eGovernment Leadership:
High Performance, Maximum Value

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High performance
in government

What characterizes high performance in government? Through our extensive research and experience in the public sector, Accenture has found that true high-performance governments bear unmistakable hallmarks. High-performance governments generate maximum public value. They are relentlessly citizen centered and outcome focused. Their capabilities and operational activities all support the delivery of outcomes defined by their mission, and they measure their performance based on those outcomes—not just inputs and outputs. At the same time, high-performance governments are committed to cost-effectiveness. They hold themselves accountable; they actively accept their role as stewards of the public trust; and they make their operations and results transparent to all. They are innovative and flexible, continually striving to improve value delivery, and are able to respond creatively to new challenges and opportunities. They work in open and collaborative ways, understanding that their organization is part of a larger system, and cultivate working relationships with other agencies, organizations and stakeholders. Finally, high-performance governments reflect their enthusiasm for delivering public value. This evident passion engages both internal staff and external stakeholders in active support of their organizations' missions.

Electronic government (eGovernment) enables high performance. It enables better outcomes for less cost—maximum value from every resource expended. It provides an avenue for enhanced or entirely new customer services—services that may not even have been imagined yet. In the process it helps governments transform service delivery, so that they meet their obligations to their stakeholders in the most efficient and cost-effective way possible.

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Foreword

Since 2000, Accenture has been studying and reporting on trends in the international eGovernment landscape. During that time we have seen countries around the globe rush to build an online mirror of the offline world—and then step back to reflect on what value that strategy had brought to them. For most, it brought a realization of the need for change.

This year's report, *eGovernment Leadership: High Performance, Maximum Value,* finds many countries at a crossroads. Their advances in maturity are slowing down. They find themselves looking for the strategies that will drive high performance—better outcomes in a more cost-effective manner—and propel them toward the ultimate goal of eGovernment: whole-of-government service transformation.

Governments are taking many different paths to try to reach this point. Some have slowly built more sophisticated transactional capabilities into their programs. Others have regrouped and developed more focused action plans that target maximum value from every eGovernment investment they make. The leaders reap the real value of eGovernment, not only through measurably improved customer service, but also through tangible savings in time, money and human resources to deliver the services.

Yet, we find that even the most advanced countries still have work to do to derive greater value. This year we polled citizens to get insight into their attitudes and practices related to their countries' eGovernment programs. We learned there is a gap between what governments provide and what citizens know of the offerings or would like their governments to provide. As a result, take-up of eGovernment is far from maximized. Until that gap is bridged, governments will never get all of the value possible out of their eGovernment investments.

In this report, we aim to help governments identify the course of action that will most likely deliver high performance in eGovernment. They need to start by taking a balanced approach to determining eGovernment value. They need to assess the service outcomes that will have the greatest impact and balance those outcomes against the costs to achieve them. That way, they can target their investments wisely—and build transparency into the process for their stakeholders.

Governments need to integrate services seamlessly across horizontal and vertical levels of government. The technology challenges and the complexities of governance mean the task will not be easy, but only then will they be able to provide the truly seamless service that will drive broad take-up of services.

Above all, governments need to aspire to service transformation. Highly effective strategies will use the opportunities presented by Internet-based technologies to alter the delivery of government services dramatically. In some cases, services will be transformed (and improved) so radically that old service models will disappear completely. High-performance governments will not be afraid to let them go.

Stephen J. Rohleder
Group Chief Executive—Government

Vivienne Jupp
Managing Partner—
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Executive summary

This is the fifth year Accenture has surveyed the international eGovernment landscape. Our goal in these *eGovernment Leadership* reports is to provide insights into trends and examples of some of the most innovative practices to help governments learn from each other and improve their overall eGovernment performance.

Clearly the most consistent trend in government as a whole over time is that governments try to take the finite resources they have and put them to use for the greatest public good. Governments are under constant pressure to improve the quality and cost-effectiveness of service delivery. To meet the incessant demands on their limited resources, Accenture believes that they need to transform into high-performance governments.

High-performance governments are ones that meet their statutory obligations and their stakeholder expectations in the most cost-effective way possible. They continually strive for more and better outcomes for less and less cost. They extract maximum value from every resource expended. In the process, they transform service delivery—and are

unafraid to discard old business models and processes that no longer work in favor of newer, technology-enabled ones. It is this last attribute where eGovernment has its greatest potential. Thus, Accenture believes eGovernment is an important lever for delivering value.

Our aim, therefore, is not just to chart the current eGovernment landscape, but also to help the public sector map out better strategies for leveraging eGovernment to deliver high performance.

We have made our research richer in 2004 by adding a number of new elements. We have augmented our research base—a quantitative assessment of the quality and maturity of services for both citizens and businesses available through 22 national governments—by introducing a new survey component. This year we include the results of a quantitative survey of citizens' attitudes and practices related to eGovernment in 12 countries. By combining our understanding of global trends with first-hand feedback from the citizens themselves, we believe we are offering the most complete picture of the state of eGovernment around the world to date.

Executive summary

Our research shows that a number of trends discussed in the past have taken hold and can now be taken for granted. Some themes of the past that could now be considered general attributes of eGovernment programs are:

- eGovernment programs are customer centric. Governments are no longer using their internal structures as an organizing principle for their online programs.
- eGovernment programs offer broad availability of services. Although a few countries are still playing catch-up, the average service breadth across all countries approaches 90 percent.
- eGovernment programs incorporate portals. Most governments offer some central point for accessing services, even if the portals themselves have no transactional capability.
- eGovernment programs exhibit greater maturity in their business services than in their citizen services. We surmise the reason is that so many of businesses' interactions with government are routine and high-volume the case for eGovernment conversion was clearer early on. The potential value of driving the manual activities out of these processes made them the initial targets of focused development in many countries' eGovernment programs.

What, then, are the new trends in eGovernment? We found five clear emerging patterns and present them in the first section of our report.

First, we found that eGovernment advances are diminishing. With few exceptions, growth in eGovernment maturity has fallen off for the second year in a row. The trend we first described last year, in which countries hit plateaus of eGovernment maturity after a period of rapid development, was even more apparent in 2004. The pace of progress has now slowed to the point that a large number of countries are massed around the same level in the rankings—making distinctions of one or two places less meaningful than they have been in the past. More interesting is to map the rates of growth of these countries over the past four years. In some cases, governments may have reinvigorated their strategies; in other cases, there may be other factors at play.

Our second finding is that leaders in eGovernment are reaping tangible savings. In last year's report, we described the trend of some governments reevaluating

their visions of online service. Many had begun to realize that the true value in eGovernment lies in the way it helps governments deliver enhanced services and makes government operations more cost-effective. This year we see a decided trend of countries finally realizing measurable cost savings from eGovernment. For some, the savings result in an agency being able to redeploy resources toward more value-added activities. Other countries show signs of wanting to replicate these successes. We see evidence of many either adopting or planning to adopt more judicious approaches to planning and assessing their eGovernment initiatives, taking into account the balance between better service and cost savings for government. These strategies are far more explicit than they had been in the past about the need for measurable value being prerequisite to any future investments in eGovernment.

Our third finding is that promoting take-up of eGovernment is taking hold as a priority, although more work needs to be done. Most governments have put fundamental eGovernment enablers in place to remove barriers to access. The leaders are also making creative use of incentives and marketing techniques to drive up usage of existing services, with some notable success. The implications for deriving value from eGovernment are serious, particularly in today's financially uncertain environment. Many countries' future plans incorporate eGovernment as a component of a larger agenda for governmental change. They build on the potential labor and cost savings inherent in eGovernment. However, these savings depend completely upon the numbers of people and businesses that use the services. Our citizen survey shows that eGovernment currently is far from being used to its full extent.

Our fourth finding is that the nature of governments' integration challenge is changing. Governments that seek to move beyond their current state of eGovernment maturity are actively looking for ways to build the cross-agency integration that will create seamless interactions for their customers. Interest in horizontal integration has been apparent for some time; what is new are decided efforts to integrate vertically—across national, state/regional and local levels of government. Governments that attempt this level of integration face greater technical complexity as well as new challenges in organizing the governance and funding of these new initiatives.

These challenges will have to be mastered, as vertical interoperability will be critical for true service transformation.

Our fifth finding is that personalization is emerging. The idea of tailoring what government provides to the individual user comes about as an evolution of the intentions-based approach where a basic form of segmentation has been used. Now segmentation is being augmented with an added element of time, so that services and information offered change as certain life events occur. Some countries are finding that personalization is not without its challenges. Aside from privacy concerns, there may be a risk that citizens are disinclined to undertake much effort to create a personalized site. Legislation also limits how much personal information can be gathered. Therefore, some governments are working on maximizing the amount of services that can be matched to citizens' interests and needs based on a minimum amount of confidential information.

In section two of this report, The Citizens' View, we introduce a new dimension of the overall eGovernment picture. In the past, our information for these *eGovernment Leadership* reports has always come from Accenture researchers behaving as citizens and businesses looking for particular services, our interviews with government executives and our own extensive experience working with agencies at all levels of government. One perspective we had never included, however, was that of the citizen—the actual end users in different countries. Last year, we undertook our first survey of citizens' attitudes and practices related to eGovernment and released it as a supplemental study. This year, we have augmented the scope of that research, and it now forms an integral part of this report. We found that even in countries with a high Internet penetration, many citizens rarely—if ever—visited a government website. When they did, it was overwhelmingly for informational rather than higher-value transactional services. These findings have important implications; countries not only need a balanced approach to determining where to make their eGovernment investments, they also need more robust marketing programs to promote existing services aggressively and drive up usage of high-value services.

The clear gaps in what government online programs provide for citizens and the way citizens view and actually use these programs point to a problem governments historically have had in accurately assessing the value in their eGovernment initiatives. Governments have made investments without having a standard view of what outcomes constitute value. They also have picked targets that failed to give an accurate picture of how well their programs were delivering against their eGovernment visions. Section three of the report, Driving Value Through eGovernment, provides a framework based on the Accenture Public Sector Value Model for plotting the two levers of eGovernment value—outcomes and cost-effectiveness—as well as for measuring success in eGovernment and tracking progress over time.

In section four, Innovative Practices in eGovernment, we once again describe some of the best examples of eGovernment initiatives in five different industries: revenue and customs; postal; human services; immigration, justice and security; and education. These examples illustrate how governments are adding value by using eGovernment as a way to enhance service delivery, rather than merely to provide an additional channel. This year, we have included a number of examples of governments that have built integrated services across multiple agencies with great success.

In section five, Transforming Service, Transforming Governments, we provide a vision of the ultimate goal of eGovernment—service transformation. We also make recommendations for countries at different stages of maturity to help them take their next steps forward. Service transformation involves far more than simply replicating the offline world online. Service transformation means governments will anticipate and push appropriate services out to citizens and businesses rather than merely respond to requests or claims. Governments that transform their services will not think in terms of horizontal and vertical integration alone, but will envision and create entirely new services enabled by seamless integration.

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 within the context of each country.

2004 key findings

Five key findings emerged from our research:
- eGovernment advances are diminishing.
- eGovernment leaders are reaping tangible savings.
- Promoting take-up is taking hold, but the challenge remains.
- The integration challenge is changing.
- Personalization is emerging.

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

eGovernment advances are diminishing

This year we see clear evidence that with few exceptions eGovernment advances are diminishing. The average maturity increase across all countries in 2004 was 5.6 percent, in comparison to an average of 7.4 percent in 2003 and 11.5 percent in 2002.

Former leaders that have made little progress for the past few years now find themselves shoulder to shoulder with countries that once were far behind. In fact, this year the difference in maturity for a large group of countries has dwindled to such a small amount that we have introduced joint rankings to reflect more accurately their juxtaposition.

We see this as further evidence of the plateau trend we introduced in last year's report, *eGovernment Leadership: Engaging the Customer*.[1] Then we proposed that countries progress through a series of plateaus on their way to full eGovernment maturity. We saw a pattern in which countries would introduce an innovation, make rapid progress and gradually level off as the amount of impact that could come from an unchanged strategy began to diminish. To jump to a new level of maturity, countries had to reassess their priorities and craft a new action plan. Few countries this year showed they had made a true jump in maturity.

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[1] For a copy of *eGovernment Leadership: Engaging the Customer,* visit www.accenture.com/xd/xd.asp?it=enweb&xd=newsroom\epresskit\ egovernment\egov_epress.xml

For the fourth year in a row, the top three maturity spots were taken by Canada first, followed by Singapore and the United States in a joint second-place ranking (see Figure 1).

Following the three leaders, we see a large cluster of countries within the range of 50 percent to 60 percent overall maturity. Within this group, many of the countries are approximately on equal footing in terms of overall maturity. Australia, Finland, Denmark and Sweden share a fourth-place ranking; the United

Figure 1: 2004 overall maturity scores

Country	Score
Canada	80
Singapore	67
United States	67
Australia	58
Denmark	58
Finland	58
Sweden	58
France	57
Netherlands	55
United Kingdom	55
Belgium	51
Ireland	51
Japan	51
Germany	50
Norway	49
Spain	49
Malaysia	46
Italy	40
Mexico	37
Portugal	31
Brazil	27
South Africa	18

0 10 20 30 40 50 60 70 80
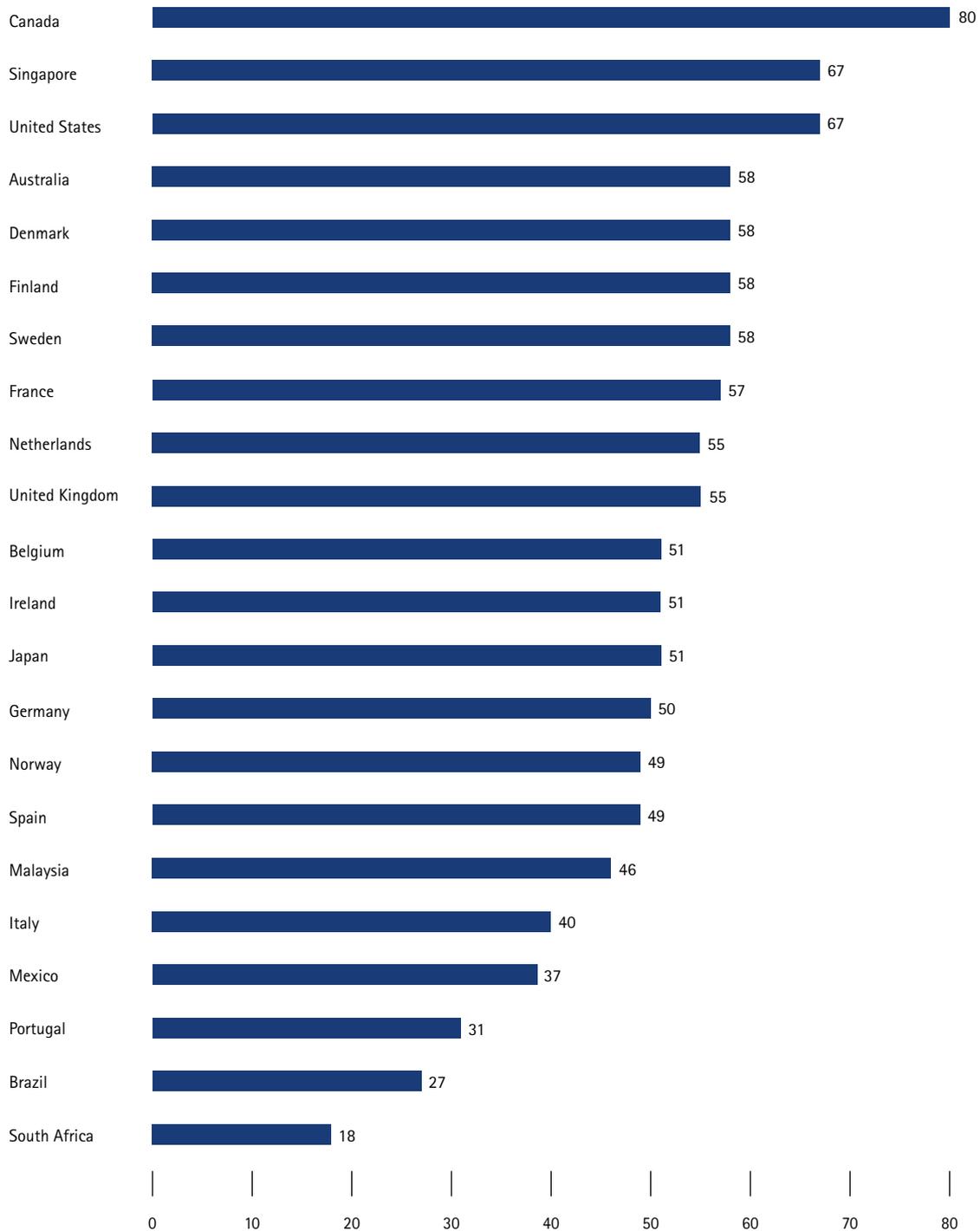
2004 key findings

Figure 2: Maturity growth 2000 to 2005

Legend:
- Y2000 Maturity
- Y2001 Maturity
- Y2002 Maturity
- Y2003 Maturity
- Y2004 Maturity

Countries (top to bottom): Canada, Singapore, United States, Australia, Denmark, Finland, France, Netherlands, United Kingdom, Belgium, Ireland, Japan, Germany, Norway, Spain, Malaysia, Italy, Mexico, Portugal, Brazil, South Africa

X-axis: Maturity (0, 20, 40, 60, 80, 100)
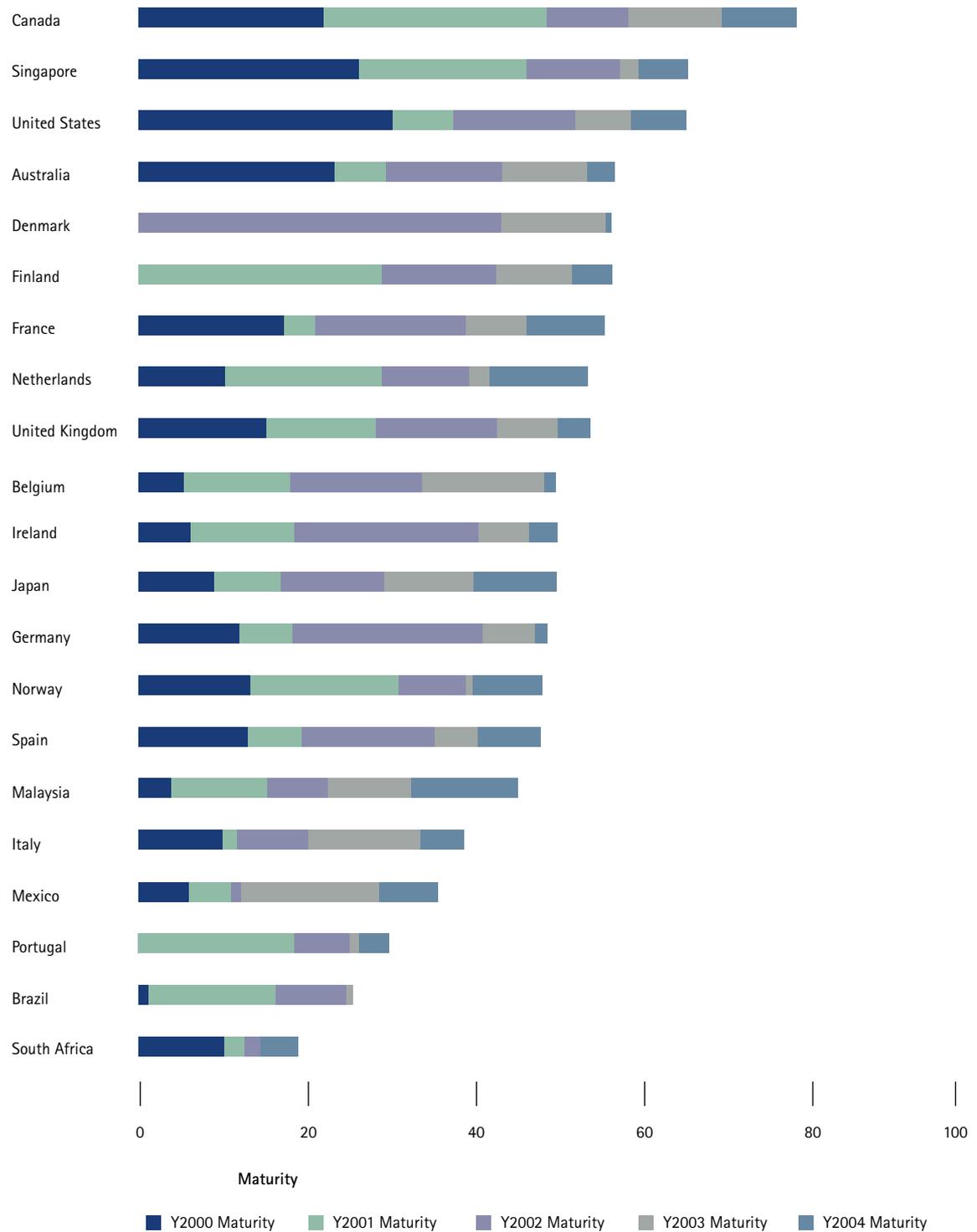
Kingdom and the Netherlands share ninth place; and Ireland, Japan and Belgium share 11th place. Even among those countries that do not share a ranking, the differences are minor. A slip in rankings, then, is not as telling as other data. More interesting is a comparison of countries' growth patterns (see Figure 2), along with an analysis of what these countries' plans are for future improvement.

Overall, eGovernment maturity has risen dramatically since the year 2000. For most countries, the most rapid advances occurred during the early years of their eGovernment programs. This trend is not surprising, given the "quick-hit" opportunities that were available to all initially. Figure 2 shows how progress has slowed for most countries, particularly within the past two years.

The rise and fall in the rankings of some countries against a backdrop of no real stellar performances—or obvious missteps—points out clearly how eGovernment plateaus happen. Countries that do not progress fall behind those that continue to make steady progress. At a certain point, a course of action reaches the limits of its utility and a lackluster eGovernment program yields no additional value.

Consider the countries in this middle group of maturity (50 percent to 60 percent) as an example (see Figure 3). Germany and Belgium both experienced drops in overall rankings. Both countries continued implementation of an early eGovernment plan and neither made the kind of transformational changes that would have propelled them to a higher stage of maturity.

However, Germany recently has refined the strategic elements of its eGovernment plan. In particular, Germany articulated a Deutschland Online vision and a new action plan that truly focuses on integration. This reassessment may provide Germany with the starting point for a new upswing in growth. Likewise, Belgium has hit a plateau after two years of strong growth and a rapid rise through the rankings. However, the country has been quietly making improvements to a number of back-end eGovernment enablers that may set the stage for a burst of improvement on the customer-focused end in future years.

Denmark will be another interesting country to watch over the course of the next year. Like Belgium and Germany, it too experienced minimal growth

Figure 3: Growth rates: 50 percent to 60 percent overall maturity

a. Overall maturity 56%–60%

Legend: Australia, France, Denmark, United Kingdom, Finland, Average

b. Overall maturity 50%–55%

Legend: Belgium, Japan, Average, Germany, Netherlands, Ireland, Norway*
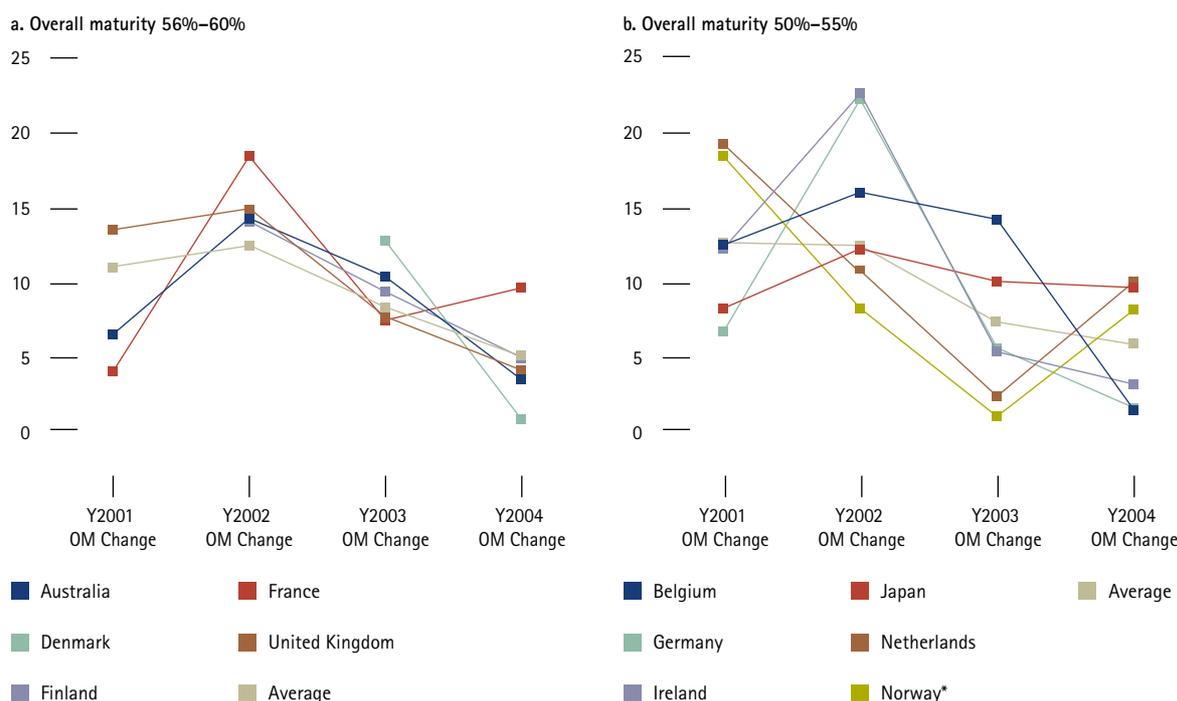
*Although Norway's overall maturity is slightly below 50 percent, it is included here to highlight the similarities in its growth pattern to the Netherlands.

2004 key findings

during the past year. However, the country released a new strategy in February 2004 that demonstrates that the country plans to focus on developing a "coherent" public service (independent of legacy applications and individual suppliers and across public-sector boundaries). The strategy is fueled by a number of relevant and quantifiable goals.

The United Kingdom and Ireland also made only minor progress from 2003 to 2004, although their slowdowns in growth were not as severe as some other countries. The United Kingdom lost one place in the rankings and Ireland remained the same. Again, the way these countries have hit a plateau shows the need to refocus priorities. Ireland's long-awaited Public Service Broker is expected to become the common framework for integrated services in the country. Once this fundamental enabler is in place, growth could take off once again. The United

Kingdom's online future is still unclear. It reached the peak of its growth several years ago and has slowed down since then while other countries continued to grow. This year, however, there will be a restructuring in the governance of the eGovernment program that potentially could bring a new strategy. The United Kingdom also seems to be ahead of many countries in its use of marketing. While these UK marketing efforts are primarily in response to late take-up of the Internet in general, applying the principles learned to eGovernment specifically could start paying dividends in terms of increases in take-up and satisfaction with eGovernment. (See page 17 in the "Promoting take-up is taking hold, but the challenge remains" section for specific examples of how take-up already is improving in the United Kingdom.)
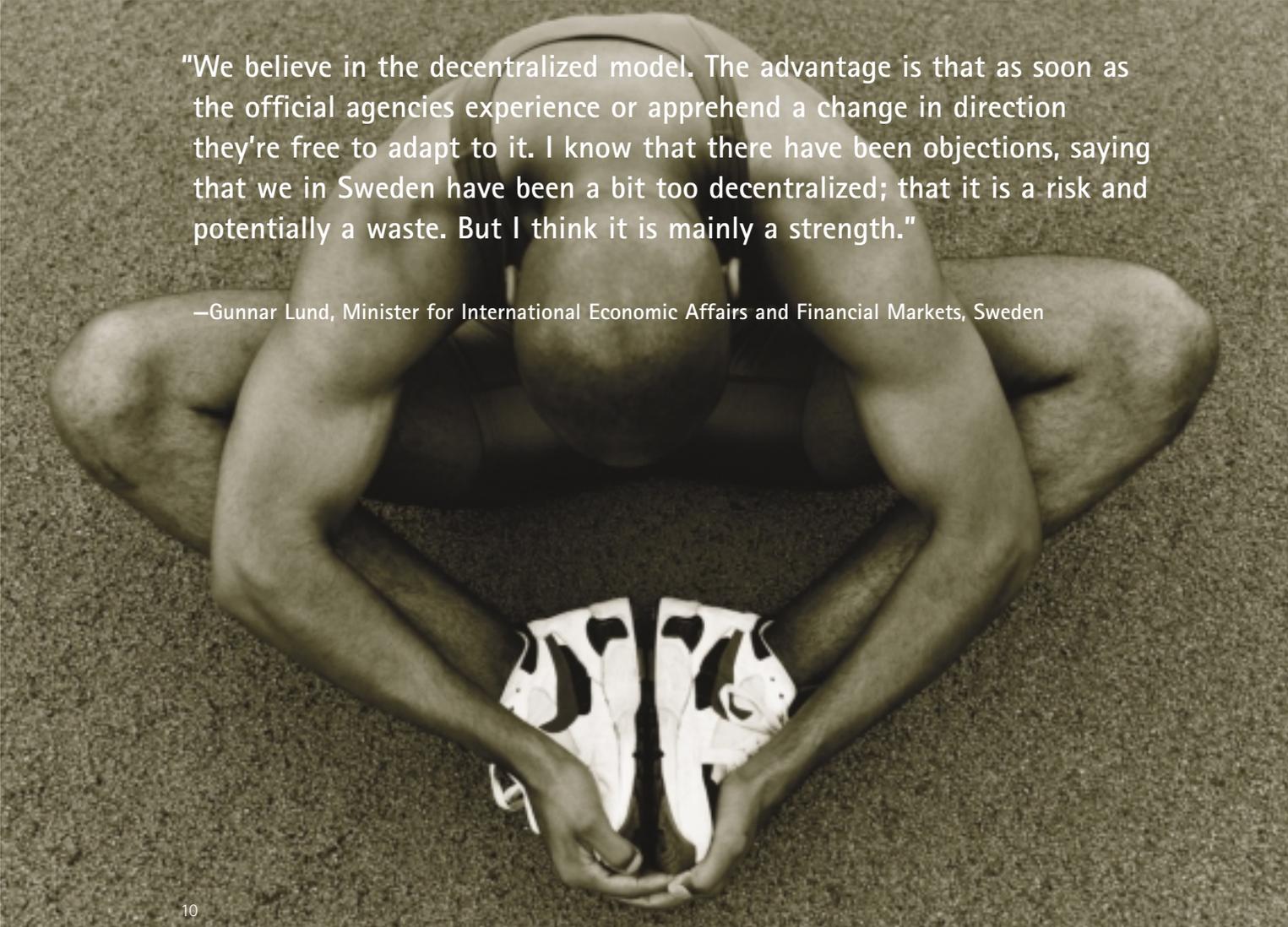
"We believe in the decentralized model. The advantage is that as soon as the official agencies experience or apprehend a change in direction they're free to adapt to it. I know that there have been objections, saying that we in Sweden have been a bit too decentralized; that it is a risk and potentially a waste. But I think it is mainly a strength."

—Gunnar Lund, Minister for International Economic Affairs and Financial Markets, Sweden

The countries in the mid-range of maturity that are currently on an upswing are France and the Netherlands. France has not done anything dramatic to improve; rather it spent several years putting its eGovernment foundations in place and identifying clear priorities. It then moved forward slowly and steadily—minimizing peaks and lows in its progress. The country very recently unveiled a new strategy and action plan for 2004 through 2007 that emphasizes the major elements of transformation—customer-focused service, transparency and measurable objectives.

The Netherlands and Norway (which has 49 percent maturity) have followed nearly identical patterns of growth since the beginning of our study. After a few years of slow growth both countries decidedly accelerated their pace of progress over the past year and are likely to continue to improve. The Netherlands is taking steps to corral its many strong but disconnected services into one website. That move, plus the country's historically strong emphasis on customer relationship management, sets the stage for continued progress upward.

Norway also may be poised for dramatic advancement, particularly in relation to its business-focused services. One of its most significant developments during the past year was the launch of Altinn in late 2003. The program is important because Altinn provides a common Internet-based solution for reporting financial data from businesses and citizens to agencies across the government. Altinn will likely prove to be a significant eGovernment enabler for a whole range of new and enhanced eGovernment services for businesses and citizens in the near future.

Finally, we should look briefly at Sweden, which made its debut this year in a joint fourth-place position. While no growth data is available for the country from past studies, results from this year showed that Sweden is already a strong eGovernment performer. Whether it can maintain its solid position remains to be seen. The country has a highly decentralized eGovernment program, to which it attributes its successes to date. To make further maturity advances, however, Sweden may need to undertake a serious effort to coordinate these services for truly seamless interactions for its customers. Coordination is not likely to stem from mandates.

The country's minister for International Economic Affairs and Financial Markets expressed the opinion that future involvement from the central government in regional eGovernment strategies and actions would come in the form of encouragement, not central decrees.

Looking at the growth patterns among the top three ranking leaders also reveals some interesting developments (see Figure 4).

Canada continued to increase the gap between itself and the remainder of the countries, including number two-ranked Singapore and the United States. These two countries each grew approximately 6 percent, as opposed to Canada's 9 percent. Once again, Canada's focus on self-examination and its relentless pursuit of user feedback have allowed it to continue to build what is clearly one of the world-leading customer-focused government online programs.

Yet, while all three countries continue to make steady progress, only Singapore shows signs of an upswing in its growth rate. The causes are the same as in other tiers of maturity. Singapore's eGovernment program has been reinvigorated within the past 12 months. The country had an above-average improvement in its overall customer relationship management score. It also updated its eGovernment action plan in

Figure 4: Growth rates: Top three overall maturity
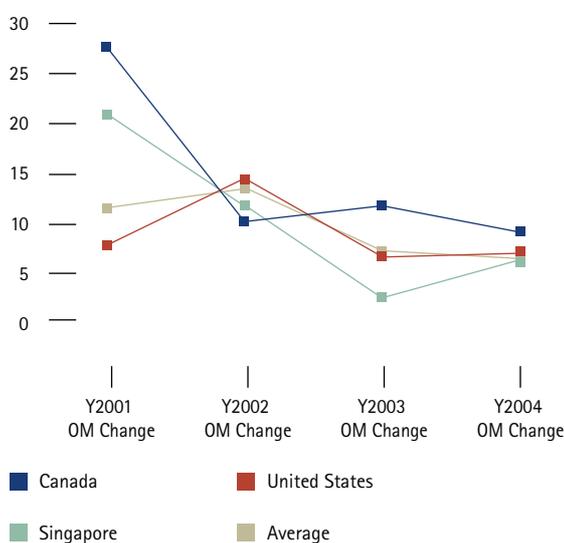
2004 key findings

2003, setting five new strategic priorities that stress exploiting the strong eGovernment foundations put in place between 2000 and 2003, and translating them into real benefits for individuals and businesses.

The United States, while still a steady and strong performer, seems somewhat less ambitious in comparison. Electronic government continues as one of the five key elements of the President's Management Agenda for improving the management and performance of the US federal government as a whole (see sidebar, *eGovernment for service transformation,* on page 13). In a broader context, eGovernment is considered to be integral to the US Government Performance and Results Act (GPRA) of 1993, which marked the country's shift in focus away from a preoccupation with activities undertaken to a focus on the results of those activities. However, the current eGovernment strategy continues to build off a vision first articulated three years ago. The country had below-average improvement in its overall customer relationship management score and seemed to show more improvement at the agency level, rather than through government-wide initiatives.

Even Canada seems to recognize that it is reaching the limit of what it can achieve with its current program. While its performance is strong, the pioneering country is now looking at what lies beyond its current level of success and likely will help define new eGovernment standards for the world over the next few years (see sidebar, *Reflections from a world leader,* on page 14).

The growth patterns within the approximate bottom third of the rankings are somewhat more fractured, but still indicate some countries worth noting (see Figure 5).

Spain will be a country worth watching over the next 12 months. The country developed a new strategy and action plan in 2003 that demonstrates a real interest in customer-focused services and in building collaboration among different public authorities.

Malaysia continues to make steady progress year after year and has been slowly climbing through the rankings. While Malaysia is still playing catch-up with countries in the top half, for the first time it is challenging those that started out strong several years ago but have made relatively minor changes since.

Figure 5: Growth rates: Less than 50 percent overall maturity

a. Overall maturity 40%–49%
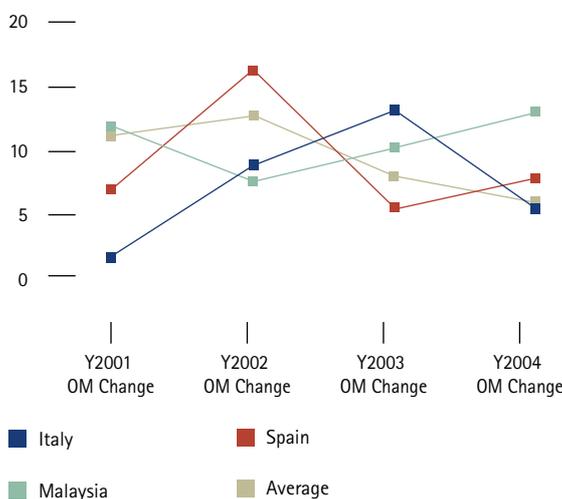
b. Overall maturity below 40%
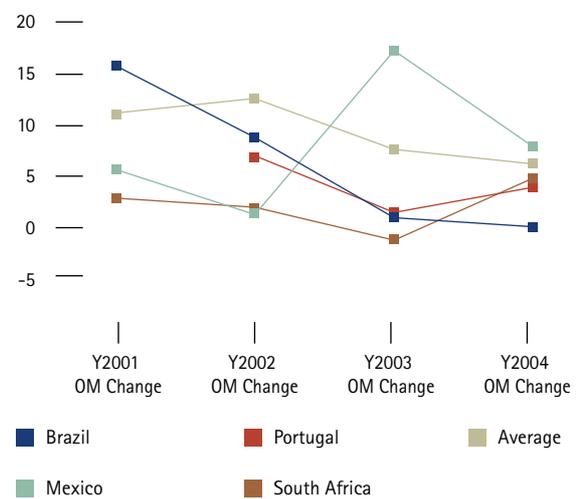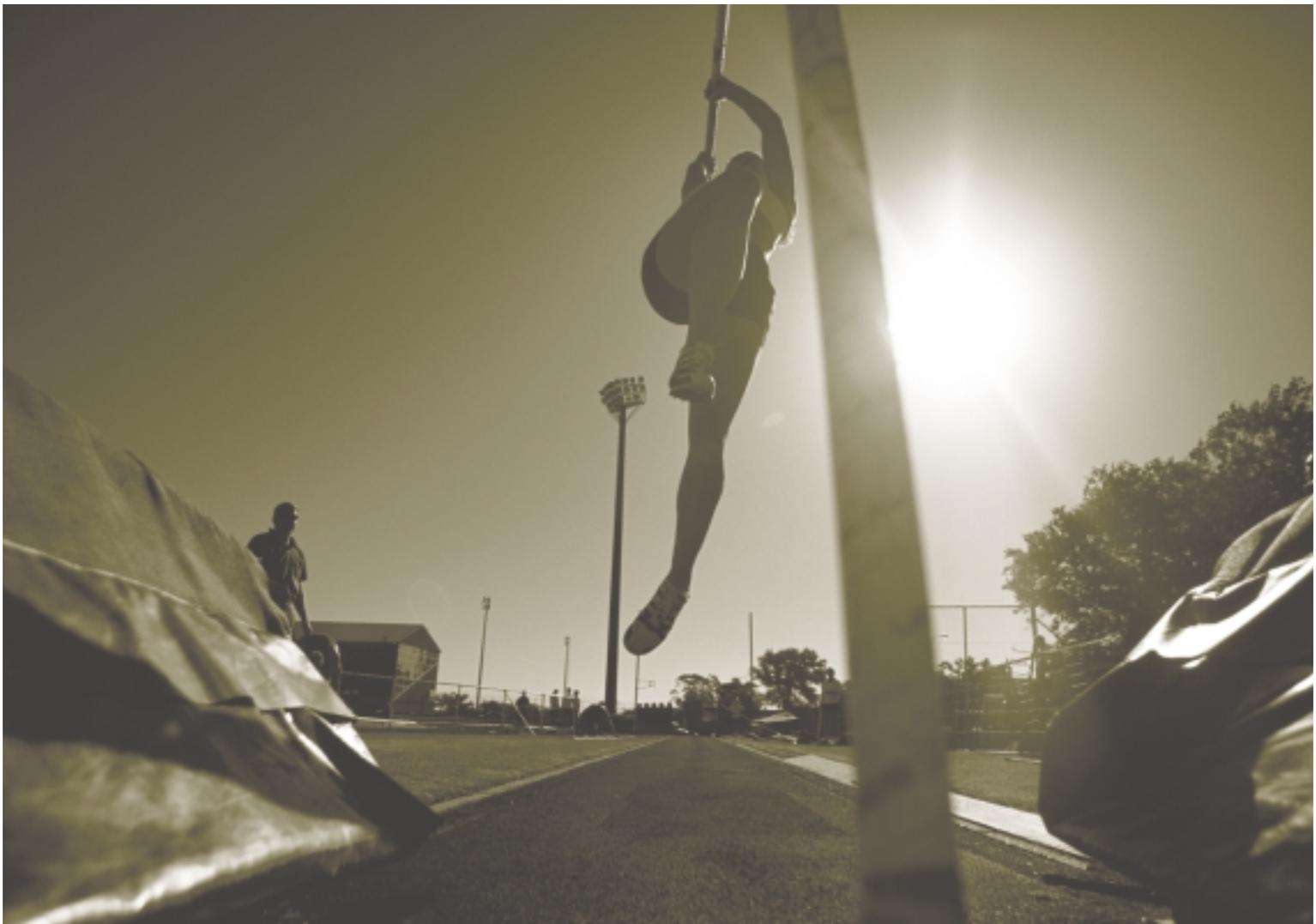
eGovernment for service transformation

Tad Anderson, associate administrator for eGovernment and IT, shares his thoughts on the role of eGovernment in transforming service delivery in the United States.

What is the US government's goal for eGovernment?
The president's vision for eGovernment is guided by three principles. Government should be citizen centered, results oriented and market based.

How does your eGovernment program fit into this picture of broader service transformation?
There has to be the proper application of technology. You have to think in terms of how do we transform... Without centralized eGovernment, you see agencies applying "e" wherever they think it's appropriate.

What are some of the biggest challenges in developing cohesive eGovernment?
Any time you meet with an agency, they say, "We're different. We can't collaborate to accomplish this goal— our mission is different, our agency is different." You hear that from everyone. This is partially for some legitimate reasons. But it's also a fear of change—fear of losing control over ownership of the system.

What lessons have you learned about eGovernment to date?
The challenge is not the technology. That's the easy part. It's change management issues...that are difficult.

What will eGovernment look like if you are successful?
What is fun to think about is what it would look like if it were based on service delivery...There is a common perception among businesses and citizens that if I am calling the government to do something it wants me to do, I don't care where the answer comes from, someone should be able to give me the answer.

What happens 10 years from now when eGovernment is the norm, when citizens expect to get their service from Firstgov.gov? If we do it right, we will be out of a job!

2004 key findings

eGovernment leaders are reaping tangible savings

When governments began their online programs several years ago, their initial objectives were to provide service improvements and alternate channels of delivery. Cost savings were a hoped-for result— a potential by-product, rather than a certainty. Few countries realized significant cost savings in those early years.

This year, we see evidence that the focus for many governments is now specifically on the cost savings potential of eGovernment. This is not surprising, given that most governments currently operate in an environment of severe fiscal constraints. Other governments seem loath to make the investments needed to build a robust eGovernment program. This may be a costly, shortsighted move, however,

as we see evidence that a number of eGovernment leaders already are reaping tangible savings on their way to high performance.

Canada, for example, recently conducted a comparison of channel costs per transaction that showed the cost savings from online service are significant. Its survey showed that an in-person transaction costs the government Can$44, a mail transaction costs Can$38 and a telephone (agent) transaction costs Can$8. In contrast, an online transaction costs less than Can$1.

In other countries, individual agencies exhibit some of the clearest examples of the potential cost savings benefits from eGovernment. Revenue agencies in particular show the results of most countries' early focused development. In Norway, the Inland Revenue Department (Skatteetaten), www.skatteetaten.no,

Reflections from a world leader

Michelle d'Auray, CIO of the Canadian government, shares her thoughts on what leads to high performance in eGovernment and on the challenges Canada faces as it looks to its eGovernment future.

How do you define high-performance eGovernment?
High-performance eGovernment is one that meets citizens' needs, that has a huge degree of seamlessness and ease of access, that has a speedy response time and that essentially challenges the way of doing things traditionally. Put the [customer] first and provide the [customer] with the whole of government at his or her disposal.

Do you have a guiding principle for eGovernment?
Citizens and businesses don't care what level of government they interact with, they just want to be able to get things done.

What has the Canadian government done right in its own eGovernment program?
The direction [of our program] was predicated on very extensive polling and focus groups. It wasn't as if the direction was imposed by some strange group of people who had dreamt this up one day. It was imposed by the people whom we were trying to serve.

What do you see as the future challenges?
It's not just the delivery mechanisms themselves, but also rethinking the services. The challenges, I think, are going to be informational—how you deal with information, how it's architected, how it's shared, how it's tracked—and then, if I can use the term, the governance mechanisms become absolutely critical for us. What will be interesting is to see how far we can go down the integration path without having to change the rules.

What is your advice for moving ahead?
You have to find a couple of goals. We've ended up calling them catalytic. What would drive change efficiently, what would be change-generating enough that would be worth investing in that might take you enough of the way to the next stage that won't necessarily turn government inside out.

reports that electronic filing of returns has resulted in an additional NKr1 billion in income being reported for an additional NKr400 million in tax payments. The department realized additional savings because it was able to reduce the number of full-time employees handling tax returns by 200, thanks to the automation of some manual processing.

Ireland's Revenue Online Service, www.ros.ie, reports equally impressive savings due to a number of different factors related to online filing. Based on last year's numbers, the Revenue Commissioners predicts that just through online filing of income tax for self-employed individuals the government will save approximately 33 percent of all relevant manual processing costs this year. Through the elimination of hundreds of thousands of paper forms, receipts, statements of account and so on, the agency estimates it has already saved €600,000 in postage costs alone. Revenue Online Service also realizes savings through the use of its online Customer Information Service, which allows customers and tax agents to access their customer data held in revenue files. Estimates of savings from this one service are approximately 30 person-years in 2003 alone—the result of about 800,000 queries being handled through self-service instead of phone or letter.

In the United States, more than 2.4 million taxpayers filed online last year. If numbers like these continue, Internal Revenue Service officials believe the agency could close a returns facility and consolidate other administrative work. Consequently, the agency estimates that it may free up enough resources to hire as many as 2,200 investigators—shifting resources to enforcement without compromising customer service.

Other countries show evidence of seeking the best balance between service outcomes and cost savings for maximum eGovernment value. For many, their old strategies and action plans, which focused on simple availability online, did not align with their new understanding of the importance of demonstrable value. We now see a decided trend of countries taking more judicious approaches to their eGovernment initiatives, whereby the value of the outcomes of eGovernment to businesses and citizens is taken into account with other factors, such as cost savings for government.

For example, Australia published a study on the benefits of eGovernment in 2003, and is now developing demand and value assessment methodologies to measure both the social and financial cost/benefit ratio of eGovernment services. In its 2003 to 2006 action plan, Singapore has adopted three outcomes for eGovernment: "delighted customers, connected citizens and networked government." Singapore plans to review its current suite of online services against the needs of the public to identify opportunities for service innovation that will yield greater value. Targets have been set for the administration to track the country's eGovernment performance in terms of the value it brings to its customers. The government's plan hinges on capitalizing on existing information and communications technology investments in the public sector, rather than new developments.

Denmark's eGovernment strategy (www.e.gov.dk) is quite explicit in its shift in emphasis to savings realization: "Surveys indicate that public-sector digitalization projects have thus far tended to focus on supplying better service to citizens and businesses, for example via the development of a number of information portals. If digitalization is to contribute to the release of significant resources, however, there is a need to focus on how the developed infrastructure can be utilized to reduce the public sector's administrative costs, as well as how the requisite savings may be made and by whom."

In some cases, the more balanced viewpoint of some of the new eGovernment action plans are not currently supported by an all-encompassing approach to measuring value or progress; however, in many cases such a measurement framework is planned.

For example, Mexico is developing a new project management system for eGovernment that will include metrics, key performance indicators and a scorecard to facilitate evaluating its e-Mexico initiative. Finally, the European Union, through its Interchange of Data between Administrations initiative, provides a suggested framework for its member countries to assess the value of investment of all major IT initiatives. The methods in the framework are suggested for both evaluating and calculating costs and benefits from new initiatives, as well as for following up on previous investments.

2004 key findings

Promoting take-up is taking hold, but the challenge remains

In last year's report, we discussed how increasing take-up of online services was directly related to the value gained from an eGovernment program in terms of improved service, greater efficiency and cost savings. Clearly, the full benefits of eGovernment will be realized only if citizens and businesses use it, but most governments still find themselves confronted with the challenge of low usage and the need for innovative methods to drive take-up. In fact, our citizen survey this year showed that even among the most mature countries, take-up is less than optimal. In Canada, 41 percent of regular Internet users rarely or never have visited a government website. In the United States, that number is 48 percent.

An example from the United Kingdom illustrates the significant value in moving users from offline to online services. A recent report from the UK National Audit Office revealed that 20 percent of postal applications to the UK's Cattle Tracing System were inaccurate. The result has been that the UK Department for the Environment, Food and Rural Affairs has paid UK£9 million each year since 2000 in extra staffing costs to rectify the errors. In contrast, the National Audit Office found that only 1 percent of electronic requests was inaccurate. As a result, the Department for the Environment, Food and Rural Affairs has called for more electronic applications to reduce mistakes, cut the number of extra staff required to correct errors and avoid potential EU fines.

While there are serious implications for driving up value for countries that do not address take-up, we find evidence that many are expending more effort in this area than in the past. A number of governments are using mechanisms for driving take-up, including promoting the use of intermediaries, providing incentives and marketing existing services.

For example, in May 2003 the United Kingdom published a framework to encourage the use of private- and voluntary-sector intermediaries in eGovernment service delivery. The government's goal is to ensure that all UK departments involve intermediaries as part of their overall eGovernment strategy. Likewise, the South African government's stated intention is to pursue partnerships with intermediaries such as the post office network, the banking sector, community-based organizations and other private-sector organizations in all feasible situations.

Some countries are providing incentives to drive usage. We saw this trend particularly among revenue services. For example, several countries, including France, Ireland and Singapore, offer an extended filing period for users of online tax filing services. In the United States, the Free File website (www.irs.gov/efile/article/0,,id=118986,00.html) allows most taxpayers to prepare and file their taxes online for free and get their refunds in half the time it would take to process their paper returns.

For the past two years, our survey of citizens' perceptions and usage of eGovernment revealed that the biggest factors for driving citizens to greater eGovernment usage are saving time and money. Numerous examples show how eGovernment services are already doing this. In Singapore, online applications for telecommunications dealer class licenses cost 20 percent less than nonelectronic applications. In Finland, a new service for domain registration (https://domain.ficora.fi) reduced application processing time from a week to a few minutes. Take-up of the service surged, with 23,000 new domain applications submitted during just the first week of service.

Yet, citizens and businesses will only use advantageous services if they know about them. Some leading countries thoroughly understand this point, and are making concerted efforts in marketing with some excellent results.

For example, to promote www.canada.gc.ca, the Canadian government used a number of traditional marketing techniques, including a television and radio campaign, advertisements in airline magazines and newspapers and media kits available through the Canada website and gateways. Similarly, the Singaporean government introduced a number of publicity and promotional programs to improve low take-up, such as coverage by broadcast and print media; road shows and exhibitions to showcase

e-services; advertisements on radio, public transport, newspapers, magazines and posters; and handbooks, flyers and other marketing collateral.

Interestingly, our citizen survey showed that of the countries we surveyed in both 2003 and 2004, Canada and Singapore recorded the strongest growth in eGovernment transactional use. For example, the percentage of regular Internet users who filed their taxes online jumped from 21 percent to 33 percent in Canada and from 33 percent to 55 percent in Singapore in just one year.

The United Kingdom took steps to promote usage of the Internet (and potentially increase take-up of eGovernment services) last year. In 2003 it ran a campaign to drive people online that the government estimates produced a five-fold return on its initial investment of UK£1million. Our citizen surveys show that their efforts seem to be paying off as

well. From 2003 to 2004 we saw the number of UK Internet users who said they had never visited a government site drop from 65 percent to 37 percent. Along with increased usage has come increased satisfaction. The number of regular Internet users in the United Kingdom who rated their country's eGovernment performance as fair or better jumped from 48 percent to 65 percent.

Other countries would do well to take note of these successes. Germany, for example, has estimated that the potential savings from eGovernment at the federal level could be as high as €400 million, given a usage of 10 percent to 30 percent. This is in addition to any savings at the state and municipal levels. However, among the countries we surveyed as part of our citizen research, Germany had the highest percentage (54 percent) of regular Internet users who had never even visited a government site.
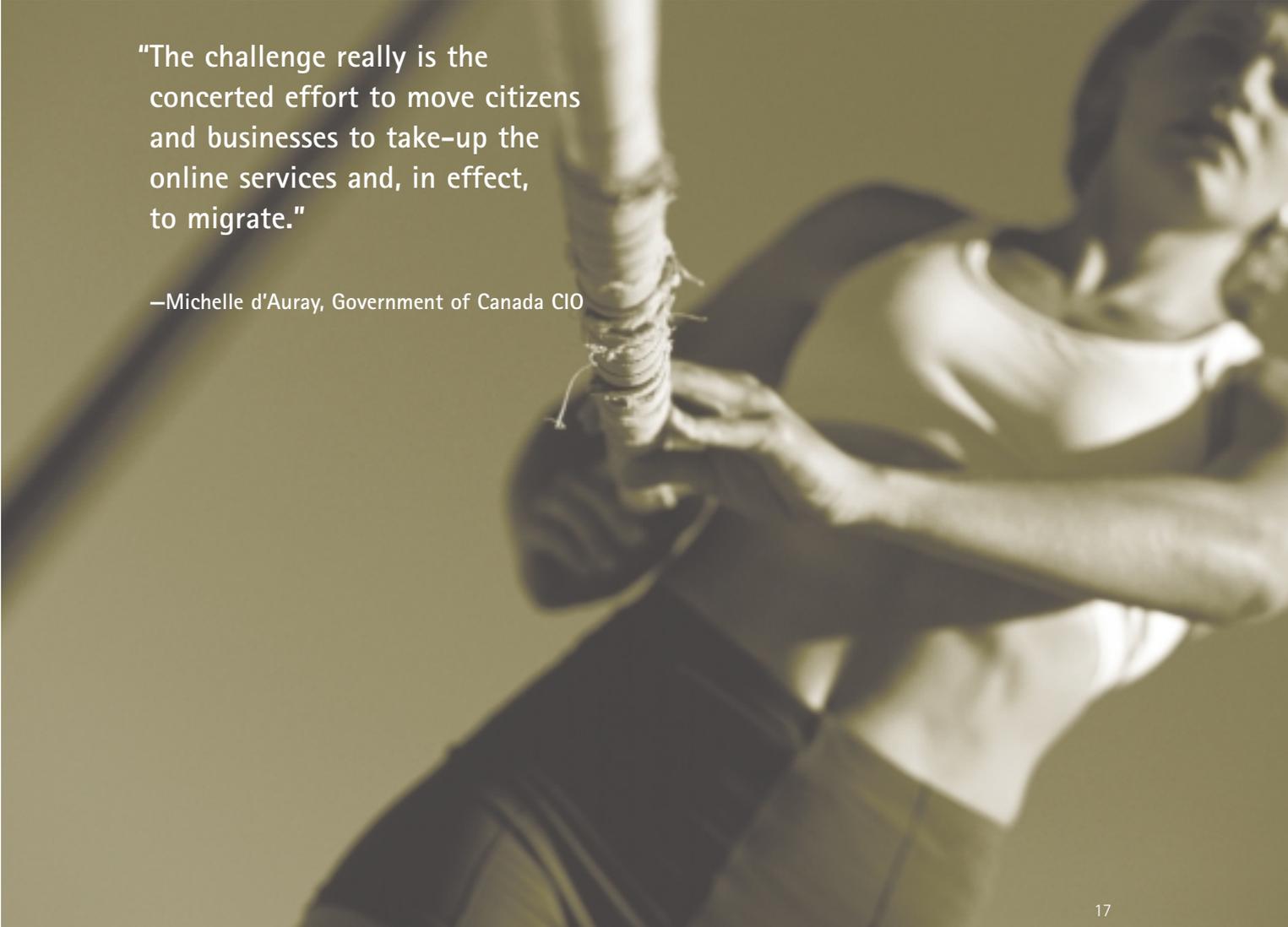
"The challenge really is the concerted effort to move citizens and businesses to take-up the online services and, in effect, to migrate."

—Michelle d'Auray, Government of Canada CIO

2004 key findings

The integration challenge is changing

For governments that want to increase the value from their eGovernment programs as a step toward high performance, the logical move is to find ways to integrate services for seamless interactions for customers. The horizontal integration of eGovernment services (across agencies and departments within the same level of government) has long been a goal of many countries, even while many have struggled with the challenges of connecting across various department and agency systems.

Horizontal integration is still a challenge area for both technical and organizational reasons, but governments are now beginning to look beyond this to the next challenge: vertical integration. Vertical integration can be defined as the integration of central government services with state, local or municipal services. It has all the challenges of horizontal integration and more. Most significantly, vertical integration adds a layer of complexity to the governance challenge. Differences in legislation, potentially more organizational cultural differences and separate and distinct chains of command compound the usual proprietary feelings within agencies. Funding is also a more complicated challenge if there is no central funding agency, as decisions about equitable distribution of investments deal with completely separate sources of money.

Nevertheless, for some countries vertical integration is the ultimate prize—providing a truly seamless approach to eGovernment—and they are starting to pursue it.

For example, the Canadian government's vision of service is for delivery networks made up of shared points-of-presence with integrated channels across levels of government. Canada does not want just to improve its Government On-line program, it wants to move beyond it through a single, citizen-centered, whole-of-government approach. Canada's current push is to reach a state of service transformation that moves from federal to inter-jurisdictional integration. Michelle d'Auray, the Government of Canada CIO,

has identified developing appropriate governance mechanisms in vertically oriented and vertically organized organizations as one of her top five challenges for Canada's eGovernment program going forward.

The targets established by the Finnish Information Society Program in September 2003 emphasize that public administration services will be made customer oriented and, in order to save costs and operate in real time, will be carried out within the public administration on a cross-agency basis (by different agencies and departments). The plan also expresses the expectation that as reliance on electronic services grows, the boundaries between regional, national and, in the long run, EU-level services will become more and more blurred and lose importance.

To accomplish the new eGovernment objectives it laid out in 2003, Portugal's action plan specifies that there should be an interoperable and integrated platform that permits the connectivity not only of central, regional and local public administration portals, but also with the private sector and other European institutions.

In Sweden (which has a highly decentralized approach to eGovernment implementation), the government appointed a delegation of members from central and local government, the industry and academia to increase cooperation between the public and private sectors in developing e-services for the public sector. The delegation also provides visionary and innovative thinking. It focuses on concrete actions, such as proposing funding arrangements to help agencies and local authorities implement the country's 24/7 Agency concept. (See the *Building integration from decentralization* sidebar on page 19.)

The interoperability of services at an international level is also garnering attention, even though it poses greater challenges. Moving across country borders not only brings the previously discussed challenges of governance, funding and integration, it adds a greater degree of technical complexity, as all countries involved are not necessarily starting

Building integration from decentralization

Accenture interviewed Gunnar Lund, Sweden's minister for International Economic Affairs and Financial Markets, about the elements of high performance in online service delivery. We share his thoughts here.

How do you define high-performance government?
Increased efficiency and improved availability are particularly important. The increased availability creates a whole new relationship between the official machinery, citizens and corporations. What we have seen so far is only the beginning and the possibility to achieve greater benefits is substantial.

How does a government know it is successful in eGovernment?
It is very simple. The measurement of success is simple. It's that demand increases. The key is to identify the demand, the need, and understand it.

What is the biggest challenge to successful eGovernment?
Traditional public administration has taken care of citizens separately, depending on subject area. For our part, we have, for quite a long time, aimed to break these barriers and get rid of that way of thinking...We have to tie all the pieces together to get an overall picture. And that is where we have an instrument in the Government Offices. We are steering the official agencies.

How is Sweden dealing with this challenge?
We have now a fantastic instrument—a catalyst. The public officials at the public agencies realize that they have a need for and an interest in creating more horizontal cooperation. But naturally cooperation can be pushed further and we, from the government, are trying to do this.

What will successful eGovernment in Sweden look like in your mind?
Of course, the end purpose is to have one single portal and from there be able to access the whole Swedish public administration instantly. That is obviously the ideal and that, I think, is possible to develop very far—the sky's the limit.

The push for international integration

The European Union is pushing the limits in its drive for integration and interoperability of eGovernment services. The Interchange of Data between Administrations (IDA) is a European Commission-driven strategic initiative that uses advances in information and communications technology to support rapid electronic exchange of information between member state administrations. Initially, IDA helped set up infrastructure, establish common formats and integrate new information and communications technology-based business processes. Now, it is improving network services, tools, security and interoperability.

The latest version of the IDA action plan calls on the European Commission "to issue an agreed interoperability framework, based on open standards, to support the delivery of pan-European eGovernment services to citizens and enterprises." In early 2003, representatives from the EU institutions and member states' administrations began discussions on the European Interoperability Framework. It is worth noting that while the European Union has no power to enforce any of its plans or initiatives, its hope is that member state administrations will use the guidance provided by the European Interoperability Framework to supplement their national eGovernment interoperability frameworks with a pan-European dimension, and thus enable pan-European interoperability.

To drive pan-European cooperation, the IDA initiative provides funding to stimulate technical innovations. All projects are evaluated within the IDA's Value of Investment framework. The framework emphasizes that each major IT investment should be analyzed at the earliest stage for the value of its outcomes against the cost to achieve them. The methods in the framework are suggested for evaluating and calculating costs and benefits from new initiatives as well as for following up on previous investments. One of the most ambitious of these IDA initiatives is the pan-European e-services portal.

Perhaps not surprisingly, Europe's e-services portal faces significant issues attendant with integration at such a monumental scale. Creating a portal that aggregates the necessary information while accommodating differences between national governments and multiple languages is highly complex. A recent IDA strategy update released in October 2003 admits that there are huge practical difficulties involved in coordinating such a portal. "All EU national administration websites are structured in their own unique way, providing different levels of information on their public services, according to their importance and availability," it said. Consequently, the portal will be kept as a pilot until later in 2004, although eventually it will become the first point of contact for citizens and businesses engaged in cross-border activities.

"It is important that the European Union as an organization adopts IT, that we gradually start to communicate more efficiently, by using technology, between the institutions of the European Union and all 15 administrations. All problems are constantly solved on a bilateral basis... However, it would be more rational to create more common solutions for Europe."

—Gunnar Lund, Minister for International Economic Affairs and Financial Markets, Sweden

out with the same level of technical sophistication. We see this happen most in the European Union. (See sidebar, *The push for international integration*, on page 20.)

For example, the first phase of the New Computerized Transit System was introduced to a number of customs offices in Germany, Italy, Spain and Switzerland in May 2000. It is now in the final phases of full rollout. This system is a major step toward the ultimate goal of fully paperless processing. The European Union and its member states will spend well over €100 million between 2003 and 2007 to introduce an even greater degree of electronic information exchange, which has the potential to save businesses time and money and reduce the instance of fraud.

For individuals, the 15 Western European countries that make up the region of free cross-border movement known as the "Schengen area" or "Schengenland" launched a website in the United States that offers Europe-bound travelers quick and easy access to information on obtaining the single, Europe-wide visa: the Schengen visa (www.eurovisa.info).

Traveling in Europe has been simplified since the introduction of the Schengen visa, which allows for travel in and between Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Italy, Greece, Luxembourg, the Netherlands, Norway, Portugal, Spain and Sweden. From now on, visitors who require a visa need only the Schengen visa, which allows free cross-border movement throughout the Schengen zone once customs and immigration are cleared at the first point of entry within the Schengen zone. This means internal border controls have disappeared; there are no or few stops and checks; and internal air, road and train travel are handled as domestic trips, similar to travel from one US state to another.

As these examples illustrate, much of the European Union's eGovernment work focuses on building foundations. In other words, for now it focuses not so much on developing citizen-centric services on the front end, but rather, facilitating cross-border integration behind the scenes. However, a

few existing or planned services will benefit citizens as much as government.

EURES, for example, provides a network that links employment services across Europe. This network allows all EURES users to receive up-to-date information in their home countries before taking (or considering) a job in another country. The EURES website delivers information and online services on job searches, curricula vitae searches, labor market information, living and working conditions and European public employment services.

The network benefits both sides of the employment equation. Citizens have access to employment opportunities across Europe and to a wide range of assistance from advisers. For businesses, EURES provides a platform to publish vacancies throughout the European Union as well as support in finding the right human resources, regardless of the employees' locations.

Personalization is emerging

Last year we emphasized that the principles of customer relationship management underpin eGovernment. Customer relationship management promises intelligent interactions between governments and their customers based on information about the characteristics, needs and preferences of customers.

That said, customer relationship management implies personalization of services over time—tailoring what the government provides to the individual user. Personalization, if implemented well, has obvious benefits for the user. He or she obtains more appropriate services and receives more relevant information, which should improve the user experience and drive greater customer satisfaction. Personalization also can help users have the most relevant sites right at their fingertips, eliminating a major barrier to eGovernment usage.

It also drives value for the government, since personalization suggests the better use of available customer data to target eGovernment services more accurately and improve eGovernment delivery strategy. The resulting improved services should drive take-up.

2004 key findings

The personalization of eGovernment services can be seen as an evolution of the intentions-based approach where a basic form of segmentation was used. Current personalization efforts engage in greater segmentation. The goal is to develop personalized services that interpret available data within the context of a particular time, whereby the services and information offered change as certain life events occur.

In 2004 we found some evidence of personalization in governments' approaches to online service, specifically in relation to their eGovernment portals. However, implementation appears to be in its infancy.

For example, France is planning to establish a personalized portal, myservice-public.fr, as one of its main priorities for 2004. In January 2004, Singapore launched a more personalized portal in pilot form, my.eCitizen, where citizens can customize and personalize their view of the eGovernment portal, removing links and information about services that are not relevant to their particular life situation.

The Canada site (www.canada.gc.ca) offers an option for users to create their own customized page. The government offers alternate versions of its main site, such as for use on a mobile phone or through a Blackberry device. This is personalization not in the sense of personal interests, but in the sense of preferred channels.

Personalization is not without its challenges. Aside from privacy concerns, there is the risk that citizens will be disinclined to undertake much effort to create a personalized site. From the government's perspective, a consequence of privacy protection means that there are legislative limits to how much personal information can be gathered. Therefore, the real trend regarding personalization may be how far governments can take the concept of anonymous personalization. The concept is about maximizing the amount of services that can be matched to citizens' interests and needs for a minimum amount of confidential information. For example, personalization based on usage patterns in Internet-based transactions is a form of anonymous personalization that is widely used by commercial organizations. It drives loyalty (good for commercial revenues) and transaction efficiency. Similarly, call patterns in call centers and visit patterns in offices, when combined with segment analysis, could be used to improve transaction quality and efficiency and balance channel operations. Some countries currently allow users to view personalized services based on location through entry of a postal code. Anonymous personalization balances citizens' service desires with their privacy concerns and governments' automation goals with their legal limitations. It will be a theme to watch for the future.

The citizens' view

Most of governments' efforts to improve their online programs are only as useful as the extent to which people actually use the services. The question is: What do citizens think of the online services their governments offer them? This year we have included in our *eGovernment Leadership* report the results of our survey of citizens' attitudes and use of eGovernment in 12 different countries: Australia, Belgium, Canada, France, Germany, Ireland, Italy, Singapore, Spain, Sweden, the United Kingdom and the United States.[2]

The research was designed to reveal:
• Current usage of eGovernment.
• Triggers and barriers to eGovernment use in each country.
• Current attitudes toward eGovernment in each country.
• Future priorities for the development of eGovernment.
(See the Appendix on page 108 for a full description of the citizen survey methodology.)

In terms of their cultures and their eGovernment development, these countries are quite different. Interestingly, however, there was quite uniform agreement on many trends. In terms of their attitudes, perceptions, needs and desires, people speak with the same voice when it comes to eGovernment.

Overall, we found that users are generally positive about eGovernment, but that countries across the board need to do more work to raise awareness and drive up usage of existing services. We found that citizens who are using eGovernment today overwhelmingly do so for informational purposes rather than transactional ones; that the barriers to greater take-up tend to be related to ease of use; and that the triggers for use are related to increased convenience for simple transactional services.

Our findings within each of the four main areas of the research—current usage, triggers and barriers, current attitudes and future priorities—are explained in greater depth in the sections that follow.

[2] The survey respondents included only regular Internet users.

The citizens' view

Current usage

We found that eGovernment usage in general is concentrated at both ends of the Internet penetration spectrum. We attribute this to the fact that in high-penetration countries, such as the United States and Australia, people have experience with the Internet and have explored its potential for many uses. In lower penetration countries, such as France, Italy and Spain, the high enthusiasm of the early adopters also may lead them to explore. In contrast, some medium penetration countries, such as the United Kingdom, Ireland and Belgium, have the lowest usage rates of eGovernment services, suggesting the need for exposure to, and actual experience with, eGovernment to drive take-up. Germany's Internet users were the least likely to have ever used eGovernment. Fewer than half of the country's regular Internet users have ever used any eGovernment service at all.

Figure 6 (below) presents a matrix that shows the state of eGovernment usage in the 12 countries surveyed. The four categories of usage are:
• Formative: Below average Internet penetration and eGovernment use.
• Niche: Below average Internet penetration and high levels of eGovernment use.
• Stalled: Above average Internet penetration and below average eGovernment use.
• Mass: Above average Internet penetration and high levels of eGovernment use.

With the exception of Spain, Internet users' preferred channel of interaction with the government in all countries is indeed the Internet (even though a sizable minority still prefers in-person service). This trend was especially true in France and Italy. Again, this finding may reflect the enthusiasm for "all things Internet" among the early Internet adopters in these countries. Countries with lower levels of

Figure 6: The state of eGovernment usage (countries are positioned relative to average Internet penetration and average eGovernment use)
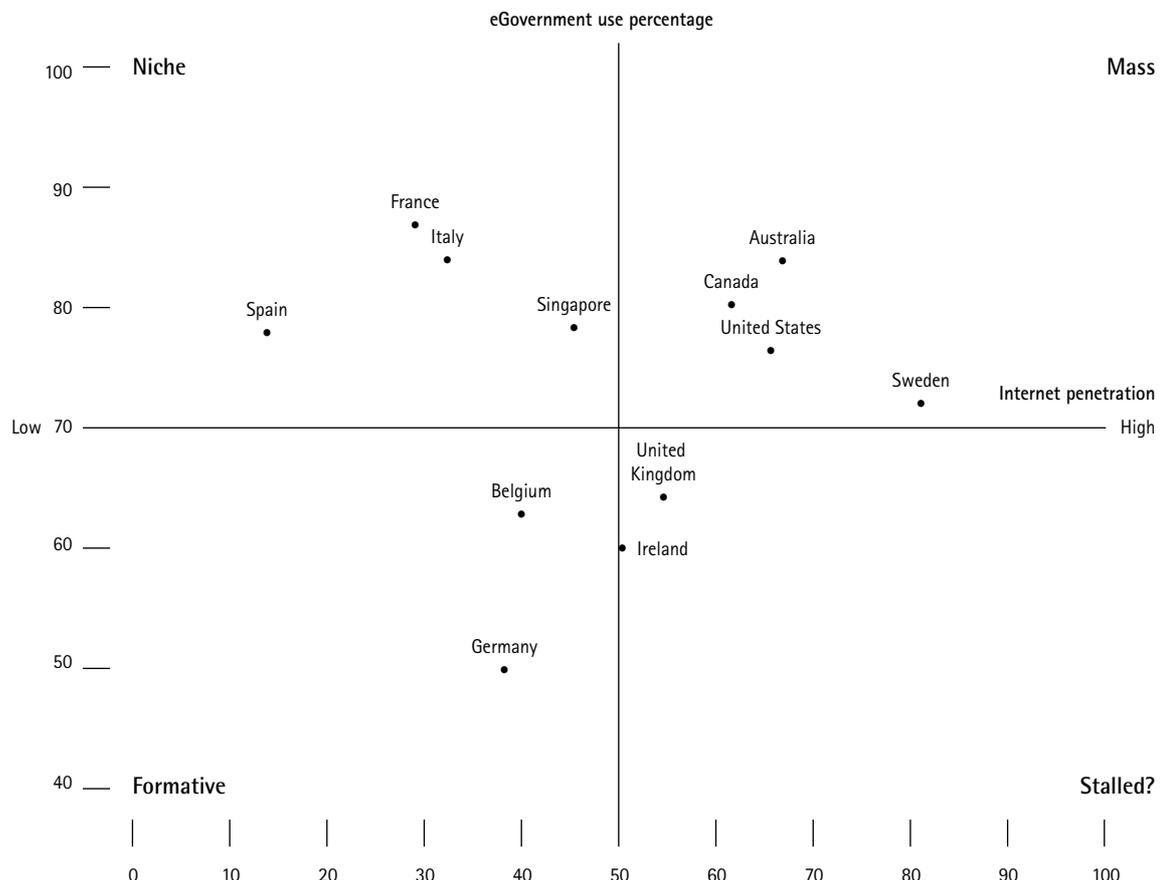
preference for Internet contact, such as Ireland and Sweden, may have additional challenges in encouraging online contact and changing people's personal preferences. Sweden's high Internet penetration rate indicates that the eGovernment take-up challenges are not related to barriers of access. The country's disparate eGovernment offerings may have clouded the picture of eGovernment's benefits for citizens. Ireland has a relatively Internet-savvy population and many sophisticated online services. Its low take-up points to a real need for increased marketing.

Those citizens who use eGovernment overwhelmingly do so for informational purposes (see Figure 7).

Transactional use is higher in high-penetration countries but it is still quite low in comparison to informational use.

The relatively low use of transactional services may indicate a number of eGovernment problems—that governments are not picking the right services to put online, that the services are not easier or quicker to use or that the government is not adequately promoting the benefits of the services.

Transactional services (as opposed to informational ones), with their potential for handling high-volume and high-cost interactions, hold the greatest potential

Figure 7: Purpose of visiting a government agency website

Percentage of all users who have ever used a government website

- Usually to find information
- Usually to conduct a transaction
- Both equally
- Don't know
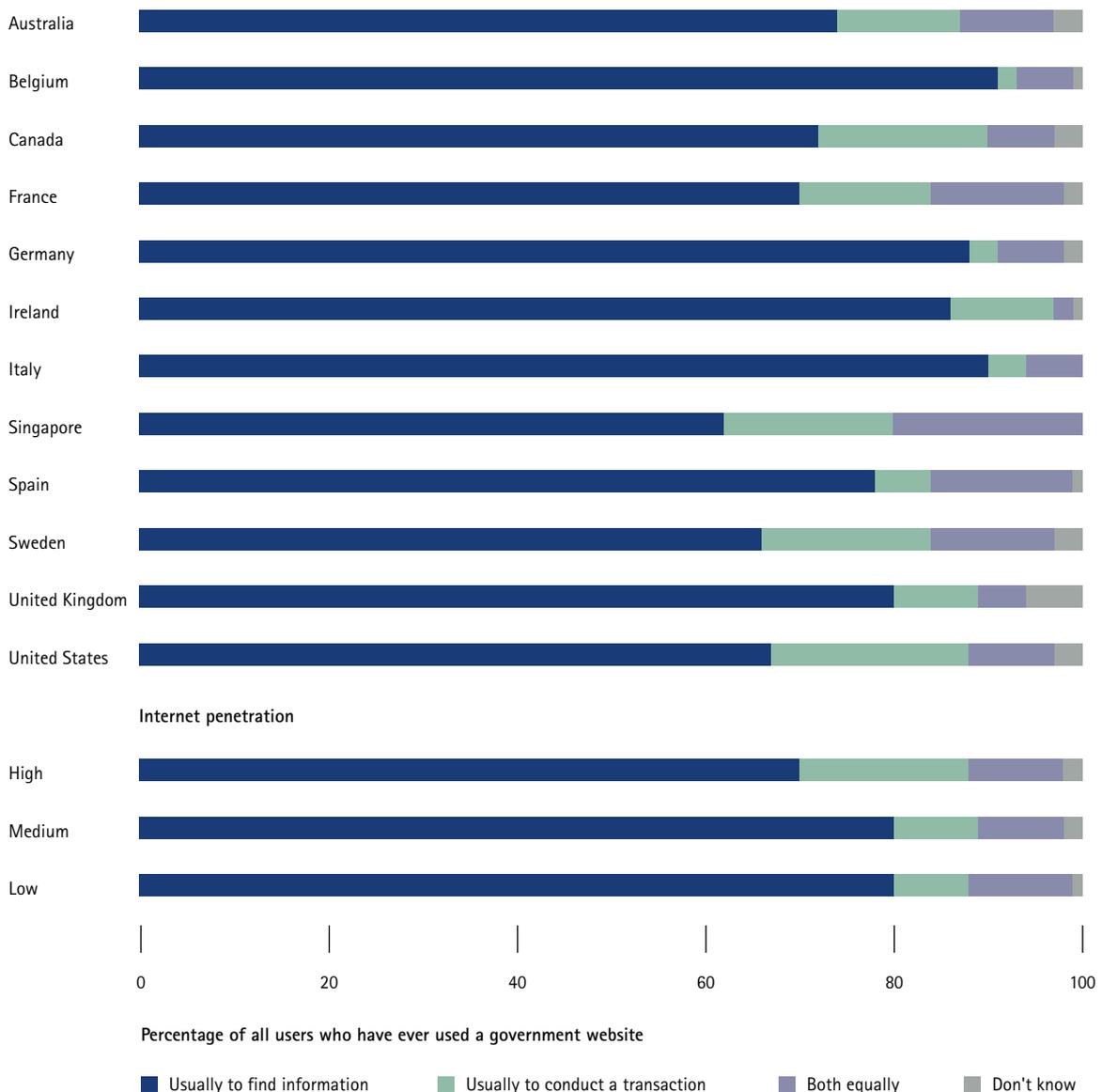
The citizens' view

for delivering value. (The section "eGovernment leaders are reaping tangible savings" on page 14 provides numerous examples of the value that comes from take-up of transactional services.) Not only can they free government resources to concentrate on other higher-value activities that may deliver more customer service impact, but they can help streamline commonplace interactions for the citizen as well. Interestingly, citizen satisfaction with eGovernment is highest with the transactional services; users are less positive about information-based services (see Figure 8). This point emphasizes the usefulness and appeal of transactional services and their importance in driving trial and usage.

Among the transactional services listed in our survey, filing taxes was the service most likely to have been used by citizens. Those that have filed online generally have had a positive experience.

However, interest in this service among non-users of eGovernment services was noticeably lower than in more basic transactions, such as renewing drivers' licenses. It may be a problem of lack of awareness or unfamiliarity with the initial steps often needed to enable online filing (such as setting up authentication). This may be enough of a deterrent to keep people using the paper-based methods they already know.

Triggers and barriers

Not surprisingly, saving time and money are the two greatest personal perceived benefits from eGovernment. In almost every country at least 75 percent of the respondents agreed that they would make greater use of eGovernment if it saved them time. Similarly, at least 70 percent of the respondents agreed that they would use eGovernment if it saved

Figure 8: Aggregate satisfaction with eGovernment services

Percentage of all Internet users who have ever used each service in each country

Very satisfied | Fairly satisfied | Neither | Fairly dissatisfied | Very dissatisfied | Don't know
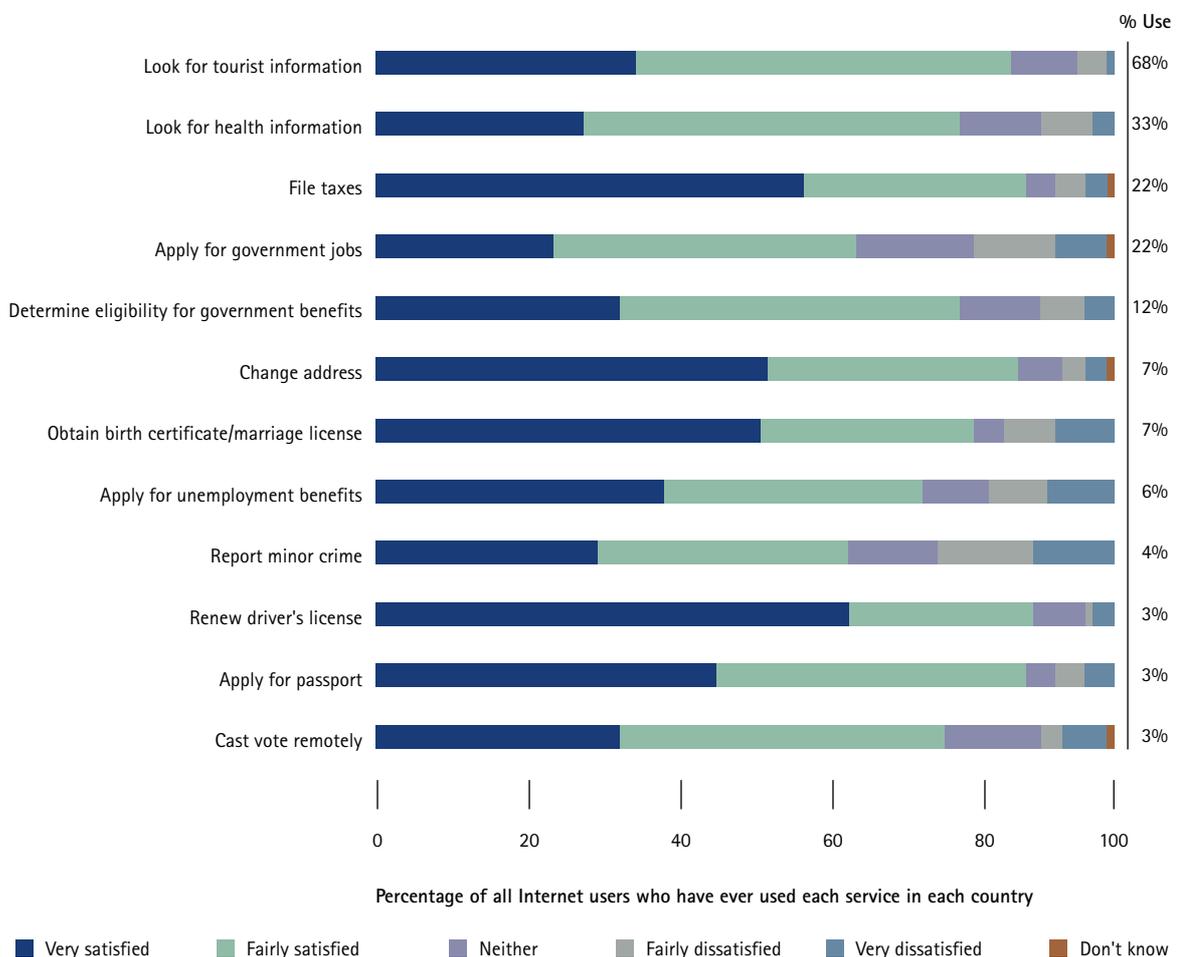
them money. (As detailed in the "Promoting take-up is taking hold" section on page 16, a number of countries are responding in kind, for example, providing incentives in the form of extended filing periods.) Sweden was the one exception. Only 60 percent and 48 percent of Swedish respondents agreed with those two statements respectively.

The barriers to eGovernment continue to be the perception (and in some cases, the reality) that it is difficult for users to find the correct website for what they want to do and that it is easier to conduct business over the phone (see Figure 9). In countries with low Internet penetration, preference

for personal contact is a current barrier to greater eGovernment uptake. As Internet access develops, promoting the advantages of eGovernment and encouraging trial should erode this preference.

As Figure 9 shows, security and privacy issues still figure into the eGovernment equation, but they may not figure as prominently as the widespread perception that other channels are more convenient. Again, the solution to overcoming this perception is not only building online services that are as easy (or easier) to use than traditional channels, but also marketing them to citizens.

Figure 9: Barriers to more frequent eGovernment use

Percentage of all nonregular visitors to government websites

Internet penetration: ■ High   ■ Medium   ■ Low
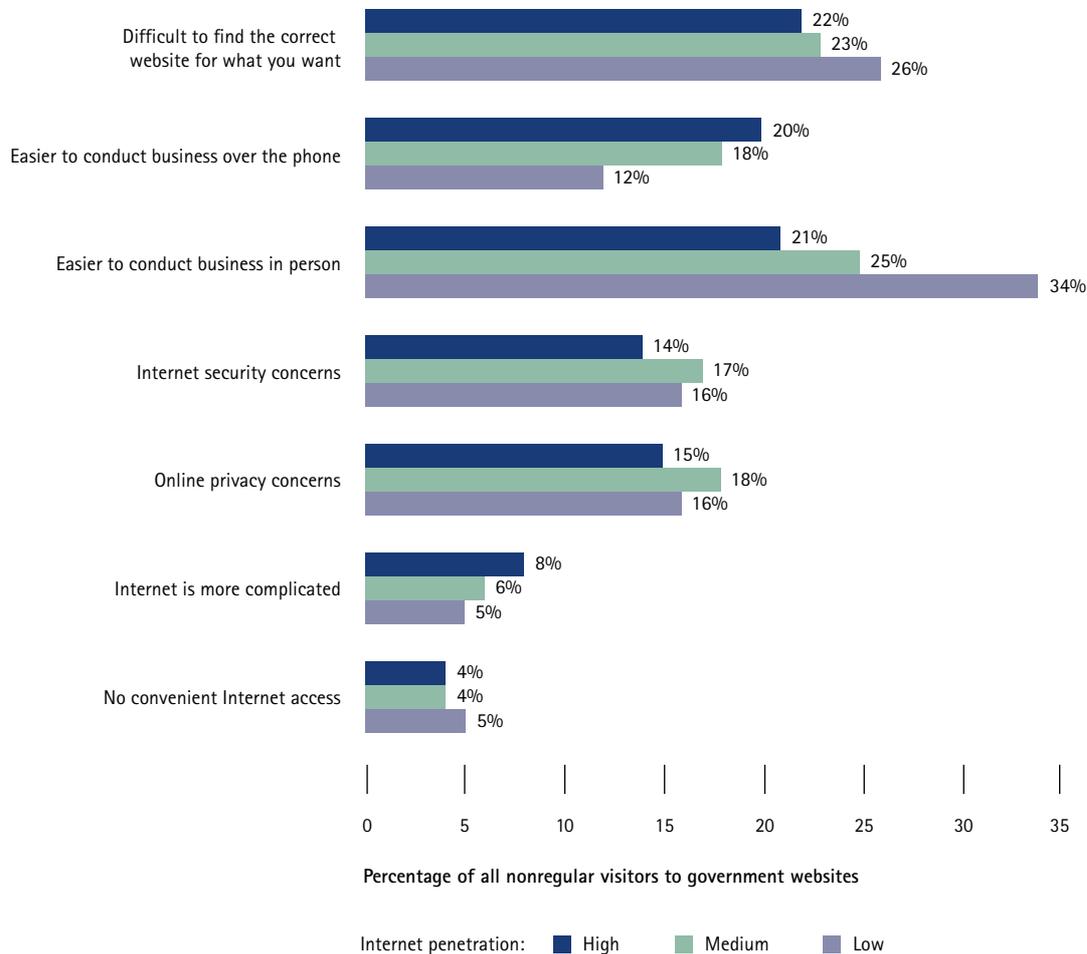
Current attitudes

Overall, relatively positive attitudes exist toward eGovernment's continued development. As Figure 10 shows, the optimists (people who agree that eGovernment will make government more efficient and more accountable) outweigh the pessimists (people who disagree that eGovernment will make government more efficient and more accountable) by a significant amount.

Figure 10: eGovernment optimists and pessimists

	Pessimist ← → Optimist	Net* Optimist	Rank
Australia	17 / 29	+12	12
Belgium	7 / 50	+43	2
Canada	14 / 40	+26	7
France	12 / 35	+23	9
Germany	9 / 34	+25	8
Ireland	6 / 46	+40	3
Italy	7 / 46	+39	4
Singapore	3 / 53	+50	1
Spain	12 / 40	+28	5
Sweden	5 / 33	+28	5
United Kingdom	20 / 37	+17	11
United States	13 / 36	+23	9
Internet penetration			
High	12 / 35	+23	
Medium	9 / 44	+35	
Low	10 / 40	+30	

Percentage of all regular Internet users

■ Agree government is more efficient/accountable due to eGovernment

■ Disagree government is more efficient/accountable due to eGovernment

*Net optimist is calculated by subtracting the total number of pessimists from the total number of optimists.

The citizens' view

However, concerns exist as to whether eGovernment will exclude those without Internet access. More people agree than disagree with the statement that people without Internet access will get fewer government services (see Figure 11). There also are some who believe it will make dealing with government less personal, and who doubt whether it will save money, improve efficiency and make government more accountable. Clearly addressing these issues while making sites easier to use and more secure will help improve attitudes and drive usage.

Figure 11: Attitudes toward eGovernment

eGovernment will make dealing with government agencies more impersonal.

	Net disagree	Net agree*
	US IT CA	BE	AU
		IR	SI GE
	UK	FR	SP SW

-30 -20 -10 0 10 20 30 40 50 60 70 80
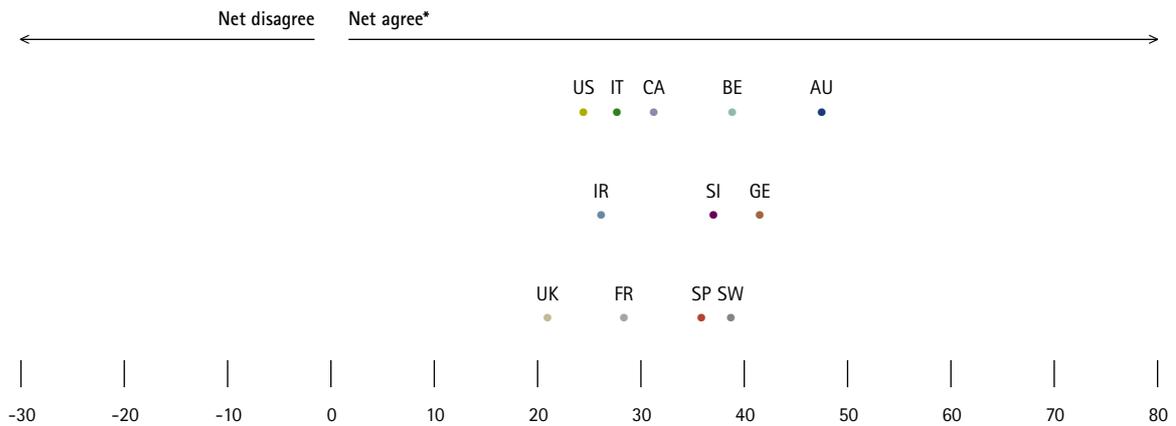
eGovernment will save the economy money in the long term.

Net disagree	Net agree
	AU FR	SI	IT
	CA IR	SW
	UK	US	BE GE SP

-30 -20 -10 0 10 20 30 40 50 60 70 80
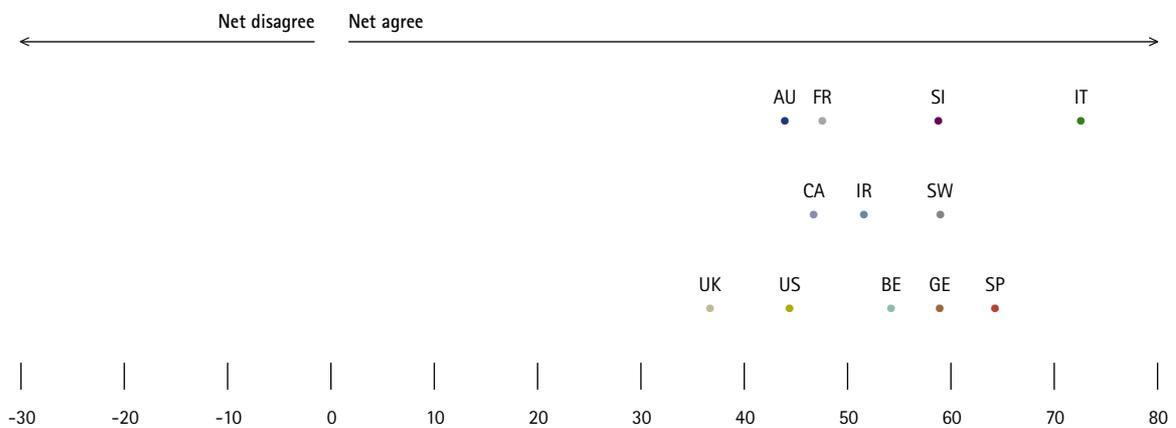
eGovernment will make government departments and agencies more efficient.

Net disagree	Net agree
	AU	FR	SP IR
	CA SW	BE SI
	UK	US	GE IT

-30 -20 -10 0 10 20 30 40 50 60 70 80
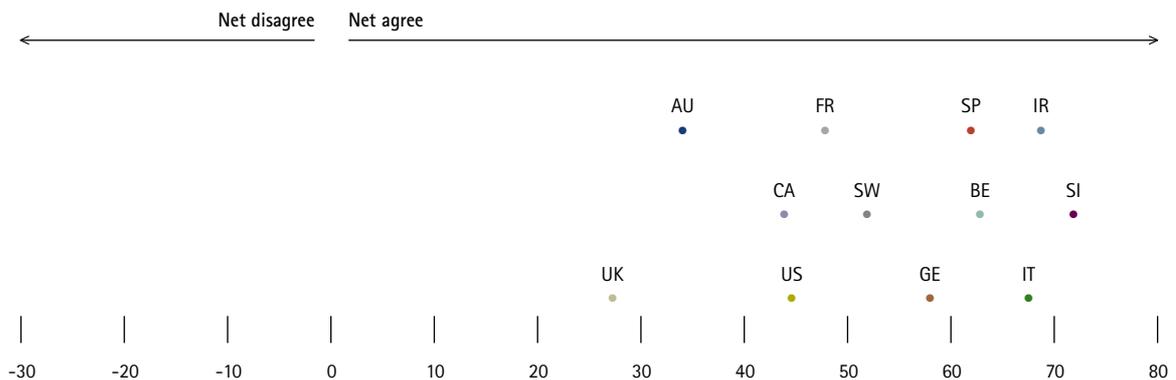
*Net totals were calculated by subtracting the total number of respondents who disagreed with a statement from the total number who agreed with it.

Australia: AU
Belgium: BE
Canada: CA
France: FR
Germany: GE
Ireland: IR

Italy: IT
Singapore: SI
Spain: SP
Sweden: SW
United Kingdom: UK
United States: US
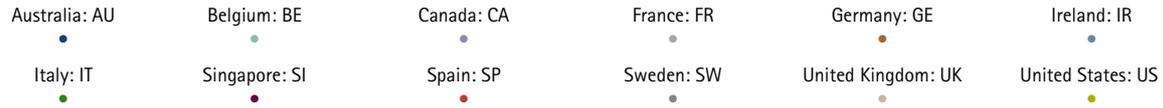
eGovernment should be a high priority for the government.

Net disagree   Net agree

CA   SI   IR   GE

SP   AU   BE   FR   IT

UK   US   SW

-30   -20   -10   0   10   20   30   40   50   60   70   80
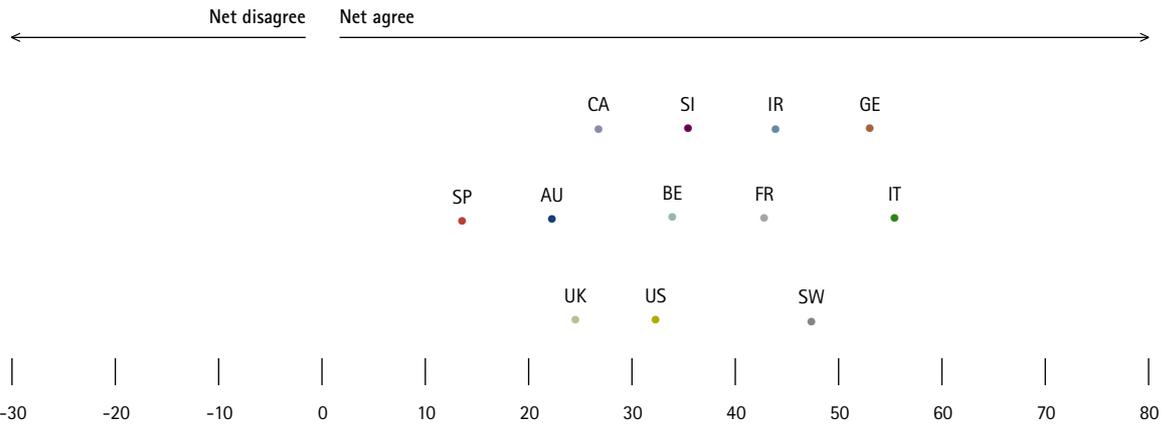
eGovernment will mean that people without Internet access will get fewer government services.

Net disagree   Net agree

IR   IT   FR   SI

SP   CA   GE   SW

US   UK   AU   BE

-30   -20   -10   0   10   20   30   40   50   60   70   80
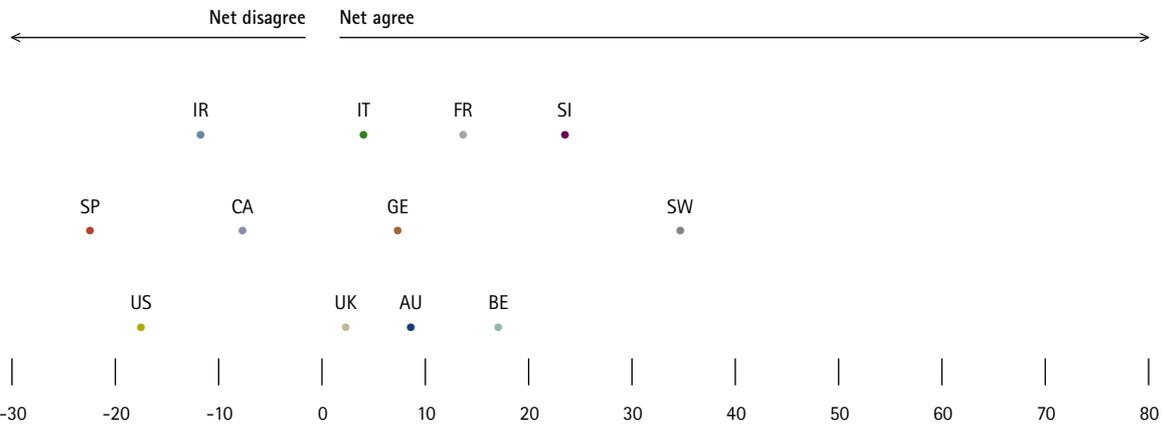
eGovernment makes government more accountable to its citizens.

Net disagree   Net agree

AU   FR   CA   BE

SP   UK   IR   SI

GE   US   SW   IT

-30   -20   -10   0   10   20   30   40   50   60   70   80
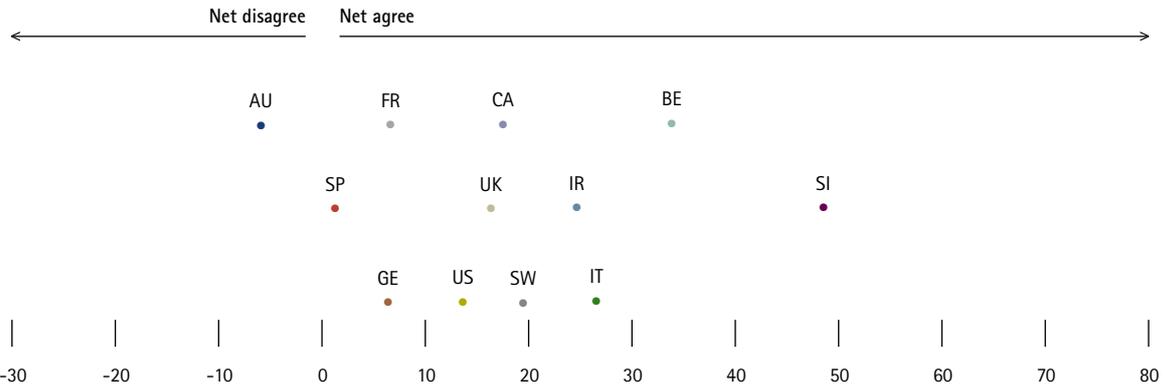
The citizens' view

Overall, users think eGovernment makes it easier to stay informed. Not as many agree that it makes transactions easier, but this is at least partially due to current experience levels (see Figures 12a and 12b). Fewer people have used transactional services than informational ones and thus, transactional services are likely to be rated lower. (Interestingly, as Figure 8 shows, satisfaction with eGovernment is higher among users who have used it for transactional purposes than among those who have used it for information alone.)

The point here is that exposure to eGovernment is very important. Governments have a job to do in educating citizens about their offerings. As an example, when asked to rate the development of eGovernment in their country, four in 10 Germans did not feel qualified to discuss how good a job their government is doing.

Increasing understanding (and then take-up) of eGovernment services will result from governments aggressively promoting them. Many governments will have to invest more strongly in building marketing competency than they have in the past.

Figure 12a: Comparison of attitudes toward eGovernment's effectiveness for informational and transactional purposes

Does eGovernment make it easier to stay informed?

Percentage of all who have ever used eGovernment services in each country

■ Yes ■ No ■ Don't know
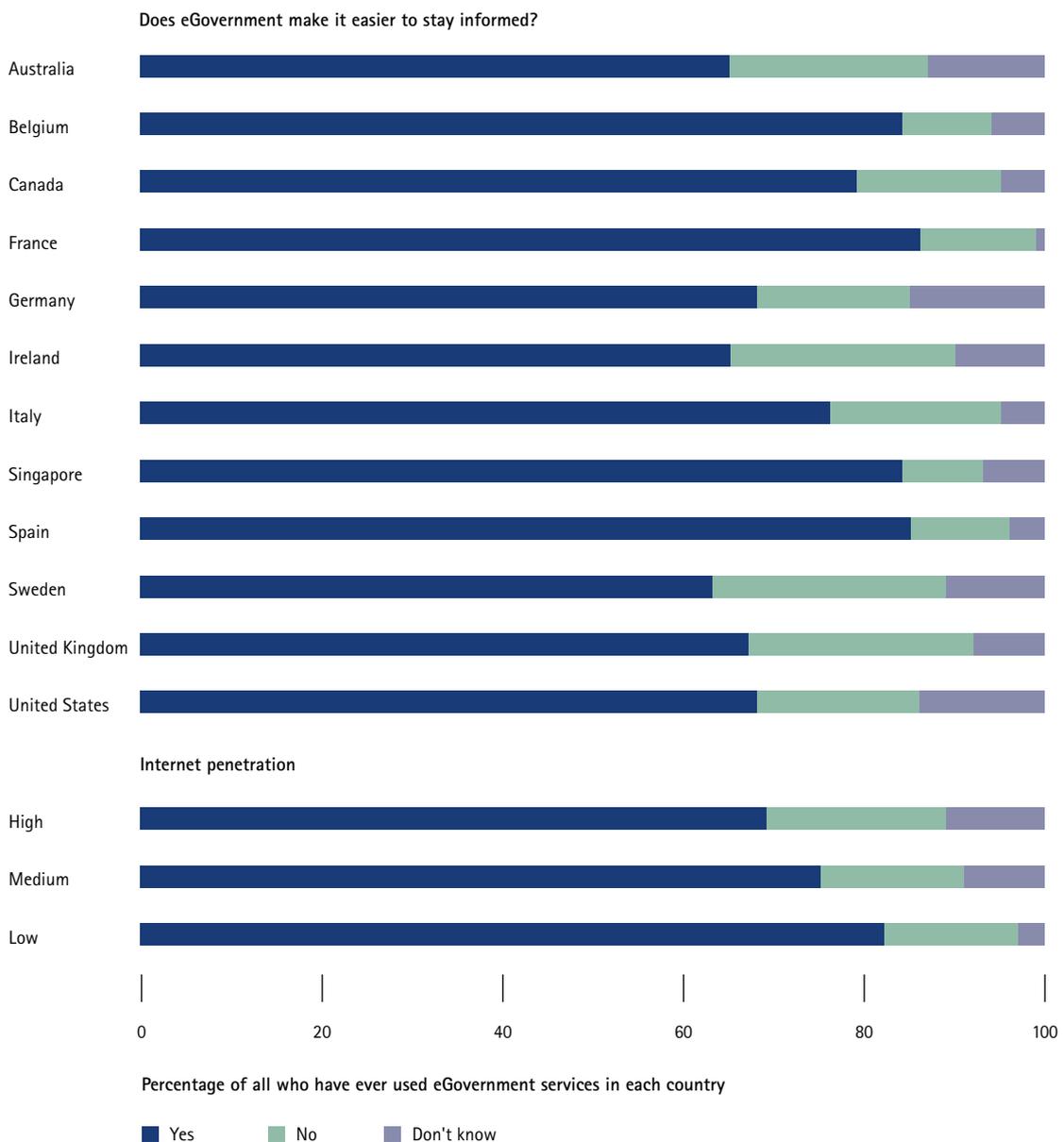
Figure 12b: Comparison of attitudes toward eGovernment's effectiveness for informational and transactional purposes

Does eGovernment make it easier to conduct transactions?

Internet penetration

Percentage of all who have ever used eGovernment services in each country

■ Yes   ■ No   ■ Don't know
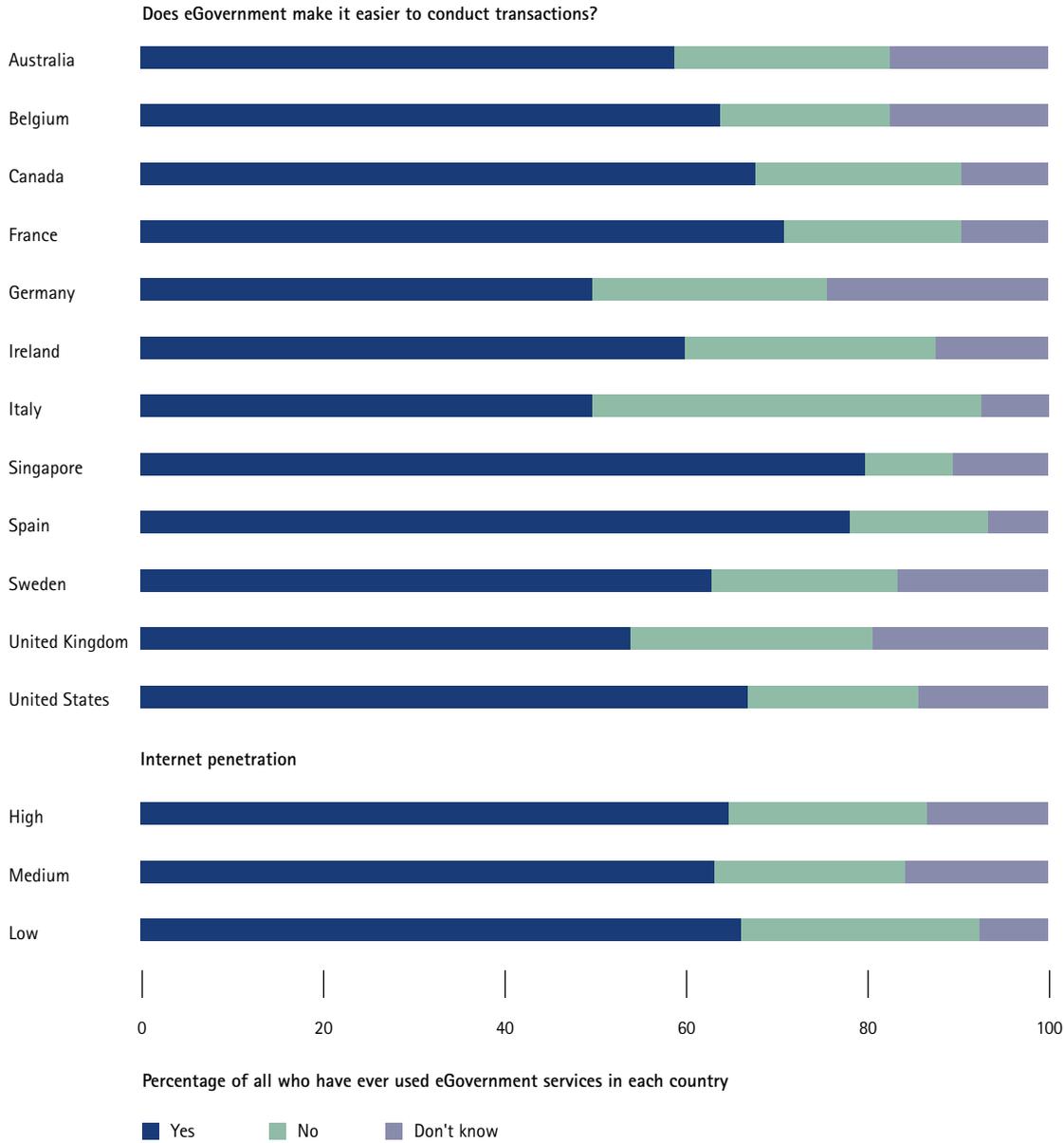
The citizens' view

Future priorities[3]

In general, countries' future priorities should be to develop and promote the convenience and security of eGovernment services. In addition, expanding and promoting simple-to-use transactional services should be a key focus. People who use transactional services tend to have higher levels of satisfaction and a more favorable opinion of their government's performance than those who use informational services alone. Simple transactions should bring in new users and, if trends hold, positively influence attitudes toward eGovernment overall.

The effective bundling of services also may help take-up. Singapore and Japan, for example, have had success bundling services related to starting a new business. Quick and immediate access to a group of services means there is greater likelihood that citizens will use them.

More specific priorities can be seen when countries are divided into categories based on Internet penetration rates. For each of the country types—high, medium and low penetration—we have divided eGovernment services into quadrants based on usage, interest and impact of the service.
- Critical improvement: These are services of high interest and of high potential use and impact. They should be among the immediate priorities for development.
- High leverage: These are services that already are strong and of high impact and interest. Government should spend more time promoting these services.
- Less critical improvement: These are services that are used infrequently, of little interest to users and of low impact to government.
- Low leverage: These are services that are fairly strong but where development of the service is unlikely to add additional value. The emphasis should be on promotion for these services.

High-penetration countries.

In high-penetration countries, renewing or applying for passports, drivers' licenses, marriage certificates or birth certificates are all key services to develop and promote (see Figure 13). Online health information is another priority area that will drive overall satisfaction—it is likely to be high impact, but there is capacity for improvement in quality. In contrast, applying for benefits or government jobs online are currently less critical improvement areas. These are services less frequently used and of less interest to nonusers. Filing taxes is not a critical improvement area in high-penetration countries, probably reflecting its already high rating among users. However, because it is a high-impact service of high interest to users, governments should continue to promote it.

Medium-penetration countries.

Tax services online represent high-leverage services in medium-penetration countries—they drive satisfaction and are highly rated. Looking for health information is an area where improvement is required—it can have a high impact on overall satisfaction and is of interest to citizens, but is underused (see Figure 14).

Low-penetration countries.

Online tax services are a major driver of eGovernment performance in low-penetration countries, as they are already highly leveraged. Searching for government jobs online may be a key area for improvement. This is an underused service that would likely have a positive impact on overall satisfaction. Experience levels tend to be lower for eGovernment services such as searching for government jobs and determining benefits eligibility in these countries; however, these services may hold great appeal and may be key to encouraging initial usage of eGovernment (see Figure 15).

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[3] We note that the recommendations we make in this section are based primarily on the results from this citizen survey, which did not cover all 206 services of the main research. Thus, there may be other services that fall into the categories of critical improvement and high leverage. While these priorities provide a starting point, we emphasize that governments need to conduct their own research on their citizens to focus their efforts most accurately.

Figure 13: Strategic improvement matrix: High-penetration countries

Australia, Canada, Sweden, United States

Importance of service

Critical improvement	8	6	High leverage
		10 11	
		2	
12 4		9	7
1		3	5	Low leverage
Less critical improvement			

Performance of service
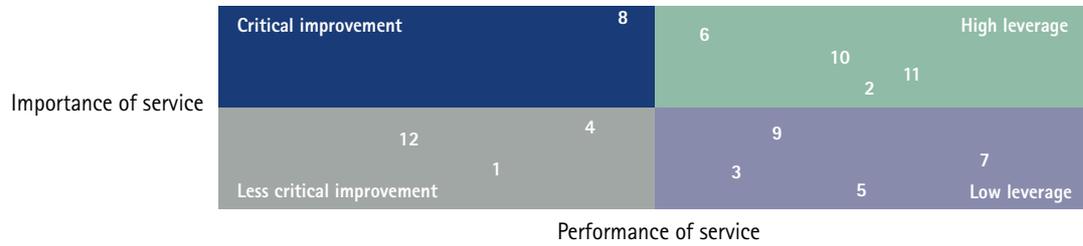
Figure 14: Strategic improvement matrix: Medium-penetration countries

Belgium, Germany, Ireland, Singapore, United Kingdom

Importance of service

Critical improvement — 7 — High leverage
1 — 8
6 — 4 — 5
12 — 9
Less critical improvement — 2 — Low leverage

Performance of service
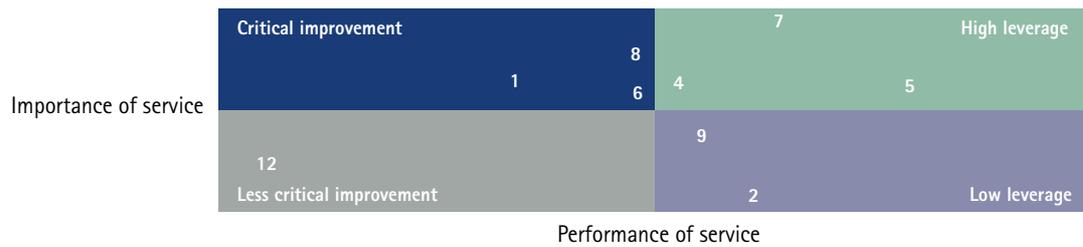
Figure 15: Strategic improvement matrix: Low-penetration countries

France, Italy, Spain

Importance of service

Critical improvement — 1 — 10 — High leverage
7
3 — 8 — 9
5
6 — Low leverage
Less critical improvement

Performance of service
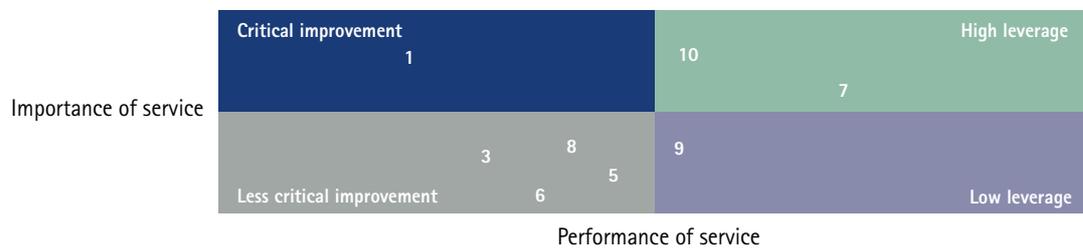
1. Apply for government jobs	5. Change address	9. Look for tourist information
2. Apply for passport	6. Determine eligibility for benefits	10. Obtain birth certificate/marriage license
3. Apply for unemployment benefits	7. File taxes	11. Renew driver's license
4. Cast vote remotely	8. Look for health information	12. Report minor crime

Driving value through eGovernment

Accenture has developed the Accenture Public Sector Value Model (detailed in the sidebar on page 39) to help government agencies analyze how they deliver value to citizens and how they can improve their performance to deliver increased value. While this model is not focused on eGovernment specifically, its principles can be applied to help governments take a more balanced approach to their online programs that will further them on their journeys to becoming high-performance governments.

Specifically, its focus on outcomes and cost-effectiveness can help government agencies consider the wider transformational opportunities that eGovernment offers and, conversely, to be more skeptical about the benefits of some more superficial approaches to putting government services online. This is an important point, as many governments have set targets in the past that were misaligned with what constitutes real value for their citizens.

High performance is driven by outcomes and cost-effectiveness

Adopting the Accenture Public Sector Value Model, it is clear that eGovernment strategies will add value when they:
• Improve an agency's delivery of its statutory purposes.
• Meet stakeholder expectations more effectively.
• Enable both of these outcomes more cost-effectively than other strategies.

It is unlikely that just replicating existing services electronically will maximize the opportunity to add value when judged against this standard. Effective, value-adding strategies will use the opportunities presented by Internet-based technologies to alter the business model for the delivery of government services dramatically. In some cases, services will be transformed (and improved) so radically that old service models will disappear completely. Such strategies will have targets that are clearly quantified in measurable outcomes.

Driving value through eGovernment

Improving the delivery of statutory purpose

There are already many examples of eGovernment being used to help agencies improve the efficiency with which they deliver their statutory obligations. For example, many, if not most, taxation authorities are now adopting electronic filing for tax returns. Because electronic filing enables information to be checked and confirmed directly with the taxpayer, it is improving levels of compliance while also decreasing the cost of compliance-checking for the agency. In Canada, for example, approximately 43 percent of personal income tax returns are now handled electronically. This has enabled the redeployment of more than 1,350 staff previously engaged in processing and verifying paper returns.

The greatest additional value from eGovernment, however, increasingly will come from helping government agencies deliver their statutory obligations in new and innovative ways. For example, Australia's job-search application not only helps job seekers complete and file resumes online, but it also offers automated job-matching facilities to help match jobs with job seekers based on their skills and interests. Canada offers a similar job-search capability that also incorporates an online resume-builder assistance tool. In these cases, Internet-based technologies are helping government agencies change and improve the way they perform their functions, rather than just automate what they already do.

These new e-enabled business models have the following characteristics:
- They are personalized to the individual citizen and exploit the fact that they can deal with an individual directly.
- They integrate services both horizontally (across parts of an agency or multiple agencies) and vertically (across local and central government agencies). They may even enable radical reshaping of the scope and functions of some parts of government.
- They exploit electronic capabilities to offer highly tailored services that can match particular requirements.
- They have more inherent flexibility than current models. For example, they provide 24 hours a day, 7 days per week availability.

Meeting stakeholder expectations through service improvement

Service delivery in the private sector increasingly sets the expectations of both citizens and businesses as to what the public sector should also be able to achieve. The increasing prevalence of delivery approaches that exploit the Internet, mobile telephony and other electronic mechanisms provides government with the means to meet these rising expectations, but also continues to raise the level of expectations. For example, at the simplest level citizens now expect routine government information to be available online. Increasingly, they also expect routine transactions to be available online and to be of a consistent quality. If government does not meet these expectations it will not only *not* be adding public-sector value, but it will be actively destroying it, as government services are perceived to fall behind now generally accepted standards.

The General Register Office in Ireland (www.groireland.ie) provides an excellent example of how integrating services can add value for citizens and government alike. The Office recently implemented the Civil Registration Modernization Program, which aims to streamline the civil registration process, covering all life events, such as births, deaths and marriages. In the first application to use the Inter-Agency Messaging Service, registration of a birth triggers assignment of the personal public service number and also triggers a child benefit application. In the case of child benefits, where it is a first birth, a prefilled form is proactively sent to the parents, who only need to fill in bank account details where the allowance should be paid. For any subsequent children, these details are used and the parent does not have to make any application for the benefit; it is automatic and transparent. From the government's perspective, registration of a birth with the civil registration service automatically triggers notification to other relevant departments.

The Accenture Public Sector Value Model[*]

The Accenture Public Sector Value Model was developed to address the challenge agencies face in developing a meaningful baseline for measuring performance and performance improvements. It proposes a more complete approach to measuring successful actions and provides a process for tracking progress over time.

At its simplest, the Accenture Public Sector Value Model considers two levers of public value—outcomes and cost-effectiveness. By increasing one or the other, agencies can be understood to be creating value. By increasing one at the expense of the other, they can be understood to be making a trade-off between their two fundamental means of creating value. A decrease in both levers represents a clear reduction in public value.

A Public Sector Value analysis defines outcomes for government agencies based on their:
• Statutory purpose—What the agency is established to do (for example, a revenue agency is established to collect tax revenues; a school board is established to educate children; and a police force is established to maintain public order).
• Stakeholder expectations—What the stakeholders expect of an agency as it performs its statutory duties (for example, that a social security agency's interactions with citizens will be prompt, accurate and courteous and that a revenue agency will minimize the burden of compliance on businesses).

These outcomes are weighted, based on relevant external factors for specific administrations. They are then measured using metrics, which can be grouped to develop an outcome score. Separately, the cost of the resources deployed in delivering these outcomes is calculated. Then, by dividing cost into outcomes a cost-effectiveness score is developed (see Figure 16).

Figure 16: A movement toward the top-right quadrant on the Accenture Public Sector Value Model graph represents real public-sector value creation
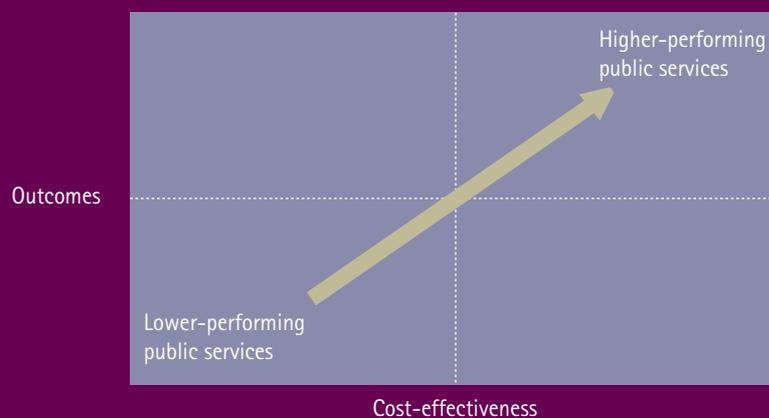
• Outcomes are a weighted basket of social achievements

• Cost-effectiveness = $\dfrac{\text{Outcomes}}{\text{(Annual expenditures - capital expenditure + capital charge)}}$

• Hypothesis = greater value is created through generating improved outcomes in a more cost-effective way

Public-sector value is created as the delivery of outcomes is improved in a cost-effective fashion. High-performing agencies will consistently increase the public-sector value they deliver year after year by a combination of service delivery improvements balanced by increases in cost-efficiency.

The Accenture Public Sector Value Model cannot tell whether a government is performing well or badly. However, it can tell whether a government is doing better or worse from year to year, or whether it is performing better or worse than comparable agencies elsewhere. It can identify what actions were taken to cause improvements and help pinpoint problems. It should not replace other performance measures; rather, it complements these other approaches. Other performance measures—such as the balanced scorecard approach, the US Program Assessment Rating Tool or the UK Public Service Agreements—will still be required to measure whether an agency is being well run.

* Patent pending.

Driving value through eGovernment

Improving cost-effectiveness

Implementing new, high-performance business models enabled by eGovernment technology will allow governments to improve cost-effectiveness. By improving the integration of services within and across agencies, governments can not only meet stakeholder expectations through service improvements, they can also improve cost-effectiveness by:

- Automating services, resulting in reduced administration. Government employees can then focus their attention on higher-value tasks.
- Integrating services, resulting in the elimination of duplicated efforts and greater cost-effectiveness. Duplication of effort on the part of a citizen or business reduces value by not meeting their service delivery expectations. For government, duplicated efforts means wasted resources.

Canada's Record of Employment Web service shows how eGovernment can add value by delivering both improved time and cost savings outcomes to the government through automation. It takes an average of 10 to 15 minutes to create a paper record of employment form. In the same amount of time, 300 to 450 record of employment forms can be issued online. In terms of processing, the paper transaction can take up to seven days whereas the online version takes only a few hours. The cost savings are significant.

Assessing value to set strategy

To a considerable extent eGovernment strategies have been an "act of faith" on the part of governments. Some benefits in terms of increased automation and improved access have been relatively obvious. Others have been harder to quantify—in particular, the general belief that providing online access to government services must always be a good thing in and of itself. Applying the concepts of the Accenture Public Sector Value Model should bring a rigor to future eGovernment strategies that has been lacking previously. We believe effective eGovernment strategies will address three key questions in the future:

1. How will the strategy improve the performance of government agencies in the delivery of their core statutory duties?
2. How will the strategy meet rising stakeholder expectations of government services?
3. How will the strategy contribute to improved cost-effectiveness in the provision of government services?

Effective eGovernment strategies will seek to add value in all three dimensions and move governments toward their goal of high performance.

Innovative practices in eGovernment

Government executives share similar challenges with their peers in similar agencies across the globe. This year we once again provide a look at trends and innovations in agencies across five areas: revenue and customs; postal; human services; immigration, justice and security; and education. Our goal in presenting these examples is to illustrate how some governments use eGovernment as a way to enhance service delivery and deliver high-performance—providing better outcomes more cost-effectively.

Just as individual countries mature at different rates, we also saw that industries across countries also mature at different rates (see Figure 17). Revenue continues to be the most mature industry segment, followed by postal. This is not surprising. The relative ease of establishing a business case for online revenue services and the need for postal agencies to compete against private-sector delivery services made these industries the first area of focus for government online programs.

Overall, we see that all segments are maturing more slowly. This trend reflects the slowing progress of eGovernment as a whole, as quick-win options are diminishing.

Across all industries we found evidence of many excellent services. Some we covered in past reports and do not cover here, even though they continue to be exemplary. Instead, we once again concentrate on agencies that have further developed their services or those that have only recently begun to deliver an excellent online service.

Figure 17: eGovernment growth by industry

Revenue
- 70%
- 62%
- 52%
- 27%

Postal
- 57%
- 56%
- 43%
- 28%

Human services
- 51%
- 50%
- 34%
- 17%

Education
- 57%
- 46%
- 39%
- 26%

Immigration/justice/security
- 34%
- 31%
- 21%
- 7%

Average
- 54%
- 49%
- 38%
- 21%

x-axis: 0 20 40 60 80

Legend:
- 2004 overall maturity score
- 2003 overall maturity score
- 2002 overall maturity score
- 2001 overall maturity score
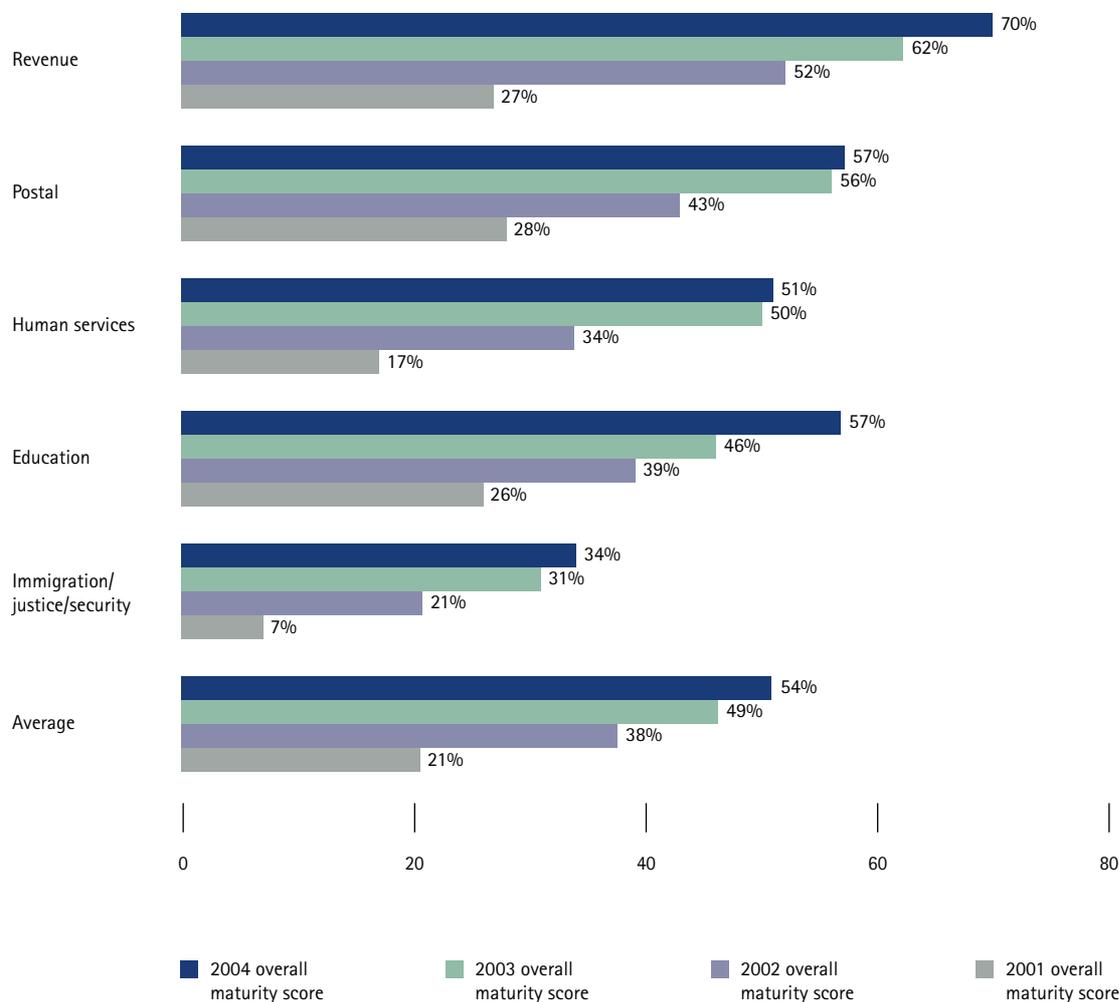
Revenue and customs

Revenue and customs agencies are charged with collecting the taxes that run the government. Because their regulations touch such a broad base of both citizens and businesses, elimination of low-value manual processes can have a profound impact—allowing agencies to focus on the bigger challenges of enforcing compliance and improving service. If revenue and customs agencies can ensure these interactions are simple and swift, the departments can perform their revenue-raising jobs easier and cheaper. The innovative practices here show how governments in the revenue and customs areas have used online services to encourage compliance while reducing the burden on the customer.

Innovative practices in eGovernment

The Australian Tax Office now provides a full tax service for businesses and tax agents that allows for paying business returns online, transferring balances between accounts, requesting refunds, viewing tax accounts in detail and paying obligations (https://bp.ato.gov.au). The service is a good example of bundling for the convenience of the customer; it brings together information from multiple tax accounts and across multiple tax types as well as linking with sources of advice within the tax office. The site can be personalized and is kept secure through digital certificates. While not yet available for all businesses, the site is becoming popular among those that have used it. One large company reported that its tax account reconciliation process has been reduced from two weeks to three hours because of the availability of online information and reports.

Results such as this demonstrate why revenue services tend to have such dramatic take-up (see Figure 18). The payoff can be enormous for online adopters. A number of other revenue services further illustrate the point. In Ireland, the Revenue Online Service, which we first described in last year's report, has a feature that allows users to estimate their likely tax liabilities without having to submit any paper forms (www.ros.ie). As an added incentive to use its online service, Revenue Online Service also allows customers an extra three weeks to file their returns and pay the tax due. Providing benefits such as these is paying off. According to the Irish Office of the Revenue Commissioners, the total number of online transactions more than tripled from 2002 to 2003 and the number of digital certificates issued in 2003 increased by 72 percent. Forty percent of

www.ros.ie

income tax returns were filed via the Revenue Online Service in 2003. It also collected 17 percent of all revenue related to business taxes in 2003. The total number of payments made via the service currently stands at €13.5 billion.

The French service for online value-added tax filing and payment (http://tva.dgi.minefi.gouv.fr/index.jsp) has also had excellent take-up. Using Télé-TVA is mandatory for companies with more than €15 million of revenue per year. The French Ministry of Finance reports that €61.4 billion, or 50 percent of VAT, has been declared and paid online by 50,000 businesses using Télé-TVA.

https://bp.ato.gov.au

http://tva.dgi.minefi.gouv.fr/index.jsp

Figure 18. Take-up of personal income tax filing online

Singapore
- 8.37%
- 18.97%
- 30.46%
- 42.12%
- 60%

Canada
- 3.68%
- 11.68%
- 16%
- 40%
- 43%

United States
- 23.39%
- 27.73%
- 30.91%
- 35.76%
- 40.28%

Ireland
- 9%
- 40%

Australia
- 4.92%
- 11.91%
- 24.48%
- 34%

Netherlands
- 9.24%
- 16.45%
- 20%
- 33%

Denmark
- .13%
- 19.97%
- 24.82%
- 30.86%

Norway
- 12.74%
- 16.76%
- 23.34%

Spain
- .16%
- .86%
- 4.09%
- 8.56%
- 11.81%

United Kingdom
- .44%
- .85%
- 3.61%
- 7.66%

Sweden
- 3.91%
- 7.60%

0   10   20   30   40   50   60

Percentage of personal income tax returns filed online—progress since launch

■ Year 1   ■ Year 2   ■ Year 3   ■ Year 4   ■ Year 5*

* This chart incorporates data from the years leading up to and including 2003. The categorization Year 1 to Year 5 refers to the number of years each country has offered online filing of personal income tax returns. Year 1 refers to the first year the service was offered, Year 2 refers to the second year the service was offered, and so on.

Innovative practices in eGovernment

www.ir.dgi.minefi.gouv.fr

The French tax site (www.ir.dgi.minefi.gouv.fr) is also proving popular. The site offers online filing and immediate tax receipt. It is supported by online and phone help and offers security through the use of digital signatures and digital certificates. In 2003, some 600,000 income tax return forms were filed online by French people.

The Spanish revenue site of the Agencia Española de Administración Tributaria (AEAT) is similarly rich. Citizens can submit their tax returns online, using a digital signature, and get status updates, help or more information about taxes. All the services provided by this agency are available through the citizen portal (www.administracion.es). The success of the French and Spanish services show the value of providing support for users to ensure their initial online experiences are good ones.

Canada Revenue Agency (www.ccra-adrc.gc.ca/menu-e.html) is transforming the way services are delivered within the Canadian government. The agency has been steadily moving away from paper-based transactions that require manual processing toward automated transactions that can be submitted, verified and processed by computer systems. Canada Revenue laid the groundwork for electronic filing about 10 years ago, when it revised the manual process that it had been using to input and verify personal income tax returns. The new process for electronic filing, by computer and by telephone, eliminates the requirement to submit a paper return and supporting documents. Close to 43 percent of personal income tax returns filed in 2003 used the agency's automated systems. More significantly, the agency has closed one of its taxation data centers and has redistributed or redeployed about 1,350 of the jobs formerly required to process paper returns.

www.administracion.es

www.ccra-adrc.gc.ca/menu-e.html

www.tullverket.se

Sweden's Virtual Customs Office (www.tullverket.se) is perhaps the most innovative service we saw in the customs area in the past year. Businesses that have a credit account at the Virtual Customs Office can get invoices electronically and pay them via any online banking service, while those without an account still have to pay in cash at the border. The Virtual Customs Office is part of the Swedish quality initiative, The Stairway. The Stairway enables companies to receive streamlined and quick customs handling if they cooperate with the customs office and allow the office to quality-assure the companies' own customs-related processes beforehand.

The website of the Virtual Customs Office has a section where users can search for TARIC classification codes, which enables them to see taxes and duties for any goods. The electronic customs declaration service allows businesses to lodge import or export entries electronically for clearance. Fast freight companies and other businesses that use the simplified process also can communicate their manifests through this service. To sign documents electronically, these users use a mobile phone, to which a unique sign-in code is sent by short messaging service each time the person wishes to log in. All entries can then be made and signed electronically.

Postal

Postal services frequently are among the most innovative eGovernment services. Often forced to compete with private-sector delivery services and personal e-mail, postal agencies have been compelled far earlier than other agencies to think with a competitive mindset. We have seen postal agencies drop services more quickly than other agencies as well. In a few cases this year, for example, we saw agencies drop customer e-mail as an offering. Again, this is probably due to the agencies' need to assess market conditions and move quickly to cut areas that do not provide a meaningful return. Increasingly, postal agencies are coupling traditional mail to technology innovations (personalized stamps, for example). This trend will likely continue (as opposed to the one that positions post offices as Internet service providers, where competition is extreme and marketing requires special skills).

The following selection of best practice examples encapsulates the broad range of new services—not just online counterparts of existing offline offerings—that demonstrate the service transformation potential of eGovernment.

Posten in Sweden (www.posten.se) is an excellent example of innovation born of necessity. Although Posten is a wholly state-owned company with a monopoly in certain areas (such as issuing stamps), in other areas it competes with private companies. In response to the need to compete, Posten has created a number of highly competitive online products.

www.posten.se

Innovative practices in eGovernment

One such product, called ePostboxen, allows a citizen to collect incoming mail and bills in one secure place and then link to an Internet bank. The citizen can then pay all the bills through this entry point. Citizens also can use ePostboxen to send secure e-mails. For businesses, Posten offers a track and trace service similar to what Posten's private competitors provide in that it allows businesses to track parcels on their way to receivers and makes complete status and transaction history available. Other functions, offered through Posten's PacSoft Online service, include automatic label printing and adding user profiles.

Likewise, the United States Postal Service implemented its Confirm offering (www.usps.com/nationalpremieraccounts/confirm.htm) as a way to add value for its critical bulk mailer customer segment. Using a system of barcodes and automated scanning technology, Confirm allows large mailers to track their outgoing and incoming mailings throughout the postal system via the Internet. With advance knowledge of when mailings are hitting target mailboxes and when replies are on their way back, Confirm customers can better coordinate their marketing efforts and plan staff and inventory more accurately.
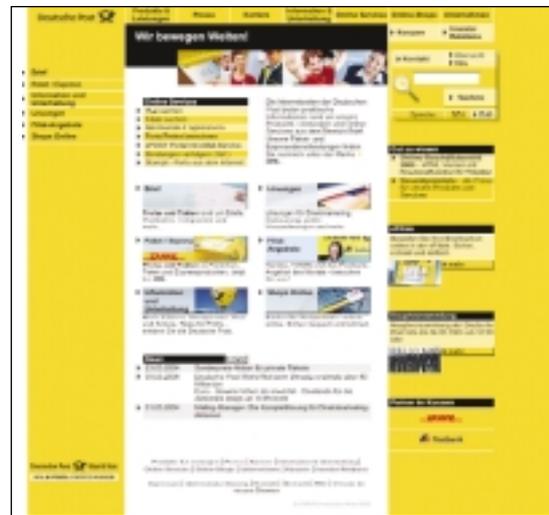
www.deutschepost.de

The German postal service (www.deutschepost.de) is a fine example of using a portal to provide access to both traditional and online-only services. The site provides basic information services—such as postal code searches, branch information, postage calculators and an online philatelic shop—as well as more complex services, such as online change of address and stamp printing. The ePost function offers tiered (basic to premium) e-mail services, as well as storage and shared access for digital photo albums and online subscriptions to more than 200 magazines. For businesses, the direct marketing shop offers a whole roster of functions for planning and executing a direct marketing campaign. It provides links to marketing studies and other free informational brochures, contact information for potential direct mailing partners, detailed postage calculators and online forums for direct marketers.

www.usps.com/nationalpremieraccounts/confirm.htm

In the United Kingdom, the Royal Mail introduced the SmartStamp service (www.royalmail.com/portal/rm/onlinepostage), allowing business customers to print postage directly from a computer. The SmartStamp software can be used with Microsoft Outlook address books so that users can print stamped and addressed envelopes all at the same time. In addition to first- and second-class mail, SmartStamp allows users to print stamps for most Royal Mail UK and overseas services. Businesses can purchase one corporate account, which can then be used by all staff—even those working remotely. Access levels can be set, restricting stamp-printing privileges to certain users. The service is easy to use and even allows for personalization—businesses can design their own stamps that add to building corporate identity through logos, slogans and the like. Spain has a somewhat similar service in which users can buy and print post-paid stamps and labels for certified mail (www.correos.es).

www.royalmail.com/portal/rm/onlinepostage

www.correos.es

Certipost (www.certipost.be), a joint venture of Belgacom and The Belgian Post Group, is a separate entity created to secure and certify electronic communications. Since its origination, it has grown to include electronic counters, electronic invoicing, B2B exchange hubs and the infrastructure for digital certificates. Certipost's online registered mail service was launched on July 16, 2003 and is offered free via an electronic mailbox—MyCertipost. Holders of Belgian electronic ID cards have access to the new service by registering online. It is also accessible by getting a free electronic signature at one of the 125 registration offices in the country. Once registered, users have a personal secured MyCertipost account, which they can use for certified transactions.

Human services

Human services agencies are responsible for ensuring the social welfare of citizens. In contrast to revenue services, whose goal it is to bring in money for the government, human service agencies give benefits back to the citizen. Their services are geared toward providing support, advice, benefits and payments. Human services deal with the most vulnerable members of society—the elderly, the impoverished, children and the unemployed. As such, they have to balance a number of unique challenges. Their customer contact is often highly personal, which limits to some degree the extent of services that can be offered online. Additionally, they must be keenly aware of making sure services are equitably offered across all channels. These reasons
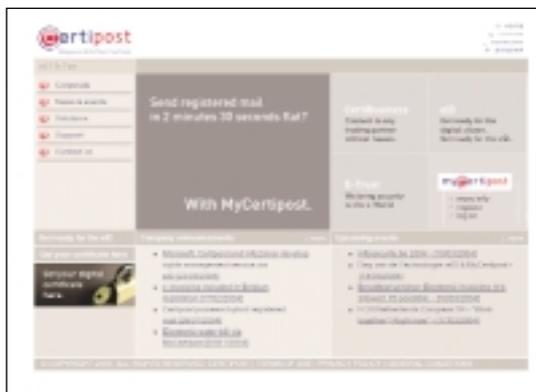
www.certipost.be

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may contribute to why the more quantitative measures of this survey show them as maturing more slowly than other industries.

As an industry, human services improved modestly. The examples here spotlight some of the latest and most successful forays into cross-agency (or cross-sector) collaboration.

As was the case in last year's research, some of the best examples came in the area of job-search offerings. Australia's JobSearch (www.jobsearch.gov.au) allows registered users to create and submit resumes—and then use those resumes in applications for governmental and nongovernmental jobs alike. JobSearch offers a job-matching feature that helps users link up with the jobs most suited to their skills and interests. The site is a good example of bundling related services and integrating offerings across the public and private sectors. For example, a user can find a job, build a resume, apply for the job, review training programs and find out about working conditions and wages—all through the same site.

Canada's Job Search site (www.jobsetc.ca/toolbox/job_search/jobSearch.do?lang=e) offers some of the same functionality. It is an interactive site that also allows for searching multiple sites—in business and in government—simultaneously. It even provides e-mail alerts when jobs matching specific criteria of the user are posted. The site provides a resume builder tool and a way to submit online applications for federal jobs.
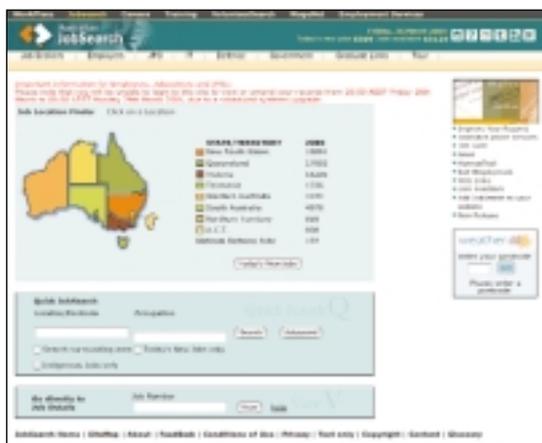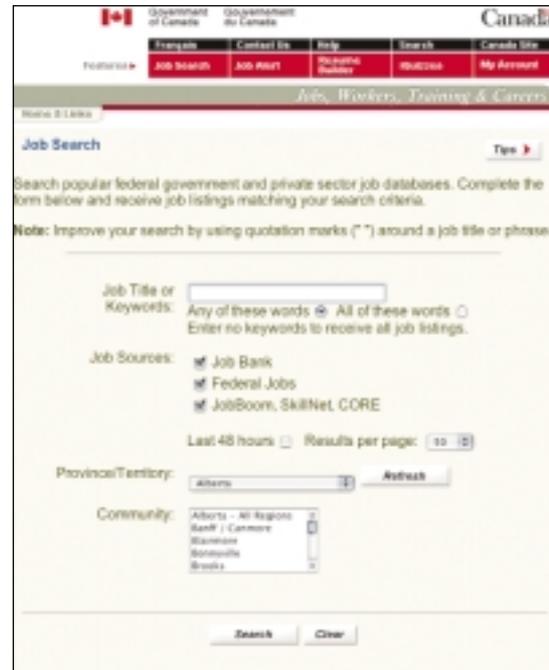
www.jobsetc.ca/toolbox/job_search/jobSearch.do?lang=e

The United States provides its citizens information on all government benefits through its GovBenefits site, www.govbenefits.gov. The site offers several ways to search for the information. While it does entail making choices about what the user wants to know, once a specific benefit is selected, there is a good overview provided with relevant links for additional information, such as how to determine

www.jobsearch.gov.au
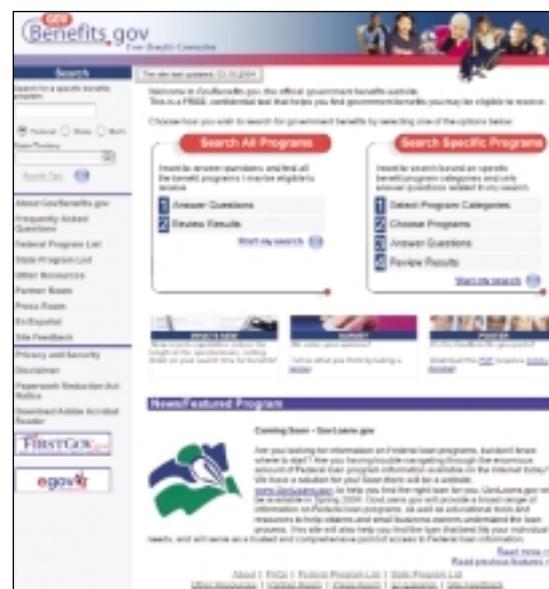
www.govbenefits.gov

www.consumerinformation.ca

www.tyoelake.fi

eligibility. The GovBenefits site exemplifies the citizen-centric concept in that it covers all benefits that people might be entitled to, no matter from where the benefit originates.

Canada offers another excellent example of cross-agency collaboration—this time across vertical levels of government. The Canadian Consumer Information Gateway (www.consumerinformation.ca) is an online initiative that includes more than 35 federal government departments and agencies, as well as more than 250 provincial and territorial partners. These organizations have come together to promote Canadian consumer interests and awareness. One useful tool being piloted on the gateway is called the Complaint Courier, which assists the user in sending a complaint in a step-by-step process. The site even offers a dialogue coach for helping customers call in a complaint and a letter wizard for creating a written complaint. The last step allows a user to submit a complaint to the appropriate complaint board online—regardless of the province or city.

In Finland, the joint service Työeläke.fi (www.tyoelake.fi) of the Pension Insurance Companies and the Finnish Centre for Pensions contains a personal employment record of everyone that is insured under Finnish earnings-related pension schemes. Työeläke.fi brings together information from the nine different pension systems and about 70 different pension institutes in Finland today. On the portal users can check that their personal employment information is correct, find out which insurance company manages their earnings-related pension, access a preliminary calculation of the amount of their earnings-related pensions and calculate their pension estimates directly online. The site is kept

secure through public key infrastructure authentication with a FineID card, electronic social security card or online banking authentication.

One final example of public- and private-sector collaboration in human services is the SÉSAM Vitale system (www.sesam-vitale.fr). Fifty million "cartes Vitale" have been distributed to French citizens. When the citizens show their cards to health professionals (such as doctors, pharmacies, hospitals, dental surgeons and midwives) registered and equipped with a terminal, the Vitale system enables

www.sesam-vitale.fr

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www.ameli.fr

www.courtservice.gov.uk

https://www.moneyclaim.gov.uk/csmco2/index.jsp

them to create and forward electronic forms directly to the patient's public health center. Personal data are registered in the Vitale card, using the citizen heath services' identifier, so that the provider electronically transmits the relevant information. By December 2003, about 176,000 health professionals had transmitted electronic forms, which represents 57 percent of the statements received by the general health insurance scheme. Citizens can also track the status of their payments through the Internet service, which is offered by the Assurance Maladie en ligne (www.ameli.fr).

Immigration, justice and security

We saw little change across services in the immigration, justice and security agencies in 2004. However, the types of services these agencies provide are not likely to be the focus of apparent, customer-facing eGovernment improvements. Rather, these improvements typically come in the areas of internal processes and government-to-government interaction and thus, may be invisible to an outside observer. Much of the effort in this industry is focused on enablers of security, such as incorporating biometrics and ID cards to assure the wrong people do not exploit existing systems and services. Nevertheless, we found a number of services focused on the end user that are worth noting.

The United Kingdom Court Service (www.courtservice. gov.uk) has developed an interesting service for handling money claims online. Billed as the Court Service's first step in bringing court users an Internet-based service, Money Claim Online (https://www.moneyclaim.gov.uk/csmco2/index.jsp) allows citizens to claim online fixed amounts of money less than UK£100,000. After a claimant registers with the service and creates a user ID, he or she completes information on the claim online, guided through the process step by step. The website displays a claim number and then submits the claim to a county court bulk center to be processed and

www.inburgeringsloket.nl

www.fafsa.ed.gov

Education

We saw continued maturing in the education industry. Whereas third-level sites already have reached a high level of maturity, improvement in primary and secondary education sites continues to drive the growth of the industry as a whole.

Educational services frequently are within the purview of local jurisdictions. As a result, many educational services fall out of the scope of what we survey in our *eGovernment Leadership* research. Nevertheless, among national-level education services we saw improvement overall and a number of noteworthy practices.

The United States Free Application for Federal Student Aid site (www.fafsa.ed.gov) offers an excellent service for every phase of the federal student aid applications process. The site is organized around a logical timeline—before beginning an application, filling out an application and application follow-up—and provides information on getting organized, establishing eligibility and applying for a PIN for fast online aid filing. It also provides the application itself and functionality for checking the status of an application as quickly as one week after online submission. The website uses skip logic based on a user's information, which means online applicants need to answer fewer questions than those using

mailed to the defendant. Defendants can then answer the claims by filling in forms online and payments can be made via credit card. Defendants and claimants can track the status of the claim online.

Immigrants that move to the Netherlands can obtain all the information needed to settle in the country through the Inburgeringsloket (www.inburgeringsloket.nl) service, which is currently offered in Dutch and German. Inburgeringsloket provides a single point of contact through its "virtual counter," which points immigrants to an introduction to Dutch society and overviews of how things work—for example, how to go to the hospital and whom to call in emergencies.

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www.csn.se

www.ppk.kpm.my/smartschool

the paper form. The site also checks a user's answers before submission, so there is less chance an application will be rejected because of missing or conflicting information.

Sweden offers similar functionality through its online Student Aid program, Webbsvar, at www.csn.se. Students under the age of 20 are granted student aid without having to apply. For students over the age of 20 who study below third-level education, application forms can be ordered or printed from the website. Webbsvar is an intentions-based service centered on the customer. It has a full status report function, which details exactly what has happened or is happening to a user's request. Users can view the value of their student loans, when coming payments are due, transaction histories and more. They can also get a status report of pending applications. Legislation currently prevents Webbsvar from accepting electronic applications and this is the site's most obviously lacking function.

Malaysia has successfully implemented the Malaysian Smart School Pilot Project (www.ppk.kpm.my/smartschool), another high-profile application within Malaysia's Multimedia Super Corridor project. The Smart School project's intent is to transform the Malaysian education system into an advanced technology-based process that will revolutionize the way students learn, think and act. Though active for just more than a year and with several years to go until full implementation, the pilot has already reached some impressive achievements, including the production of about 1,500 courseware titles, a first-ever integrated Smart School management system for Malaysian schools and the establishment of 87 Malaysian Smart Schools.

In the Netherlands, the Open Universiteit Nederland (www.ou.nl), an independent government-funded institute for distance learning at the university level, has a very well organized site that makes it possible to find information about courses, ask people who have taken the courses questions about their experiences and register online. It offers all of its students an electronic learning environment through which they can easily communicate with each other and with their teachers. Furthermore, students can download learning materials and check their knowledge and skills with a short introductory opening test on Studienet, the special extranet for students. Currently, almost 15,000 students make use of Studienet, making it the country's largest electronic learning environment.

www.ou.nl

Cross-industry services

A number of services that could be considered truly innovative defy categorization into the five industries described here. Nevertheless, they are worthy of notice, particularly as they are excellent examples of the potential of cross-agency integration.

Singapore offers one of the most interesting services we have seen this year for registering a new business (https://licences.business.gov.sg). This is a highly interactive website that uses a shopping-cart analogy called "My License Cart." A user first chooses the type of business to be registered from a broad list that covers everything from vendors selling cooked food to mining and quarrying operations. The website then provides a list of all relevant licenses, permits and administrative matters for the business, from which the user can choose, apply for and add to the shopping cart. At checkout, the user can view the total amount to be paid, make the payment with a credit card and then check the status of the application online.

Japan also offers a one-stop shop for users to obtain information about starting a business. The Sogyo Navi (Starting Business Navigator) portal, www.sogyo-navi.jp/index.html, was enabled by cooperation between the public and private sectors, led by the Ministry of Economy, Trade and Industry. Currently, it allows users to obtain all information
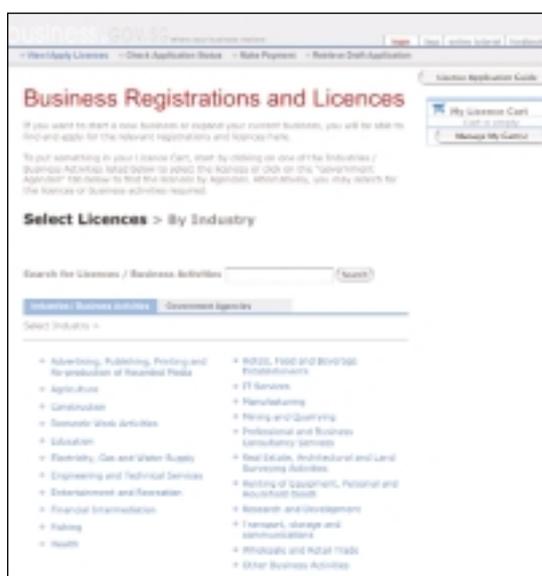
www.sogyo-navi.jp/index.html

about starting a business, download the application forms and ask for support in procedures related to starting a business. Online filing will be operational in the future.

Through Norway's Altinn (https://www.altinn.no), a business can submit mandatory company information to the government directly from its internal IT systems or via a Web interface. Altinn is a new initiative to minimize administrative activities and simplify the dialogue with government for businesses and citizens. It is a good example of government bundling business-related services; it is the start of a common way for businesses and citizens to report all types of financial information to different government agencies. Although the program is an initiative of the Directorate of Taxes, Statistics Norway and the Brønnøysund Register of Legal

https://licences.business.gov.sg

https://www.altinn.no

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Entities, it was developed with interoperability as a key concern and will allow other government agencies to add their services in the future.

The public authorities that regulate enterprises in Denmark joined in partnership with a number of private-sector businesses to create a portal to all government services for enterprises (http://virk.dk). Virk.dk is one of the largest eGovernment projects in Denmark, involving 60 different authorities. Approximately half of all report forms currently in use between the public administration and companies are available, with the rest of the forms expected to be added during the next few years. In the first two months of operation, virk.dk had between 15,000 and 20,000 weekly visitors.

http://virk.dk

Conclusion

Transforming service, transforming governments

Governments have begun to realize that the time for quick wins and dramatic progress in eGovernment has passed. However, the plateaus some countries have reached need not signal the limit of eGovernment's potential. There are significant savings to be reaped from eGovernment, and most governments are just beginning to realize this. Governments should concentrate on promoting take-up and communicating the benefits to all in order to attain these significant savings. It is now time for governments to focus on driving high performance through their online programs, so that they can get better outcomes in a more cost-effective manner.

Governments around the world are at a crossroads—each one faces challenges based on its current state of eGovernment maturity and must set its future priorities accordingly (see Figure 19). For some, that means thinking differently. More resources and effort expended in the same ways yield neither the advances they once did nor the savings that are possible.

Countries with low eGovernment maturity should identify and focus development on high-value services. Then, they should promote these services more aggressively to drive greater take-up and greater savings realization. Countries in the mid-range of maturity should ensure eGovernment targets are balanced between outcomes and cost-effectiveness. They also should break down barriers between departments and agencies, to enable a single point of contact for citizen and business information and transactions. High-maturity countries should adopt a whole-of-government approach, building on strong governance and cross-agency collaboration. Their aim should be to establish seamless integration across all levels of government.

Governments at the highest level of maturity face perhaps the biggest leap in making future gains. In fact, they may even be unable to define clearly what awaits them at the next level of eGovernment. True eGovernment leaders sense that it is service transformation, that there is a far greater potential in eGovernment than simply replicating the physical world online. They are unsure, however, what transformed service will look like, and what transforming it will entail.

Accenture believes that service transformation will lead governments to become proactive—anticipating and pushing appropriate services out to citizens and businesses in a timely manner, and not simply responding to requests or claims. Governments that transform their services will not think in terms of horizontal and vertical integration alone, but will envision and create entirely new services enabled by seamless integration. They will pride themselves on removing services that do not add value.

Getting to service transformation requires a new, inspiring vision—something some leading countries are already beginning to articulate in their plans for eGovernment. It requires taking a long-term view while understanding that progress will be made in short-term strides rather than one giant leap. Positive outcomes achieved cost-effectively—and not just simple quantitative outputs or targets—will be the measures of progress.

Service transformation will not be easy. It will require making government employees accountable and rewarding them based on their achievements. It will require thinking together as a whole government and not as hundreds of individual agencies. Governance models will necessarily change and fiefdoms disappear. While the benefits are striking, the changes may be wrenching for those affected.

No government has yet achieved service transformation. Some are thinking about it, while others may never have the appetite or the incentive to undertake the change. However, we expect that those that do can look forward to the rewards of high performance and better engagement with the citizens they support.

Figure 19: Future priorities for eGovernment

Low-maturity countries	Medium-maturity countries	High-maturity countries
Identify and implement high-demand services with demonstrable benefits to drive initial uptake of eGovernment. Focus on high-volume, repetitive services.	Ensure that the long-term goal of eGovernment initiatives is to enable service transformation, not just automate existing offline services.	Be willing to establish new, more cost-effective business models and eliminate old, ineffective ones.
Establish cross-agency collaboration.	Establish a strong governance model.	Adopt a whole-of-government approach, building on strong governance and cross-agency collaboration.
Start with business-focused services and follow with citizen services.	Ensure that the focus is on citizen and business needs and that services are structured and driven accordingly. Decisions should be based on knowledge of these needs.	Share the benefits of eGovernment, such as cost and time savings, with citizens and businesses. Communicate these benefits.
Quick wins can be achieved but should be part of a broader plan to build the foundations for service transformation.	Ensure eGovernment targets are balanced between outcomes and cost-effectiveness.	Aim to establish seamless integration across all levels of government.
	Break down barriers between departments and agencies, enabling a single point of contact for citizen and business information and transactions.	Be proactive about services, pushing them out to citizens or even making them invisible from a citizen's perspective.
	Consider the use of bundling and intermediaries.	

Country reports

Australia

While Australia had modest improvement in its overall maturity score, it moved up in the rankings into the top four. A number of its services improved, with seven improving to an interact level and five moving from interact to transact.

Australia was an early eGovernment mover. Like the other countries in the top four, it has reached a very high level of service breadth, with the vast majority of applicable national government services online by December 2001. Today, the government seems to have embraced many principles of high-performance government: it has implemented outcomes-based performance management and is working toward greater financial control and accountability.

Australia's federal eGovernment strategy, introduced in 2002, is called "Better Services, Better Government." The key objectives of the strategy are to achieve greater efficiency and a return on investment, ensure convenient access to services and information,

deliver services that are responsive to client needs, integrate related services, build user trust and confidence and enhance closer citizen engagement.

Australia has evolved to a more federated approach to eGovernment, with each agency adopting more responsibility in relation to information and communications technology, and the shared leadership on cross-agency issues provided by interdepartmental committees and supported by a central agency, the National Office for the Information Economy (www.noie.gov.au).[4]

Because Australia has a federated approach, there is no central eGovernment action plan; rather, each agency is responsible for producing its own action plans and developing the most appropriate use of technology to fulfill its business strategy. Agencies develop their own online service strategies in accordance with government decisions and the overall outcomes and outputs of the budgetary framework.

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[4] The National Office for Information and Economy (NOIE) has been replaced by a new Australian Government Information Management Office (AGIMO), with that replacement taking effect April 8, 2004. Existing NOIE functions will be divided between AGIMO and the Department of Communications, Information Technology and the Arts. AGIMO will take control of IT and Internet projects applying across multiple agencies, and coordinate the use of IT within government. It will also provide strategic IT advice for government programs and services and manage online initiatives. The office will be headed by the Australian government chief information officer. It is too early to assess the impact of this change on the eGovernment policy or direction.

As a whole, Australia is demonstrating a strong drive to provide value through its eGovernment program. The emphasis of its Better Services, Better Government vision is on agencies establishing "business cases for investments in changes to their operational and business processes enabled by information and communications technology and the online environment." This ensures the value proposition for change is realized in implementation.

A number of innovations have emerged in response. For example, the Australian Tax Office designed the Tax Agent Portal in response to a strong desire from the accounting, business and finance sectors to be able to access an online self-service library of tax office products, services, tools and information concerning the tax system. The Tax Agent Portal currently has nearly 16,600 registrants, who conduct more than 20,000 log-ins and generate more than 745,000 page hits per week.

Much of the drive toward value comes as a result of the *E-government Benefits Study* published in April 2003 (www.noie.gov.au/projects/egovernment/ Better_Government/egovt_benefits_study.htm). The study was a survey of citizens, businesses and federal departments and agencies commissioned by the National Office for the Information Economy. It looked at the demand for eGovernment, measured the benefits of eGovernment and determined the return on investment for government.

Australia has a very high Internet penetration rate, at 77 percent of the population. Additionally, our own citizen survey showed it to be among the top three countries in which regular Internet users have actually used a government website. Yet, use is primarily confined to looking for published information. Australia has a mature online government program, with many rich and mature transactional services, but it may be that its federated approach has led to suboptimal use. In fact, one of the key criticisms in the *E-government Benefits Study* was that government agencies and departments need to lose their silo mentality and provide outcome-focused services that transcend agency boundaries.

Our own research showed that the top reason Australians did not use the Internet more frequently for government services was because it was difficult to find the correct website. Currently, 19 portals comprise the government's customer-focused portals

framework. There are two whole-of-government online entry points, www.australia.gov and www.fed.gov.au. Perhaps in response to the criticism and to the low take-up of its services, one of the proposed enhancements to Australia's eGovernment program is merging the two entry sites.

Other barriers to effective transactional/interactive use of government websites by citizens are the lack of a common identifier, limiting integration across agencies, and the perceived inconvenience of the security approach (that is, digital certificates). Individuals typically conduct infrequent, lower-risk transactions that do not necessarily warrant a full digital certificate-based approach (until that approach is more effectively supported by commercial products).

While there is a challenge for Australia to enable transactions that traverse state and federal boundaries, perhaps a greater challenge is the removal of boundaries within solutions. Australia must turn more attention toward integrating the technologies with the operational process and business reform needed to truly drive value, both to government and to citizens, from having an electronic presence.

Another key outcome of the *E-government Benefits Study* was the development of demand and value assessment methodologies. These provide a consistent framework for measuring the social and financial benefit/cost ratio and strategic alignment for existing and proposed government online programs. The framework will allow business managers to assess the intrinsic worth of government online programs provided as components of their overall service-delivery strategies.

Australia has a strong eGovernment history and a current focus on deriving value from its online investments. However, it also has a population that is not taking advantage of the offerings already in existence. The devolution of responsibility, while leading to greater eGovernment agility, has also led to confusion for the user. The government now has the challenge of building interoperability across these fragmented services to provide a meaningful experience for its customers. The stakes are high—Australia's Internet-savvy population holds tremendous potential for greater take-up—and hence, for the government to deliver an overall program of better service more cost-effectively.

Belgium

Belgium is part of a large cluster of countries whose scores are so close that even improvements of just a few percentage points can mean gains or losses of several places in the rankings. Belgium has spent the past year consolidating its eGovernment achievements and putting essential enablers in place that will facilitate growth in the near future.

After the federal elections in May 2003, Peter Vanvelthoven was appointed state secretary for eGovernment, deputy to the minister for the Budget and Public Enterprise. In this newly created role, Mr. Vanvelthoven is building on the eGovernment vision expressed by Minister Van Den Bossche in April 2002. At that time, Minister Van Den Bossche restated the country's commitment to eGovernment and its priorities: first to get the back office processes right and then to roll out new services to citizens. The government is convinced that automation and reengineering of the back office will be good for all citizens, even those who do not wish to interact with government online.

Mr. Vanvelthoven presented his eGovernment action plan in November 2003. There are 17 priorities for 2004 through 2005, including improving accessibility for blind users, data mining to combat fraud, initiating eGovernment awards to spur innovation, and improving and expanding the tax filing service, electronic birth registration and e-procurement.

This year, Belgium seems to be channeling its efforts toward enhancing its eGovernment enablers, setting the stage for even greater progress in customer-facing initiatives in the future.

For example, the country has successfully launched a unique identification card for businesses and organizations. The Kruispuntbank Ondernemingen (Crossroads Bank for Enterprises) allocates each company a single unique identification number. The creation of the Crossroads Bank for Enterprises means each company deals with only one point of contact to complete all formal processes in setting up a business; each company has a single number for all its governmental contacts (as opposed to more than 70 types of identification numbers in the past); and each company has to provide its entire basic identification data to the government only once, not repeatedly to different government bodies. From the government's perspective, the initiative allows more than 3,000 government agencies and intermediaries to gain access to and update company information using a Web interface.

The country is also hard at work on implementing a national electronic identification card for citizens. It has already delivered 37,000 electronic identification cards and an additional 82,000 cards are expected to be delivered within a very short time. The government plans to have all citizens supplied with a card by the time of the next federal elections in 2007. The citizen's card makes it possible for citizens to have online access to their files with government; request documents online (e.g., birth certificate); and exchange information with government and other parties in a secure way. Furthermore, a number of new applications will be possible.

Belgium's strong performance in 2003 reflected the country's efforts in developing customer-focused services. Then, the launch of the country's first superportal coincided with a strong overall improvement in customer relationship management that gave the country a big boost in the rankings. This year, although the focus was primarily on building eGovernment enablers, the country also had several customer-facing successes worth noting.

Specifically, the Belgian portal, www.belgium.be, launched a number of useful services. It introduced a service called Web DIV that allows citizens to order their license plates online. In another example, citizens can now declare their income online and calculate their tax returns via tax-on-web (https://www.belgium.be/taxonweb/app/page/public/). In its first year of offering tax filing online, the Belgian government received 57,000 electronic declarations of taxes (or about 2 percent of the total).

The government also launched eCommunities through the portal. This application has been accessible to civil servants since April 2003. The aim of eCommunities is to enable communication, cooperation, and knowledge management and sharing within cross-departmental networks of expertise. System functionality includes document management, simple and advanced search capabilities, content management, and joint working tools. The first eCommunities have been initiated by departments dealing with horizontal issues (such as personnel and organization, information and communications technology, budget and audit) and they currently include approximately 1,000 members.

The portal also provided online results for the election on May 18, 2003, in a one-day eDemocracy event.

One point missing from Belgium's current set of priorities is improving take-up of eGovernment services among the country's citizens. Last year we emphasized that Belgium has a significant challenge in increasing take-up among citizens. We found little evidence this year to suggest that the Belgian government is actively encouraging citizens to use its services. Governmental efforts seem more inclined toward simply getting people to use the Internet. In this regard, Belgium is having success. For example, the government has recently promoted the use of broadband and as a result, the country now has very high ISDN and broadband take-up. Again, this is seen as an enabler for eGovernment.

Still, Belgium has only a moderate level of regular Internet users—about 41 percent of the population. More significantly, about half of these regular Internet users have rarely or never visited a government website. Younger users, who have a higher Internet use, are even less likely to use eGovernment than older ones. This segment should be building their eGovernment habits now. Therefore, encouraging trial will continue to be key.

Our citizen survey also shows that the regular Internet users would prefer transacting with the government via the Internet (as opposed to via phone, mail or in person), if given the choice. Additionally, when citizens are using the services they are generally reporting a good experience. For example, the most popular transactional service, tax filing, rated well. In its first year of availability, the government received 2 percent of total declarations this way. Those who did so in our survey were positive about the experience. The potential is significant.

As Belgium looks ahead to the future of its public administration, it must focus more attention on promoting usage among its citizens. Fewer than half of those who use the Internet on a regular basis think their government is doing a good or excellent job developing its online government resources. Take-up is still the issue. The government is right in that it must work to get more of its general population online. However, the potential value to be gained in increased customer satisfaction, operational efficiency and cost savings is too great for promoting online services to be deferred until the future.

Brazil

Brazil had no change in its overall ranking, the result of improvement of less than 2 percent in overall maturity. The modest improvement can be attributed for the most part to the lack of new investments and low prioritization of information technology during the first year of the new government, whose main priorities have been social programs.

The new president, Mr. Luis Ignacio Lula da Silva, was elected with a very determined focus on a social transformation agenda comprising social security, tax, legal, economic and administrative reforms. Programs such as Fome Zero (hunger and poverty combat) have been prioritized. On the other hand, investments in information technology have been cut or drastically reduced to reach tight fiscal goals, leading to a considerable impact on eGovernment development.

Consequently, a number of Brazil's scores for this year reflect the deferred eGovernment focus. Brazil scored below the average in terms of services that improved in depth to either an interact level or a transact level. Additionally, a number of countries overtook Brazil in overall customer relationship management score, one of the country's strengths in 2002.

Last year's lull notwithstanding, Brazil seems poised for marked activity over the coming year. A new head of eGovernment was appointed in January 2003: José Dirceu de Oliveira e Silva, minister chief of staff of the Brazilian presidency, will be responsible for implementing the Brazilian eGovernment vision. Additionally, an eGovernment Executive Committee was created by presidential decree on October 18, 2003. This committee is responsible for formulating policies, establishing directives, and planning, coordinating and developing information and communications technology. It also drives interoperability between government agencies and public-sector reform through information technology.

The government officials' eGovernment strategy for the next three-year period has been confirmed, but has not yet been released officially. There are high expectations about the revamp of the program, however, mainly from the information technology community, based on the creation of the eGovernment Committee and the reestablishment of the Technical Chambers, which were created to address specific information technology issues in the eGovernment program. The eGovernment Chamber responsible for issuing policies related to telecommunications infra-structure is preparing to release defined directives for 2004 through 2006, as well as the action plan for 2004.

Among the expected announcements is the defini-tion of a policy that will govern the eGovernment network common to all federal administration, the Infovia Br@sil. The Infovia will be a high-speed network that will supply government with a cost-effective environment, greater uptime, high capacity and, most important, greater reliability to benefit all government-generated applications. The creation of the Infovia is perceived as the solution to some of the Technical Chambers' greatest challenges: to end the fragmentation and the high cost of voice and data networks, and to establish norms and policies aimed at integrating the many existing government networks (voice, data and image). It is expected that by 2006 all infrastructure policy will be implemented and institutionalized, including the technical norms for the creation and implementation of new networks.

Other government priorities include implementing an open-source policy to be used by all government agencies and implementing telecenters, where gov-ernment services will be available via kiosks and telephone, with support available to citizens.

The government transition—combined with cost-containment measures and administration priorities on basic social programs—has meant that the Brazilian government did not demonstrate a great deal of progress in its eGovernment program this year. As the new government gains traction and expands its focus areas, there is great expectation that government will once again invest in—and reignite—its eGovernment initiatives in 2004.

Canada

Canada's eGovernment program continues to set the standard for the rest of the world. The country ranked number one for the fourth year in a row and, in fact, increased its lead over its closest challengers, Singapore and the United States. Canada was once again the leader across all categories of eGovernment maturity—service breadth, service depth and customer relationship management.

Canada's vision and eGovernment action plan essentially have not changed since first articulated. The government's goal is to connect better with citizens and its strategy is twofold: to have the most commonly used services online by 2005, with a 10 percent increase in citizen satisfaction by 2005.

Looking at Canada's performance over the past few years, it is clear to see why the country consistently scores so high—and why, in fact, it continues to experience growth year after year.

As in many other countries, Canada's vision of eGovernment is predicated on the idea of customer centricity and a whole-of-government approach. The government considers eGovernment as an enabler for transforming service delivery to reap operational efficiencies and better results for Canadians. Unlike many countries, however, Canada's eGovernment action plan is built on a remarkably solid foundation of fact—based on known information from its customer base.

Canada's program of regularly surveying citizens and businesses for indications of attitudes and needs appears to be the most extensive of any of the countries in this leadership survey. The country uses a broad range of mechanisms. For example, from 2002 to 2003, more than 10,000 Canadians participated in surveys and focus groups conducted by the government on eGovernment and service transformation. Through the Institute for Citizen-Centred Services, the federal government, nine provincial and territorial governments, and five municipal governments recently sponsored a third round of Citizens First research with a representative sample of 9,000 Canadians. Canadian government research covers multiple angles—taking the form of online surveys, usability interviews, focus groups and one-on-one qualitative interviews.

Building on this solid base of information, Canada has developed visions for service to Canadians, service to business and for international services to guide future transformation initiatives. The

government is now undertaking a series of "catalytic" projects that will likely provide the most value and help move the transformation agenda forward. Canada also regularly scrutinizes its overall progress with a comprehensive set of performance management tools. This approach has allowed Canada to enhance its existing online offerings and build truly innovative new services that customers want or need.

For example, the country's portal, www.canada.gc.ca, saw a number of enhancements to the main site and to each of the client-centered gateways. The Canada site's main page was redesigned, incorporating changes such as making the language more accessible to users of all literacy levels, presenting a more consistent organizational structure and providing more efficient site navigation. All of these modifications were validated by focus group testing.

One of the more interesting eGovernment developments was in the country's wireless portal (http://canada.gc.ca/mobile/wireless_e.html). This evolving pilot project is designed to provide users with quick and easy access to contact information, e-mail and in-person service points from their mobile Internet-enabled device. The wireless portal complements the existing service channels; information accessible through the wireless portal is already available on the Canada site, through 1 800 O-Canada or at Service Canada Access Centres. Aside from providing contact information, the wireless portal provides access to information on border wait times, government news and economic indicators. While the wireless portal is still in its early stages, its growth has been phenomenal: it experienced 900 percent more activity in 2003 than in 2002, partly due to the addition of four new services. New services and information are planned for rollout over the course of the next few months. As with all of Canada's Government On-line initiatives, criteria for including services on the wireless portal have been developed based on public opinion research, usability testing and research of industry standards.

The Canadian government has made concerted efforts in marketing to increase eGovernment service take-up, and it seems to realize value in doing so. To promote www.canada.gc.ca, the government used a number of traditional marketing techniques in 2003.

Take-up of online services is increasing steadily. Results from one of Canada's own surveys showed that more than 70 percent of Canadian Internet users had visited a Government of Canada website at least once in 2002—up from 61 percent in 2000.[5] Accenture's citizen survey showed that eight in 10 Canadian Internet users have used an eGovernment site—and that 22 percent say they do so regularly.

Looking ahead, Canadian government CIO Michelle d'Auray has identified two of the largest challenges as adequately addressing citizens' security and privacy concerns and delivering real interoperability. The government has taken steps to meet these challenges. For example, in 2003 it launched epass, an authentication component of its Secure Channel initiative. A number of online services already require epass, with more planned in 2004.

Regarding interoperability, the Canadian government has already demonstrated through its ability to deliver high-functioning clusters of services that its governance model is working. Yet, high-performance eGovernment implies ease of access and seamlessness across levels of government, with a very quick response time. The technical aspects of integration at this scale will prove a real challenge even to Canada's thoughtfully executed program.

Canada is approaching the highest levels of eGovernment maturity. It will now need to decide whether it is going to pursue incremental change or adopt a more dramatic approach to accelerate service transformation. To accomplish dramatic transformational change, the government should consider laying out a revised plan for the next stages of its transformation agenda. It will need to garner the right level of political support for the transformation, review and fine-tune the governance model to solidify whole-of-government approaches and determine how the funding can be provided so as to sustain the transformation. Finally, to gauge the ultimate success of the transformation, the Canadian government will need to establish a strong link between service transformation and the achievement of its goals and outcomes. Service transformation will be considered a success if it can be shown that it leads to a better client experience and to better, more efficient government operations.

[5] Erin Research Inc., *Citizens First 3* (2003)

Denmark

Denmark remained in fourth place in the rankings this year, joined by Australia, Finland and Sweden. It made little measurable progress in overall maturity, with its score improving by less than 1 percent. The country's strong starting point has enabled it to hold onto its position in the top 10. However, Denmark's relative lack of new or improved services has allowed Australia and Finland to catch up to it.

There were no noteworthy changes to Denmark's eGovernment vision or leadership during the past year. Project eGovernment (www.e.gov.dk), first developed in 2001 and expected to run until 2004, has been extended to 2006. The guiding principle behind Project eGovernment is that the responsibility for implementing eGovernment should be decentralized, but that in some instances there may be a need for common guidelines and solutions to general problems of a legal, technical and organizational nature. Accordingly, financing for Project eGovernment is shared among national, regional and municipal authorities.

While little changed in Denmark's eGovernment program last year, the Digital Taskforce (which, along with the Ministries of Finance and Science, Technology and Innovation, has responsibility for implementing the national eGovernment vision) released a new eGovernment strategy in February 2004. This new strategy has a greater focus on return on investment and tangible eGovernment benefits. Additional changes may come as a result of a number of recent eGovernment surveys conducted on behalf of Danish government agencies that do not show clear, measurable benefits from existing eGovernment programs.

While eGovernment progress in Denmark was slower than in years past, a number of new initiatives were launched in 2003. While these projects are not directly related to delivering services, they are important fundamentals that should allow the country to improve service delivery in the future. In February 2003, the Danish government appointed telecommunications company TDC to deliver the

basic technology for digital signatures to government organizations and the public. Through the scheme, all Danish citizens can download a free software-based digital signature, providing sufficient security for most public-sector and private-sector transactions. The objective is to increase take-up and usage of digital signatures by the public and government organizations. By January 2004, 68,000 citizens had installed and activated their digital signatures. Additionally, a juvenile signature has been created for citizens between the ages of 15 and 18, to further increase take-up.

In March 2003, the long-anticipated XML InfostructureBase was launched, supporting the development of XML document exchange across the government and between the government and businesses.

The eDay Initiative began in September 2003. Under eDay, all public authorities in central and local government are allowed to demand from each other that all nonsensitive written communication be sent electronically. eDay is expected to save the public sector €25 million each year. The Danish government will likely launch an eDay II in 2004, giving citizens and businesses the right to demand that digital signatures be accepted as legitimate identification in their electronic communications with public authorities.

Aside from putting these eGovernment foundations in place, Denmark also launched one *de facto* eGovernment service last year that is worth noting. In late 2003, the Danish government introduced www.virk.dk, a new enterprise portal created by a collaborative effort among the public authorities that regulate enterprises in Denmark. This project is one of the first examples of a private company running a service for the government. Virk.dk has approximately 10,000 weekly visitors.

More innovations are expected in 2004. For example, Denmark will pilot Internet voting in the next elections for the European parliament, in June 2004. The pilot will involve 15,000 Danish voters in the town of Ishoj, near Copenhagen. The trial, which aims at increasing voter participation, was organized by the local council in cooperation with the European Parliament office in Denmark. To overcome security concerns, Internet voting will be voluntary, and voters will also have to visit a real ballot box to cast their actual votes.

Denmark's progress slowed in 2003—not as a result of any mistakes, but from what we have seen to be a common slow-down after a period of rapid development. Denmark seems to have reached a plateau. Taking the next step in maturity will require a reevaluation of objectives and a resulting change in approach. Denmark is already taking the first step of reassessing its eGovernment goals. Now it will need to develop a corresponding action plan that improves its service depth and customer relationship management maturity and encourages more people to use eGovernment services.

Finland

Finland continues to make steady progress toward the top of the eGovernment rankings. This year, it improved its position by two places—moving into the top five rankings. Overall maturity improved by 5 percent and the country showed modest improvement in all areas. Its strong existing eGovernment foundation means that even slight increases are enough to keep the country ahead of challengers with a considerable gap to close.

Finland has had a new cabinet since the summer of 2003, and part of the cabinet's responsibilities is the new Information Society Policy Programme. The newly appointed prime minister, Matti Vanhanen, is the head of this program, which includes eGovernment. He is assisted by the program director, Ms. Katrina Harjuhahto-Madetoja, who came to the newly created position with a background as a chief information officer in the private sector.

Along with the change in eGovernment leadership came a change in the eGovernment vision. The new vision does not seem materially different from the previous one; rather, it is more a restatement of core eGovernment values—most especially, a focus on the citizen. A new eGovernment action plan was

also released in September 2003, with an emphasis on improving access to, and customer-friendliness of, online services and improving interoperability across levels of government. Specific projects are mentioned, including defining and introducing network services in public administration, further developing the Finnish portal, www.suomi.fi, and marketing it more effectively, and supporting regional information society pilot projects.

As the Information Society Programme is new, no progress measurements are yet available. However, the program will be monitored annually by the government using metrics drawn up nationally and by the European Union. It is expected that new performance measures under the Information Society Programme will make some of the measures used in the past obsolete.

While each government office is responsible for developing its own online services, the Ministry of Finance has set up a project to define the quality criteria for eGovernment services. The expected completion date is April 2004. The project's purpose is to determine areas for evaluation and to define scoring. The end goal is to use the evaluation

techniques to highlight concrete areas for improvement, particularly with regard to the end user's point of view. As part of this project, best practice services will be rewarded and details will be shared with other services.

Finland has a number of innovative services that could act as a model for others. The TV-Fee Administration of the Finnish Communications Regulatory Authority (FICORA), www.ficora.fi/suomi, launched consumer-oriented electronic invoicing in 2003. The government agency is collaborating with a private-sector entity to enable all Finnish families that have a TV and an Internet bank account to receive their TV license fee invoices electronically. This is the first Finnish agency to launch a complete electronic bill presentment and payment scheme.

The Finnish Communications Regulatory Authority is also the sponsor of a new service for domain name registration (https://domain.ficora.fi). Registration took more than a week to complete when done manually. When the new system became operational in September 2003, the processing time was cut to just a few minutes. Domain names are now operational within one hour of being granted. Consequently, take-up of the service has exploded. Approximately 23,000 new domain applications were submitted during the first week of the service, 17,000 of which came during the first 16 hours. Before the launch, the total number of .fi domain names was approximately 42,000.

The joint service Työeläke.fi (www.tyoelake.fi) of Pension Insurance Companies and the Finnish Centre for Pensions was launched in December 2002. This Web service allows citizens to check their personal employment records to verify whether the data regarding all pension-accruing employment (both public- and private-sector) are correct. It requires authentication through public key infrastructure with a FineID card, electronic social security card or online banking authentication. The innovative service has already received international recognition, having been chosen as a finalist in an international eGovernment competition.

While Finland's eGovernment development is scattered across different agencies, the country does offer three separate portals targeted to different end users. Senaattori is the government's intranet information

directory, which provides access to internal and external government and parliament information. The citizen-focused portal is Suomi.fi (www.suomi.fi). Yritys-Suomi (Enterprise Finland), www.yrityssuomi.fi (or in English, www.enterprisefinland.fi), is the portal for small and medium companies to interact with government.

However, although there are several portals in Finland, they presently lack depth. The user is soon redirected to Web pages of individual organizations that have no cross-organizational coordination. The portals themselves do not contain e-services.

In the future, Suomi.fi, Lomake.fi (Finnish public online forms service), Otakantaa.fi (government discussion forum for citizens) and Asiointiopas.fi (guide to online services for citizens) will be developed into a truly integrated site family. However, this transition will likely take several years, unless a more comprehensive development approach is taken.

To build confidence in its maturing eGovernment program, the Finnish government launched a new National Information Security Strategy. The strategy combines the perspectives of the government, trade, industry, organizations and private citizens into common information security objectives, offering guidelines and measures for improving information security and privacy protection. It is one of the first strategies internationally that concerns information security in the whole society. The strategy coincides with new laws regulating electronic signatures and privacy in public administration.

Finland has proven itself both an innovator and a steady performer across its eGovernment services. The missing piece of its program has been integration and interoperability through fully functional portals. Planned enhancements to Suomi.fi may improve this aspect of eGovernment. However, for Finland to keep pace with other eGovernment leaders, these enhancements must be more than cosmetic. They must enhance the customer-friendliness of government outlined in its newly devised eGovernment action plan. Agencies are just now starting to develop targeted, integrated and truly customer-focused, end-to-end services. The country will need to continue down this path to dramatically change the way services are provided, from both the citizens' and the agencies' perspectives.

France

France made a marked advance in the 2004 rankings, moving from 12th to eighth place. This improvement results from steady progress in various areas, reflected by the country's increases in both its overall service maturity (10 percent increase) and customer relationship management maturity (15 percent increase) scores.

French eGovernment now covers a large scope of services that reach a high level of maturity. The gateway to the French administration, www.service-public.fr, has become a benchmark, hosting 2 million visits a month by October 2003. Individual agencies are enjoying notable successes as well. For example, the Ministry for the Economy, Finance and Industry received more than 600,000 income tax return forms filed online in 2003—five times more than in 2002. In the health area, the SESAM-Vitale system enables health professionals to create and forward electronic forms directly to the patient's public health insurance center, thanks to 50 million "cartes Vitale" distributed to French citizens. In December 2003, approximately 176,000 health professionals used the system and, on average, 16.5 million electronic forms were received each week—20 percent more than in December 2002.

The government developed the functionality of its main portals and added customer relationship management services on different channels. In November 2003, the former secretary of state for the State Reform launched "Allo Service Public," which provides information and guidance on public services and administrative procedures through a single national telephone number (3939). As a result of its successful pilot, the service will be extended to the entire country during 2004. Welfare services were developed, such as www.anpe.fr, where the unemployed can check job advertisements, submit their curricula vitae and receive offers. They also can update their employment situation monthly on www.assedic.fr.

Other new online services were provided to French citizens, such as www.amendes.gouv.fr to pay fines online. In the education area, candidates can now apply to preparatory classes online at www.admission-prepas.org. Online voting has been successfully tested with the Conseil Supérieur des Français de l'Etranger election, and several French cities will use kiosk voting for the next European Union election in June 2004.

In January 2004, the French Government unveiled a new strategy and action plan for 2004 to 2007, called ADELE (ADministration ELEctronique). The program aims at driving progressive and consistent development of services to better serve citizens, businesses and public servants in a coherent and coordinated way. ADELE constitutes the framework of eGovernment initiatives in different areas such as technical infrastructure, interoperability standards, security, smart cards, training programs and partnerships. The program defines both qualitative and quantitative objectives and allocates €1.8 billion to 140 initiatives, including major programs such as COPERNIC (renewed tax account systems), ACCORD (a modernized state financial system), "Allo Service Public," SESAM-Vitale, and the electronic national identification card that will be developed and launched in 2006.

The government aims at achieving €5 billion to €7 billion in productivity gains per year from 2007 through these and other initiatives. The newly created Agency for the Development of the Electronic Administration coordinates the development of the action plan in close cooperation with ministries, local authorities, and representatives from medical and social institutions, industries, unions and users. Annual assessments of the implementation are planned, as well as citizen satisfaction surveys.

Although increasing, Internet penetration remains low in France, at less than 30 percent. Among the 12 countries surveyed for citizens' attitudes, France has the second lowest regular Internet usage, just ahead of Spain, far below Sweden (80 percent regular users), the United States (66 percent) and the United Kingdom (53 percent).

However, a high proportion of regular Internet users have used eGovernment, with one person in three doing so regularly. Looking for information is the primary usage of eGovernment sites in France, but nearly 30 percent of the visits relate to conducting transactions. Most French users appear to appreciate the advantages of eGovernment; the Internet is the preferred method to communicate with government for 49 percent of them.

Driving up usage of the Internet in general and of eGovernment in particular are top priorities for France to derive real value from the program. In 2003, the French government created an interministries delegation dedicated to develop Internet usage. The broadband expansion, gathering 3.5 million subscribers by the end of 2003 (out of 21 million Internet access subscribers) may pave the way to further progress.

Other challenges are on the horizon. France appears ahead in many areas where innovation is taking place, but needs to move to a new phase of broader service implementation with an integrated technical architecture and higher usage. The complexity of the French administration (combining national, regional, district and local-city levels) naturally results in numerous sites that need to be coordinated to offer coherent services. Providing integrated eGovernment services is a challenge, particularly as competencies get redefined in the context of a decentralization process. It requires strong coordination among different levels of administration and creates some obvious complexity. Some cross-cutting projects are currently being tested (for example, the Ministry of Education is collaborating with some regions to set up a platform for services for schools). The results will have to be assessed to determine whether the program answers users' needs and articulates what national and regional competencies are needed.

A citizen-centric approach should drive transformation within the administration, which will require process reengineering and change management. The administration will need to set up the appropriate conditions of interoperability between agencies' back offices to mask the organizational complexity and get the highest profit from e-enabling paper-based exchanges. It will also need to respect fundamental principles, such as equal treatment of all citizens and confidentiality of personal data. This phase of reengineering is a key issue and an essential condition for adding new high-value services to citizens. Tackling this problem will require increased communication to convert the public agents and the citizens to these new practices.

In a strong eGovernment position thanks to the results the country has achieved to date and a firm government will to modernize the French administration, France appears ready to face its future eGovernment challenges. Beyond its national responsibilities, France is involved in constructing the European Union electronic administration and international projects bound to the governance of the Internet. The ability to face the challenges of its ambitions is now crucial to establish France as a leader in eGovernment.

Germany

2004:	14
2003 Rank:	10
2002 Rank:	9
Vision introduced:	1999
Vision title:	BundOnline 2005

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

Regular Internet users (percent of population):
39.40 percent

Regular Internet users who have ever visited an eGovernment site: 47 percent

Germany

The government of Germany made little measurable progress on its eGovernment vision this year, which caused the country to slip four places in the rankings. As with a number of other countries in this large cluster of 50 percent to 60 percent overall maturity, Germany lost ground to countries that had eGovernment performances only slightly better than its own. Despite the fact that a few German eGovernment services improved to a transact level, the country's overall maturity score improved by less than 2 percent. The only area Germany showed real improvement was in customer relationship management, where its performance improved by close to 17 percent. Even with that improvement, however, the country remains in the bottom half of the customer relationship management rankings.

As happened last year when it slipped one place in the rankings, Germany's modest advances have allowed it to be overtaken by faster-moving countries, such as France, the Netherlands and Japan.

In July 2003, the management of the German eGovernment initiative, BundOnline 2005, was transferred out of the Ministry of Inner Affairs and is now centralized in the Bundesverwaltungsamt (Federal Office for Administration). This may indicate that the eGovernment program has lost its top rank on the political agenda.

In past years the national BundOnline 2005 vision focused on making federal government services available online, despite the fact that in Germany the most significant services for citizens and businesses are provided primarily by state and, especially, municipal governments. In consequence, BundOnline 2005 has now been augmented with a "Deutschland-Online" vision (www.deutschland-online.de), which seeks to integrate portals, provide infrastructure and set standards across all levels of government. Based on the principle "Einige für alle" (some for all), transferable best-of-breed solutions for the most significant services shall be developed by leading

state and local governments and then rolled out across the country. This approach stresses the importance of synergies for eGovernment in a federal state. There are more than 7,000 government portals and sites in Germany across all layers of the federal system, as well as hundreds of different software solutions for the various online services. To avoid duplicating effort and to save costs, Deutschland-Online wants to capitalize on the experience of the BundOnline 2005 initiative.

The BundOnline 2005 program itself has been refreshed through a new action plan, *Masterplan for Information Society 2006,* which was released in December 2003. The specific near-term eGovernment goals include implementing at least 50 percent of all Deutschland-Online goals, implementing e-procurement for all federal bids by 2005 and implementing an online form management system in 2004 and 2005.

Despite Germany's slow advance in 2003, selected German services made noticeable improvements. For example, the Federal Insurance Office receives insurance companies' applications for federal subsidies to private pension plans online and processes them in an integrated electronic workflow. To protect the sensitive personal information within the transactions, data is encrypted and access is restricted to registered users.

Germany continues to measure progress primarily by the number of services put online. The secretary of state, Gottrik Wewer, stated that at the end of the calendar year 2003, 268 services would be available online. As of October 2003, 232 out of 440 federal services were available. Major effort has been put into improving the online information available to the public, while in many cases the challenge of moving complex transactions online is being left to the last phase of the BundOnline 2005 program. In addition to measuring progress by comparing action against plan, citizen surveys asking about service usability and user friendliness have been implemented on the Bund portal, www.bund.de.

The eGovernment discussion in Germany is often dominated by the call for security, legal certainty, and data privacy, which are largely believed to be achievable only through the use of smart card–based digital certificates. If more pragmatic approaches are not feasible, such smart cards will be key to the availability of transactional eGovernment services in Germany. Within the government program Information Society 2006, smart cards will play a central role going forward. The government plans to give job cards containing employee data to 40 million employees in 2004. A total of 70 million health cards is expected to be distributed by 2006 and a digital passport is planned for 2008. All of these cards incorporate a digital signature for security. Their rollout to the public may have the potential to push Germany back into the front line of eGovernment innovators.

Germany has strong foundations in eGovernment, but for the past two years has done little to build upon them. Additionally, while the country has improved its focus on customer relationship management (a historically weak area), it still has more room for improvement in its customer focus. The development of the Deutschland-Online program may lead to a greater level of integration and interoperability across all levels of government that reignites the country's momentum toward greater eGovernment maturity.

Ireland	
2004 Rank:	11 (joint)
2003 Rank:	11
2002 Rank:	10
Vision introduced:	2002
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. Its eGovernment objective is 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 e-business in the private sector.

Regular Internet users (percent of population):
50.46 percent

Regular Internet users who have ever visited an eGovernment site: 60 percent

Ireland

Ireland has reached a plateau of eGovernment maturity in the same way as the majority of countries in our research this year, particularly in terms of service breadth, depth and customer relationship management. This may be due in part to a refocusing of eGovernment efforts to develop enablers that should boost Ireland's eGovernment growth in the coming years.

While the Irish government's vision for eGovernment has not changed since its introduction in 2002, the government is aware of what steps it needs to take to move forward. In November 2003, the Irish Information Society Commission called for a re-orientation of the country's eGovernment strategy in its report, *eGovernment: More than an Automation of Government Services* (www.isc.ie/about/reports.html). The report emphasizes that government must look beyond putting services online to how information and communications technologies can improve overall public-sector performance. The report describes what it means to be a truly high-performance government in the online arena: using eGovernment as one,

albeit important, tool to deliver high-value government services more efficiently and cost-effectively.

The Information Society Commission's recommendations touch on a number of themes covered in this leadership report, such as the need for a more balanced approach to eGovernment based on value and the importance of interoperability. As such, the commission advises that eGovernment be closely aligned with overall public reform to improve services, processes and policies. Additionally, it states that Ireland must revisit its original target of putting all services online by 2005 with a clearer focus on measurable benefits. This is an important point as to date, Ireland does not have a method of measuring the tangible benefits of eGovernment. The report also states that the eGovernment program must incorporate a variety of channels to accommodate the needs and preferences of all citizens and businesses.

Ireland recently completed a crucial step in building an enabling infrastructure. The Reach Agency (www.reach.ie), a cross-departmental team of civil servants, has come to the end of its procurement

process for the implementation of the Public Services Broker. The Public Services Broker will be an electronic one-stop shop where the public can access and apply for a wide range of state services and benefits. It is at the heart of the new connected public service, and its implementation will signal the beginning of delivering new integrated eGovernment services in Ireland. In developing the enabling infrastructure, the Reach Agency also developed an inter-agency messaging service to support the electronic exchange of customer data among agencies in the public service. The first service launched is the exchange of birth registration data between the General Register Office, the Department of Social and Family Affairs and the Central Statistics Office. This service will soon be extended to support the capture and dissemination of death and marriage notification data among a wider range of agencies.

As the government makes further progress, it intends to publish its performance against the action plan online through regular progress reports. The most recent report shows considerable progress in some areas. For example, all local authorities have upgraded their systems to support the online planning application and development control process. The eTenders site (http://etenders.gov.ie) has been extremely successful to date, as have a number of other innovative services.

Another example is the Irish Revenue Online Service, www.ros.ie. When launching new services, the Office of the Revenue Commissioners has focused on encouraging intermediaries, such as tax agents, to avail themselves of its online filing application. The strategy is paying off. According to the Revenue Commissioners, the total number of transactions on the site has tripled from 2002 to 2003, with 40 percent of income tax and 17 percent of all revenue relating to business taxes paid through the Revenue Online Service last year. Payments through the system since it was launched in September 2000 total €13.5 billion.

 A new service for farmers was also launched in 2003. The iMap system developed by the Department of Agriculture and Food supports more than €1 billion in annual European Union agricultural subsidy payments. Farmers now have online access to this system, which provides them with detailed information on their applications for the past several years and allows them to view and print up-to-date maps and aerial photography of their land.

Other new services launched by the Irish government since the beginning of 2004 will be worth watching. In early February, the Minister for the Environment, Heritage and Local Government launched a service called Motor Tax On-line (www.motortax.ie) that makes it possible for Irish citizens to renew their motor tax 24 hours a day, seven days a week using the Internet. Before, the service was only offered in person at a local government level. To use the new service, all that is needed is a credit or debit card, Internet access and a unique PIN number that will be mailed with the renewal notice. After the online transaction is completed, the new tax disk will be mailed, in most cases, by the following day. The government hopes a substantial portion of the more than €720m likely to be collected in motor tax this year will come over the Internet.

Results from our citizen survey indicate Ireland has work to do in promoting take-up of its online services among citizens. Approximately 50 percent of the population in Ireland are regular Internet users, yet only 60 percent of these have ever even visited a government website. The country's low take-up of its sophisticated online services points to a real need for increased marketing.

While Ireland's eGovernment maturity has leveled off somewhat over the past two years, it is now once again poised for strong growth. Most crucially, it has re-charted its eGovernment path. The new emphasis on greater interoperability and planned implementation of broader measurement criteria to assess eGovernment benefits should deliver significant value for the citizen in coming years.

Italy

Italy's pace of eGovernment progress has slowed down and consequently, the country slipped one place in this year's rankings. Overall maturity improved 5 percent (slightly below the average across countries of 6 percent), compared to a 14 percent improvement from 2002 to 2003. Italy did make modest improvements across the board, but these were not enough to allow it to gain ground. The country was particularly impacted by its poor performance in service depth and in customer relationship management maturity.

As reflected by its scores, there have been no changes in Italy's eGovernment vision or action plan since 2003. The eGovernment team has simply reinstated its original vision, first articulated in 2000. However, a reference document for the second stage of eGovernment development in central and local government was presented in July 2003 at the European eGovernment Conference. The government's current high-level targets include reforming public administration to make it more responsive to the needs of users (individual citizens or businesses),

providing modern services and creating public value while ensuring ease of access and interaction. These objectives will build off a modern enabling infrastructure that ensures services are provided securely and efficiently. The reference document lists the critical components of this infrastructure: a single point of access to a set of high-quality services, secure methods of digital identification, multiple access channels, efficient and low-cost back-office operations, interoperability and cooperation among agencies, and a communications network across all government agencies.

The focus on building interoperability and cooperation is particularly interesting. The Italian public administration has been moving to a model of devolution to reduce the size of government and simplify administrative processes. The transition is under way so that most services are provided at the local, rather than the national, level. The current existing portals reflect the necessity of cooperation. For example, the citizen portal, www.italia.gov.it, while focused on citizens' needs, primarily redirects citizens

to some 3,000 public administration sites that are providing the majority of services. The Italian government recognizes the need for improvement in its portal and the role different levels of government will play. In fact, the Italian Ministry for Innovation and Technologies emphasizes that for future portal enhancements, these disparate agencies must remain involved (www.innovazione.gov.it/eng/egovernment/infrastrutture/portale.shtml).

While eGovernment efforts primarily are directed through local authorities, the central government does gather and disseminate information related to successful practices from central, regional, provincial and municipal offices. The BuoniEsempi website, www.buoniesempi.it, includes brief descriptions of the projects, as well as supporting documentation and useful guides. It also contains job offers for those interested in working and training with the local authorities that carried out the projects. BuoniEsempi.it is an initiative of the Department of the Public Administration and Formez (a public-sector professional training institute), and was developed as part of the new "Cantieri" program for promoting innovation in public administrations.

The Italian government focused significant attention on issues of security and data privacy in 2003. Most notably, it developed the new personal data protection code, which went into effect on January 1, 2004. This code brings together the many fragmented updates and amendments to Italy's existing framework for personal data protection, Law 675/1996. While many of the rules remain the same, the new code simplifies them and introduces several innovations aligned with the European Directive 2000/58 regarding privacy and the Internet. Its work in developing the code has been done in conjunction with preparations for setting up a single unique identifier (not yet available to the citizen) and testing of an electronic identification card and a national services card.

The Italian government is also undertaking a number of new initiatives to encourage take-up of its eGovernment services. These initiatives focus primarily on increasing access—an important priority for a country with the relatively low Internet penetration of 31 percent.

The "Vola con Internet" (Fly with the Internet) project, sponsored by the Minister for Information and Technology (www.innovazione.gov.it) provides incentives for the use of the Internet among young people. The initiative is backed through funding approved by a 2003 financial amendment that provides all teenagers born in 1987 with a subsidy of €175 if they decide to buy a computer with Internet access. The Italian Ministry for Innovation and Technologies has also launched a political and legislative antidiscrimination strategy to ensure people with disabilities have the right of access to the services and information distributed through the Internet. To this end, the ministry introduced a bill on the accessibility requirements for all the Italian public administration websites.

Italy continues to make modest eGovernment improvements, but seems to lack the focused strategy and action plan needed to bring together the many, far-flung online elements of its public administration. As its governmental reform continues to progress, the country will need to develop a detailed model of eGovernment collaboration that will lead to a truly seamless and enhanced service experience for its customers.

Japan

Japan moved up four places in the rankings in 2004, driven by strong improvement in its service maturity and customer relationship management maturity scores. This jump follows a two-place advancement in the rankings last year and is evidence of Japan's determined push to become a world-leading eGovernment player. Some of the most noticeable improvements came in the areas of pensions and environmental regulations. Japan's concerted efforts over the past year in developing its service breadth and depth led it to a fourth-place ranking in service maturity alone.

It has been two and a half years since the eJapan Strategy was first unveiled. During this time, the government, with the Strategic Headquarters for the Promotion of an Advanced Information and Telecommunications Network Society and the private sector, has made significant efforts to work together to bring about Japan's information technology revolution. Consequently, the government has one of the highest service breadth scores in our survey. Japan is now ready for the next phase of its eGovernment program. In July 2003, the government adopted its "E-government Construction Plan"

(www.e-gov.go.jp/doc/scheme/html), which documented strategic priorities and action plans until the end of 2005.

This plan is built on fundamental principles of high-performing eGovernment programs: citizen-oriented service, simple and cost-effective government, administration reform to reflect digitization and building an environment that makes eGovernment a reality. A number of specific projects are outlined, including merging common services into a single gateway, upgrading high-cost legacy systems and developing an eGovernment user support center by 2005.

To prepare for its new eGovernment initiatives, Japan established managerial-level advisory positions and filled them with private-sector technology experts to build the IT Strategy Council. Prime Minister Junichiro Koizumi continues to be responsible for implementing the country's eGovernment vision and is now supported by this council. The experts check whether ministries and agencies are making full use of information technology capabilities and provide advice on electronic security.

Under Japan's new eGovernment action plan the existing eGovernment portal, www.e-gov.go.jp, is scheduled to be revamped with a more user-centric focus. As it exists now, the portal offers several different agency-focused search types and links to government websites. However, the changes are already beginning to take place. As part of an enhancement in January 2004, guidance and navigation for online applications for administrative processes moved to a user-intention-based organization. This first step will now be extended across other government information and services. By 2005, the government plans to have the portal provide services in a more convenient, intelligible way, with a focus on quality rather than quantity. There is explicit reference to "one-stop" services for both citizens and businesses.

While the central portal itself is not fully customer centric, Japan has a number of innovative, customer-friendly services worth noting. The multipayment network was developed through cooperation between the public and private sectors and launched in January 2004. Through the Pay-easy service of this network system, citizens and businesses will be able to pay fees or taxes to government within a secure environment. e-Tax (www.e-tax.nta.go.jp) is the first big service that will use this system and the number of governmental services accepting Pay-easy will increase in the future.

The Sogyo Navi (Starting Business Navigator) portal, www.sogyo-navi.jp/index.html, is a one-stop shop for users to obtain information about starting a business. Sogyo Navi was developed to examine the feasibility of a one-stop process for applications and transactions enabled by cooperation between the public and private sectors, and to explore the best ways to develop a user-focused portal. The portal was developed with collaboration between the national government and the private sector, led by the Ministry of Economy, Trade and Industry. Online filing will be operational in the future.

The importance of protecting personal information has increased along with the popularity of IT in Japan. In 2003, the Diet passed a personal data protection law to establish basic requirements for handling personal information, the responsibilities of national and local government agencies and the obligations of private companies. The law will be enforced within two years.

To encourage adoption of eGovernment, the Japanese government has instituted an annual Systemized Administration Week every October. The events promote eGovernment to the public, increase employee motivation and bring together different government organizations in an opportunity to collaborate. Typical activities during the week include broadcasting commercials, holding seminars and symposiums, gathering citizen feedback and awarding prizes for promoting eGovernment.

While Japan has intensified its efforts and made significant advances both in developing its customer focus and promoting eGovernment adoption, it has room for further improvement still. Japan ranked 19 out of 22 countries in customer relationship management maturity this year. Looking ahead to the rest of 2004 and beyond, if Japan develops its customer focus with the same concerted effort it used to build its strong eGovernment breadth and depth, then the country will be positioned for even more significant advances in its overall maturity.

Malaysia

2004 Rank:	17
2003 Rank:	18
2002 Rank:	20
Vision introduced:	1997
Vision title:	Electronic Government

Vision summary:
The vision of Electronic Government is a vision for the people in government, businesses and citizenry to work together for the benefit of Malaysia and all its citizens. The vision of Electronic Government will be realized when, through the use of information and communications technology and multimedia, government agencies can become more efficient and effective in delivering their services to the public.

Regular Internet users (percent of population):
8.81 percent

Malaysia

Malaysia improved by one place in the 2004 rankings. For the second year in a row, the country continued to beat the average improvement in overall maturity. Its improvement in overall maturity of 13 percent was approximately double the average. The country also beat the average in terms of improving the service levels of existing services and at adding services at a high level of depth. Six services moved from either a publish level or interact level to a transact level, and three new transact-level services were introduced. The modest ranking improvement is a product of Malaysia starting from a point of needing to play catch-up.

Malaysia's most significant strides came in the area of customer relationship management and it is likely to continue to progress rapidly. The country just released its new myGov pilot portal, www.gov.my/MyGov/Home. The new portal is based on user intentions, in contrast to the old government-centric portal. This prototype portal initially will focus on providing information and services relevant to citizens, with topics arranged in categories such as life

stages. The first government-to-citizen phase of the portal will go live in early 2004, with items to serve business and government users to be added later. Currently, the government is also building the Bahasa Melayu (local language) version of the portal.

The government's vision for eGovernment was developed in 1997 and has not changed since. While the vision remains the same, however, the government has updated its action plan, which it released in the summer of 2003. Some of the planned actions include developing the citizen portal, business portal and government-to-employee portal; implementing a key performance indicator system to increase back-office cohesiveness; capturing data across the government and establishing a single, high-bandwidth government backbone.

Additionally, the government has set a number of aggressive eGovernment policy targets for 2005, including having 80 percent of all amenable government services electronically enabled, providing Internet access to all government knowledge

workers and implementing at least four major cross-agency information and communications technology initiatives.

Malaysia's focus on eGovernment has already led to some innovative eGovernment services. MyKad continues to be the flagship application. The national smart card incorporates a host of government and private-sector applications in a single card. Current applications include use as a national identification card, driver's license, toll payment device and ATM card, among others.

Malaysia has successfully implemented the Malaysian Smart School Pilot Project, another high-profile application within Malaysia's Multimedia Super Corridor project. The project's intent is to transform the Malaysian education system into a highly advanced technology-based process that will revolutionize the way students learn, think and act. This reform required five technology-enabled components—a Smart School management system, teaching-learning materials, systems integration, technology infrastructure and support services. Though implemented for only just over a year, the Smart School project has already had impressive achievements, including the production of approximately 1,500 courseware titles, a first-ever integrated Smart School management system for Malaysian schools and the establishment of 87 Malaysian Smart Schools.

In the area of ubiquitous government, young people who want to know if they have been selected for the country's national service program can find out through the short messaging service, using their identity card number or name, and get a reply within seconds. Besides national service, citizens also have the options to use short messaging service for voter's confirmation, police summonses and other services.

While the Malaysian government does not seem to be actively promoting its services to increase take-up, it is taking measures to foster an environment conducive to electronic business. For example, it is taking steps to protect privacy and to provide legal certainty for electronic transactions. Various new laws are currently being considered, including the

Personal Data Protection Act, whose basic tenet is that no personal information will be used other than for what it was originally intended. This act is expected to go before parliament in 2004.

To promote ePerolehan (www.ePerolehan.com), the government's electronic procurement system, Malaysia is taking a hard-line approach. In January of 2003, the Ministry of Finance issued a directive to all 35,000 government suppliers nationwide to be ePerolehan-enabled or risk losing out on government-related business opportunities.

The country continues to assess its performance based on public complaints, surveys and short polls at the end of transactions, as well as by requiring service providers to provide statistics on transactions. These results, however, are not made public.

Moving forward, Malaysia still has considerable ground to cover to become a recognized eGovernment leader. However, the expected launch of the operational eCitizen portal in 2004 should propel the government ahead considerably. With support from the prime minister, Malaysia can expect more efficient public services via its "cut the red tape" initiatives. If Malaysia sustains maturity gains like it has over the past two years, the country could be poised for impressive eGovernment advancement in a short time.

Mexico

In 2004, Mexico remained in 19th place in the rankings. After its radical jump of four places in our last report, 2003 was marked by more moderate, but consistent, eGovernment progress. Overall maturity improved by 7 percent, which was slightly above average, compared to last year, when it made a significant jump due to an increase in overall maturity of 17 percent (largely the result of the launch of its citizen portal in late 2002). Some evidence suggests that Mexico has made the most of its short-term initiatives and is now in a state of formulation—developing longer-term initiatives with future potential impact.

The country's eGovernment program is part of a larger e-Mexico National Program (www.e-mexico.gob.mx). The e-Mexico program is a series of initiatives with the intention of developing the country's information and communications technology industry, fostering an internal market for this industry's products, promoting an adequate regulatory framework for the use of electronic media and e-commerce, and digitizing government services. The focus of the e-Mexico National program itself has changed

dramatically over the past year, switching from a 70 percent to 80 percent focus on connectivity in 2002 to a 5 percent focus on connectivity and a 95 percent focus on content in 2003.

The government's current priorities with regard to eGovernment are to identify the needs of each Mexican region and build the infrastructure that will fully support electronic services. The first phase of the e-Mexico program focused on providing applications and connectivity to municipal governments. The second phase will connect the citizenry through public access digital community centers. In June 2003, President Vicente Fox inaugurated the first satellite network of e-Mexico, connecting for the first time all the municipalities with 3,200 digital community centers. It is expected that in the coming year, the last stage of this crucial satellite network will be completed.

Leaders of the e-Mexico program believe that by 2025, as many as 98 percent of Mexican citizens will have Internet access through 10,000 digital community centers, located in such places as

schools, libraries and hospitals. This is a critical component of successful take-up of eGovernment, as Mexico currently has a very low Internet penetration of approximately 10 percent. Once a critical mass of citizens has access to the Internet, the government hopes they will make extensive use of the applications and network services planned for the third phase, from 2006 and beyond.

To build its eGovernment program, the Mexican government continues to work extensively with the private sector. For example, the e-Mexico connectivity program has been financed by the federal, state and municipal governments, as well as the private sector—including a number of major technology players, such as Microsoft, Hewlett-Packard and SAP.

The country already has some innovative practices in place with more in development. For example, most reports and publications available at Bancomext (www.bancomext.gob.mx) can be downloaded online. Others that must be purchased are available through the Centro de Información Digital Virtual Store. A user can purchase copies of printed publications and reports related to foreign trade, with an online help tool provided so direct contact with an agent is instantly available during certain hours.

The Servicio de Administración Tributaria, www.sat.gob.mx, is rolling out a new service for businesses. Users that obtain a digital certificate will soon be able to use the certificate for electronic invoices through the service.

The government is taking active steps to promote the use of its developing eGovernment program. The creation of the digital community centers—Internet connectivity to basic services related to education, health, the economy and government—is most notable. A more specific example is the government's encouragement of tax payment via the Internet and the banks. The government is publicizing this new service by different media, such as newspapers and television.

To measure the success of its initiatives, Mexico is developing a new project management system that will contain metrics, key performance indicators and a scorecard to facilitate follow-up on the e-Mexico

program. Currently, three modules have been completed, with the entire system expected to be finished after the first quarter of 2004.

Although Mexico made average progress in 2004, its past performance indicates a strong commitment to eGovernment growth. The country continues to put the foundations—most critically, widespread citizen access—in place. The outstanding question for its eGovernment program is whether the country can capitalize on its significant investments in infrastructure improvements and regain the momentum of past years.

The Netherlands

The Netherlands moved up four places in 2004, with a significant improvement in its overall maturity score of 12 percent. This improvement is especially important, as the country had slipped in the rankings for the last two years. The Netherlands is now clearly seeing the benefits of initiatives started in past years. The country did well across all categories, posting above-average improvements in its service breadth, depth and customer relationship management scores. Four services moved from a publish level or interact level to a transact level and 10 services moved from publish to interact. Eight new services were added, a contributing factor to the country's strong improvement in service breadth score.

The government's 15 percent improvement in customer relationship management score was driven largely by some significant enhancements to its portal, www.overheid.nl, made last year. The most notable improvements include the ability to purchase a mix of 2,500 public- and private-sector products and services online, an improved search engine that allows users to search among the more than 1,200 existing government websites and a youth-focused page. The newly enhanced site went online in March 2003.

In addition to the new services that were brought online in 2003, a number of other truly innovative, customer-focused initiatives also surfaced last year. For example, in the field of public transportation, the implementation of the OV-chip was started (www.translink.nl), which will enable customers to pay electronically on all trains, buses, subways and tramways based on actual traveled distance. Following a successful implementation in Hong Kong, the Netherlands will be one the first countries in the world to offer such services.

In the Netherlands, more than one ministry is implementing the eGovernment vision. In fact, most ministries undertake eGovernment initiatives, with each setting its own strategy and direction. Every ministry has its own budget for eGovernment and tries to manage its own eGovernment planning. The three key agents in implementing the overall eGovernment vision are the ministers of Interior

and Kingdom Affairs, Economic Affairs and Finance.

In the first quarter of 2004, the government presented its Federal ICT (Information and Communications Technology) Agenda, focused on more effective and efficient use of information and communications technology in the Netherlands. This report describes multiple qualitative goals, as well as existing and future projects to reach those goals. Although this renewal of the vision concerning eGovernment shows commitment from the Dutch government, there was no mention of centralized budgets for the projects mentioned in the Federal ICT Agenda.

Despite the lack of centralized budgets, the Federal ICT Agenda reports that the Dutch government aims for 65 percent of total public services to be available online in 2007, as well as the vast majority of public tenders to be handled electronically before the end of 2005.

To measure progress against its action plan, the Netherlands is using several methods, including surveys, online panels and usability testing. Each ministry (as well as other governmental institutions) conducts its own research into progress. The country's decentralized approach to implementing and measuring eGovernment may have hindered the country's progress in the past. However, the government is making an effort to collect the disparate sources of information and house the content on one central website, http://advies.overheid.nl/index.jsp. Having this information available in one place should facilitate identifying opportunities for improvement. The Overheid.nl Monitor looks at five aspects of eGovernment quality: user friendliness, general information, administrative information, services and potential for participation.

The country also ranks its own performance, compared to other leading countries, in five information and communications technology areas through its "ICT toets." Results from its most recent tests showed that Dutch businesses score highest in their use of customer relationship management software in comparison to businesses in other countries. Five percent of the country's national product is spent on information and communications technology, which makes it fourth behind the United Kingdom, the United States and Sweden. According to the ICT toets, the Netherlands is one of the countries most active in preventing cyber crimes.

As part of its efforts to increase citizen take-up of services, the Netherlands held numerous marketing campaigns (www.postbus51.nl) to promote its eGovernment availability in 2003. Belastingdienst (how to file taxes electronically through CD-ROM), Nationale Ombudsman (where to file complaints about governmental services), Provinciale Staten Verkiezingen 2003 (where to find online information about the elections) and Paspoort (where to find information about what to do about a lost passport) were the notable campaigns. The government also held a number of conferences and hosted several award programs to promote eGovernment. Additionally, the Ministry of Interior set up a website to obtain feedback from individuals and organizations about eGovernment services and needs of the "electronic civilian," at www.burger.overheid.nl.

As it encourages take-up, the Netherlands is taking the issue of privacy and Internet security seriously. In the coming year, the government intends to introduce a single unique identifier within a public key infrastructure for electronic interaction with the government. In the future, all Dutch citizens and business will have their own smart card, containing electronic certificates for identification, signature and encryption. The Federal ICT Agenda sets 2008 as a deadline for implementation of this card to keep up with the European information and communications technology agenda. The government also has established the Computer Emergency Response Team-Rijks Overheid to provide trustworthy and real-time information about viruses and other damaging software to public organizations.

The Netherlands has taken serious steps to improve its eGovernment program over the past year. While its decentralized approach may be impeding progress, its customer focus, interest in performance measurement and emphasis on building private and secure electronic transactions are strong foundations for securing its top-10 position in future rankings.

Norway

Norway made moderate progress this year, moving one place in the overall rankings to a joint 15th ranking with Spain. It posted an 8 percent improvement in overall maturity from 2003 to 2004, which is notable given that it made less than a 1 percent improvement in overall maturity from 2002 to 2003. Norway had a large improvement in its customer relationship management score, with more than 14 percent improvement. The renewed focus on customer relationship management was evident in its changes in service levels. Five services jumped from a publish level to a transact level; 12 jumped from publish to interact.

The eNorway vision was originally articulated in June 2000 by the then Minister for Trade and Industry, Grete Knudsen. The present government has recently launched its updated strategy for the use of information and communications technology in the public sector, *Strategy for ICT in the Public Sector: Strategy 2003-2005* (http://odin.dep.no/ aad/engelsk/publ/rapporter/002061-990027/ index-dok000-b-n-a.html).

While the country's ranking has improved, the Norwegian government is not content to rest on its past successes. The updated strategy document discusses areas of needed improvement, including: underdeveloped and uncoordinated user services; interagency boundaries that restrict data interchange; underdeveloped cost-benefit assessments; gaps in security and public confidence; poor exchange of information and communications technology experience, competence building and innovation; and insufficient managerial competence in information and communications technology. The more in-depth Norwegian eGovernment action plan (www.enorge.org/ modules/module_109/publisher_ view_product.asp?iEntityId=1104), which was created in April 2002, details more specific eGovernment targets and flagship projects to meet them. The projects cover a broad range of eGovernment necessities, including drawing up requirements for electronic signatures, developing and disseminating guidance material for raising IT security awareness, stimulating the development of broadband and removing obstacles to electronic

reporting and the exchange of personal information between government agencies. This action plan is being supplemented by status reports twice a year.

Based on its most recent status report, *e-Norway: Status Report June 2003,* Norway is progressing well in some areas and more slowly in others. For example, the introduction of broadband seems to be progressing well, with 65 percent of the Norwegian population able to access the broadband network by the summer of 2003. On the other hand, the introduction of electronic signatures as part of a public key infrastructure is going more slowly than planned.

The slow progress in this area will likely be remedied soon, as the government has made an agreement with 13 vendors to establish common standards for a public key infrastructure. The 13 vendors involved will each contribute NKr200,000 or deliver an equivalent value of work to the project. The agreement will ensure that available public key infrastructure solutions will be able to interact. The goal is that by the end of 2005, Norwegian citizens will need only one digital signature to make secure transactions.

The government is enhancing the security of its online transactions in other ways as well. In May 2003 the government approved its National Strategy for Information Security, consisting of a prioritized list of measures to be implemented in the next two to three years for protecting critical infrastructure and systems, introducing a culture of security in Norwegian enterprises and preparing the way for the coordinated development and enforcement of a body of regulations concerning IT security.

As the government builds a more secure infrastructure, take-up is likely to be increased. Norwegians have extremely good access to the Internet, and use it actively. The country's Internet penetration rate is already one of the highest in this research. To close disparities in usage, Norway has taken a number of innovative steps. For example, Seniornett Norway is a program aimed at a target group of people aged 60 and over. The goal is to develop appropriate Internet training courses for seniors, among whom Internet usage is far less widespread. One initiative, an annual SeniorSurf Day, functions as a local

grapevine—allowing senior citizens to find out about the Internet and how they can make best use of the facilities in places such as Internet cafes.

The public is showing an increasing tendency to prefer the telephone and Internet as the means of contacting the government. The government is reacting to this trend with new service offerings. For example, the Brønnøysund Register Centre, a government body under the Norwegian Ministry of Trade and Industry, has introduced a new short messaging service, in which it is possible to check liabilities on a used car before buying it. The registration number of the car is sent to the Brønnøysund Register Center. After a few seconds, a reply tells whether there are any outstanding loans or other liabilities on the car.

The government has also actively promoted the use of electronic channels through traditional and untraditional means. In the area of electronic tax filing, advertising campaigns were conducted on TV to promote the service availability. A new service for approving tax returns via short messaging service was accompanied by money prizes totaling NKr20,000. As a result, 191,000 citizens approved their tax return via short messaging service in 2003. In all, a total of 1.1 million citizens approved their tax returns electronically in 2003—a 20 percent increase over 2002.

Norway's intensified focus on customer relationship management led the way for an upsurge in its eGovernment maturity this year. It made some savvy moves—branching services out to alternative channels based on an assessment of its citizens' preferences—and already is reaping the benefits. Its biggest challenges lie in completing its secure public key infrastructure and in overcoming barriers at all levels of government, where culture, tradition and physical infrastructure still impede true interagency cooperation.

Portugal

In 2004, Portugal made no movement in the rankings, remaining in 20th place. For the second year in a row, it showed very modest overall maturity improvement (approximately 4 percent) and scored below the average across all categories—service breadth, depth and customer relationship management. Only two services moved from publish or interact level to transact level and no new services were added at the transact level.

Much of the problem with Portugal's slow eGovernment advancement stems from a history of development marked by fragmented information across hundreds of websites, which led to gaps in relevant information and services. Portugal's eGovernment program is showing strong signs of reinvigoration, however.

The first ideas for a new eGovernment vision were presented in November 2002. This new vision focuses on efficient and quality public service, supported by rational technology solutions. The new vision represents Portugal's shift to a more balanced approach to eGovernment: one that emphasizes that eGovernment is a means to an end and not an end unto itself. The main goals of eGovernment in Portugal are to increase the convenience and satisfaction of citizens, provide more efficiency with lower costs, increase transparency of the state mechanism, increase the democratic participation of all citizens, promote the development of the information and knowledge society and achieve international recognition of the quality of Portuguese eGovernment, thereby stirring national pride. The minister responsible for implementing this new eGovernment vision is Deputy Prime Minister José Luís Arnaut. The same resolution that gave him this responsibility also created a Unidade de Missão Inovação e Conhecimento (Unit for Innovation and Knowledge), which forms part of the prime minister's office and is in charge of driving the information society and eGovernment policies.

A new eGovernment action plan to support this vision was approved and published in the summer of 2003. It outlines seven action points and a number of eGovernment initiatives. Chief among these are enabling public-sector electronic purchases, creating a portal for public administration, promoting inter-operability, rationalizing communication costs and developing a new citizen portal.

Besides several portals of a vertical nature, Portugal currently has two distinct cross-government portals. Infocid, www.infocid.pt, provides a limited set of services (being mostly informative). The second portal, the Government Portal, www.portugal.gov.pt, is organized around government agency structures. It contains published information about the government and is less citizen focused than Infocid.

The Portuguese government launched a new eGovernment citizens' portal in March 2004. This new "Portal do Cidadão" (www.portaldocidadao.pt/umic/pt) has increased interactive and transactional capabilities. The government's aim was to launch with approximately 50 to 100 interactive services, growing to all feasible services online at a transactional level by 2006. Although the portal is beginning with "fixed Internet" capabilities only, it is slated to accommodate multiple access channels over time. The portal may also adapt a voluntary identification and authentication model as an alternative to a single unique identifier (and the potential associated privacy concerns).

To accomplish its new eGovernment objectives, Portugal will likely rely heavily on partnerships with the private sector. In its call for interoperability, the action plan specifies that there should be an inter-operable and integrated platform that permits the connectivity not only among central, regional and local public administration portals, but also with the private sector and other European institutions. Collaboration will be necessary for technical expertise and for funding. In fact, the Unidade de Missão Inovação e Conhecimento has already established protocols for cooperation with private-sector companies.

Although Portugal made only modest overall eGovernment improvement during the past year, a number of services performed exceptionally well. Declarações Electrónicas, the revenue declarations site (www.e-financas.gov.pt) grew at an impressive rate, more than doubling its number of registered users and adding a number of additional services, such as customs declarations.

Looking ahead, a number of programs related to culture, education, public administration and other specific sectors are under way. It is also important to emphasize one of the most significant initiatives of Unidade de Missão Inovação e Conhecimento, an ambitious program to foster broadband dissemination, which may have dramatic impact on the country's currently low Internet penetration rate.

According to the Portuguese eGovernment strategy, the development of eGovernment services is ultimately meant to generate positive impact across the country. The critical foundation of a strategy and action plan is in place. Portugal's next hurdle is to overcome a fragmented eGovernment history and to allow the planned initiatives to take hold and build momentum.

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

Regular Internet users (percent of population):
48.17 percent

Regular Internet users who have ever visited an eGovernment site: 79 percent

Singapore

Singapore once again proved its eGovernment prowess, maintaining its number two position (joint with the United States) in the rankings for the fourth year in a row. While it made only modest improvements in the breadth and depth of its services (which are already among the most mature of all the countries surveyed), its customer relationship management score improved by 19 percent. Nine of its services improved from a publish level or interact level to a transact level.

Singapore updated its eGovernment action plan in 2003, setting five new strategic priorities and outlining six new programs to carry the country forward to 2006. Singapore's action plan intends to achieve three outcomes: delighted customers, connected citizens and networked government. It emphasizes being both proactive and responsive. It also stresses exploiting the strong eGovernment foundations put in place between 2000 and 2003 and translating them into real benefit for individuals and businesses (www.egov.gov.sg/egovt_action_planII.htm).

To achieve these goals, the government plans to invest S$1.3 billion over the next three years to upgrade infrastructure, develop capabilities and further improve electronic public services. The Infocomm Development Authority of Singapore (www.ida.gov.sg) also intends to invest S$30 million annually to seed pilots and trials that will develop capabilities in mobile services, Web services and portals, wired and wireless network infrastructure and other promising areas.

The effect of these investments should be well worth monitoring, given Singapore's proven track record for delivering effective online services to its customers. The year 2003 was no exception, with a number of noteworthy innovations.

The .NetMySingapore initiative is a strategic partnership between the Infocomm Development Authority of Singapore, Microsoft and NTUC Income for exploring opportunities created by Web services technology. Through this partnership, government

services are being made available via private-sector intermediaries through NTUC Income's Big Trumpet portal (www.bigtrumpet.com.sg). For example, under the MyTravel section, an individual can search for a tour package, buy travel insurance and apply for an exit permit from the Ministry of Defense—all at the same website.

Singapore, which has been a leader in using mobile technology for eGovernment applications, continued its push in this area by introducing a large number of innovative services. For example, employers with 10 employees or fewer can now submit their Central Provident Fund contributions through mobile phones (http://www.cpf.gov.sg/cpf_info/ mpal.asp). They can track the submission status, as well as retrieve their record of payment. Citizens also can view their fund accounts via their mobile phones. The National Library Board (www.nlb.gov.sg) introduced a service where library users can check their library account, renew their books, pay their library fees and fines, and even receive reminder alerts of their loans via short messaging service.

Because the Singaporean government has put almost all of its feasible e-services online, the next rational step is to promote them. Some of the incentives to get customers to change their behaviors from traditional mode to the online world include differentiated pricing, faster turnaround time and high-quality e-services. For example, it costs S$10 less to apply for a passport online. Online applications for telecommunications dealer class licences cost 20 percent less than applications through the non-electronic mode.

The government's efforts to provide valuable online services and encourage their adoption clearly are leading to high citizen satisfaction and impressive take-up. The government's own research reveals that 75 percent of Singaporeans who need to transact with the government do so through electronic means and that for those who transact online, four out of five were satisfied (http://app.mof.gov.sg/ pressrelease/speechdetails.asp?speechID=87). The country's eCitizen portal, www.ecitizen.gov.sg, which received some updates in 2003, averages about

4.2 million hits a month. An enhanced eCitizen site was launched in December 2003 that specifically caters to customers' online behaviors and preferences. Prior versions allowed for only two ways to access services: via search engine and through 16 different subject categories. Additional and more streamlined access paths are expected by March 2004, including My.eCitizen, a personal home page that allows customers to pick and choose e-services relevant to their particular life situation.

While Singapore continues to be a world leader, over the past two years there has been evidence that the country was reaching a plateau of eGovernment maturity and needed to take a fresh approach. The new action plan for 2003 to 2006 demonstrates that the Singaporean government is now ready to take definitive steps to move to a new stage of online service provision. The government's citizen-centered focus, its willingness to reengineer offline processes for an online world and its smart approach of building on its considerable past investments, may have put the country on the brink of a far more significant gain on world-leading Canada during the next year.

South Africa

South Africa remained in 22nd place this year, having made little improvement in any of the categories of eGovernment maturity. Overall, its maturity improved by a modest 5 percent, with its greatest improvement coming in the area of customer relationship management (9 percent improvement). Its service depth score, in contrast, improved by only 2 percent.

Under the current vision and action plan, the eGovernment strategy is set to be implemented in six phases over a 10-year horizon. The government considers the first two phases to be complete. A new version of South Africa's eGovernment vision is due shortly, which is expected to involve the establishment of a single point of access to government services any time, any place and by any means. However, there have been no indications that there will be any changes in the action plan as already outlined in the horizon plan.

While the South African government currently does have a central government website, www.gov.za, it is not a portal in the true sense. The top priorities for 2004 will be to launch a new, true eGovernment portal and to reorganize service delivery in government into "one-stop shops" that will build off this new portal. The new portal, called the eGovernment Gateway, is expected to be launched in March 2004 with government-wide information and some transactional capability.

As the new government portal gains traction, there should be coinciding new methods of evaluating progress. The current basis for determining the value of any eGovernment project focuses on whether the project will increase productivity, lower costs and/or improve citizen convenience. These principles will still apply, but the South African government will look to put in place more tangible measures after the new portal is launched. Individual government agencies are already using more complex methods of performance measurement. The South African Revenue Service (under the Department of Finance), for example, is actively tracking hits on its online tax site (www.efiling.gov.za) and the monetary value of taxes paid, as well as the number of returns processed electronically.

To develop its eGovernment program, the government has expressed an interest in partnering with the private sector.

The Deeds Office has recently issued a tender to the private sector (though not on a public-private partnership basis), for services that will digitize all of its existing deeds into an electronic document management system and introduce a process for digitizing all future deeds. Once this exercise is complete, the Deeds Office will have the necessary base to offer services to its customers online.

The South African government also seems highly amenable to promoting eGovernment services for use by intermediaries, such as the post office network, the banking sector, community-based organizations and other private-sector organizations. In fact, the government's stated intentions are to pursue such partnerships in all practicable situations.

As the government works to build a more mature eGovernment program, it is concurrently working on promoting take-up through a number of means. Individual agencies are promoting their services with incentives. For example, the government's revenue agency changed its business model for online filing to a free service and is also attracting users by extending the payment deadline and processing returns more quickly. The service saw an almost 10-fold growth in just five months, due primarily to these new incentives.

Currently, eGovernment service adoption is hampered by the fact that very few South Africans have access to a computer. Internet penetration is currently less than 9 percent. The government is trying to bridge the digital divide through various initiatives, sometimes in conjunction with the private sector. For example, the Centre for Public Service Innovation is leading a project where the government portal is used by officials who act as intermediaries. Through "Multipurpose Community Centres," multiple government services are delivered in one location—in essence, providing one-stop service. Multipurpose Community Centres are defined as centers that have at least six government departments offering services to people who live nearby. They also typically have an information technology center for access to additional services such as those offered by non-governmental organizations and the business sector. Multipurpose Community Centres are viewed as the primary vehicle for implementing development communication and information programs, as they can serve as a base from which a wide range of services and products can reach communities.

South Africa has also implemented the PiT project, which delivers access to services such as e-mail, e-business directory, government services and information, educational services and Internet browsing capabilities via kiosks, and which is seen as complementary to the Multipurpose Community Centres initiative.

The City of Cape Town embarked on a Smart City strategy with the aim of empowering every citizen with technology-driven services. To enable this strategy, the city initiated a number of programs, of which the enterprise resource planning implementation program was one of the most significant. The City of Cape Town now seems well positioned for further initiatives to make the strategy a reality.

In a move that may stimulate business use of eGovernment, the Independent Electoral Commission has implemented an Internet-based eProcurement solution, with which the commission is streamlining its procurement process and making the process fair and transparent. The system has both an Internet component (used by suppliers to register and bid on auctions) and an intranet component (used by the commission to maintain item specifications, manage auctions and approve suppliers). It has also been fully integrated with the Independent Electoral Commission's existing enterprise resource planning and workflow management systems.

With the significant usage of mobile technology in South Africa, many of the cellular service providers are working on services that can be provided via short messaging service and wireless access protocol. For example, the Independent Electoral Commission provides a service where voters can obtain voter registration information using a mobile phone.

While South Africa showed little progress in 2003, it seems poised for marked improvement in 2004. The most critical aspect will be to get the eGovernment Gateway operational, as a starting point for delivering on its vision of citizen-centered service delivery. The government's forays into wireless service are admirable and should be continued while additional alternatives are sought for at-home, fixed Internet eGovernment.

Spain

Spain	
2004 Rank:	15 (joint)
2003 Rank:	14
2002 Rank:	15
Vision introduced:	2003
Vision title:	Electronic Administration for Spain

Vision summary:
The Electronic Administration is a route to advance toward the development of better government, in which the technology is fundamentally a means and not an end in itself. The vision of the Electronic Administration for Spain must tend toward an integrated model, centered on the user.

Regular Internet users (percent of population):
17.54 percent

Regular Internet users who have ever visited an eGovernment site: 78 percent

Spain

Spain made moderate progress in 2003, but not enough to allow it to maintain its position in the rankings. It slipped one place to a joint-15th ranking with Norway, not so much because it stalled, but because other countries have moved ahead at a faster pace. The country introduced some new publish-level services and two services improved to a transact level, but with the large cluster of countries around the 50 percent to 60 percent overall maturity level, these improvements had little impact on the ranking.

The year 2003 was one of transition for the country, in which it reflected on what it had achieved and what it needed to change to be more effective. A new head of the country's eGovernment program was appointed in August, under the Ministry of Science and Technology, with responsibility for implementing the eGovernment recommendations of the España.es Initiative. España.es was initiated on the recommendation of a special commission in April 2003—the result of the country's decided determination to move ahead.

España.es outlines six areas of action, one of which is Administración.es (Electronic Administration). The associated action plan for implementing the

Electronic Administration is structured around four priorities, with a number of projects that will be carried out during the next four years. The four priorities include facilitating public access for users (through electronic ID cards and public and free Internet access points); promoting the development of services for users (payment via Internet, electronic services cards and perfecting the citizen portal); promoting the development of eEurope basic public electronic services; and providing support for the internal reorganization of public authorities. The new action plan has created a mechanism for monitoring progress and the Government Delegate Commission for Economic Affairs is responsible for reporting weekly to the Council of Ministers, via the management office set up in the Ministry of Science and Technology and in the Ministry of Public Administration.

During 2003, Spain made a number of changes to its existing portal, www.administración.es. This portal is organized into four categories: Ciudadano (focused on citizens), Empresa/Profesional (focused on enterprises), Organización Pública (focused on public employees) and a newly added Administración in Internet category, which contains government resources on the Internet. A new section for each

category is called "Cerca de Usted," which offers personalized information about services offered in nearby government office locations. The latest (second) iteration of the portal was launched in April 2003. In addition to the externally obvious upgrades, the new version incorporates XML. It has a new text-only version that is more accessible for people with disabilities and offers content in all of Spain's official languages: Spanish, Basque, Catalonian, Galician and Valencian. The site also now contains an International Portal in Spanish, French and English, specifically for foreign users.

Individual agencies have introduced new customer-friendly electronic services over the past year as well. For example, the Tax Agency (www.aeat.es) has added to its electronic services a seized property auctions service. Under this system, anyone who wishes to participate in an online auction may do so without having to be physically present at the location where the auction is taking place.

Another new service is telematics billing, which allows companies to present bills below €3,000 automatically in electronic format to the Tax Agency. Companies are obliged to present copies of their bills at the end of the fiscal year for their VAT returns and to save copies of their bills during a specific period of time to facilitate audits. Now companies may save these bills in digital/scanned format.

The Social Security Agency now allows companies to pay their workers' social security fees using private banking services, such as ATMs, phone banking and Internet banking. Until last March the service was only offered in person at bank branches.

In August 2003, the Ministry of Economy became the first organization of the Spanish central administration to have fully incorporated digital identification in its internal processes. All 2,860 Ministry employees now have fully functional digital identities in the form of smart cards. The department's 2,200 personal computers have been equipped with cryptographic card readers, enabling employees to access, fill and sign 40 electronic forms corresponding to internal administrative procedures, for greatly improved operational efficiency.

To fight fraud, the National Institute of Employment Service (www.inem.es) of the Social Security Agency now allows employees to consult the "Labour Life

Registry" from their computers to check if benefit-seekers are really unemployed. Additionally, the service developed Contrat@, a Web application that allows employers to submit employee contracts for new hires electronically and information about transitions from temporary to permanent status, contact extensions, and so on, as obliged by law. The system was released in April 2003 and reached 20 percent participation by September 2003.

A number of advances related to electronic voting have recently appeared. One is www.elecciones.mir.es, which allowed citizens to follow the results during the elections night. The website also offers practical information about election legislation, political parties registered in the Ministry of the Interior and a database with all the results of the elections that have been held in Spain since 1977.

Another eDemocracy innovation was Candidato2004.net, www.candidato2004.net. Its objective was to become an open forum for debate between candidates and citizens for the duration of the official campaign, which officially kicked off in February 2004. The website contents included the election platform of each party and details about candidates for each province. Once registered on the site, any citizen could post questions to any of the more than 2,000 candidates. The candidates received these questions in private and either posted a public answer on the website or rejected the queries. In such cases, the citizen received an e-mail with the reason for the rejection and an invitation to reformulate the query. Candidates from all major Spanish parties made a commitment to answer these citizens' queries in the shortest possible time.

eGovernment improvements such as these point to the potential for real innovation within Spain's public administration. The country may have faltered during the past year because of its focus on developing a new strategy and plan of action. Review of the plans shows an interest in customer-focused services and in building collaboration among different public authorities. The latter objective will be critical to accomplishing the former. Many public services are provided at the regional level. Now, the government has the considerable challenge of building the collaboration and interoperability needed to merge these separate efforts for a truly cohesive experience for the citizens.

Sweden

Sweden is a new addition to our research and debuts at an impressive number four (joint with Australia, Finland and Denmark), with an overall maturity of 58 percent. Its service breadth (92 percent), depth (65 percent) and customer relationship management maturity (54 percent) were all above average.

Gunnar Lund, the deputy minister for Finance, was given responsibility for public administration policy when he was appointed minister for International and Economic Affairs and Financial Markets in October 2002. Since then, he has made it clear that his priority in this area is to accelerate the development of the "24/7 Agency"—the Swedish vision of a public administration using information and communications technology to be able to deliver services 24 hours a day, seven days a week.

The 24/7 Agency concept was introduced in the action program "An Information Society for All," presented in 2000 by Prime Minister Göran Person and former Minister for Industry and Trade Björn Rosengren. This action program aimed to make Sweden the first country to become a true information society for the benefit of all its citizens.

The vision has been refined and updated since that time. Essentially, the Swedish government's goal is to provide access (irrespective of office hours and location); high-quality services and responses; openness to users' opinions and ideas on how to improve public administration; simple, fair rules; and optimal benefit to users through collaboration, continuous assessment and development of activities.

However, the Swedish model of government is very decentralized, with individual agencies enjoying great autonomy. As such, there is no central eGovernment action plan. While general eGovernment frameworks for the agencies are put in place by central government, agencies set their own targets and means of reaching those targets. Action plans, therefore, vary significantly among agencies.

Although there is no central action plan for eGovernment, the country's overall progress is measured by the Swedish Agency for Public Management, which conducts studies in this area. So far, studies by two different independent companies have been done annually. One, a Nielsen Netratings study monitoring user numbers and

behavior on eGovernment sites, will now be carried out quarterly (effective November 2003). Results from a Swedish government study showed that between February and April of 2003, close to two-thirds of all active Internet users in Sweden visited a website of a government agency or a local authority. It is important to note that while usage is measured, very little has been done within the Swedish government in terms of rating the content and maturity of public-sector websites.

The central government is also supporting the agencies and local governments by developing models that can be used for measuring tangible benefits of eGovernment if they choose to do so. This project will also provide guidance for apportioning funding contributions when agencies make joint investments in information technology infrastructure.

In October 2003, the government appointed a delegation of members from central and local government, the industry and academia to increase the cooperation between the public and private sectors in developing e-services for the public sector. The delegation is seen as the cornerstone of the government's plans to accelerate the development of online public services. Its main task will be to promote cooperation and provide visionary and innovative thinking, while focusing on concrete actions (including proposing funding arrangements for helping agencies and local authorities to implement the 24/7 Agency concept).

Simultaneously, the government presented an information technology political strategy group with the task of advising the government on how to create an information society that includes all citizens. This group also has members from the private sector and will report to the Ministry of Industry, Employment and Communications.

While eGovernment services are dispersed in Sweden, the central government has made some effort to bring access to these services into a central location. The Swedish portal, www.sverigedirekt.se, is not categorized by user intention, but rather by government organization. While there are plans to make the portal more intentions based, the Swedish Agency for Public Management wants to keep it as an orientation portal. There are no plans for making it the entry to the public sector for all citizens; the Swedish Agency for Public Management claims that portal usage is very low, as people tend to know

their agencies and authorities and thus go directly to these sources instead of using the central portal.

A number of individual services in Sweden are highly innovative. The Swedish National Market Board online service (www.ams.se) not only advertises vacancies but also allows job seekers to upload their curricula vitae. Potential employers can then match skills and competencies to their vacancies through a range of databases covering such specialist areas as education, art, photography and the performing arts.

A few interesting examples of short messaging service use in Sweden can be found in the City of Stockholm, which has piloted two such services that will be implemented on a wider scale. In one project, substitute home-helpers who take care of disabled people are contacted through group short messaging service. Previously, coordinators spent approximately two hours every morning calling possible substitutes for regular staff who were absent. Now, a group message is sent out to all persons in the substitute pool and those available usually call within 10 to 15 minutes. In another pilot, some schools in Stockholm regularly send a short messaging service message to parents whose child has skipped a class.

Promotion of eGovernment services in Sweden is very sparse. Interestingly, however, some studies indicate that Sweden has one of the highest usage levels of eGovernment globally. Our own citizen survey found that three out of four Swedish Internet users have visited an eGovernment website, with just under one in five doing so regularly. These numbers are significant. Sweden has a very high Internet penetration rate, which means a very large portion of the general population already has had some experience with eGovernment.

Sweden has one of the most different eGovernment programs of any of the 22 countries surveyed in this report. The noninterfering policy of its central government means that the program is highly decentralized; yet this does not seem to have posed many problems for the citizenry to date. Usage of government websites is still quite high. However, the government may be underestimating the potential of a well-designed user-centered portal. If more focus were spent on aggregating and enhancing services, more people might use the portal on a regular basis for an overall improved experience.

The United Kingdom

The United Kingdom made limited progress in its eGovernment program last year, which caused it to slip one place in the rankings to a joint ninth-place position with the Netherlands. The United Kingdom is among the large group of countries with maturity between 50 percent and 60 percent; consequently, its slower eGovernment progress allowed it to be overtaken by one of its close-ranking neighbors, France.

While overall the services we surveyed for this report changed little, the UK government offered some notable improvements to its online program in 2003. The Government Gateway (www.gateway.gov.uk)— the centralized registration service for eGovernment services—underwent a major upgrade in April 2003 to allow end-to-end transactions between agencies as well as with their customers. Also in 2003, the first service using the Government Gateway's new payment engine functionality went live.

For now, the United Kingdom's eGovernment vision and strategy remain unchanged. Changes may be on the horizon, however. Andrew Pinder, the UK government e-Envoy, will retire from his post in April 2004.

At that time, his responsibilities for eGovernment will transfer to a new appointee in a newly created role, the Head of eGovernment. This will be a Cabinet-level position, described as "analogous to that of a CIO in a very large and diverse conglomerate" and "one of the most influential roles in the world of IT today."

According to the *UK Online Annual Report 2003*, www.e-envoy.gov.uk/assetRoot/04/00/60/69/ 04006069.pdf, "the challenge for government will be to capitalize on the potential of ICT (information and communications technology) to transform service delivery and achieve a step change in operational efficiency...The government has decided to appoint a Head of eGovernment, whose role will be to give strategic leadership and drive to the application of ICT within government to support the reform and modernization of Britain's public services." This official will be responsible for delivering existing targets for electronic service delivery by 2005, and will likely work closely with the Office of Government Commerce to that end.

The government's explicit reference to using technology to support public-service reform is evidence of its fundamental understanding of the value of eGovernment as an enabler of high-performance government and not as an end unto itself. Accordingly, the UK government is working on its own outcomes-based public value framework to justify, promote and explain future eGovernment investments. That framework is due to be published in 2004. Developments such as these are important, as in recent history the United Kingdom's eGovernment program came under scrutiny for its emphasis on getting as many services online as possible without clearly demonstrating the value of doing so.

The most recent update to the country's 1999 eGovernment action plan was in 2002. Many of the objectives from that document still resonate, particularly the desire to remove barriers to take-up (such as lack of understanding, lack of access and lack of trust). Our citizen survey showed that take-up continues to be an issue for the United Kingdom. Among Internet users surveyed, four in 10 have never visited a government website.

The UK government currently is taking steps to promote usage of the Internet (and potentially increase the audience for e-commerce and eGovernment alike). For example, in 2003 the Office of the e-Envoy, along with partners from the public, private and voluntary sectors, ran a six-week campaign during May and June called "Get Started" to encourage new users to get online. The top-line objective of the campaign was to educate and drive users into UK Online and other access centers for their first experience of the Internet. The government estimates that the campaign produced a five-fold return on its initial investment of UK£1million. In a separate initiative beginning in January 2004, readers of *The Sun* newspaper will be able to read their newspaper online, courtesy of UK Online. *Sun* readers can collect tokens and get free "taster" Internet sessions at the 6,000 UK Online centers in locations such as libraries, colleges and town halls.

Individual agencies have mounted their own efforts to stimulate usage of online services. For example, Inland Revenue is encouraging take-up of its

e-services by offering nearly 1.5 million small employers up to £825 tax-free if they send in their employer end-of-year tax returns online.

Progress on all 25 key priorities in the action plan is monitored and reported on monthly (www.e-envoy.gov.uk/EStrategy/ActionPlan/fs/en). Additionally, departments are required to submit their e-business strategies and electronic service delivery progress reports to the office of the e-Envoy every six months.

Further feedback mechanisms are in place for the government's customers themselves. The CitizenSpace section of the government's citizen portal (www.ukonline.gov.uk/CitizenSpace/CitizenSpace/fs/en) invites users to provide comments on the service and to suggest how services might be developed. UK GovTalk (www.govtalk.gov.uk) is a website to encourage the public and industry to contribute their input for richer, more innovative industry.

Interestingly, for the first time ever, the 2003 *UK Online Annual Report* provides no information on whether any of the recommendations set out in last year's UK Online Action Plan have been completed, taken forward or subsumed into new actions. Rather, the report this year contains a simple list of highlights and a summary of achievements. Additionally, no corresponding action plan of new future activities or outstanding recommendations has been published. It may be that little activity in this area is seen until after the transition of leadership to the Head of eGovernment takes place.

While there was little discernible movement in the maturity of the UK government's online program this year, the picture may be very different in a year's time. Upcoming changes in leadership and organization, the expected enhancements of a customer-focused citizen portal, and additional planned initiatives focused on driving Internet awareness and usage among the population should make the United Kingdom one of the most interesting eGovernment programs to watch over the next 12 months.

The United States

In 2004, the United States improved enough to secure a joint second-place ranking. With an overall increase in maturity of approximately 7 percent, the country kept pace with Singapore, although it lost some ground to world-leading Canada. The United States had modest improvement in customer relationship management maturity of only 3 percent, with its most notable improvements coming in the areas of tax and postal e-services for businesses. Overall, seven services improved from publish to interact level and three from a publish or interact level to a transact level.

The United States saw some changes to its eGovernment leadership during 2003. Mark Forman, the federal chief information officer, resigned in August. A new head of eGovernment was appointed—Karen Evans, administrator of eGovernment and Information Technology under the Office of Management and Budget.

The country's eGovernment vision remains as first articulated in 2001. However, the strategy was updated in April 2003 and adheres to three guiding principles: citizen-centered (not bureaucracy or agency-centered); results-oriented, producing measurable improvements for citizens; and market-based, actively promoting innovation.

The federal government is taking a two-pronged approach to eGovernment. One is through modernizing information technology investments within agencies using the principles of e-business. The other is through integrating such investments across agencies, centered on groups of customers (such as individuals, businesses, other governments and federal government employees). Specific initiatives include expanding and improving FirstGov.gov (www.firstgov.gov), the citizen-centered government portal, so that citizens gain access to all information and services "within three clicks"; developing a federal government-wide public key infrastructure; and moving all agencies to a single e-procurement portal, www.FedBizOpps.gov, for large solicitations.

Work on these initiatives is well under way. For example, the E-Authentication initiative—part of the government's larger public key infrastructure strategy—is moving from its initial phase of deployment using the E-Authentication Gateway to a new phase allowing multiple, federated identity authentication services to coexist within a single architecture. (The goal is to provide a model for E-Authentication that

is not irrevocably bound to a single industry standard, vendor or product.) An architecture team has been established to develop alternative architectures for federated identity authentication services that will apply government-wide. The team will also present interface specifications for all components in the federated authentication architecture by June 2004. The FirstGov portal also has changed, although less in substance (which was already rich and intentions-based) than in appearance.

Individual agencies provided some of the United States' most innovative offerings in 2003. The US Department of Labor launched a new version of GovBenefits.gov (www.govbenefits.gov) that includes information on benefits programs in 20 states, taking another step toward making the portal a government-wide source for citizens. This site provides information on all government benefits, no matter where the benefits originate. There are several ways to search for the information and users can also utilize a questionnaire to be directed to appropriate programs. Once a specific benefit is selected, GovBenefits.gov provides a helpful overview and relevant links for additional information, such as eligibility guidelines.

The US Department of Health and Human Services, in conjunction with 11 other government entities and with private-sector involvement, launched the www.grants.gov site for the Federal Grants.gov initiative (one of the 24 major initiatives of the overall eGovernment program). Users can search for grant opportunities a number of different ways. For those granting agencies whose applications are available online, the application process is completely electronic.

The 2003 US eGovernment strategy makes no mention of any concerted marketing effort to increase citizen take-up of eGovernment services. Rather, campaigns are agency specific, often with marked success. For example, the Internal Revenue Service launched its Free File Web site in January 2003, accompanied by an aggressive marketing campaign. The agency has also turned its sights on intermediaries (tax practitioners), urging them to embrace the convenience of online filing and the improvements offered through its online tax forms. The efforts seem to be paying dividends. As of June 27, 2003, 52.2 million individual tax returns were electronically filed during the 2003 filing season, accounting for 42.1 percent of total returns filed. This

represents an increase of 5.8 million (12.5 percent) electronically filed returns compared to the total returns electronically filed during the same period in 2002 (46.4 million).

While the government is not providing any centralized push for eGovernment, it is making moves to monitor and measure the performance of individual agencies' eGovernment initiatives and the overall program. The Office of Management and Budget has established goals for eGovernment and information technology and has developed a scorecard against specific performance criteria. Additionally, agencies must provide annual updates on their implementations of the E-Government Act of 2002. Initial reports were received in December of 2003. The government also updates and publishes a chart detailing the progress and next steps for all 24 of its current major eGovernment initiatives.

The United States recently has made some significant changes to the way it manages information security and privacy. The E-Government Act of 2002 requires federal government agencies to conduct privacy impact assessments before developing or procuring information technology or initiating any new collections of personally identifiable information. The E-Government Act also requires agencies to post machine-readable privacy notices on their websites, detailing agency practices and individual rights. In an example of how the government is looking to shore up its own potential vulnerabilities, the White House published "The National Strategy to Secure Cyberspace" in February 2003.

Looking ahead, the United States has the right priorities in place; however, it could take a number of easily identifiable steps to improve its overall eGovernment performance. For example, it could begin working with individual states to replicate successes, such as the GovBenefits.gov site, to create fewer access points to a broader range of government services, no matter where the information or service originates. It could also look at Singapore's success in introducing mobile services. Recent reviews show that only about 1 percent of US government sites are accessible through personal digital assistants, mobile phones or pagers. Finally, the government should formalize plans for marketing its services; Canada and Singapore's proven successes should inspire the government to focus on promoting its many excellent online offerings.

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 included additional services this year, increasing the total from 201 to 206.

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 23, 2004.

Accenture selected 22 governments for the study: Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Portugal, Singapore, South Africa, Spain, Sweden, the United Kingdom and the United States. In total, 206 national government services across 12 major service sectors were investigated. The 12 service sectors researched were agriculture; defense; eDemocracy; education; human services; immigration, justice and security; postal; procurement; regulation; 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.

No government surveyed offered all 206 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. 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

Customer relationship management 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 five required building blocks: insight, customer service, interactions, organization and networks, and a separate support measure.

- **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?
- **Customer servic**e—Does the website offer helpful information related to the type of transaction I am performing or based on my user history? Is the help unprompted or do I need to seek it? Customer service measures whether or not government adequately supports users during their online interactions.
- **Interactions**—Can I interact with the government via related government contact points and websites? Interactions measures the degree to which services can be accessed through multiple channels and the ease of those interactions.
- **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 measures 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.
- **Support**—Is this site integrated with other channels of communication (for example, a call center) to assist me in finding information or completing a transaction? Support measures whether or not it is easy for the user to find alternative means to get access to the services if required.

Appendix—research methodologies

Overall maturity

By combining service maturity and customer relationship management, 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 customer relationship management 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 2003* (November 2003) provided all statistics relating to the number of Internet users. Data is compiled from a variety of sources, including governmental and Internet agencies, market-research organizations and Computer Economics' own surveys and proprietary methodology. *CIA Factbook* (July 2003) supplied all statistics relating to population figures.

Citizen research

In addition to the base research described above, we also conducted quantitative research on citizens' perceptions and practices related to eGovernment in 12 countries. This citizen survey is a new addition to our annual *eGovernment Leadership* report.

The citizen survey was conducted by an independent market research company, Lansdowne Market Research (part of the Millward Brown Group), from January 5 through January 23, 2004. The 12 countries sampled were Australia, Belgium, Canada, France, Germany, Ireland, Italy, Singapore, Spain, Sweden, the United Kingdom and the United States. Four hundred regular Internet users were surveyed in each country (with the exception of the United States, where 600 regular Internet users were

surveyed).[6] Regular Internet users were defined as individuals who used the Internet at least once a week from any location.

Polls were conducted via telephone, using random-digit dialing. Poll respondents in each country included Internet users only; the survey results do *not* represent a sample of the entire population of Internet users and nonusers alike. Once participants were identified as Internet users, they were then asked a series of 11 questions about their attitudes toward their countries' eGovernment programs, their use of eGovernment and their interests in particular services.

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 third 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 analyzed 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.

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[6] Quotas were set to match the known profile of regular users in each country.

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