (broadcast) service to one-to-one service. This move is not about simple personalization of websites; rather, it is about matching services and the structure of services to make it easier for one individual to do business with the government. To bring service 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.



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.

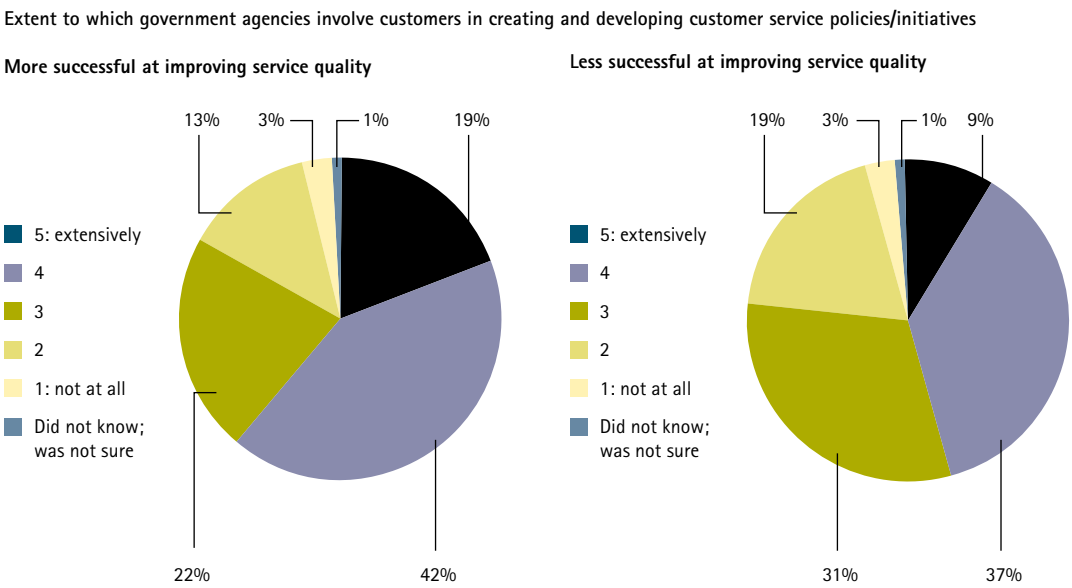
Part of the process of knowing what your customers want should come as a follow-on to more refined segmentation. With a more granular view of their customer base, governments can then tap into available data about these segments to determine how service can be improved or what channels could be employed 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.



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:

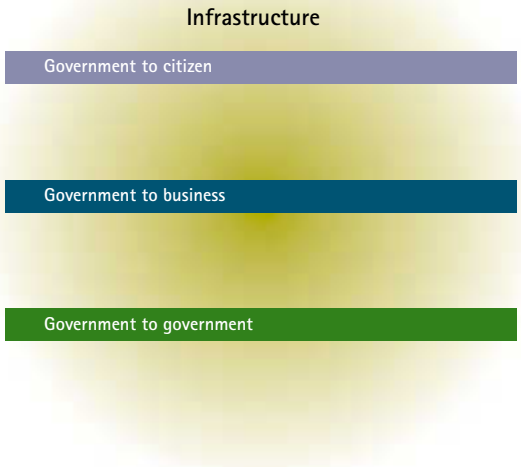
- **Government to business.** Does the project simplify business processes? Does it streamline high-volume and/or high-cost processes?
- **Government to citizen.** Will the program be predictive of citizen needs? Does it reduce bureaucratic interactions for the citizen?
- **Government to government.** 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 customer-centric 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 cross-agency 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 private-sector 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.

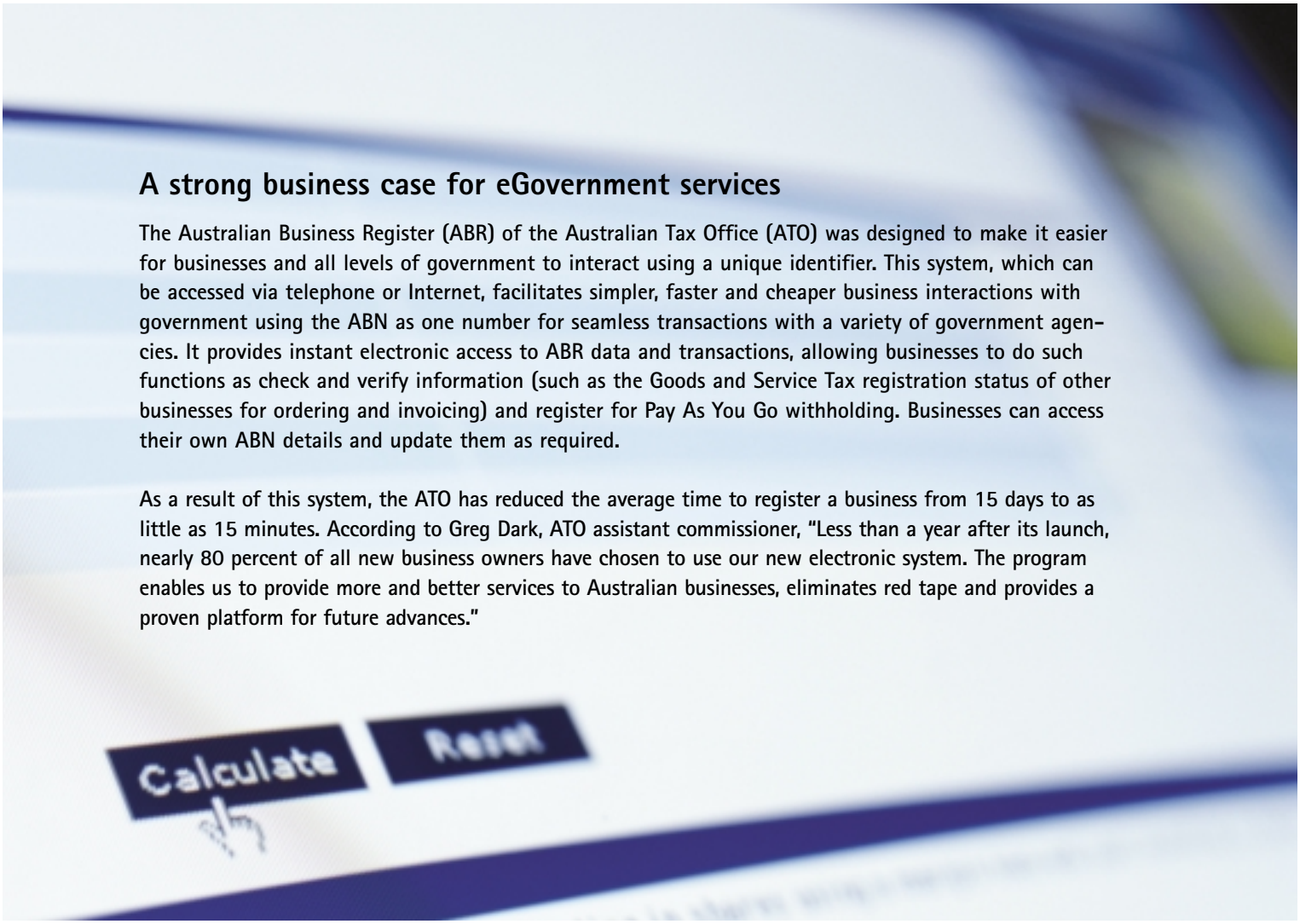
What makes ROS such an interesting case is that the Irish government began by targeting specific intermediaries, accountants and agencies, first. The government's success with these intermediaries led it to expand the program to include other intermediaries, car dealers and distributors. That move was 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.

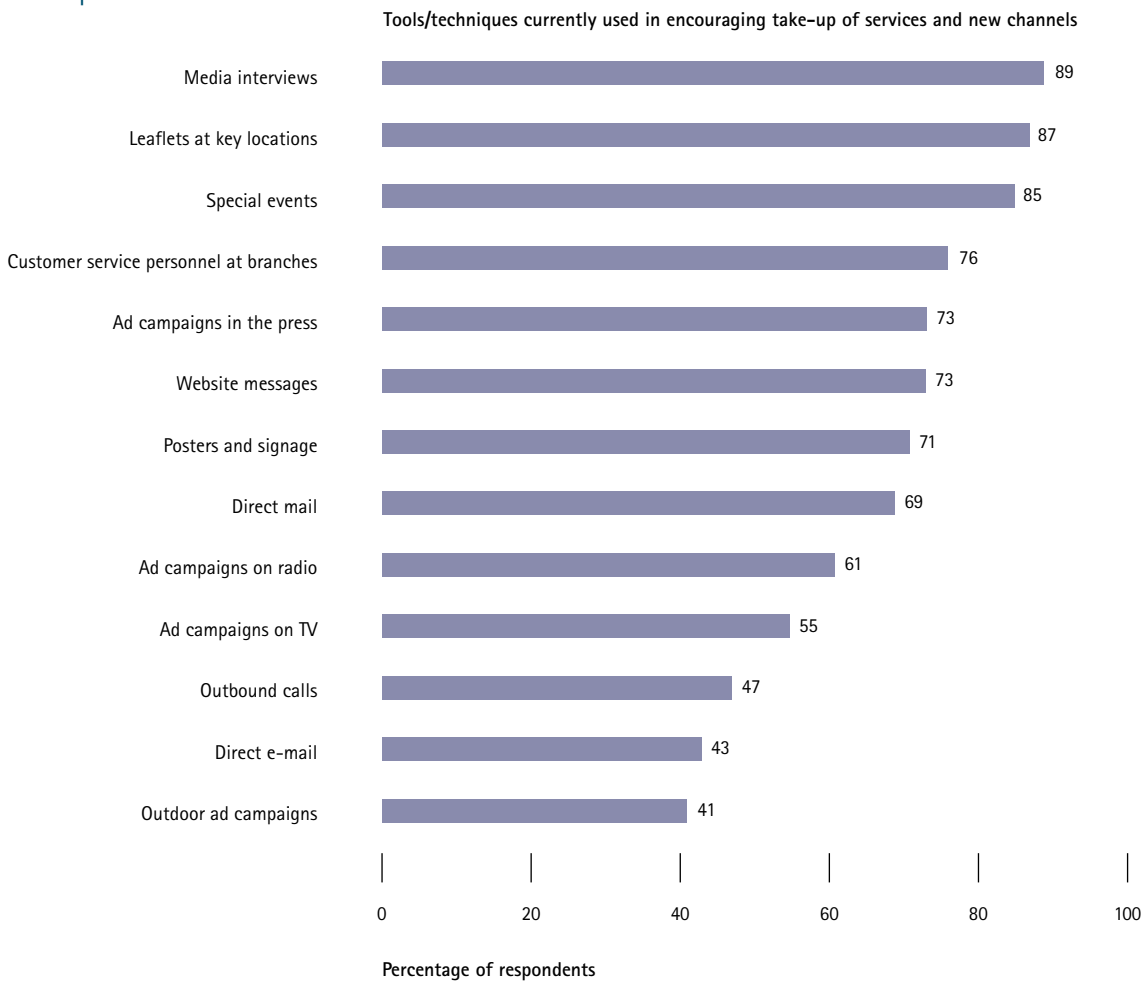
the way forward

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.

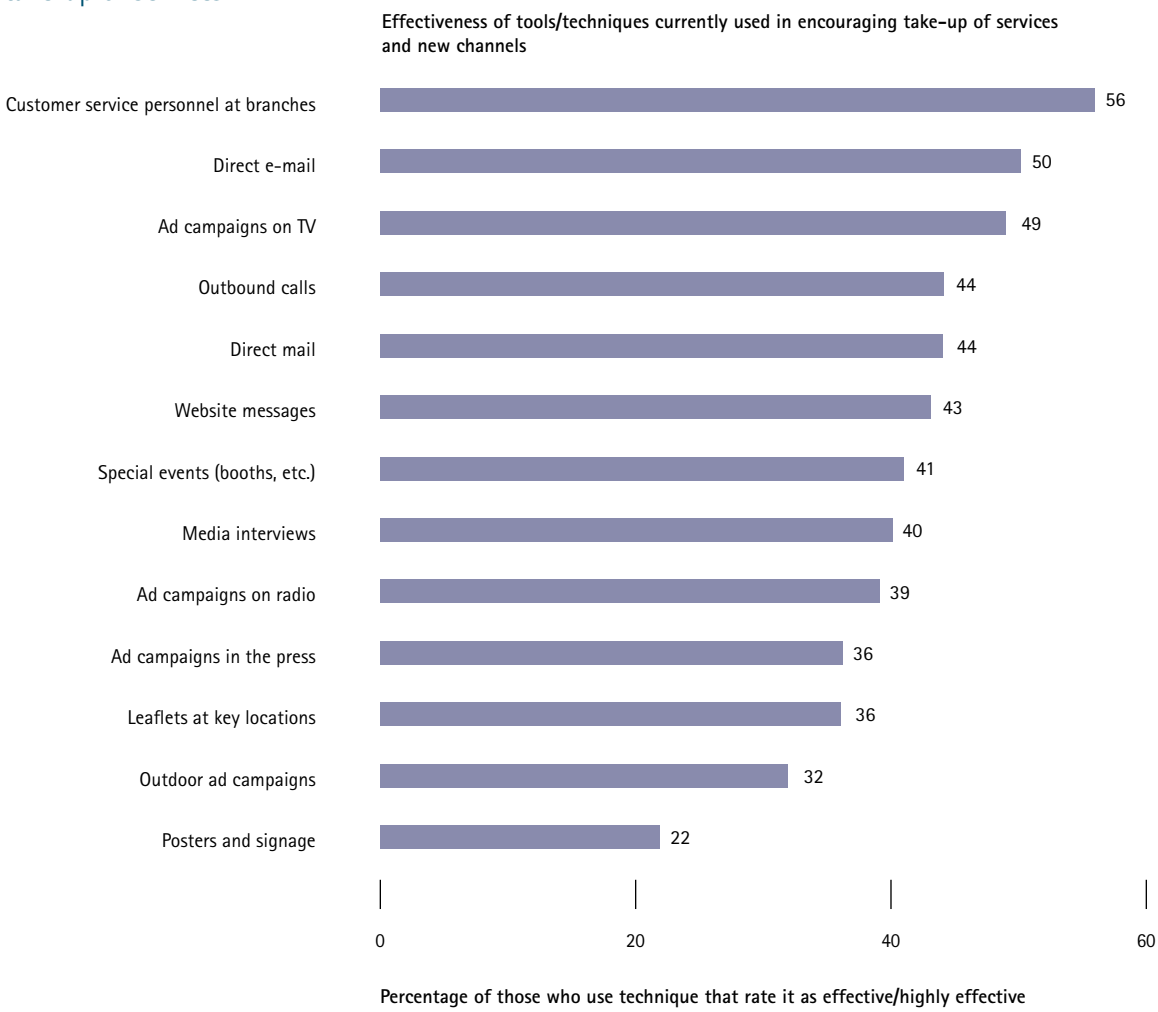
If users perceive that doing business with government online is difficult, the eGovernment program will fail, no matter how valuable the services might be or how much marketing is done to encourage take-up. Every step required to use an online service is a potential barrier, and even small barriers can 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 multi-channel 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 the 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.

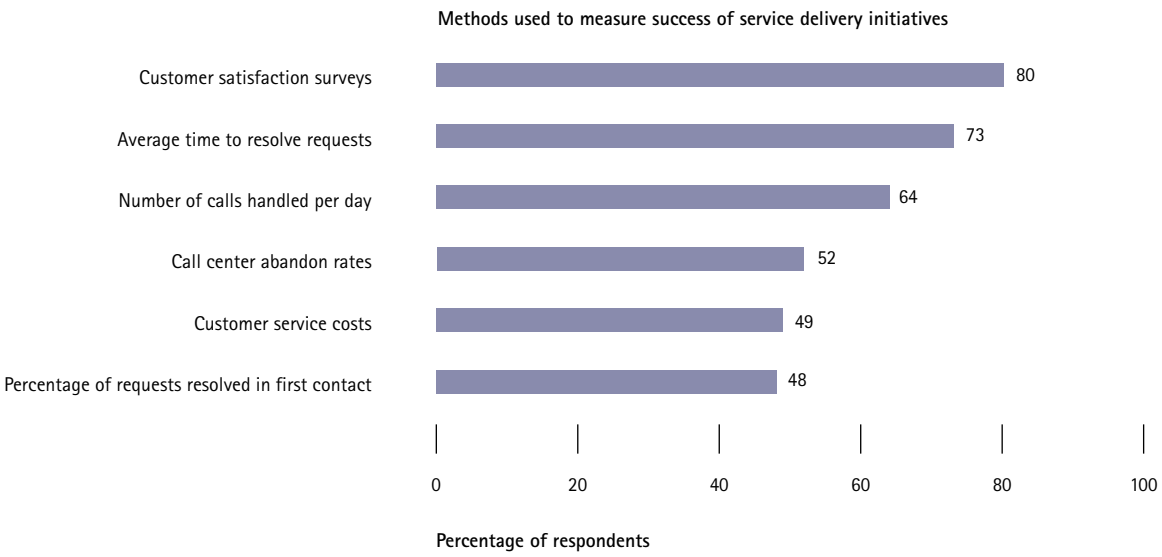
The solution for governments, then, is to choose some combination of measures that most closely mirrors the objectives they are trying to achieve and to learn from the leaders who have put such measures into effective use. For example, part of the government of Norway's ongoing plan for measuring progress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



innovative practices in eGovernment

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 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

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 increases are achievable. The challenge is to break 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 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

www.sat.gob.mx

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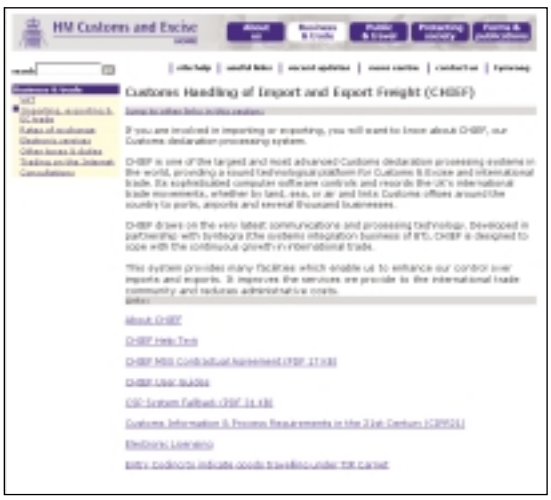
tax administration by allowing taxpayers to file their tax statements electronically in an easier, less labor-intensive process. The SAT service is organized around users' needs, providing them with guidelines for carrying out the transaction successfully, as well as alternative ways to deal with queries. 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 (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 labor-intensive 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.



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

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.

www.webreg.dk

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.

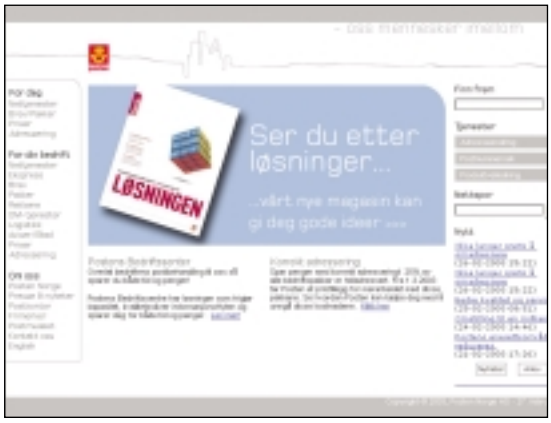
Postal

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 On-line Business Centre. 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 (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.

www.maileva.com

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 one-third 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.e-boks.dk

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 customer-focused 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 customer-centric 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

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

https://egov.immigration.gov/graphics/cris/jsps/index.jsp

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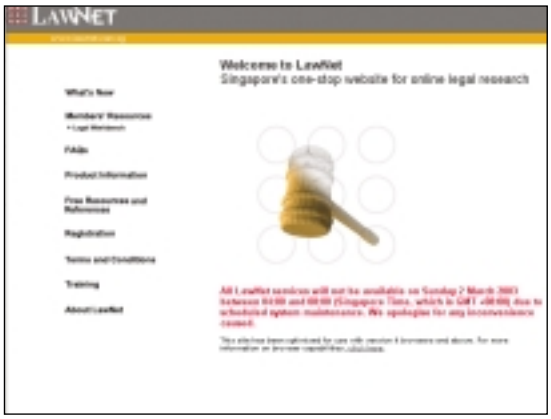
the United States (https://egov.immigration.gov/graphics/cris/jsps/index.jsp). The website provides online access to the current status of immigration benefits applications submitted to an INS Service Center. Using the application receipt number assigned by the INS, customers (and their representatives) 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.sg

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.sg/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

www.lanekassen.no

country reports

Australia	
Maturity Stage	Mature Delivery
2003 Rank	5
2002 Rank	4
Vision Introduced	2002
Vision Title	Better Services, Better Government

Vision Summary

"Better Services, Better Government" maps out the next phase of the federal government's drive to move from placing government information and services online to more comprehensive and integrated application of new technologies to government information, service delivery and administration.

Regular Internet Users	69.72 percent

Australia

After moving up one position in 2002 to fourth, Australia's rate of improvement slowed in 2003, causing it to finish a close fifth to Denmark in the overall country rankings. During the past year, Australia did make progress on a number of the priorities it set in 2002, which included driving transactional processes online and building on previous developments in wireless transactions and CRM services.

In 2003, we see evidence that online services are becoming more sophisticated, with a move from services providing static information only to those with transactional capabilities. Australia, in fact, made quite a large jump in the Service Depth measure—an improvement of 14.3 percent. Its Service Depth score increased across a range of services; 17 services (11 percent of the total of applicable services) moved from Publish to Transact or Interact. Australia's strongest areas of improvement in this regard include employment services, welfare services and services that facilitate the regulatory environment (such as filing complaints about businesses or dealing with fraud).

However, although Australia's overall Service Maturity score improved over the year, the government made little improvement on its 2002 CRM score, consequently slipping in its CRM ranking.

The vision and framework for the next stage of eGovernment was launched in November 2002 by the Minister for Communications, Information Technology and the Arts, Senator Richard Alston. This new vision and framework, "Better Services, Better Government," replaces "A Strategic Framework for the Information Economy," the government's policy approach first released in July 1998. It features many of the hallmarks of leading-edge thinking about eGovernment today.

The new vision emphasizes achieving greater efficiency and return on investment; ensuring convenient access to government services and information; delivering services that are responsive to the needs of individual Australian households, business and civic organizations; integrating related services; building experience, user trust and confidence in the use of new technologies;

and enhancing closer citizen engagement in policy formulation and processes.

What's different about the new vision for Australia is that it shifts focus from placing government information and services online to more comprehensive and integrated application of new technologies to government information, service delivery and administration.

One innovative example of these principles in action is Australia's January 2003 launch of the world's first 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 either to use the 10-second photo-matching entry system or wait to have their passports manually processed.

Australia's eGovernment priorities for this year include promoting the uptake of electronic procurement and broader electronic business processes, especially by small and medium enterprises. Less than two years after abandoning its centralized approach to information technology (IT) outsourcing, the federal government is again proposing a consolidated approach to IT buying and management. In October 2002 it announced a whole-of-government framework for hi-tech investment and governance. The majority of Australia's central government agencies are expected to implement simple e-procurement in 2002. However, the major impediment cited by agencies with reference to overall e-procurement implementation has been a lack of supplier readiness.

Additionally, the National Office for the Information Economy hopes to reinvigorate businesses' move online with its multimillion-dollar program, Information Technology Online (ITOL). The ITOL program, which began in 1996, has been extended to 2006, with the aim of accelerating the take-up of B2B transactions, especially by small-to-medium enterprises. Since 1996, the program has allocated almost A$7.5 million to 81 projects across a range of industry sectors, including agriculture, construction, superannuation and road transport.

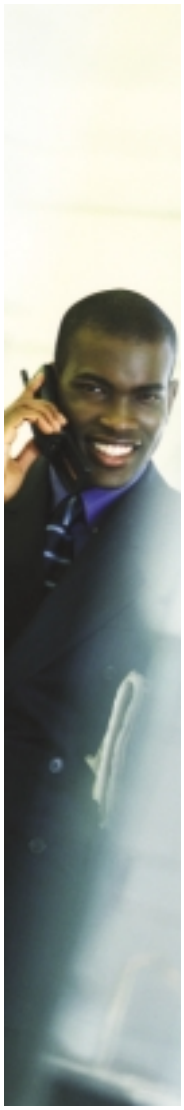
Australia's focus on promoting eGovernment uptake among businesses seems sound strategy and likely to lead to strong gains in efficiencies and faster realization of benefits for the government.

On the citizen front, the Australian government has launched a software package that will help Internet shoppers protect themselves against online fraud. The consumer PING software, which can be downloaded free of charge from www.consumerping.gov.au, covers the 30 most popular online product categories. Consumer PING provides consumer information on buying products online, including safety and legal matters, fraud, product recalls and other tips.

One of the biggest challenges Australia faces as it tries to improve its eGovernment program is that it does not have a centralized approach across agencies to market services and encourage take-up of eGovernment service. The National Office for the Information Economy (NOIE) is in the process of completing an eGovernment Benefits Study that examines customer issues surrounding demand for online services, the benefits realized by both government and citizens/business and the return on investment to government agencies. The study examines issues from a citizen/business/intermediary perspective as well as examining metropolitan/nonmetropolitan differences.

What the government has in its favor in terms of take-up is a strong base of likely users. Australia's Internet penetration rate of 69.72 percent was highest of all the countries we surveyed, and Australia's use of online government services increased almost 50 percent during the past 12 months, with 72 percent of Internet users accessing government online, according to a November 2002 study by researchers Taylor Nelson Sofres. That penetration rate should only increase, as the government has extended its Internet Assistance Program (IAP) to ensure all Internet users across the country can achieve data speeds equivalent to at least 19.2 Kbps. Given that approximately 46 percent of Australians used eGovernment services in the past 12 months, a proactive involvement of citizens as services are developed would be highly beneficial.

Australia's continued improvement in service delivery is consistent across industries. It has made strong improvement in the depth of its service delivery. Its slow rate of improvement in CRM (about 1 percent), however, illustrates how strong continual progress across all dimensions of eGovernment is necessary to maintain position in the rankings. Focusing on the CRM elements of its program will be key for Australia to reignite its momentum and regain ground lost to such fast-moving nations as Belgium and Denmark.



Belgium	
Maturity Stage	Mature Delivery
2003 Rank	9
2002 Rank	16
Vision Introduced	1999
Vision Title	New Technologies at the Service of Government, its Administration and its Clients

Vision Summary

Government has a dual role in eGovernment. On the one side is the role of the enabler: creating juridical and administrative conditions for the realization of the information society. On the other side government should set the example in the way it applies technologies and the way it interacts with its clients.

Regular Internet Users 34.92 percent

Belgium

Belgium continues to show remarkable focus, setting its aims and making steady progress in implementation. It has been gradually moving up in the ranks since we began this survey: from 18th in 2000, to 16th in 2001 and 2002, to ninth this year.

Early last year Belgium issued a restatement of its commitment to eGovernment through Minister Van Den Bossche, responsible for the Federal Information and Communications Technology (ICT) department. The priorities are shifting, although they are in line with what had been announced as the country's strategy in the past.

Last year, the priorities were clear: to integrate back-office functions before moving on to the front end. Belgium did express expectations that its first "superportal" would be operational in 2002. And it was—the portal was officially launched in November 2002 with the goal of citizens and businesses being able to get tailored information from government (www.belgium.be). The portal aims at different target groups: citizens, businesses and civil servants, with special attention paid to visually impaired people.

The approach of the portal is consistent with the significant increase in Belgium's emphasis on CRM this year. Belgium's overall 2003 CRM score of 51.00 percent was third highest overall, and its positive increase on this measure of 20.67 percent was the second highest overall, just behind Hong Kong.

As focused as its intentions are, Belgium still has considerable work to do in building a successful eGovernment program—namely in the area of ensuring take-up. Belgium has a significant challenge in increasing take-up among citizens. Figures from the Ministry of Telecommunications show that more than two-thirds of the Belgian citizens do not have/use the Internet at home.

The government seems to have an understanding of what it will take to build momentum given the country's relatively low Internet penetration. The solutions, according to Minister Van Den Bossche, include the fundamentals of service and

government modernization, along with accessibility (public kiosks in town halls, post offices, rail stations and libraries). eGovernment is considered an important additional channel next to other channels into government. The attitude is that eGovernment will be an enabler to make government services faster, more user friendly and user-centric, and more transparent.

Beyond driving usage, Belgium has set itself a number of focused targets to reach its aims of getting tailored services to targeted groups. For example, an Electronic ID pilot set to start in 11 communities in March 2003 could dramatically change the way Belgian citizens interact with government. These new ID cards with embedded digital certificates will let citizens combine transactions, such as paying taxes and electronic voting, with many more planned in the future. The move may set a precedent for the adoption of electronic ID cards across Europe, but the concept could also spark new privacy concerns.

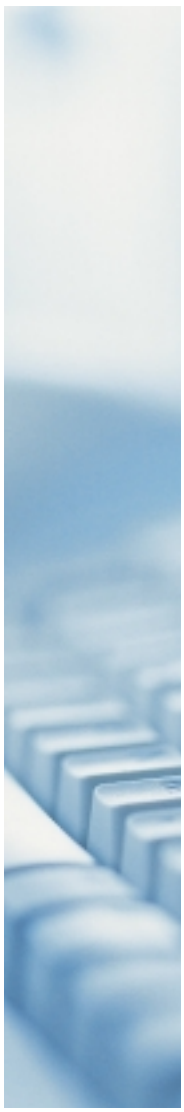
From now on, all businesses in Belgium will have one unique number for all government services. The numbers will be allocated in the coming months. At the same time, a "crossroads" database (Kruispuntbank Ondernemingen [KBO], Banque Carrefour des Entreprises [BCE]; http://mineco.fgov.be/redir_new.asp?loc=/enterprises/crossroads_bank/home_nl.htm) on businesses is being set up. Via this crossroads database, government services will be able to exchange information. The unique number is necessary to go ahead with the simplification of the administration.

Additional initiatives launched and operational include mandatory electronic declaration of new employees by businesses as of January 2003 (DIMONA; www.socialsecurity.be/site), electronic publication of tenders—both from a business and agency perspective (JEPP; www.jepp.be) and piloting a Fiscal Counter for notaries and putting fiscal forms online (Finform; www.finform.fgov.be/diffusion/searchpage?language=fr).

Belgium's government has finalized some fundamental building blocks for eGovernment, which were set up as part of a rethinking of back office and front office processes. "Tango," the government network, is linking government with citizens, businesses and its employees; "FedMAN," a vast secured broadband network, is connecting the metropolitan agencies of the federal government; and a Universal Messaging Engine realizes structured data communication between the heterogeneous systems, portals and websites of the different federal agencies.

Other noteworthy goals of Belgium's eGovernment program include (as decided by the Counsel of Ministers on December 20, 2002) the introduction of a series of transactional services on its portal in the period of March through July 2003 (e-communities, online registration of vehicles, elections, online tax, starting up a business, online consultation and management of information on businesses). Additional social security services will be put online until the targeted completion date of January 2005.

Looking ahead, if Belgium focuses on driving usage of targeted services it is very likely that the strong fundamental CRM focus of its eGovernment program will entice citizens to branch out into usage in other areas and will cause rapid increase in overall take-up of online services.



Brazil	
Maturity Stage	Basic Capability
2003 Rank	21
2002 Rank	19
Vision Introduced	1999
Vision Title	Electronic Government (Governo Eletrônico)

Vision Summary
To permit any citizen access to the new information technology and to be prepared to join a new dimension of the democracy.

Regular Internet Users	10.99 percent

Brazil

Brazil has slipped in this year's rankings from 19th to 21st place. Its slow progress was due primarily to the focus on elections for president, federal senate, federal and state officials and state governors and legislative seats, conducted in October 2002, which meant initiatives for eGovernment moved out of the spotlight.

The Government Network Portal (www.redegoverno.gov.br) has been expanding its range of services, which grew from around 400 in October 2000 to more than 1,700 in September 2002. The number of pages viewed monthly grew from 4 million to 35 million during the same period.

Most of the relevant services are already online, such as tax payments and unemployment and maternity benefits, among others. Despite that, several services still need to be implemented. The National Health Information Network (RNIS—Rede Nacional de Informações de Saúde) just finished implementing its first phase, connecting 3,000 health units and reaching 23 percent of all the country's municipalities (www.rnis.saude.gov.br).

Brazil continues to pursue strong partnerships with the private sector. That strategy is the guideline most widely adopted by the federal government in the implementation of new projects: the private sector is considered a potential investor and a new technology enabler, providing new government systems and services.

The Public Internet Access Kiosks, started this year, are an example where private partners provided infrastructure and computer systems to support operation. Another example is the project "Brazil Community" for the implementation of learning centers, which involves all government levels—federal state and municipality—as well as nongovernmental organizations and private companies. Finally, Compras-net (www.comprasnet.gov.br) is probably the most major initiative to date developed under the private-sector partnership strategy.

Brazil's eGovernment goals include bridging the digital divide, making eGovernment services much more broadly available and bringing to fruition the potential benefits of technology-enabled services

to Brazilian citizens. To accomplish these goals, Brazil will continue to rely on innovative programs. One such example is the government's implementation of electronic cards for millions of low-income families. These cards improve access to basic government services and minimum wage program aids such as Bolsa-Escola (school grants), Auxílio-Desemprego (unemployment payment) and Auxílio-Maternidade (maternity leave payment).

Brazil's largest-scale eGovernment citizen application, electronic voting, which was conducted by the Electoral Courts, uses electronic ballot boxes with votes stored in magnetic disks and electronically processed. In the 2002 national elections, approximately 390,000 of such electronic ballot boxes were used, with the participation of around 114 million voters and results finalized in a matter of hours.

Brazil continues to lay its eGovernment foundations, making significant advances in its CRM capabilities. Additionally, the country continues to make relevant improvement in its IT infrastructure, allowing the implementation of new Web-based services. The pieces are in place for stronger showings in future years.

Canada	
Maturity Stage	Service Transformation
2003 Rank	1
2002 Rank	1
Vision Introduced	1999
Vision Title	Government On-Line

Vision Summary
Our goal is to be known around the world as the government most connected to its citizens, with Canadians able to access all government information and services online at the time and place of their choosing.

Regular Internet Users	60.97 percent

Canada

For the third year running, Canada has placed number one in our ranking of eGovernment maturity and shows evidence of pulling ahead from its two closest challengers—Singapore and the United States. This year Canada stands alone in eGovernment maturity. It is the only country that has begun the move to the Service Transformation stage of eGovernment. Canada's fundamental eGovernment principles of clear vision, user involvement, good targets and departmental and jurisdictional integration have served it well to this point and have paved a path for Government On-Line (GOL) to be integrated with general service improvements. In future years, Canada will deem itself successful when there is no separate and distinct GOL initiative, and the existing initiative has been completely wrapped into an overall program of transformed government service delivery.

Key to Canada's continuing success is that the GOL strategy continues to evolve and adapt with time and learning. In early 2002, the government established an Internet user panel to begin collecting information on online service preferences and expectations. This innovative On-Line Citizens Panel is helping the government understand current perceptions of and future expectations for GOL. Additionally, GOL users representing urban and nonurban locations will be recruited to participate in online surveys and focus groups to examine issues such as navigation, privacy, security, e-consultations, content management, customization and language quality.

The country continues to invest in eGovernment improvements—disbursing an additional $280 million over the next two fiscal years, increasing GOL's overall budget to $880 million to 2005. Additionally, the government monitors international trends, relying on international benchmarking reports to gauge progress.

GOL has now adopted a broader service vision focusing on client-centric service delivery across the range of service delivery channels (Internet, in-person and by telephone). The approach is highly worthwhile in citizens' minds, according to compelling statistics published on the GOL initiative site (www.gol-ged.gc.ca). Seventy-seven percent of

Canadians think that the Internet will improve how they receive services from the government of Canada; 73 percent believe that putting services and information online is a good use of tax dollars; 78 percent believe that GOL makes the government more innovative and 77 percent believe that GOL will improve how Canadians interact with government.

Businesses, too, are seeing the benefits of this customer-centric approach. A number of innovative initiatives exemplify the concept. A newly offered service called "Manage My Account" allows businesses to manage their postal accounts online (www.canadapost.ca/business/obc/accounts-e.asp). The Marine Service On-line site (www.marineservices.gc.ca), gives commercial operators a wealth of online tools to aid their business operations, including navigational aids such as updated charts, current marine conditions and links to available services such as certification and licensing and vehicle registration.

This move to new models of customer service delivery requires a higher degree of coordination and integration across the whole of government than ever before. To accommodate this need, Canada has instituted the Interdepartmental Committee Governance Structure to promote the shift toward a broader multichannel service vision and pave the way for long-term governance of a more integrated service delivery agenda. This approach is described as Horizon Governance and Management.

The government has also redefined original service targets—from putting all services online to putting only the most commonly used services online. For citizens, that means major benefit programs are coming online, including pension plans, old age security and farm safety nets, an integrated program to allow farmers to file a single application for many different programs. Canada's revised targets include putting the most frequently used services online by 2005.

While the online "service face" of the government of Canada continues to evolve, progress behind the scenes is moving at an even faster pace, as the culture change of working horizontally is beginning to take hold. The next phase of work involves moving from information and services that are grouped together to those that fit together and can be aligned in such a way as to facilitate simultaneous access.

Common Look and Feel (CLF) standards are mandatory across agencies to ensure that all Canadians, regardless of their Internet ability, geographic location or demographic representation, have equal access to information and services on government of Canada websites. Additionally, common marketing by departments and agencies of clustered and integrated services will be a priority over the next 12 months.

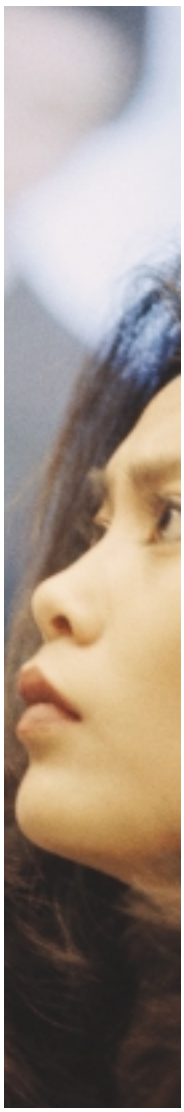
One of the key goals of the government in developing a common infrastructure across agencies is the Secure Channel, which is nearing completion of the initial phase of its construction. The Secure Channel is the backbone of hardware and software that will soon be available to all departments and agencies to securely receive, store and exchange electronic information and to identify the clients they are dealing with electronically. The Secure Channel is vital to GOL, as it is meant to assure citizens that their information and transactions with government are protected, to protect against network intrusions, to provide on-demand, broadband network services to departments and agencies and to provide identification and authentication of individuals and businesses with which government conducts business, among other goals.

The first phase of the Secure Channel includes infrastructure to support intrusion detection and directory services as well as a registration/authentication service called epass. Epass is one of the world's first PKI digital signature services for mass use by individuals. The first phase of Secure Channel was launched in September 2002, with a second phase featuring increased client service applications slated for a launch in the spring of 2003.

Over the past year, the government of Canada has developed a performance measurement framework for all of its eGovernment initiatives, which encompasses three main outcomes—citizen/client-centered government, better/more responsive service and capacity for online service delivery.

GOL departments and agencies have begun to report publicly on their initiatives. A government-wide report on GOL has also been posted. This report provides, among other things, a summary of overall progress being made on all elements of GOL.

Additionally, the government keeps up to date on changing trends and opinions by ongoing research to obtain client feedback and a Common Measurements Tool (CMT) developed to measure client satisfaction for in-person services. The next step for Canada is to adapt the CMT for telephone and Internet-based services to ensure consistency across delivery channels.



Denmark	
Maturity Stage	Mature Delivery
2003 Rank	4
2002 Rank	5
Vision Introduced	2001
Vision Title	Digital Administration

Vision Summary

The eGovernment vision is to systematically use digital technologies to introduce new ways of thinking and transform organizations and work processes to improve the quality of service and efficiency.

Regular Internet Users	55.6 percent

Denmark

Denmark, a new addition in last year's survey, has made notable progress during the past 12 months, moving up one place to make a strong showing against the top three leading countries. Denmark achieved the highest Service Breadth of all countries we surveyed, with 162 of 165 possible services online (98 percent Service Breadth). Its Service Maturity Depth is 62 percent, an increase of 9 percent over last year, which puts it above the average of 52 percent. Denmark also made greater than 10 percent improvement in its CRM measure. The country's consistently high performance across all industries is leading it to close the gap to the leaders rapidly.

During the Danish EU Presidency, the eGovernment workgroup was tasked to focus on value creation and return on investment. Likewise, the role of the Ministry of Finance and of Denmark's Digital TaskForce is to focus on the business side of initiatives—identifying opportunities for value creation, cost reduction and redeployment of resources to help Danish governmental departments realize their objectives. Meanwhile, the Ministry of Science, Technology and Innovation continues to lead the development of IT policy and infrastructure.

Denmark received high marks in large part because of its consistency across a broad range of measures, reflecting strong commitment to whole-of-government planning and implementation. We see the leadership structure as a reflection of this commitment and expect that the clear alignment of roles and better coordination of objectives and activities between the Ministry of Finance, the Ministry of Science, Technology and Innovation, and the Digital TaskForce could potentially accelerate eGovernment initiatives.

As Denmark looks to enhance its eGovernment program, one of its main focuses will be on private–public partnership. There is limited experience running digital projects in private–public partnerships in Denmark. Therefore, there has been a common interest in the public and private sectors to start a dialog about which elements are important to obtain a successful partnership.

While Denmark is looking to gain experience with public–private partnerships, a few innovative examples exist. One eagerly awaited public–private initiative is scheduled to launch on May 1, 2003. Denmark's new enterprise portal, www.virk.dk, will give access to approximately half of all report forms currently in use between the public administration and companies, with the rest of the forms being added during the next few years. Virk.dk is being developed in close partnership between the government and a number of private sector companies. Additionally, a panel of 400 selected companies is giving input to the design of the portal's content and functions.

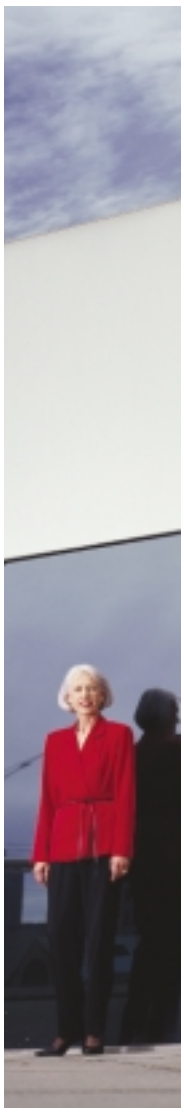
One of Denmark's major eGovernment priorities for this year is ensuring digital signatures will be broadly distributed to citizens. (See www.oio.dk/oces for more information.) With the introduction of the national digital signature, one of the most referred to barriers for eGovernment will be removed. It is therefore expected that this initiative will further accelerate the development and adoption of eGovernment services. Digital signatures will also begin to set the stage for citizens owning control over their personal data and releasing it to government on an as-needed basis and for more transparency in terms of citizens being able to follow their case through government processes.

To facilitate transfer of data across public authorities, a national database for XML metadata, known as the XML Infostructurebase, isb.oio.dk, has been developed and started operating. The Infostructurebase supports the development and distribution of XML document standards and Web services across government and between government and the private sector. It is expected that this initiative will help accelerate the integration of government systems and services and be a significant part of the business case for eGovernment.

Additionally, by the end of summer 2003 many of the legal barriers to eGovernment will be removed, when all public authorities in Denmark will have the right to communicate electronically with each other. That day, Eday, is currently set for September 1 (www.e.gov.dk/sitemod/design/layouts/default/index.asp?pid=4490).

As Denmark progresses in its eGovernment initiatives, it strives to measure the depth of eGovernment across all levels of government—central, regional and local. Its goal is to measure both back- and front-office activities at all levels of government and encourage cross-pollination of best practices. Ultimately, the government would like to influence use of this concept at the European Union level.

As part of its measurement process, Denmark conducts an annual evaluation of all public sector websites and surveys users' experience of electronic government services. This project is called Top of the Web. The public assessments of websites inspire government institutions to improve the quality of service they provide to citizens. In the most recent survey in autumn of 2002 (for results, see www.bpn.dk), the evaluation was supplemented with a survey of back-office integration of online government services and general barriers to eGovernment across organizations and websites. This reflects Denmark's increased focus on moving to the next phase of eGovernment, with seamless integration across IT systems and organizational borders.



Finland	
Maturity Stage	Mature Delivery
2003 Rank	6
2002 Rank	7
Vision Introduced	1998
Vision Title	Quality of Life, Knowledge and Competitiveness

Vision Summary

A society which develops and utilizes the opportunities inherent in the information society to improve the quality of life, knowledge, international competitiveness and interaction in an exemplary, versatile and sustainable way.

Regular Internet Users	68.06 percent

Finland

Finland made steady improvement in the past year, regaining its sixth place in the overall rankings, which it had ceded to the United Kingdom by a very small margin last year. Of the 161 services that the government is responsible for, 151 are provided to some extent. This result led Finland to an above-average Service Maturity Breadth of 94 percent (the average is 87 percent). Finland's Service Maturity Depth of 61 percent, an increase of 7 percent over last year, also puts it above the average score of 52 percent on this measure.

However, Finland's future eGovernment program may undergo change. Finland's current eGovernment action plan does not cover past 2003 and the country holds parliamentary elections in March 2003. The new cabinet is expected to set some direction also for eGovernment development. Additionally, the charter of the Information Society Advisory Board expires on May 31, 2003.

The current action plan set out by the Information Society Advisory Board outlines actions along four strategic lines: reforming administrative activities and processes; encouraging the supply of and demand for online services; improving access, usability and end user competence; and attaining better administrative coordination, with a named authority or organization to be responsible for implementation and follow-up of the implementation of each action point.

As in previous years, Finland's banking system continues to provide a solid structure for online and mobile payments in the government sector. One area of cooperation between the banks and government is the incorporation of electronic IDs/citizen certificates, provided by the State of Finland, in debit cards. The identifier is the same as that used in the national Electronic Identification Card. The Electronic Identification Card is a service card containing a Public Key Infrastructure (PKI)-based qualified certificate. The card allows its holder to be electronically identified on the Internet, and he/she can use various public and private sector services, including the Internet banking services provided by one of the major Finnish banks.

In citizen identification, another significant development area is the cooperation program

between one of the Finnish teleoperators and the Population Register Center. This program aims at creating a service for electronic identification of a person on a mobile terminal. In this program, the electronic IDs/citizen certificates will be matched with mobile phones' subscriber identity module cards.

As part of its movement toward attaining better administrative coordination, the Finnish government's 118 offices, ministries, research institutes and universities began transferring to electronic invoicing, with some 20 organizations launching development projects for e-invoicing during the past 12 months. The state treasury is responsible for the joint project, which will be implemented by state administrative organizations. The private-sector partners are responsible for the products and services necessary to send and receive electronic invoices, as well as the digital processing system for archiving and purchase invoices. Finland is the first European country to progress this far with electronic state financial administration.

In an innovative example of how Finland is driving up demand for online services, the Finnish government now offers an online option for playing the Finnish National Lottery, Veikkaus. Currently, 75 percent of Finns play the national lottery, with as many as 40 percent playing every week. Veikkaus has several ways of playing Lotto. One option is to play it via the Web using a system of passwords and accounts. Payment is made from and winnings are deposited into gaming accounts. Veikkaus has also introduced a new way of playing Lotto through interactive digital television. In iTV Lotto the player fills a coupon on a digital teletext system using a remote control.

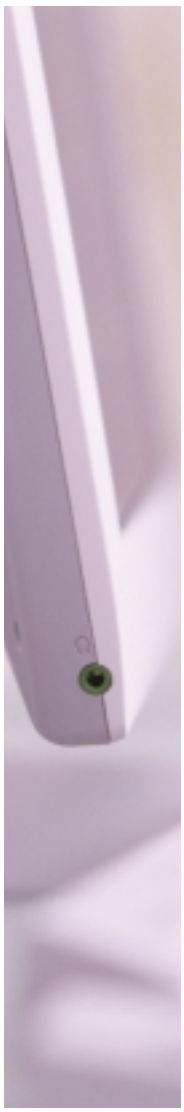
The Finnish government has incorporated the idea of targeting services to appropriate user groups. It provides three central government portals, including one targeted to citizens, one targeted to businesses and one targeted to government employees as an intranet solution. The portal targeted to private citizens (www.suomi.fi/suomi) is based on the former portal "Kansalaisen käsikirja" (Citizen's handbook) and was launched in April 2002. In an effort to gauge the attitudes and needs of its user group, the suomi.fi editorial board has conducted two surveys of the portal users: one on user opinions and the other on site usability. The users found the portal easy to use and its structure was considered to be clear. The portal's search functions were recognized as a development area.

Although the portals link to most of the key services, the degree of sophistication of each service varies because development has been agency led. This year we saw evidence of lots of Service Maturity improvements in business-related services, a number of which made moves from Publish to Transact capability. For example, Finland's postal service offered almost all of its services at a high level—with only the United States performing better in this industry. Finland also was the top-performing country in eDemocracy, primarily because its registration system is fully linked to the Population Register. Changes to the Register automatically update the voting registration system, without any further intervention on the citizen's part.

However, Finland performed poorly in the revenue area, ranking 21st. Although seven services were provided at maximum or near maximum level, four were provided at a low Publish level and two services that could be provided were not provided at all. Additionally, Finland could work to improve its provision of social security services. Many services are now offered at a Publish level; providing integrated service provision would greatly enhance the citizen experience. Finland should look to Australia's Centrelink or Canada's Benefits On-line programs for leading examples to follow in this regard.

To promote its image as a progressive information society, Finland also recently launched its new E.Finland.fi website. E.finland.fi is built and maintained in cooperation with the Ministry for Foreign Affairs, Ministry of Finance, Ministry of Transport and Communications, National Technology Agency (Tekes), Finnish National Fund for Research and Development (Sitra), and TIEKE Finnish Information Society Development Centre. Its goal is to present Finland as the technological heartland of northern Europe, providing accurate and up-to-date information on Finnish IT know-how and Finnish information society functions and solutions. The site is primarily directed toward international businesses, research and development organizations and to parties engaged and interested in the development of information societies.

A report published in January 2002 suggested that the Ministry of Finance's role in eGovernment coordination should be strengthened. This recommendation has been implemented and the Ministry of Finance is now responsible for the promotion of coordinated development of the information society and thus has a coordinating role in eGovernment. This strong leadership will be absolutely critical if Finland hopes to make any significant moves in eGovernment maturity. The government also needs to focus on delivering additional value through its online channel. Its current action plan does not specifically list enhancing service quality as a top strategic action. Rather the four key strategic actions seem focused on accessibility. This is a key fundamental, but the add-on service enhancements must follow for Finland to accelerate its progress.



France	
Maturity Stage	Mature Delivery
2003 Rank	12
2002 Rank	12
Vision Introduced	1998
Vision Title	Electronic Administration

Vision Summary

To inform citizens and users, to simplify administrative steps, to modernize administration work, to guarantee rights of users and citizens and to support the development of communication and information technologies.

Regular Internet Users	25.10 percent

France

In 2003, France retained its 12th-place ranking with steady progress in both overall Service Maturity (7 percent improvement) and CRM (9 percent improvement), despite a number of significant political activities during the past year that could have interrupted its momentum.

The two-round presidential vote elections of April 21 and May 5, 2002, led to President Jacques Chirac's re-election. Parliamentary elections were held on June 9 and 16, 2002, giving a victory to President Chirac's majority.

Subsequently, a new French eGovernment team was put into place, with Jean-Paul Delevoye as Minister of Public Affairs, Government Reform and Regional Planning, and Henri Plagnol given charge of electronic administration as the French State Secretary for State Reform.

Since the change of government, the prime minister stated his continued support for the eGovernment vision announced by his predecessor and the work to make public service online by 2005. In a November 2002 statement by Prime Minister Raffarin, the future of electronic administration was articulated around five themes: to inform citizens and users, to simplify administrative steps, to modernize administration work, to guarantee rights of users and citizens and to support the development of communication and information technologies.

In addition, a key stated goal is to build an integrated network between administrations. The aim is to break the barriers between government agencies and simplify administrative procedures for citizens and companies.

To realize its eGovernment vision, France has set a number of very clear priorities. A report commissioned by Henri Plagnol, entitled *L'Hyper-République: Bâtir l'administration en réseau autour du citoyen*, describes the role that communication and information technologies can play in the improvement of public administration services. It describes an inventory of the foundations of the electronic administration, the objectives of which

include making the electronic administration accessible to the greatest number, engaging with citizens, making public information reliable and guaranteeing the safety of the exchanges. It also presents an action plan over five years, comprising 18 proposals, to achieve these objectives. These proposals cover such themes as improving the coherence of the public Internet, promoting participative e-democracy and accessibility for all to the electronic administration.

Security continues to be a high priority for the government, specifically the market for online filing with the use of electronic signatures. The Ministry of Finance (www.minefi.gouv.fr) has developed two main applications with digital signatures in the area of tax filing. The first is Télé-TVA, the online filing of VAT. Since the end of 2001, it has been mandatory for companies having revenue above 15 million Euros. The registration for delivery of electronic certificates is done by post mail, and the certificate is paid by the company registering. By the end of 2002, more than 45,000 users were registered for Télé-TVA.

Télé-IR is online filing for personal revenue. The service was opened in March 2002 for the National Revenue Campaign. The registration and the delivery of certificate are done online, and the certificate delivered is free. More than 150,000 certificates were delivered since the service was opened, and more than 120,000 individual taxpayers filed their taxes online during the 2002 campaign. Thanks to screen and navigation simplification, this first large-scale public use of digital certificates was well accepted by the public.

The French government has done no recent relaunch or redesigns of its main citizen portal, www.service-public.fr, although the site can now be viewed in several languages—English, German and Spanish. This government portal is user friendly, although there are no sophisticated interactive services available on it. It directs users to other French administration sites that could be described as portals themselves. One specific initiative identified for electronic administration is to develop online personalized services through the site mon.service-public.fr.

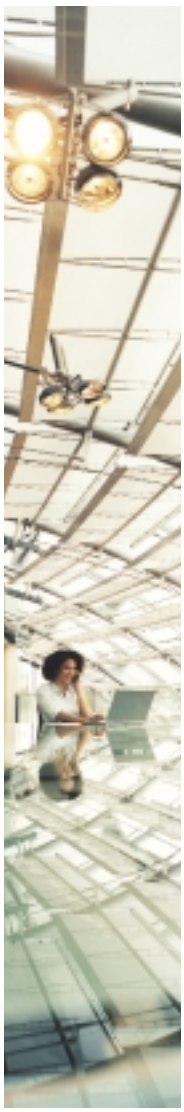
To drive take-up of eGovernment offerings among different user groups, the French government adopts different approaches depending on target audience. For citizens, it mainly uses media channels. For example, for the last tax campaign in March 2002, the Tax Administration deployed a specific communication plan involving radio and television ads and Internet banners to encourage taxpayers to declare online. For 2003, the government plans to extend the period of declaration for Internet tax filers.

For businesses, the government launched a national information campaign to promote the site www.net-entreprises.fr. This site, which is available to all companies and independent contractors, is a free and protected site for the payment of social contributions. However, users must be registered on the site, and the service is not widely known.

At this stage, there are no official policies on working with the private sector in the development of the eGovernment vision. However, the private sector is working with administration on the implementation of key IT programs and projects, including normal public procurement procedures and indirect action on the vision. Additionally, the private sector participates in key "think tanks" organized by the administration to further its electronic administration vision.

After three years of efforts to develop multiple initiatives, France appears to be at a strategic phase in terms of eGovernment. It has accumulated experience in many public services areas. French politicians and citizens have developed a strong interest in the Internet and believe in the opportunity it can offer in the public service area. France also has addressed several key issues around standards, interoperability and security, that can be the foundation of an e-Administration strategy. Now that all the foundations are in place—the vision, a structure to conduct eGovernment initiatives, a sponsorship from politicians, an awareness from citizens—the next two to three years will show if France can progress to broad operational deployment such as it has done in specific industry areas. The country has been gathering itself for a leap into the next stage of eGovernment. France is now ready to start accelerating change according to its potential. This step should happen in tandem with the arrival of the new government in 2002.

The challenge for the next few years is to build real industrial platforms that will allow the deployment of eGovernment services in several areas in a short amount of time to support decentralization, social evolution, security issues and the overall political agenda of the government.



Germany	
Maturity Stage	Mature Delivery
2003 Rank	10
2002 Rank	9
Vision Introduced	1999
Vision Title	BundOnline2005

Vision Summary
To ensure that citizens and industry are able to use the services of the federal administration more simply, faster and cheaper.

Regular Internet Users	31.83 percent

Germany

Germany has consolidated its eGovernment program as it begins to approach the Mature Delivery plateau. After last year's large steps in the Mature Delivery stage, it has progressed, but not dramatically. Consequently, it has been overtaken by some countries that are moving faster and has slipped one place in the overall ranking. Over the past year Germany's focus was mainly on continued implementation according to an earlier plan. Its Service Maturity increased in both the breadth and depth dimensions, and, in fact, its Service Maturity score was third highest of all countries we surveyed. However, it has not made any transformational changes that will propel it to a higher maturity stage.

Germany's main point of progress was in getting additional services online and planning for enhanced data security moving forward. After reevaluating the actions the government had taken to implement its eGovernment strategy, it became clear that the potential of online service provision had not been exploited. Germany's less than spectacular showing on the CRM measure of our survey (18th overall) is a reflection of its need to refocus its attention on customer-focused aspects of service delivery.

As part of its Initiative 2005 statement, 250 out of a total of 376 services are due to go online in the next two years through the Bund portal (www.bund.de). The primary purpose of this portal is to provide access to services provided by federal administration as well as a portal to state and municipal level institutions. The front page of the portal offers intention-based access, as well as navigation according to the organizational structure of institutions. The organization of this portal should move Germany toward a more customer-focused approach to service delivery.

In the area of targeting services to individual customer segments, Germany's eGovernment implementation plan contains a broad segmentation strategy for three groups: government to citizen, government to business and government to government. The services in those groups have

been evaluated on size of user segment, advantage over traditional offering, potential savings in resources, strategic advantages and potential for synergies. This approach shows a strong foundation for delivering value-added services, as it outlines key value drivers for future eGovernment investments.

To improve service for citizens, the German Labor Office has begun to develop a "virtual job market." In view of the more than 4.2 million jobless, the Labor Office is systematically expanding and updating its database of employment opportunities for job seekers. By the end of 2003, complex search mechanisms will be installed for all local German labor offices, to search the Internet for job advertisements tailored to individual profiles. A major innovation offered by this "job search portal for everyone" is selective access to external job exchanges linked to the portal, making the "virtual job market" the biggest European job database.

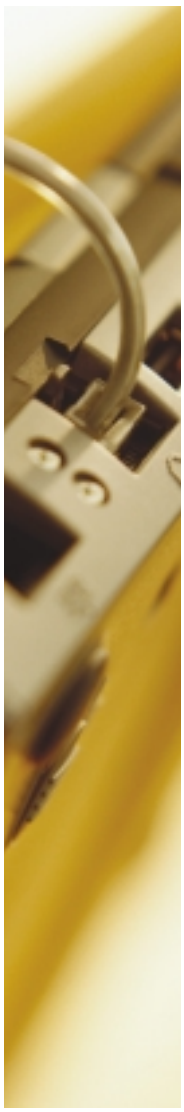
One value-added service for businesses recently introduced is the VAT registration number via WAP. The Federal Finance Office has set up a new service for the exchange of goods between business partners in the European Union. Participants who want to make sure that their business partner in the receiving EU Member State has a VAT registration number can check this information online simply and rapidly by WAP-enabled mobile phone.

In terms of other priorities for 2003, data security is expected to be fully available through a standardization of certificates and interoperability. In general, security concerns are high in Germany and data security is ensured through data protection laws (www.bfd.bund.de/information/bdsg_eng.pdf) on the state and national level.

Privacy and security concerns are managed by the Federal Office for Security in IT (www.bsi.bund.de) and the Task Force Secure Internet (in collaboration with the Federal Criminal Office). The Federal Office for Security in IT's main role is to support BundOnline2005 through the publication of the eGovernment Handbook, as well as to provide a computer emergency team for federal offices. The Task Force Secure Internet looks at data security in general and counsels the government on its IT strategy as well as its development of IT frameworks applicable for all governmental institutions.

To implement its broader eGovernment initiatives, Germany is likely to rely ever more heavily on partnerships with the private sector. Overall, public–private partnerships are increasingly seen as a way to solve two problems of public administration: a lack of specific skills and very high cost pressures due to insufficient public funds and increasing government complexity. There is collaboration between the public and private sectors to achieve high standards in IT security to enable both government and business to speed up technological developments.

Germany has shown its ability to implement eGovernment initiatives. Its strong Service Maturity score reflects quality and consistency of service across all of the industries we surveyed. To take its eGovernment program to the next level, Germany will need to turn its attention to the customer-centered aspects of its program.



Hong Kong SAR, China	
Maturity Stage	Mature Delivery
2003 Rank	7
2002 Rank	8
Vision Introduced	2001
Vision Title	2001 Digital 21 Strategy

Vision Summary
To drive Hong Kong's development as a leading digital city in the globally connected world.

Regular Internet Users	46.5 percent

Hong Kong Special Administrative Region (SAR), China

In 2003, Hong Kong SAR, China, has slightly improved its position in the ranking through progress in isolated areas. Overall progress has slowed, however.

According to a paper by the Legislative Council Panel on IT & Broadcasting, top highlights of Hong Kong SAR's goals for its eGovernment program over the last year included enhancing the environment for eGovernment development and expanding electronic service delivery (ESD) (www.esd.gov.hk), with a goal of 90 percent of services available through an e-option by end of 2003.

A major component of Hong Kong's ESD program will likely be intense partnering with the private sector. Typically the government does not provide services that are capable of being provided by the private sector—unless there is very good policy justification. Providing e-options for government services should not change this principle. With relation to IT projects, the government practices an aggressive outsourcing policy; 82 percent of IT projects already are outsourced to the IT industry.

Specific to eGovernment, the government has formed public–private sector partnerships for implementation (for example, its Electronic Tendering System [www.ets.com.hk]), in what is viewed as a win–win situation for both sides.

In another example of how the government partners with the private sector for the advancement of eGovernment, the Intellectual Property Department (IPD), in launching its online search of trademark service, has adopted an innovative approach for outcomes-based outsourcing, combining new IT application development, in-house IT maintenance and front/back-office support as a package from the private sector. Online filing and payment will be rolled out for trademarks in 2003.

As part of its focus on electronic service delivery for citizens, the revamped Government Information Centre (GIC) portal (www.info.gov.hk) was launched on March 25, 2002. The reconstructed portal, with improved navigation and clear categorization of information, provides easy access to government information and services for local and overseas

Internet surfers. To date, e-mail feedback from users has been positive. A government news bulletin (www.news.gov.hk) was also rolled out in 2002, providing an interactive channel for the government and citizens to communicate more effectively with one another. To serve the public in a customer-friendly way, the services provided in the ESDlife website (www.esd.gov.hk) are primarily organized around user intentions, while also providing a view according to government agency. ESDlife includes transactional and interactive services from the government as well as some offered by commercial entities. Initiatives like these reflect Hong Kong's high showing in the CRM measure; its score of 47 percent was sixth highest overall.

Many other ESD services also have CRM features. For example, apart from making e-booking for marriage, couples can also search for banquet information and make use of the wedding planner service provided by the commercial sector at the same website. When inquiring about public exam results through ESD, students can also search for available places in different schools, access information on career and alternative education opportunities and exchange views at the public forums. The Labour Department's Interactive Employment Service at www.jobs.gov.hk allows both job seekers and employers to search for their target jobs and employees with tailored search capability.

The government, however, needs to drive up usage of its ESD offerings and is aggressively exploring a number of different options to do so. The government offers free IT awareness courses, free public computers with Internet connection, assistance devices and software and a central fund to subsidize the purchase of specially adapted personal computers for people with disabilities and has a government-wide computer recycling program to donate computers to the needy. It is also enhancing the accessibility of government websites. Specifically, a common look and feel for government websites is being progressively rolled out.

Working closely with its private sector partners to drive up usage, the government has been enhancing the public awareness of the ESD scheme in general and specific ESD applications. These activities include exhibitions, road shows, concerts, using popular singers in publicity materials and giving out leaflets, CD-ROMs and souvenirs.

To assuage privacy concerns that might impede usage, the government of the Hong Kong SAR employs PKI in most of the government online services provided. Additionally, a range of online transactions requires users to submit a digital signature, including driver's license renewal applications, tax return filing, voter registrations and business registrations. The government will build up a critical mass of PKI users by replacing the identity card with a smart card, including the offer of a free digital certificate, from mid 2003 to all citizens. The Inland Revenue Department is also offering the use of a PIN, apart from a digital certificate, as an authentication means for many of its online applications.

The right approach has been in place for two years in Hong Kong SAR, but it is time for the vision, content and action plan to be updated to reflect its new goals of implementation and service delivery. The eGovernment program has reached a plateau. Now, the region needs to formulate and verbalize its plans for driving up usage of the services that are in place.

Ireland	
Maturity Stage	Mature Delivery
2003 Rank	11
2002 Rank	10
Vision Introduced	2001
Vision Title	New Connections

Vision Summary

Ireland's eGovernment vision has developed from a view that the application of technology could transform government service delivery to eGovernment as a key component of its government modernization and transformation program. The objective remains to be able to transact business with government or public service agencies from a single access point and to provide an environment for the expansion of eBusiness in the private sector.

Regular Internet Users	42.49 percent

Ireland

As the eGovernment leadership bar continues to rise, Ireland is making steady progress and holding its own among the major European countries. This year, Ireland slipped slightly in our rankings, moving from 10th to 11th place, primarily as a result of the slowdown in the speed of implementation of some key eGovernment initiatives. This reflects a refocusing of the eGovernment agenda on the internal government transformation required to deliver the real value promised from eGovernment and a more rigorous approach to defining the business case for eGovernment.

However, overall Service Maturity score increased 10 percentage points over last year to 48.6 percent, reflecting the refinement and expansion of existing services (such as Revenue Online Service [ROS] and An Post) plus the introduction of some new services coming online, such as applying for drivers' tests and Internet ticketing with the national bus operator. We found that 136 of the 149 services that were the responsibility of national agencies were implemented to some level, and for 22 of these, online transactions were possible.

The Department of the Taoiseach (Prime Minister), which remains the key driving force behind the eGovernment vision and initiatives, restated the country's eGovernment vision this year in "New Connections—A Strategy to Realise the Potential of the Information Society." The vision clearly states: "to make it possible for the public to access public services using modern technology—in particular the Internet…to be able to transact business with government or public service agencies from a single access point…."

To assist in driving this vision, the Taoiseach appointed Ms. Mary Hanafin, TD, to a new ministerial position of Minister for the Information Society with responsibilities across the whole Information Society policy spectrum, including tracking the progress of implementing the eGovernment vision. The top identified priorities for Ireland's eGovernment programs in 2002/2003 include providing affordable, ultra-high-speed Internet access; improving overall security of online transactions; packaging services around life events and their business equivalents, rather than by traditional agency boundaries;

ensuring real cooperation and transformation among all government bodies on eGovernment; and enforcing delivery deadlines for electronic public services. Ireland has set a goal that by 2005 all relevant public services capable of electronic delivery—from planning permission and passport applications to tax, motor and farming affairs—must be available by Internet, as well as by phone via a new national public services call center. The Cabinet Committee recently decided that further work needs to be done to determine more precisely which services will be e-enabled, taking account of the business case for investment in the transformation process.

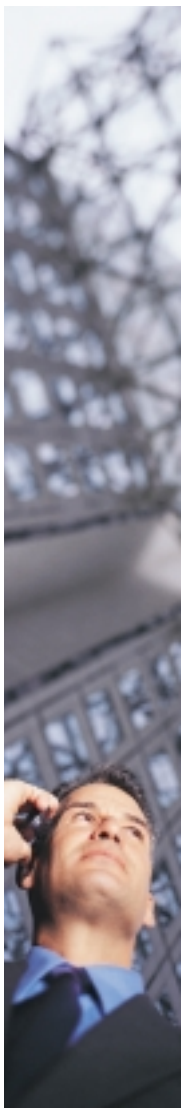
As highlighted last year, a key enabler of Ireland's eGovernment program is the implementation of the Public Services Broker by the Reach Agency, which will provide "an integrated set of processes, systems and procedures to provide a standard means of access to public services." Implementation of the Public Services Broker has been delayed. The Broker is now expected to start development this year, and it will then be used as the common framework to accelerate implementation of new integrated eGovernment services in Ireland.

With an overall Service Maturity breadth of 92 percent, a slight increase over last year, nearly all government services are now available online to some degree. There was also improvement in the Service Maturity depth, which increased to 54 percent, indicating improvement in the maturity of services delivered and demonstrating progress in closing the gap on other countries. However, the speed of implementation progress has not kept pace with recent years and with other countries.

Ireland rolled out a number of significant eGovernment programs in the past 12 months. In November 2002, a new online facility for car distributors and dealers to complete vehicle registration through Ireland's ROS was introduced. The take-up of the service has been impressive; so far in 2003, 40 percent of all new car sales in Ireland have been registered online via ROS. With such high take-up within three months of its introduction, the immediate target is to increase usage from the present rate to 80 percent of car dealers and distributors.

The national bus company, Bus Eireann, offers an end-to-end electronic ticketing process. Journeys can be planned and paid for online and an e-mail confirmation is sent. When the customer arrives at the bus station, the ticket clerk or bus driver can check the validation code electronically and issue the appropriate travel ticket in exchange. A step toward eVoting was taken this year with the introduction of kiosk-based electronic voting on a pilot basis in the May 2002 general election and extended in October 2002 for the Nice Referendum.

Ireland has demonstrated an ability to envision and execute visionary eGovernment programs. Its challenge for the year ahead, particularly in light of the slowdown in implementation of its eGovernment program, is to focus its priorities and continue to target those eGovernment services that will deliver greatest value for its constituents.



Italy	
Maturity Stage	Service Availability
2003 Rank	17
2002 Rank	21
Vision Introduced	2000
Vision Title	eGovernment Action Plan

Vision Summary

To create a structure whereby citizens can receive services by any front office regardless of territorial jurisdiction; citizens will not need to supply any information already in possession of other state administrations; services are citizen centered; citizens need notify the administration only once.

Regular Internet Users	25.99 percent

Italy

Italy has made good progress in 2003, in large part because of its enhanced emphasis on CRM. It jumped four places in the rankings, from 21 in 2002 to 17 in 2003. Although Italy started its transition toward eGovernment later than other countries, the country is moving forward very quickly and showed improvement across the whole of its eGovernment program. A number of services that it did not provide online in last year's survey, such as calculating and tracking tax returns, came online over the past year at an Interact level. The country made a particularly strong showing in several areas, including postal and procurement, where services all scored either at a Transact or high Interact level. Government is taking several actions to bring public administration online both at national and local levels, and to encourage citizens to connect to the public administration online.

Specifically, the government has outlined a number of eGovernment goals for both its citizens and its businesses, including having all "priority" services available online; 50 percent of expenditure on goods and services to be effected by e-procurement; two-thirds of all central government offices to offer citizens online access to administrative procedure files; and all offices that deliver services to have a system for measuring customer satisfaction. These goals are planned to be achieved before the end of the current legislature (2006).

Key among Italy's citizen-centered initiatives is the recent launch of a new portal (www.italia.gov.it) based on citizen needs. Just over a year ago, government websites offered little more than specific agency/ministry information, with brief descriptions of agency structure and task but no relation to services and citizens. Today most of the sites are citizen focused, user friendly and appealing, and provide actual information, services and links to further help.

Additionally, agency visions are now built around quality delivery to their clients and linking cost savings with better service. Agencies are following a model of using an internal customer to test a concept followed by value-added services to external customers. Agency visions alone are not

sufficient, however; to move forward some operational change is required. For example, the Ministry of Education (www.istruzione.it) is trying to get all teachers online by giving them e-mail addresses and targeting services at them.

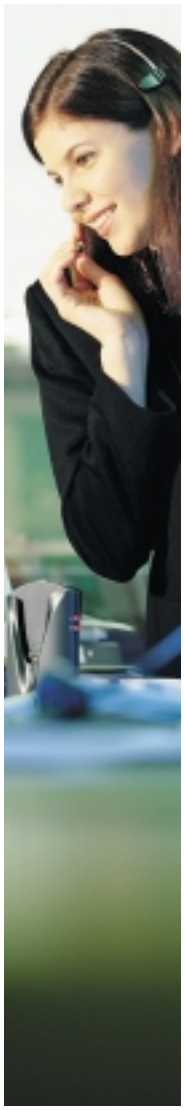
The Ministry of Innovation and Technology (www.innovazione.gov.it) has recently defined the five challenges for public administration digitalization: PCs and Internet for young people, public employees and poor groups; electronic ID cards (EIC) for online access to public administration services; innovation in large national systems (health and education); development of ICT in businesses through strong incentives to technological innovation; and efficient devolution based on a government model decentralized but integrated with Internet technologies.

Italy is undergoing a process of devolution to give more powers to local administration. The national government will be responsible for issuing general guidelines, while the 20 regioni (greater administrative areas) will manage and implement the services related to health, education and transportation. Also, the Ministry of Innovation and Technology has approved cofinancing of 138 regional and local projects costing 120 million Euros. The projects are related to infrastructure services and services to citizens and businesses (www.innovazione.gov.it/ita/egovernment/entilocali/progetti_ammessi.shtml). These investments are part of the government's commitment to government connectivity, enabling the infrastructure for the delivery of services between central and local government, government and businesses, and government and citizens.

One of the more visible and relevant moves toward streamlining government-to-citizen interactions is the planned distribution of 30 million EICs and National Services Cards by the end of 2005 by the Ministry of Innovation and Technology.

Italy has gotten the fundamentals right around infrastructure and basic service provision. The plan now is to foment a considerable change in the country's attitude to technology and online government services. However, it must be noted that the government's plan implies large investments that pose a challenge in light of the current economic environment and a reduction in budget for the development of eGovernment and IT initiatives.

Although the country has made admirable progress over the past 12 months, the journey to maturity is still under way for Italy; most of the services online remain at a Publish level. Moving to greater service depth will require major internal changes that may be at a legal level, at an organizational level and at the level of individual employees' attitudes. The change will take time.



Japan	
Maturity Stage	Service Availability
2003 Rank	15
2002 Rank	17
Vision Introduced	2002 (Revision of 1999 Strategy)
Vision Title	eJapan Strategy

Vision Summary
Through our national strategy, we hope to create a "knowledge-emergent society" that fosters diverse creativity through the exchange of knowledge among citizens.

Regular Internet Users	38.20 percent

Japan

In 2003, Japan climbed two spots in ranking, from 17 to 15, in large part because of its significant increase in overall Service Maturity score. While Japan continues to emphasize quantitative targets—one stated priority is that by the end of FY2003, 98 percent of government services will be online—its great improvement in Service Depth (the highest improvement of all countries) indicates strong future gains in transactional capability.

As part of the government's campaign to turn Japan into an information technology superpower, the IT Strategy Headquarters, headed by Prime Minister Junichiro Koizumi, is expected to build on the progress the country has made in developing IT infrastructures. With most of these targets achieved, the government plans to shift focus to promoting content development and eGovernment and productivity gains.

To promote eGovernment initiatives, a law concerning electronic signatures and certification services was effected in January 2001, and a set of bills to approve the online application of government paperwork took effect this February. Ordinances were revised to enable the online application of some 1,500 types of documents, and more will be revised to allow the online application of additional documents starting at the end of March, when eGovernment systems will be put into full gear.

In terms of infrastructure, Japan has started implementing Central Government PKI (GPKI), which consists of Bridge Certification Authority (BCA) and ministry/agency Certification Authorities (CA), and is planning to complete its cross-certification procedures between BCA and all the ministry/agency CAs by the end of March 2003. In addition, BCA has completed its cross-certification procedures with commercial registration CAs and is carrying forward cross-certification procedures with other private-sector CAs for individuals as well. Today, this is the infrastructure to achieve full online services to citizens, business and government by providing online application and notification services using GPKI.

Following the GPKI, Local Government PKI (LGPKI), which consists of LGPKI-BCA and prefectural CAs, and PKI for "Public Individual Certification Services" by local governments (JPKI), will start their operations in FY2003. Utilizing this security platform, many ministries have started to generate real benefits through their eGovernment programs. For example, the Ministry of Public Management, Home Affairs, Posts and Telecommunications launched its Web-based electronic procurement (tender and examine) system to allow business to join government tenders directly from the Internet. The application will be shared with other agencies, with a target for a government-wide e-tender system by May 2004.

Japan's current citizen portal (www.e-gov.go.jp) is organized around government agency and is not yet user-intention based, providing government information rather than services. The portal offers an enormous opportunity for the government to improve on its CRM-driven eGovernment offerings, and, in fact, the government has put in place a plan to become more focused on serving citizens. The Ministry of Economy, Trade and Industry is planning to build a government-to-business portal to provide all business transactions with government.

To drive up usage of online services, most government agencies are still at the stage of discussing incentives for eGovernment services. However, we found one example of the government discounting the fee when filing a patent online. In terms of marketing, little exists aside from posters inside central government departments and a "Government Advertising Online" homepage, where links to government announcements are accessible.

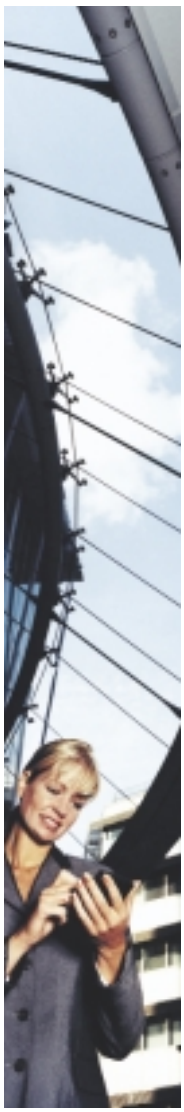
Japan seems poised to make rapid growth in uGovernment forms of eGovernment, as Japanese people have quite broadly embraced wireless eCommerce. Using mobile phones to access relevant information has become as much a part of citizens' lives as using them for telephone calls. The government is planning to make the most of this trend and is showing some innovative examples in the uGovernment space.

Various types of federal government information currently are available from all types of mobile phones, including an electronic newsletter from the Prime Minister, policy information and lists of politicians. These uGovernment offerings have search capabilities and allow Japanese citizens an additional channel to submit comments to the government.

At this stage, however, more local government websites than central ones are accessible via mobile phones. For example, at the local level, Japanese citizens can not only check the basic time schedule for buses but also how long it will take for a bus to arrive at a specific stop and the total time it will take to make a specific bus journey.

In fact, local level governments seem to be the proving ground for eGovernment services in general. Electronic voting, for example, is still at a local rather than central government level. Last June, the city of Niimi in Okayama Prefecture became the first municipality in Japan to implement electronic voting, when it allowed voters to cast their ballots in the mayoral and local assembly elections from electronic voting machines. Sapporo City, Japan's third largest city, located on the western plains of Hokkaido, the northernmost island of Japan, is providing a call center to citizens, the very first in local governments. The call center will process about 80 percent of the inquiries that were previously handled separately by the respective departments in the organization. Also at the local government level, Gifu Prefecture, located in the center of Japan, is applying IT in developing "Digitalization of Municipal Government" (D-Government), starting the very first IT outsourcing contract for e-municipalities services, including electronic documentation management, electronic applications and electronic procurement.

As Japan shifts its emphasis from eGovernment fundamentals—developing a robust national infrastructure and getting a critical mass of services online—to driving up usage of these services, its future path is clear. Japan's low emphasis on CRM to date and its low use of marketing and incentives are areas of obvious improvement for furthering its eGovernment program in the future.



Malaysia	
Maturity Stage	Service Availability
2003 Rank	18
2002 Rank	20
Vision Introduced	1997
Vision Title	Electronic Government

Vision Summary

The vision of eGovernment is a vision for people in government, business and citizenry working together for the benefit of Malaysia and all its citizens. The vision calls for both reinventing the government by using multimedia/information technology to dramatically improve productivity and creating a collaborative environment that fosters an ongoing development of Malaysia's multimedia industry. The vision focuses on effectively and efficiently delivering services from the government to the citizens, thereby enabling government to become more receptive to the needs of its citizens.

Regular Internet Users 7.44 percent

Malaysia

In 2003, Malaysia moved up two places in the ranking, from 20th to 18th, largely due to a big increase in its Service Maturity score. Its increase of 15 percent was approximately twice the overall average. Malaysia continues in the mode of rolling out its eGovernment initiatives and has been slow to introduce new services. Although government agencies have begun rolling out more interactive and citizen-centric services over their websites, there is still a need to focus on the depth of these services. Nine services last year moved from either a Publish or Interact level to a Transact level, primarily in the areas of customs and taxation. While most services are interactive, many have room for expansion to allow electronic transactions between citizens or businesses and the government.

But Malaysia faces some significant challenges as it plots its course forward. As articulated by Deputy Prime Minister Datuk Seri Abdullah Ahmad Badawi, at the opening of the Malaysian eGovernment 2002 Conference on July 1, "We face several challenges in advancing eGovernment service delivery in Malaysia. These challenges relate to the following: the facilitation and expansion of ICT infrastructure, the integration of service delivery across multiple tiers of government, the adherence to the imperative of security and privacy, and the development of a skilled and competent workforce to effect eGovernment service delivery."

To address at least some of these challenges, the Malaysian government is partnering with the private sector in all of its eGovernment projects.

Some of the most notable examples of these partnerships include ePerolehan, which is the electronic procurement system of the government of Malaysia (www.eperolehan.com). Through ePerolehan, full services enable four types of procurement: central contract, direct purchase, quotation and tender. To participate in the system, all users are required to maintain an ePerolehan Smart Card for identification, authentication and verification. These Smart Cards will store user profiles for each appointed user and also a digital certificate issued by Malaysian Government Licensed Certification Authority.

From the citizen perspective, Malaysia continues to have a low Internet penetration. Nonetheless, we found some highly interesting citizen-focused applications this year.

For example, the eServices website (www.eservices.com.my) is a pilot project under the Multimedia Super Corridor Electronic Government Flagship Application. It is a 24/7 operation and a one-stop center that allows the public to obtain information, book services, pay utility bills, check and pay traffic summonses, and change or update information details with government agencies and other organizations through various delivery channels. The eServices website allows different methods of making payments, including payments through an "Electronic Wallet" installed on PCs.

The Malaysian government is currently rolling out the world's first national smart card, called MyKad. After some field tests, it was launched in early 2002. This Government Multipurpose Card contains an individual's ID and electronic signature with an embedded chip that will allow access to government, banking, credit, telephone, transport and club services. MyKad also contains the individual's driving license and health information, facilitates four payment applications and allows for secure e-commerce transactions. It has also been integrated with Malaysian passports, for use at airport autogates.

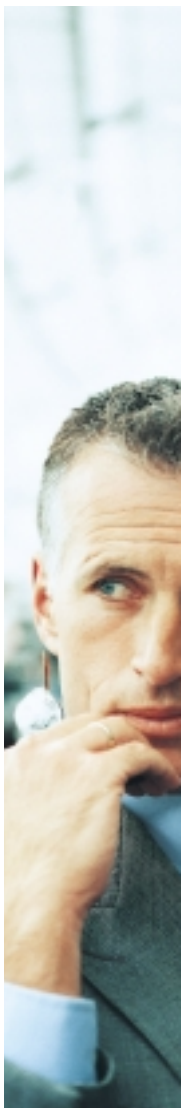
Malaysia's efforts to drive up Internet usage among citizens are being furthered by private-sector initiatives. Several banks are already providing e-cash and credit applications to facilitate payments made to government agencies. A local transportation application, Touch N Go (also incorporated in MyKad), allows citizens integrated access to the network of public transport and payments of tolled highways. These initiatives, combined with multiple delivery channels, extend the reach and increase the success of government online services in Malaysia.

However, there is still little evidence of marketing activities or analysis of customers, although Malaysia's plans for measuring progress suggest that some initiatives are planned for the future.

These approaches to measuring progress include strong focus on performance metrics for both citizen and business services, in which citizen satisfaction will be gauged by public complaints, surveys and short polls at the end of transactions. Additionally, each government unit will be requested to develop an agenda defining its aspirations and plan for eGovernment in the following year.

Progress against this agenda can be reviewed annually with objectives agreed upon for the following year. The review will include productivity benchmarks based on measurable outputs that are most meaningful for the "customers" of the unit compared with number of employees in the unit. Progress can be assessed by the trend and rate of improvement over time. Finally, service providers and government agencies will be asked to submit statistics, which can be aggregated to track performance and adherence to the electronic government roadmap.

Looking ahead, as Malaysia continues to build its base applications (such as financial, human resource management information systems and project monitoring systems), we expect it to become more aggressive in pursuing CRM-related initiatives and citizen-centered applications. To pave the way for future integration across agencies, it may want to consider consolidating the concurrent efforts of individual agencies under a central planning and management authority.



Mexico	
Maturity Stage	Basic Capability
2003 Rank	19
2002 Rank	23
Vision Introduced	2001
Vision Title	e-Mexico

Vision Summary

The e-Mexico program focuses on developing the country's IT and communications (ITC) industry, fostering an internal market for ITC products, promoting an adequate regulatory framework for the use of electronic media and eCommerce, and digitizing government services. In addition, IT and Internet education will be available in all schools, and the legal and regulatory structure for eCommerce will be in place to promote greater consumer confidence, including the use of credit cards online.

Regular Internet Users	8.22 percent

Mexico

Mexico made significant improvements to its eGovernment program over the past 12 months, improving its position in the overall rankings from 23rd to 19th place. This improvement reflects the first results of the eGovernment initiatives launched by the current administration. Those eGovernment initiatives fall under two programs: the e-Mexico National Program, which focuses on connectivity, content and services; and the Presidential Agenda for the Good Government, which defines six key strategies, including one for digital government.

This year's improvements are not related to a single, or even a few, major initiatives but to many different efforts from different departments to put more services on the Web or improve the existing ones. The country's biggest improvement was in Service Breadth, where it increased 20 percent. Many more services are now online; 21 services not provided last year are provided this year, and 49 services are new this year altogether.

Possibly the most remarkable of Mexico's eGovernment efforts was setting up the Citizen's Federal Government Portal (www.gob.mx), which offers, integrates or links many different federal services.

The year 2002 saw the completion of phase one of the portal, which focused on defining the vision, launching the program, putting services on the Web and piloting other major initiatives, such as reengineering internal processes.

Phase two, which will span 2003 and 2004, has been defined as the growth and consolidation phase. During this time more services will become available on the Web and more advanced functions will be developed. Some of the priorities for development during this phase include consolidating the Citizen's Federal Portal by including more services and integrating some of them by areas of interest, standardizing common services such as electronic signature and electronic payments, reengineering internal processes (such as public services, e-procurement and enterprise resource

planning) to be able to deliver the fastest response possible to the citizen and building a CRM solution for managing citizens' needs. Looking further into the future, proposed e-Mexico developments include establishing support for electronic government operations during the 2005–2006 timeframe.

Some of the strongest support for changes to Mexico's eGovernment program include a number of laws designed to improve transparency into Mexico's government. The new Federal Law of Transparency mandates that the Federal Administration will publish information and answer citizens' questions about the public administration organization and operations. Obviously, eGovernment is a powerful tool for accomplishing this objective, and so it has been reinforced as a strategic program.

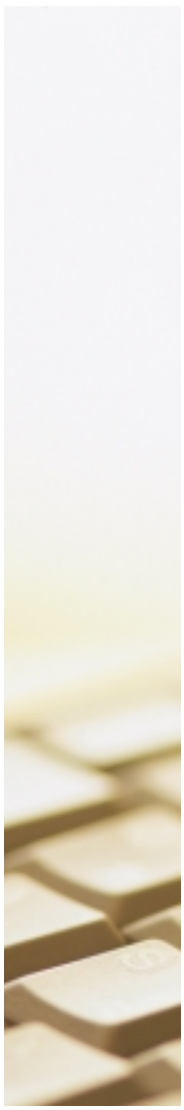
Additionally, the Freedom of Information Access Law was approved by Congress in April 2002. This law supports the constitutional right of all Mexican citizens to access all information regarding government activities. It establishes the procedure through which Mexican citizens can access information generated or owned by government institutions.

Mexico is advancing its eGovernment program through collaboration with both private-sector entities and other governments.

In one example, the government has signed an agreement with a multinational private-sector business that will give the country access to the company's know-how and experience in IT, for development in the areas of eGovernment, education, health and the economy.

And Mexico and Canada signed a cooperation program in January 2002, designed to spur Mexico's eGovernment program through learning from an eGovernment world leader. This agreement was initiated in an effort to overcome Mexico's technological setback in relation to public services by giving Mexican authorities technical support from the Canadian government.

Although Mexico still is in its early stages of eGovernment maturity, its large improvement over the past year hints at the rapid progress the country is likely to make over the next year, due in large part to the strong enabling framework that is now in place and the country's strategic focus on CRM principles as the driver of its initiatives.



The Netherlands	
Maturity Stage	Service Availability
2003 Rank	13
2002 Rank	11
Vision Introduced	2000
Vision Title	Contract met de Toekomst (Contract with the Future)

Vision Summary
To encourage the use of information and communication technology in a number of areas to create a more efficient and effective government.

Regular Internet Users 54.67 percent

The Netherlands

Having slipped two places this year, on top of a two-place slip in last year's ranking, the government of The Netherlands has been less successful in implementing visible eGovernment services and was more focused on strategy and prerequisites for a later successful implementation of those services. The Netherlands seems to be in need of strong eGovernment policy and direction. The country has scored below the average in changes to scores of Service Maturity depth, breadth, and CRM maturity.

Advances for the implementation have been slowed by a lack of governance and little alignment across departments, combined with the challenges of a tight budgetary and politically volatile environment. As a result the country has scored below the average across all measurement categories.

There were two elections of a new cabinet within one year, and information and communications technology had low visibility and priority. This absence of ICT among the key priorities for the government and no appointment of a key responsible minister for ICT has resulted in a lack of central governance for eGovernment programs.

The action plan, which was stated in 2002, still exists. However, due to the challenges that the government had to face last year, including a tight budgetary environment, there were not enough resources to achieve the goals from this plan, resulting in many plans in many places, as well as few implementations of new eGovernment services.

One major goal that was reached was the implementation of "the single identification number." All persons and businesses in The Netherlands can now be identified by a unique number, known as the Social Fiscal (SoFi) number, which may lead to the further and easier integration of services needed to provide the intentions-based service that is a hallmark of greater eGovernment maturity.

Also, the country has made large investments in its PKI, second only to the United States and Canada. These investments will form the foundation for future online transactions and two-way communication with and between government agencies.

The signs for improvement in 2003 are visible: The Secretary of State of the Ministry of Economic Affairs, Mr. J. Wijn, sent a letter to the Dutch parliament last January, outlining the plan and aiming for decreasing the administrative communication efforts of businesses toward government agencies.

The letter details the plans for the set-up of a single window for companies dealing with governmental agencies, the creation of a Government Transaction Gateway and the installation of a General Business Register.

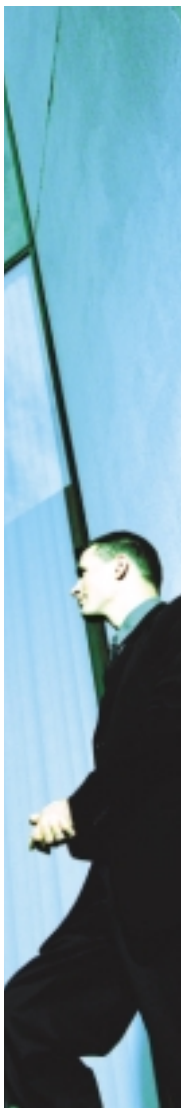
There are several pilot projects announced in this letter, as well as evidence of a "think big, start small" approach, showing the government is dedicated to delivering results this and next year.

In addition, at the end of last year the Dutch government agreed on an "operation" (consisting of up to 12 projects) called Improved Public Affairs for Civilians and Companies (Beter Bestuur voor Burgers en Bedrijven, or, "the four Bs program"). The key themes of this program are to reduce bureaucracy and detailed policy making, improve services to the public, improve quality of government operations and increase freedom of choice for civilians and companies.

The objective of this approach is to address the real problems civilians and companies are facing by breaking the barriers between departments and governmental agencies. Leadership of the program rests with the Ministries of Interior, the Ministry of Economic Affairs and the Ministry of Justice.

In the area of eGovernment for the citizen, one of the most recent actions is a tender for an eVoting experiment. For the national elections, most Dutch already did not use paper as a way to vote. Rather, voting computers were used in the voting booth, most of which were attached to a network to provide statistics in a much faster way. The eVoting experiment is aimed at the European Parliamentary elections in 2004, allowing Dutch in foreign countries to vote in the elections via telephone and Internet browser.

To date, The Netherlands' eGovernment focus has been on planning core administrative processes and not on front-end service provision. Now the time has come to reach for coherent programs and delivery-focused projects through strong governance of all areas of services to businesses, citizens and other governmental bodies. A look to the progress of its neighbor Belgium shows what could be possible with a period of focused development.



Norway	
Maturity Stage	Service Availability
2003 Rank	16
2002 Rank	13
Vision Introduced	2000
Vision Title	eNorway 2005

Vision Summary

A good framework for eNorway through streamlined regulations, good funding schemes and cultivated conditions to boost innovation and research in the IT domain. The framework shall be unbiased in terms of technology, and the government will be specifically responsible for cultivating conditions to promote effective competition.

Regular Internet Users	69.63 percent

Norway

Norway made slow progress this year, falling three places in the rankings, from 13th to 16th overall. It made essentially no improvement in overall Service Maturity score and very modest improvement in its CRM score. These scores reflect the fact that there was not much development in Norway's existing eGovernment services. Over the past year only seven moved from a Publish to an Interact level and only five from a Publish or Interact level of depth to a Transact level.

The original eNorway vision was established in June 2000 and relaunched in May 2002 by the Minister for Trade and Industry. One of the main components of the newly launched eGovernment vision is "24/7 public administration." The government of Norway has set some explicit CRM-related goals for achieving this 24/7 vision, including one common electronic interface to the government; public service available 24 hours a day, seven days a week; telephone service available 12–16 hours a day; one government office for all physical contact with the citizen, available eight hours a day, five days a week; stimulation of democratic involvement; and efficient use of resources.

eNorway 2005 sets forth a number of policy objectives to try and reach its goal of 24/7 public administration. It defines the government's responsibility for creating a good framework for eNorway through streamlined regulations, good funding schemes and cultivated conditions that boost innovation and research in the IT domain. It outlines the necessity for partnering with the private sector and the government's commitment to ensuring easy access to content that is relevant and tailored to the citizen's needs.

The vision also details the government's responsibility for motivating the rollout of broadband and electronic signatures. Legislation is in place or is pending to ensure that by 2005 all citizens and businesses have public access to electronic signatures. These laws include the Act on Electronic Signatures, the Act on the Treatment of Personal Information and a proposal for an Act on Electronic

Communication with and within the government, which Norway expects to implement by July 2003.

Security is a key concern in Norway. The current Norwegian network for communication is broadly considered not secure enough in relation to sabotage. This perceived weakness has impacted take-up of some services. For example, the government's electronic marketplace for commerce in the public sector has been established (www.ehandel.no), but the usage is minimal and likely to remain so until the infrastructure and especially security can be upgraded.

Norwegian citizens have much to gain from improved eGovernment. Norway has a very high Internet penetration rate (among the highest of countries we surveyed) and high usage of services. For example, 1.6 million Norwegians had traded on the Internet by 2002 (excluding online banking) and 1.5 million use online banking. Norwegian citizens have more frequent interaction with government than citizens in many other countries.

An important driver of progress in Norway is simplifying processes for companies, with the long-term goal being provision to citizens. For example, the Norwegian Tax Administration, the Brønnøysund Register Center and Statistics Norway have entered into an agreement with a private-sector firm to develop the "AltInn" solution. "AltInn" (which can be translated as "everything in") will enable Norwegian businesses to get an alternative way of reporting information to the government on the Internet. Today there are about 660 different forms, mainly on paper, that businesses in Norway have to fill out and return to different government agencies. The long-term aim is to replace these paper forms with an online system. The first phase of the system is planned for launch in the autumn of 2003. AltInn is an ambitious cross-agency initiative and an important model for the government, which faces a current shortage of funds to implement its eGovernment plans.

Additionally, the Minister for Trade and Industry is considering allowing private companies to commercialize public IT services as a way to speed up the development of broadband services in Norway. The end goal is to make available the wealth of electronic content residing in public institutions, such as the Norwegian Mapping Authority's electronic maps and the Norwegian Broadcasting Corporation's radio and television programs. The minister is asking for creative solutions for offering public data to the public and considers this to be an area where private businesses can contribute mightily.

The government will be evaluating the success of eNorway 2005 with status reports, weighing results against the IT policy objectives. In addition, Norway's performance will be compared with other countries.

While Norway has remained largely static this year, it has made progress in some areas and has the right legal and organizational infrastructure in place. With little money to implement its eGovernment plans, self-financing projects will contribute to driving the government's progress toward increasing maturity.

Portugal	
Maturity Stage	Basic Capability
2003 Rank	20
2002 Rank	18
Vision Introduced	2002 is the most recent review by a new government
Vision Title	

Vision Summary

The information and knowledge society is an opportunity to change the relationship between citizens and state, to reinvent the organization of the state and to lead it to citizens, and to reinforce the economy competitively, namely within sectors such as information technology and communications.

Regular Internet Users	9.87 percent

Portugal

In 2003, Portugal fell two places in the rankings, compounding a four-place fall in 2002. The post-election changes in the ruling political party had a strong impact on last year's activities regarding eGovernment, particularly in areas of cross-government initiatives.

Since then the new government has been reevaluating all programs in a very tight budgetary environment. Consequently, the country's eGovernment program grew at a slow pace over the past 12 months. One important milestone during this transition period occurred on November 20, 2002, with a government resolution appointing the Minister Assistant to the Prime Minister as the person responsible for the development of eGovernment, as well as for innovation and the information society in general. According to the resolution, the Minister Assistant's actions must be in accordance with the goals determined by the European Union and he must oversee and evaluate implementation of these strategies.

The November 20th resolution also determined the creation of a new organization, Unidade de Missão Inovação e Conhecimento (UMIC), as a structural support for the corresponding activities. This new structure is in place to deal with the information society and eGovernment, and Portugal is scheduled to release an ambitious plan this year with support from EU structural funds.

Currently, however, the main Portuguese portal directed to citizens is still INFOCID (www.infocid.pt). This portal existed last year and maintains the same functions, which are mostly related to providing information. The only transactional service available online through INFOCID is the request for civil, commercial and property certificates. Some relevant eGovernment progress was made in specific departmental websites, namely in employment-related services. Taxes, registries and postal services remain the most transactional eGovernment functions.

Portugal continues to have a very low Internet penetration rate of less than 10 percent. We found no evidence of specific marketing actions promoting citizen access to online public services. Indirectly, the government had several initiatives that may encourage the take-up of eGovernment services by eliminating "barriers of entry." These include the "Computer to All" initiative, which encourages domestic use of the Internet, and the "Digital Cities" program, which aims to provide urban regeneration, combat social exclusion and raise the competitiveness of certain industries in local regions by driving the production and use of cultural/educational materials, creating Internet Clubs and launching programs with firms to offer technological equipment to schools and associations.

Additional progress that the government has made in working to remove barriers to usage includes its commitment to the goals of the Seville European Council "E-Europe 2005: Information Society for All." Broadband access is seen as essential in Portugal for the creation of a knowledge economy and to generate economic growth.

As Portugal looks to future improvements, it has put a number of other important pieces in place. The November 20 resolution outlines the administration's outlook on eGovernment; namely that it considers the information and knowledge society as an opportunity to change the relationship between citizens and state, to reinvent the organization of the state and to lead it to citizens, and to reinforce economic competitiveness. Adoption of this resolution shows evidence of a CRM mindset and more. In fact, it verbalizes goals of transformation for the government and points out various actions for Portugal to pursue its eGovernment goals, namely to promote several services and supports, through partnerships and projects with common infrastructures.

Evidence of potentially transformational action includes a citizen portal project, which aims to provide a multichannel service, integrated across agencies. The first services are being selected, and the plan is also to link to the existing agency portals. The project goal is to go live with its first phase in December, with an offering of at least 50 online services. Successful implementation of this project will raise the intensity of eGovernment security and privacy issues. Currently, there is no generalized standard for information security, primarily because little confidential information exists online. Each department has its own solutions for protecting its own data. As another example, the "Virtual Campus" initiative was launched. It aims to be an important driver for innovation, by creating wireless networks in universities and providing easier access to computers by students and teachers.

These two initiatives aside, the UMIC had several other notable accomplishments, such as the strategic definition of public electronic procurement, which includes the development of an informational website, and the definition of a national strategy on broadband.

Portugal's future eGovernment growth may be built on wireless and mobile initiatives. The country hopes to be an early adopter of UMTS and 3G mobile technologies. The wireless implementations in some universities and cities and the national strategy on broadband are solid signs of that future direction.

Singapore	
Maturity Stage	Mature Delivery
2003 Rank	2
2002 Rank	2
Vision Introduced	2002
Vision Title	eGovernment Action Plan

Vision Summary
To be a leading eGovernment to better serve the nation in the digital economy.

Regular Internet Users 41.55 percent

Singapore

In 2003, there was no change in Singapore's vision or action plan, and no change in its overall ranking. It has reached a plateau in the Service Maturity category and has lost a little ground to eGovernment leader Canada.

Some key stated eGovernment priorities for 2003 and 2004 are to continue to deliver accessible quality e-services, continue to review the current suite of online services and the needs of the public to identify opportunities for service innovation and continue 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.

From the supply perspective, the Singapore government strove to deliver electronically every service that could be delivered electronically by end 2002. Their high Service Breadth score of 95.3 percent, which was second only to Denmark, indicates that if Singapore has not yet fully achieved its goal, it is very near to doing so. In addition, Singapore aimed to have every service delivered at the Transact level online, unless impossible to do so, in which case it would be offered at the Interact level. Only services that did not involve application from the public would be left at the Publish level.

In the words of the Director of Central Services, Ministry of Finance: "Our true measure of success is when more citizens use our e-services and find that government services online can help them to avoid getting in line."

Against this measure, Singapore's eCitizen portal, www.ecitizen.gov.sg, has made remarkably good progress, achieving an average number of hits of 4.2 million per month, a huge jump from just over 240,000 per month a year ago. At eCitizen, all the procedures and documents needed to conduct a transaction are listed, which ends the frustration of arriving at a government office without a vital document. Additionally, a feature introduced on the government's eCitizen portal will allow users to personalize the website so it can offer appropriate information and reminders. All it takes

is for a user to provide information, such as age and employment status, and opt for alerts on such matters as reminders on returning library books or even Parliament notices. Such new offerings drive both take-up and satisfaction. With the addition of more and more services, the eCitizen usage numbers are likely to swell even more.

To drive up usage of eCitizen, the government is beginning to provide incentives to encourage the public to transact online, such as lower fees for online transactions, faster turnaround time and lucky draws.

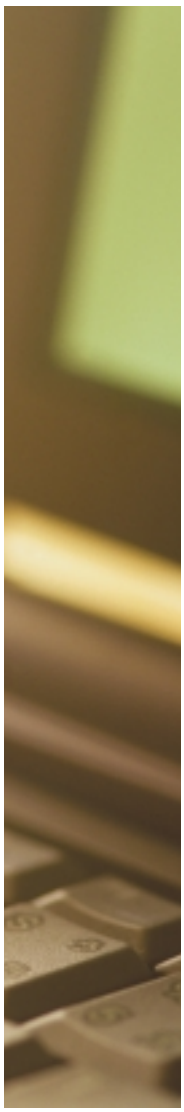
Applying for a passport online, for example, entitles the applicant to a $10 rebate. The Inland Revenue Authority of Singapore (IRAS) (www.iras.gov.sg) introduced a lucky draw. Through the E-Filing Cash Lucky Draw, the IRAS gave away $20,000, $10,000 and $5,000 as the top prizes. A significant number of taxpayers who had not e-filed before provided feedback that they would do so if someone could help them. IRAS therefore 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 the lucky draw if he or she participated in the "Help-A-Friend-To-E-File" scheme.

Additionally, the government is introducing a number of publicity and promotion programs, such as 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 about eGovernment e-services.

Singapore is also working to build customer satisfaction into its eGovernment service development by proactively soliciting input into the services delivered. Consulting the public and the private sector in developing eGovernment action plans is a key strategy for Singapore. The series of Economic Review Committees consultations that the government undertook to establish in the fundamental review of the development strategy underscores the government's commitment to seek views from the constituents.

Over the past two to three years, more public-private partnerships are emerging in the delivery of online services. In addition, the Singapore government continues to collaborate with private sector companies to encourage greater innovation in the use of ICT to better serve the nation. The Economic Review Committee ICT Working Group (ICT-WG) recommends how Singapore can improve its position in the global ICT space, to make ICT a vibrant growth engine, source of value-added employment and key enabler for other sectors of the economy. Many of the recommendations will likely be incorporated in the next phase of eGovernment Action Plan (FY2003–FY2005).

Looking ahead, while Singapore continues to be a leader, it is reaching a Service Maturity peak through its focus on broad service availability. Its strong Service Depth score and continued emphasis on Service Depth indicates it will make rapid improvements in this area as well. To close the growing gap between itself and Canada, however, Singapore must integrate its eGovernment initiative as part of a drive to improve overall service delivery. Canada has already taken the first steps toward this next stage of maturity, Service Transformation, and other leading countries are looking to make the same move. This is the next level of eGovernment sophistication for Singapore. With its strong foundation of service provision, it is better positioned to achieve that level than most other countries.



South Africa	
Maturity Stage	Basic Capability
2003 Rank	22
2002 Rank	22
Vision Introduced	
Vision Title	Electronic Government—The Digital Future: A Public Service IT Policy Framework (discussion document)

Vision Summary
To leverage eGovernment to structure and render services around life episodes of the South African people, following a series of events, from cradle to grave. Such services must be accessible to all citizens anytime, anywhere, and through different access devices and media.

Regular Internet Users	5.71 percent

South Africa

The government of South Africa made little measurable progress toward its eGovernment vision this year, remaining in 22nd place in our overall maturity rankings.

South Africa's focus during the past 12 months has been on legislative change, but there have also been a number of significant developments outside of the scope of our survey. For example, one area worthy of note is the country's focus on a contact center implementation for the South African Revenue Service (SARS), intended to transform the way that organization interacts with its citizens. The contact center will offer capabilities to handle multiple communication channels (including telephone, fax, e-mail and the Internet) in a consistent manner and will be used by taxpayers to obtain assistance (inbound calls) and by SARS to contact taxpayers (outbound calls). It is developed on many of the CRM principles that are driving eGovernment initiatives referenced elsewhere in this report and with many of the same objectives: namely, to improve service levels dramatically, maximize operational efficiency and develop knowledge-empowered staff. Phase 1 went live in the Western Cape Province of South Africa. Phases 2 and 3 of the project will include the rollout to other provinces and also the integration with the SARS Legacy System. SARS also has an e-filing initiative enabling the electronic submission of tax returns, called myTax.co.za. Although the tax implementation seems to be working well and has been well received by users, it will require a concerted effort to drive take-up. The potential savings are clear but will not happen without economies of scale.

In a broader look at South Africa's eGovernment program, the government plans to implement eGovernment over a 10-year horizon. It has identified distinct phases of eGovernment from both successes and failures of countries that have undertaken or are undertaking eGovernment initiatives. The South African government intends to phase-in eGovernment according to tested worldwide trends and through these phases, including information provision, two-way transactions,

multipurpose portals, personalized portals and clustering of services.

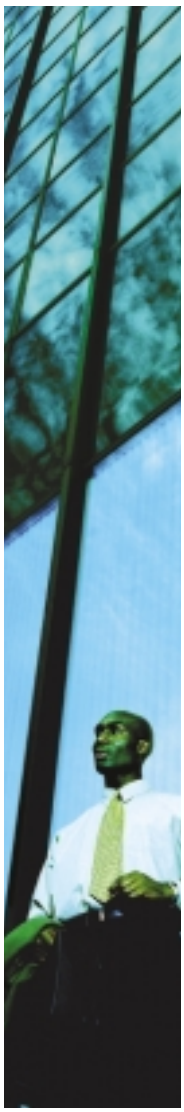
Phase 1 and 2 of this Horizon plan are considered complete by the government. As the government launches into Phase 3, it has set a number of clear priorities for 2003 and 2004. First among these is the implementation of the eGovernment gateway. The South African government currently has a central government website, www.gov.za, but it is not truly a portal. This new eGovernment gateway will include information on services offered by government; provide applications, forms and procedures; and be the place where service actually can be obtained. Citizens will be able to access this portal through the Internet, kiosks and a call center. Related to the gateway, the South African government intends to integrate or link existing two-way transactions offered by departments, such as SARS and the Department of Trade and Industry.

Additionally, the establishment of a legal framework that will allow the successful rollout of the next phases of eGovernment and seamless integration of government systems form part of the 2003/2004 priorities, as does the development of a sustainable financing model that will see the project self-sustainable in the long term. The government is also focusing on building multipurpose community centers that can address citizens' needs across many departments, with the goal being to provide better access across a wider range of communities.

The government's eGovernment action plan is a living document under constant review. For example, the government's Gateway Project is managed according to international project management best practices with clear and unambiguous milestones. As the applications become available to the citizens and to government, various mechanisms will be instituted to measure the impact of each phase as delivered and to identify possible areas for improvement. All phases of the government's 10-year Horizon plan will also be reviewed regularly in relation to technological change and any policy and business strategy changes. Additionally, the eGovernment House of Value, which evaluates projects in terms of productivity in service delivery, cost of offering services and convenience/benefits accrued to citizens, will be used to evaluate the value-add that can be attributed to specific eGovernment implementations.

A new version of the country's eGovernment vision is expected shortly, however, which purportedly will entail the establishment of single-window access to government services anytime, anyplace and by any means. The new version will be made available as soon as the Cabinet has approved it. The next step for the government will be implementing policy.

Looking forward, the success of South Africa's eGovernment program will depend on how well the government can implement its planned phased initiatives. One potential avenue for innovative implementation is through mobile phones, which already enjoy excellent market penetration in South Africa.



Spain	
Maturity Stage	Service Availability
2003 Rank	14
2002 Rank	15
Vision Introduced	1999
Vision Title	INFO XXI: The Information Society for All

Vision Summary

To provide an information society for all, providing education and employment, appropriate infrastructures and legal framework, a society which promotes its culture, a society with better quality of life, an innovative society which stimulates the growth of new businesses and new industries, to promote a society with presence in the global marketplace, to provide an administration more transparent and centered around the citizen.

Regular Internet Users	14.67 percent

Spain

In 2003, Spain advanced one position in the rankings, moving from 15th to 14th place. It continues to make steady progress toward the vision outlined in its INFO XXI Initiative (www.infoxxi.es), which is now under new leadership. Carlos López Blanco, who has been appointed Secretary of State of Telecommunications and for the Information Society, brings ample private-sector experience to his new public-sector role.

To further progress the INFO XXI Initiative, on November 8, 2002, the Council of Ministries approved the creation of the Special Commission of Study to Develop the Information Society (www.cdsi.es). This commission, working from November 2002 to April 2003, has been tasked with the main objective of reviewing and redesigning the INFO XXI Initiative.

The current INFO XXI Initiative action plan was developed in 2001, with priorities such as developing a citizen portal, electronic ID cards and an electronic civil registry, among others.

The Spanish government's portal, administracion.es, is structured into three big groups. Its structure has not changed since last year's report, although 23 new services are included. The three main groups are Ciudadano, which is focused on citizens (www.administracion.es/ciudadano.htm), Empresa/Profesional, which is focused on enterprises (www.administracion.es/empresa.htm) and Organización Pública, which is focused on public-sector employees (www.administracion.es/publico.htm).

Spain has examples of mature electronic services areas through the central government, for example, the social security (www.seg-social.es) and the taxation offices (www.aeat.es). However, the taxation office still has a margin for improvement in areas like enterprises (i.e., electronic bill) or helps/grants, as was shown in the recent development of a high-impact new service, a monthly-anticipated deduction of the tax return for working women with children less than three years old. This service has been promoted via a successful advertising campaign in numerous

media channels, including television, radio and newspapers. More than 25 percent of working women have applied for this help through the Internet.

Moving forward, Spain has taken a number of noteworthy actions that may propel its eGovernment progress rapidly. The Spanish government is also considering the "eEurope 2002" vision and plan (June 2000) and the updated "eEurope 2005" that was adopted under the Spanish Presidency of the European Commission (May 2002).

A company called RED.es (www.red.es) has been set up to manage the .es domain. The role of Red.es is emerging into coordinating the development of the Information Society and Spain's global eGovernment initiatives, always under the watch of the Ministry of Science and Technology and Ministry of Public Administrations. Perhaps most important, Red.es has the resources to develop related initiatives which may be a catalyst for moving Spain's eGovernment program forward.

The government is also working on the development of an electronic National ID Card, with the intention of having it become the single administrative card for the relationship between the administration and citizens. This card is not implemented yet, but holds great potential for streamlining electronic government to citizen interactions.

Finally, we note that the decentralized nature of the Spanish government means that many of the services surveyed as part of this research fall under the domain of regional governments. These governments are developing important eGovernment regional practices in such areas as health care, welfare and education. Regional eGovernment developments may provide guidance for specific implementations at the national level. For example, there is huge potential for a coordinated and integrated PKI solution across Spain, although that implementation is likely to mean managing across several solutions and, for maximum citizen benefit, across multiple tiers of government.

The United Kingdom	
Maturity Stage	Mature Delivery
2003 Rank	8
2002 Rank	6
Vision Introduced	2002
Vision Title	Information Age Government

Vision Summary
The government's vision is of modernized, efficient government, alive to the latest developments in e-business, and meeting the needs of citizens and businesses.

Regular Internet Users 46.51 percent

The United Kingdom

While still a high-ranking eGovernment performer, the United Kingdom slipped two places this year—from sixth to eighth place. The country has slowed down in its eGovernment progress somewhat, losing ground to countries at a similar stage of development, most notably, Belgium, which is rapidly closing the distance between the two countries.

The United Kingdom's stated goal is to make all government services available electronically by 2005, with key services achieving high levels of use. The government continues to score strongly in CRM measures—ranking fourth in overall CRM score. We believe the government will need to place additional emphasis on CRM-driven goals that enhance service delivery, rather than goals of critical mass, to make real future progress toward its stated objectives. We found some evidence that these targets in fact are changing. A number of departments have set goals of improving customer service by 2005 by ensuring 100 percent of services will be offered electronically, wherever possible through a common government portal, with take-up for key services of at least 50 percent by March 2006. In addition, goals are being set for delivering reductions in the costs of compliance for businesses. The Departments of Inland Revenue, Customs and Excise, and Environment, Food and Rural Affairs are among the UK agencies setting similar such targets.

As part of ensuring service delivery, the government is focusing heavily on broadband, spending more than £1 billion on broadband over the next four years as part of a £6 billion investment in information technology. The United Kingdom had come under criticism for its slow rollout of broadband and for setting unrealistic targets for both high-speed Internet access and getting government services online. This investment will provide the backbone for adding additional services and, more important, the technological foundation for the value-added service delivery dimension of cross-governmental and public-private sector service integration.

However, government's strong focus on the technical foundations that make this integration possible must not prevent work on delivering greater value to constituents and on setting and resetting priorities as

joined-up government develops. The United Kingdom seems to recognize that danger as it emphasizes support for new forms of public-private sector collaboration and for programs that benefit intermediaries. The UK eEnvoy, Andrew Pinder, considers that 2003 will be the start of some important developments for intermediaries. For example, banks will start offering tax services and student services, and accountants will increase their range of services.

In one highly innovative public-private example, the United Kingdom launched touch screen Jobpoint kiosks in 2002. Jobpoints are part of the Jobcentre Plus (formerly Employment Service) modernization program being developed and delivered in partnership with a private-sector corporation. 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—a total of around 400,000 job vacancies nationally—as well as vacancies from European employment service agencies and other third-party agencies. The program has already won a number of awards and accolades, including the European Commission's "eGovernment Best Practice" label.

The government sees its role in relation to private-sector entities and intermediaries as two-fold: to publish standards that allow the private sector to interoperate with government without lots of systems or interfaces and to reduce barriers that departments may inadvertently create by promoting new ventures and offering a broker service to help establish agreements and service levels.

A key component of the plan to increase private-sector collaboration (and potential innovations in service delivery to both citizens and businesses) is the UK Gateway Partnerlink. The Partnerlink (www.govtalk.gov.uk/gateway_partnerlink) initiative focuses on forming partnerships with commercial vendors interested in facilitating transaction delivery through the government gateway. These may include software applications for routine forms, such as tax assessment, or hardware devices that allow data exchange and conversion with legacy systems.

Partnerships with the developer community will help to increase the choice of front- and back-end gateway-compatible products for government departments, organizations and businesses wanting to provide gateway-enabled services. They will increase points of entry for citizens accessing these services, help drive take-up and provide an improved and more tailored user experience.

Additionally, the Office of the eEnvoy (OeE) is setting up an e-venturing unit to attract ideas and innovation for government service transformation and proposals for intermediary engagements. It will be accessible via the OeE website (www.e-envoy.gov.uk) and directly through www.e-venturing.gov.uk.

Besides striving to expand Internet access and broadband penetration across the United Kingdom and to get the government online, Andrew Pinder's office has been running an extensive advertising effort to increase awareness and use of the Internet as a channel to access government services. In 2002 the government launched a marketing campaign for the UK online portal. This marketing program included an online advertising campaign and an interactive advertising campaign on Sky Digital's most popular channels, featuring a number of celebrities encouraging viewers to go online.

To deal with citizens' concerns about how their information is used, new legislation regarding privacy and data was introduced. The Directive on Privacy and Electronic Communications was adopted in July 2002 for implementation by the end of October 2003. This Directive will update current rules on data protection and privacy in 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.

The United Kingdom has been a strong eGovernment performer that looks to have stalled somewhat of late. Perhaps the biggest concern for the government is the low number of citizens using online government services (even though about 75 percent of these will be Web-enabled by the end of the year, according to eEnvoy Andrew Pinder). Trade and Industry Secretary Patricia Hewitt has pointed out that only one in 10 UK citizens have used online government services, compared with half of the Canadian population. New emphasis on value-added services that rely on the government's strong CRM abilities may provide the impetus to restart the government's momentum toward increasing maturity and take-up rates needed to deliver real return on the country's significant eGovernment investments.

The United States	
Maturity Stage	Mature Delivery
2003 Rank	3
2002 Rank	3
Vision Introduced	2001
Vision Title	E-Government Strategy

Vision Summary

To improve the efficiency and effectiveness of the federal government's transactions through the use of improved technology, to eliminate redundant systems and to significantly improve the government's quality of service for citizens and businesses.

Regular Internet Users	66.65 percent

The United States

In 2003, the United States made good progress to retain its third-place ranking. The government's strongest showing was in the area of CRM, where it showed an improvement of more than 13 percent.

In October 2002, the Office of Management and Budget (OMB) released the E-Government Strategy, an action plan for implementing the President's management initiative of expanding electronic government to make it easy for citizens and businesses to interact with the government, save taxpayer dollars and streamline business-to-government transactions.

The strategy details 24 individual eGovernment initiatives, which are designed to improve the efficiency and effectiveness of the federal government's transactions through the use of improved technology, eliminate redundant systems and significantly improve the government's quality of service for citizens and businesses. The programs are organized into categories: G2C (projects such as one stop for recreation services, eligibility assistance online and online loan access), G2B (projects such as online expanded electronic tax products and international trade process streamlining), G2G (projects such as eGrants and disaster assistance and crisis response), internal efficiency and effectiveness (projects such as eTraining and payroll processing consolidation) and a cross-cutting initiative for government-wide eAuthentication. These projects have the potential to generate several billion dollars in savings by reducing operating inefficiencies, redundant spending and excessive paperwork. Federal IT spending in the United States will exceed $48 billion in 2002 and $52 billion in 2003.

This level of spending provides enormous opportunities for the federal government to become citizen-centered through the use of eGovernment.

OMB Director Mitch Daniels explained, "One of the President's five management initiatives is to apply the tools of E-Business to create 'E-Government': to make it much easier for citizens to work with their government, to pay their taxes, to book a trip to a national park, to apply for grants or even to

learn if they're eligible in the first place, and much more. This is what the President meant by 'citizen-centered' government."

Additionally, the US federal government has focused efforts on its Federal Enterprise Architecture project to provide the foundation for currently approved eGovernment projects and identify opportunities, based upon agreed criteria measuring impact and value to the citizen, for additional eGovernment initiatives.

To encourage take-up of services, the government is concentrating its efforts to improve eGovernment by moving away from an agency-focused presentation of services to a citizen-focused presentation of services. This requires integrated, cooperative efforts by the agencies involved in terms of the 24 initiatives described earlier, and that is where the current focus is in terms of encouragement. Additionally, new security services are being provided to the federal Web portal, FirstGov (www.firstgov.gov), that officials say will be strong enough to permit secure online transactions between federal agencies and citizens. For example, one of the initiatives planned for FirstGov, eAuthentication, would enable users to log in once through FirstGov using a password or digital certificate and perform secure transactions with several different agencies—ranging from enabling businesses to apply for permits online to helping individuals apply for federal benefits over the Internet.

Interestingly, statistics on take-up of eGovernment services are not readily apparent on the FirstGov website. However, statistics available through the marketing and communications office show that FirstGov take-up rates increased dramatically from 2001 to 2002. The number of unique visitors rose from 6.8 million to 37 million during that one-year period, while hits increased from 77 million to 149.4 million.

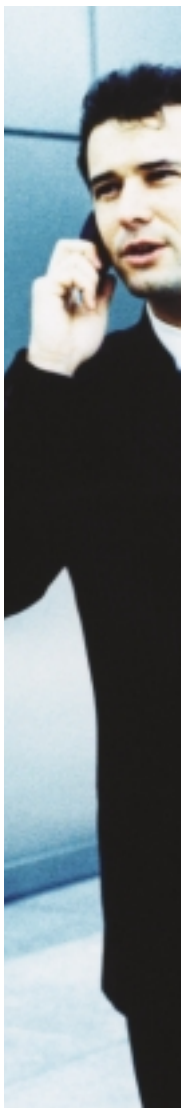
The eAuthentication initiative has G2G implications as well. After a prototype eAuthentication capability was deployed in September 2002, a number of applications are in the process of being migrated to this service. Potential agencies that will be using this service, which will allow for the sharing of credentials across government and allows for secure transactions, electronic signatures and access controls across government, include the Department of Education, Department of Agriculture/National Finance Center and the General Services Administration. Full eAuthentication capability is expected by September 2003.

Once services like these are in place, we would expect more outward-focused activities to publicize these services and encourage their use. At present, however, there appears to be little indication of any marketing incentives or rewards for using online government services.

The US eGovernment performance measures are agency-specific and still in the process of being defined. However, a consortium of performance organizations presented a baseline report last October on agencies' eGovernment practices, and OMB officials agreed that it creates an important mark for measuring future progress.

The report, "Creating a Performance-Based Electronic Government," is the first of what will be an annual study, highlighting best practices and points agencies still need to improve, particularly in the area of creating and using performance measurements. The importance of these performance measures was driven home in early 2003, when the OMB carried through on its drive to consolidate IT investments among the eGovernment projects, deciding that as a whole they will get 24 percent less funding in 2004 than they did in 2003. This action was in response to a call made by Mark Forman, director of IT at the OMB, to consolidate redundant IT investments.

The United States has made some valuable investments in its eGovernment infrastructure through its enterprise architecture project. However, it is now at a stage of maturity where it will be difficult to improve at the same rate without some level of transformation. A number of countries have made great strides toward catching up with the United States, which is seeing a widening gap between itself and world-leading Canada. To take the next step, the United States must capitalize on its infrastructure investments and shift into an eGovernment model of real integration and service delivery transformation.



appendix—
research methodologies

Quantitative online service assessments

We have maintained the foundation of our research—a quantitative assessment of the quality and maturity of services for both citizens and businesses available through national government agencies' websites. However, we have augmented the scope of this investigation by nearly 20 percent—from 169 to 201 services. This augmentation reflects the growing number of services most countries have introduced as they approach 100-percent service breadth.

Behaving as citizens and businesses, Accenture researchers in 22 selected countries used the Internet in an attempt to fulfill service needs that might typically be provided by a national government. They accessed and assessed the websites of national government agencies to determine the quality and maturity of services and the level at which business can be conducted electronically with government. The research was carried out during a two-week period between January 7 and January 22, 2003.

Accenture selected 22 governments for the study:[2] Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Hong Kong-SAR (China), Ireland, Italy, Japan, Malaysia, Mexico, The Netherlands, Norway, Portugal, Singapore, South Africa, Spain, the United Kingdom and the United States. In total, 201 national government services across 11 major service sectors were investigated. The 11 service sectors researched were Agriculture; Defense; eDemocracy; Education; Human Services; Immigration, Justice and Security; Postal; Procurement; Regulation and Participation; Revenue and Customs; and Transport.

The services surveyed were representative of what citizens and businesses require from their government most frequently. The services were traditionally offered over the counter, by phone or in paper format.

[2] Countries were selected based on the location of Accenture offices worldwide. This approach resulted in the exclusion of New Zealand, which had been surveyed in past years, from our 2003 study.

No government surveyed offered all 201 services at the national level. In most countries, aspects of many of the services are offered at a lower tier of government—examples of which include state, regional, municipal and county. For example, education services in Canada are the responsibility of the provinces and are therefore outside the scope of the study in that country. We confined our search to central governments to provide a common base for comparison for the rankings section. In instances where services are delivered at a state, local or regional level, these services were removed before the analysis was undertaken for a country and the government concerned was in no way penalized.

Services were categorized into three levels—Publish, Interact and Transact—reflecting the maximum maturity at which a particular service could be offered. Within each level, services were scored at three levels to show the maturity they had reached. Two measures were used to determine the eGovernment maturity of the countries in the research: Service Maturity and Customer Relationship Management (CRM). These measures were then combined to calculate each country's Overall Maturity.

Measurement criteria

Service Maturity

Service Maturity measures the level to which a government has developed an online presence.

It takes into account the number of services for which national governments are responsible that are available online (Service Maturity Breadth) and the level of completeness with which each service is offered (Service Maturity Depth). Service Maturity Overall is the product of Service Maturity Breadth and Service Maturity Depth.

Service Maturity—Definitions

Publish—Passive/Passive Relationship—The user does not communicate electronically with the government agency, and the agency does not communicate (other than through what is published on the website) with the user.

Interact—Active/Passive Interaction—The user must be able to communicate electronically with the government agency, but the agency does not necessarily communicate with the user. Where interaction occurs between user and agency, the user may receive individualized responses to questions but the process is not considered a complete end-to-end transaction.

Transact—Active/Active Interaction—The user must be able to communicate electronically with the government agency, and the agency must be able to respond electronically to the user. Transact substitutes a formal process previously carried out on paper or by attending an office in person, and there must be some form of exchange that confirms the transaction is valid.

Customer Relationship Management (CRM)

CRM measures the extent to which government agencies manage interactions with their customers (citizens and businesses) and deliver service in an integrated way. This includes understanding how customers want to interact, what services they need and how they are delivered. These factors are evaluated across the five "building blocks" required to deliver effective CRM: Insight, Offerings, Interactions, Organization and Networks.

- **Insight**—Does government remember me? When revisiting a website, does it know where and when I have interacted with government previously and use the information it already holds on me to offer a more tailored service?

- **Offerings**—Does the service provide what I need? Offerings measure the degree to which, for example, a website offers services or advice that are relevant to my circumstances and makes it easy to fulfill my obligations (e.g., tax returns) as a citizen or corporation.

- **Interaction**—Can I interact with the government via related government contact points and websites? Interaction measures the degree to which services can be accessed through multiple channels and the ease of that interaction.

- **Organization**—How effectively is the service delivered? Is it organized around the citizen or business needs or is it necessary to understand internal government structures to find the service needed? Organization measures the degree to which the services satisfy the customers and are efficiently delivered.

- **Networks**—Is it possible for me to access other value-added services, including those offered by nongovernment organizations, via similar channels? Networks measure the degree to which government agencies integrate their services and delivery channels with other organizations to provide added value to the citizen either through convenient bundling or more access points.

appendix—
research methodologies

Overall Maturity

By combining Service Maturity and CRM we were able to allocate a ranking to each country within the 22 countries sampled (Overall Maturity). We allocated a 70 percent weighting to Service Maturity and a 30 percent weighting to CRM to reflect our focus on the evolution of electronic service delivery within the overall approach to managing interactions with citizens and businesses.

Regular Internet users (percent of population)

For each country, percentages were calculated using the total number of Internet users per country and the total population of the country. Internet users are defined as individuals who consistently use the Internet with access from work, school, home or multiple locations. *Computer Economics, Internet Users Worldwide 2002* (November 2002) provided all statistics relating to the number of Internet users. *CIA Factbook* (July 2002) supplied all statistics relating to population figures.[3]

Qualitative customer relationship management (CRM) research

In addition to the quantitative element of the research described here, we conducted qualitative research on government agencies' approach to CRM. This consisted of telephone interviews with senior executives at a selection of target government agencies across 15 central governments: Australia, Belgium, Canada, France, Germany, Hong Kong-SAR (China), Ireland, Italy, Japan, Norway, Singapore, South Africa, Spain, the United Kingdom and the United States.

The research focused on customer-facing agencies in areas such as welfare, immigration, revenue, licensing and employment.

Interviews were conducted with senior executives from government departments, with either an overarching responsibility for the strategic objectives of the organization (such as the CEO, CIO, COO or c-level equivalent) or with specific responsibility for customer service initiatives within the organization, such as customer service directors or program managers.

A total of 143 interviews were conducted during the period December 2002 to February 2003, by Kadence UK Ltd.

Qualitative background research

We supplemented all of our research—for the overall findings as well as for the individual country reports—with information about the eGovernment environment in each of the 22 countries surveyed. Information obtained included the history, content and ownership of each country's eGovernment program, any recent political and legal developments around eGovernment in that country and details on the processes being used to implement it.

This is the second year we have gathered information about the eGovernment environment in each of the countries surveyed. We have revisited the areas examined last year to measure any changes in policy or practice, as well as analyzing a number of additional areas reflecting a change in the eGovernment environment over the last 12 months. We have drawn on this background information throughout the research report.

[3] *Computer Economics* compiles quarterly data on actual Internet usage based on data from a variety of sources including governmental and Internet agencies, market research organizations and their own surveys. Their usage statistics are based on individuals who use the Internet on a consistent basis via access at work, school, home or multiple locations.

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