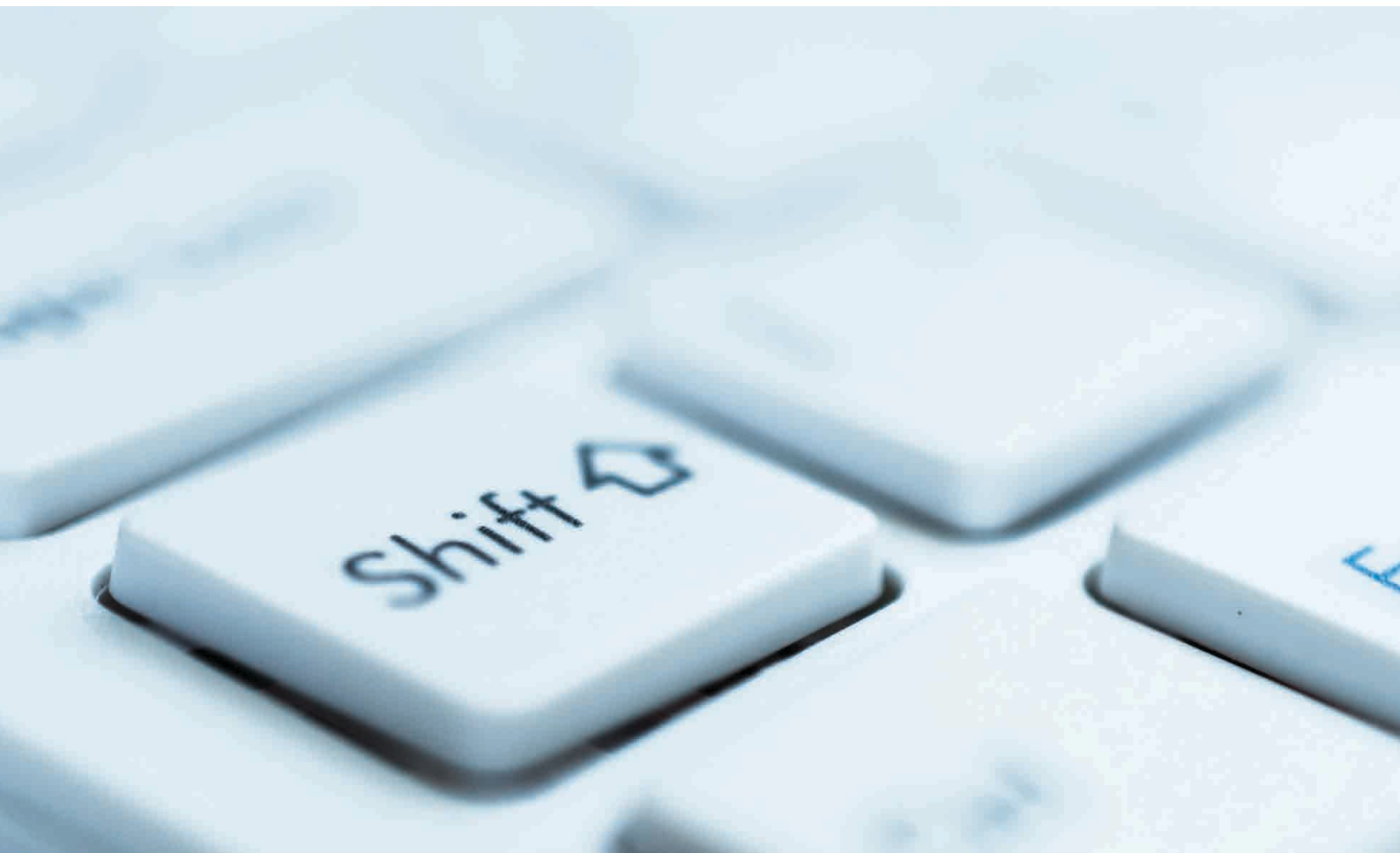


Delivering on the European Advantage?

'How European governments can and should benefit from innovative public services'

eGovernment Benchmark



FINAL INSIGHT REPORT: May 2014

A study prepared for the European Commission
DG Communications Networks, Content
and Technology

Digital
Agenda for
Europe

This study has been prepared by Capgemini, IDC, Sogeti, IS-practice and Indigov, RAND Europe and the Danish Technological Institute for the Directorate General for Communications Networks, Content and Technology.



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Who should read this report?

Anyone who is interested in how governments are coping with today’s challenges, and exploiting modern technologies in that battle.

Benchmarking is used to stimulate mutual learning, to perform multilateral surveillance, and to contribute to further convergence of Member States’ policies. It is an essential part of the response to current socio-economic challenges. The benchmarking framework is founded on the key EU eGovernment priorities. The results build from a very rich source of research data, using different methods, with strong collaboration from Member States; they provide a robust and coherent insight into the current state of play of eGovernment in Europe. The report offers insight into how services can be made ‘twice as good, in half the time, for half as much’, and can stimulate public service providers to respond faster and smarter. Benchmarking is the first step in an ongoing benchlearning and improvement cycle.

Purpose of this report and coherence with study’s deliverables

	Insight Report (THIS report)	Background report	Open research data
For whom?	Government leadership	Policy officers	Academics & research communities
What?	Key findings and recommendations	Detailed analysis of indicators and life events	All data collected in machine readable format and method
Purpose	Direct European and national eGovernment strategies	Realise direct improvements in public service delivery	Stimulate re-use of data and in-depth analysis

A guide to reading this report

WHAT EUROPE IS HERE TO DO

Vision & Ambition

- Context: policy goals and vision on eGovernment
- Introduction measurement

Ch. 1 & 2

IS EUROPE DELIVERING TO PLAN?

Performance dashboard

- Dashboard of eGovernment performance across policy priorities in Europe

Ch. 3

Citizen engagement

Government engagement

- The extent to which governments succeed in matching expectations of citizens

- Interpretation of results and extent to which services are delivered ‘joined up’

Ch. 4 & 5

ACCELERATING OUR RESPONSE TO THE NEED FOR INNOVATION

Way forward: Transforming public eServices

Way forward: Benchmarking public eServices

- implications and recommendations as regards stimulating public sector innovation

- practical next steps to be considered when further evolving the measurement

Ch. 6 & 7

Executive Summary

Europe has the potential to gain a strong advantage in today's digital society. The diversity and ingenuity of Europe can be a great asset. As a region, Europe has a wealth of erudite and respected institutions, and innovative entrepreneurs. Properly supported by quality public services their capabilities can be used to great effect to invent new services for the broad diversity of beneficiaries in the EU, and then to exploit these services and the companies in order to deliver them internationally – i.e. to use this foundation at one and the same time for local value and international economic advantage.

With ICT no longer the silent slave to public service operations, there is a key role for policy makers to play in directing and guiding Europe's actions. Unhindered by the need to deliver short-term business results and thus able to plan and organise for the long-term, governments are in a unique position to implement fresh approaches to solving existing problems across all domains and tiers of government..

The current state-of-play of public service delivery across Europe is characterised by 'disjointed' online public services. Thinking about public service provision today should not be about a series of transactional services but more about an integrated set of services organised around the life event of the user. A life event captures the user's journey irrespective of government domains and tiers. In practice, we see that these journeys are rarely completed without interruptions, thus causing an unnecessary burden for citizens and businesses.

This report provides the results of measurement of eGovernment performance and reveals gaps between:

- **Users and non-users of online public services:** at the moment, even if every European were to have access to the internet and possess the skills to use it, a significant group of non-believers (38%) refuses to use the online channel for public services. Improving the user-centricity of services will help to bridge the gap.
- **What is delivered and how it is perceived:** although public services are increasingly available online for a country's resident, usability has not kept pace. Quantity appears to take precedence over quality, i.e. user-centric service design that meets the expectations of citizens and businesses.
- **Business and citizen services:** business services are more mature with a recurring gap of 10 percentage points on average for all indicators and over several years.
- **National and local services:** local services are less user-centric (an gap of 11 percentage points on average) compared to national services and this is even worse in smaller communities. Results also show that key enablers are apparently not interoperable.
- **Services for country nationals and citizens from another EU country:** cross-border services are 30 percentage points behind public services for country nationals. Transactional services are possible only in a very few cases, causing unnecessary burdens for citizens and businesses that want to move, work or start up in another EU country. This is pre-eminently the area where Europe could have an advantage, but this is regrettably still far from reality.

- **Small and large countries:** size seems to influence overall country performance, as smaller and medium-sized countries perform better than large and very large countries.
- **Digital natives and citizens with low/no online skills:** digital advances come with the risk that some people lack the skills to use the internet and might be excluded by public services being increasingly online. Governments in countries where this is a high risk should take this into account when implementing additional digital services

Fragmentation of service provision within and between countries in Europe could increase the gap with other parts of the world and reduce Europe's competitiveness. Europe has many things to offer – but not all is on offer yet. Europe is not delivering to plan, and at the same time the plan needs to be updated and adapted to advancing insights. Change that is not incremental but structural is called for, and it needs to start soon.

Governments can anticipate new models for public service delivery, addressing and capitalising on the changing role of citizens.

There is a potential to shift from a model that is largely designed around the *delivery of services to people* towards a model that is designed to better enable *co-production of services with people*¹. However, we found that:

- European governments are not consistently opening up public organisations, data and processes;
- Service delivery is neither user-driven nor open and transparent;
- User autonomy over personal data needs to be improved;
- Public organisations provide generic information, but refrain from publishing performance insights;
- Adoption rates are much higher in younger generations than older age groups, and governments should use this to their advantage to stimulate take-up.

Innovation is the application of better solutions that meet new requirements, unarticulated needs or existing market needs. This might mean improving an existing activity to improve the impact, adapting a proven idea to a new context, or starting with something entirely new.

We see good, enlightening examples across Europe, demonstrating what innovation can bring. However, more is needed to deliver on the European advantage. We provide five recommendations that are essential (but not exhaustive) in responding to the need for innovation:

- **Service-minded:** apply outside-in design. Design through user involvement and co-creation to ensure improved user experience (and returning customers!)

- **Joined-up governance:** enable process digitization and data integration. Use silos for the right purposes. Collaboration is the key, for instance, ensuring efficient implementation of once-only registration. Centralised governance in some cases has proven to be a successful modus to lead and facilitate the process.

- **Transparent:** adopting new operating models. Be transparent as regards performance, processes and data to increase accountability and trust.

- **Exploiting technologies:** ‘SMAC’ it up! Combine disruptive technologies. Move towards a platform, where **S**ocial provides new collaborative platforms to visualise and share the information, **M**obile computing enables better provision of the information coming from objects and mobile devices as “Things” themselves, **A**nalysis of Big Data provides the intelligence, and **C**loud Computing provides scalability – all of which are key enablers of the power of the Internet of Things.

- **Build an eSkilled workforce:** increase society’s absorption capacity. A vital prerequisite for successfully utilising Europe’s technological potential is the extent to which users, practitioners, civil servants, and leadership understand technology, and are able to use it in practice.

None of this comes easily and any form of complacency is none other than a risk. Not embracing the power of modern ICT to transform public services – be that delivering healthcare over mobile devices, employing sensor technologies to transform an urban traveller’s experience, or the agility of the Cloud to provide flexibility and enable greater consistency in our public services – will only put Europe behind other regions

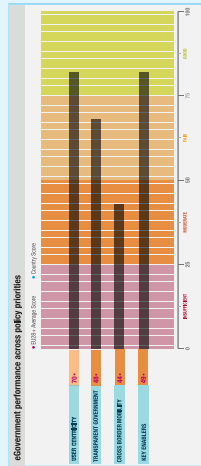
globally to the detriment of those that use the services and those organisations that provide the means by which they are delivered. However, where we currently stand is in a position with potential. The key question is whether we can use that potential to deliver an advantage.

With Europe’s vision of Horizon 2020 in mind and based on an assessment of the current performance of the EU-28+ in total, we must chart a path forward that clearly shows how we must adapt and change to exploit the untapped potential of our European advantage.

DELIVERING ON THE EUROPEAN ADVANTAGE?

THIS STUDY REVEALS EUROPE'S ACHIEVEMENTS- HOWEVER MORE IS NEEDED

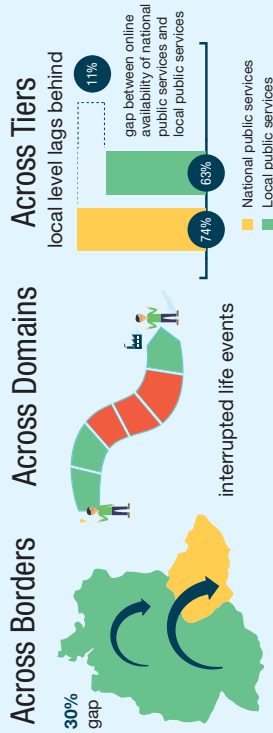
Areas for improvement: transparency, use of technology and mobility...



user centricity: more is needed to get citizens online and keep them there...

- 38%** of internet users in Europe is not willing to use the online channel for public services
- 28%** of those who did are opting to not use it again
- 28%** of European citizens have no access to internet at all
- 30%** of European citizens do not have the right skills to use online services

...requiring collaboration between and within governments to close the existing gaps:

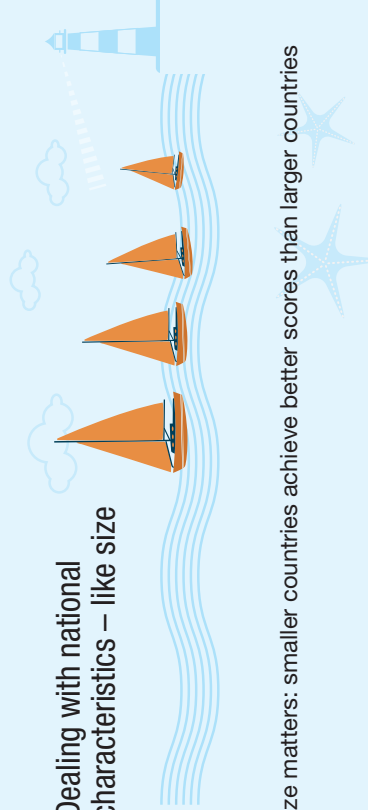


THERE IS AN IMPORTANT ROLE TO PLAY FOR POLICY MAKERS...

Countries take different strategies, and achieve mixed results

- Pioneers:** (3 countries) a-sail to discover newlands
- Silo-toppers:** (6 countries) sailing with the wind in their sails, on national territories
- Steady performers:** (9 countries) ship floating nicely
- Business oriented:** (6 countries) need to change track?
- Castaways:** (6 countries) need to find a vessel

Dealing with national characteristics – like size



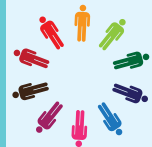
size matters: smaller countries achieve better scores than larger countries

KEY ELEMENTS OF TRANSFORMATION:

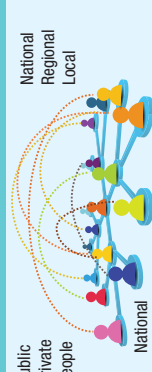
Service minded: applying outside-in design



Adopt transparent & open operating models



Joined-up governance & data integration



SMAC it up!



...IN STEERING AND DELIVERING PUBLIC SECTOR INNOVATION

Building an eSkilled workforce to increase society's absorption capacity

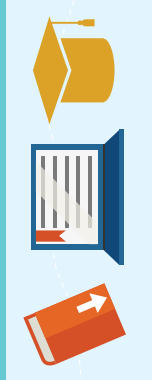


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WHAT EUROPE IS HERE TO DO



It's time to remember what Europe is here to do. [...] Do we want European leadership? European competitiveness? A bright European future? If we do - in ANY area - we need a continent prepared for the digital age



Commissioner Neelie Kroes at the World Economic Forum, 'A vision for Europe', 22 January 2014.

A guide to reading this report

WHAT EUROPE IS HERE TO DO	Vision & Ambition	<ul style="list-style-type: none"> Context: policy goals and vision on eGovernment Introduction measurement 	Ch. 1 & 2
IS EUROPE DELIVERING TO PLAN?	Performance dashboard	<ul style="list-style-type: none"> Dashboard of eGovernment performance across policy priorities in Europe 	Ch. 3
	Citizen engagement	<ul style="list-style-type: none"> The extent to which governments succeed in matching expectations of citizens 	Ch. 4 & 5
	Government engagement	<ul style="list-style-type: none"> Interpretation of results and extent to which services are delivered 'joined up' 	
ACCELERATING OUR RESPONSE TO THE NEED FOR INNOVATION	Way forward: Transforming public eServices	<ul style="list-style-type: none"> implications and recommendations as regards stimulating public sector innovation 	Ch. 6 & 7
	Way forward: Benchmarking public eServices	<ul style="list-style-type: none"> practical next steps to be considered when further evolving the measurement 	

01 Exploiting the European advantage

Some might inquire as to *if* there is a European advantage, and if so, what that might be.

The European Union (EU) is relevant on a global stage as a place for comparison with many nations, east and west, north and south, and on many fronts. One of these is how we design and deliver public services – and as part of that, how we use modern information and communication technology (ICT) to deliver them in a better way.

Our public services are of sound quality. While it is not uncommon to hear grumbles, in the round Europe has established a very solid record for delivering consistent and trusted public services to its businesses, its citizens and its visitors.

The diversity and ingenuity of Europe can be a great asset. It offers multiple sources of innovation and collective resilience.

As a global region, Europe has a wealth of erudite and respected institutions, and innovative entrepreneurs. Properly supported by quality public services we can use these capabilities to great effect to invent new services for our internal (national) customers, and to exploit these services and the companies in order to deliver them internationally – i.e. to use this foundation for local value and international economic advantage.

None of this comes easy, and any form of complacency is none other than a risk. Not embracing the power of modern ICT to transform public services – be that delivering healthcare over mobile devices, employing sensor technologies to transform an urban traveller's experience, or the agility

of the Cloud to provide flexibility and enable greater consistency in our public services – will only put us behind our global competition to the detriment of those that receive the services and those organisations that provide the means by which they are delivered. However where we currently stand is in a position with potential. The key question is whether we can use that potential to best advantage.

In essence, eGovernment is about using technology to make public service better, cheaper and faster: for society and for the good of public administrations. Like Commissioner Kroes, we believe that our future lies online². New technologies and tools develop at great speed, and have an increasing impact on our daily lives. ICT changes the way citizens behave and interact, and what they expect from public administrations. Governments are challenged to keep up with that pace, and adapt to a new open relationship with their citizens and businesses in order to fully exploit these opportunities. That does not come easily – often it requires radically changing and innovating operating models and governance, breaking down and connecting silos that have been built over decades, changing skills and behaviour, closing gaps between digital haves and have nots. With new opportunities come new challenges. These challenges may well be recognised and covered in European visions, strategies and policies. However, are they implemented within countries? And what does that mean for Europe?

The monitoring of the evolution of eGovernment since its inception in the early part of this century has evolved considerably. And must continue to

do so. Our study provides insight into the state-of-play of that development, and makes clear the extent to which Europe is delivering on its promises. It measures 'eGovernment' and – just like the challenge for governments sketched out above – it needs to evolve to remain relevant. There was a time when public services were benchmarked individually; this was a silo view, looking at single services without any connection to the overall process, i.e. the customer journey – and it was approached purely from the supply side. This 'new' benchmark builds on 'life events' that represent customer journeys and introduces demand-side elements to assess the extent to which services are actually delivered user friendly.

With the Horizon 2020 vision in mind, and based on an assessment of the current performance of both the EU-28+ in total, and individual countries, we must chart a path forward that shows clearly how we must adapt and change to exploit the untapped potential of our European advantage.



The diversity and ingenuity of Europe can be a great asset. it offers multiple sources of innovation and collective resilience

02

ICT as an integral part of public service delivery in Europe

ICT is no longer the silent slave to public service operations. It changes the quality of service; it changes the behaviours of those that consume the services; and ICT of itself changes dramatically quickly. As such there is a key role for policy makers to play in directing and guiding Europe's actions. And this affects all levels of government.

Whether as a means of improving government services, increasing competitiveness or opening up opportunities for citizens, digital innovation has been one of the spearheads of European policy for more than a decade. In 2010, the i2010³ initiative was superseded by the **Europe 2020 strategy**⁴. This proposes an ambitious schedule for exiting from the economic crisis and creating a smart, sustainable and inclusive Europe that is able to compete globally, across sectors.

The Digital Agenda for Europe⁵ (DAE) was established as one of the seven flagships of the EU 2020 strategy to increase the uptake of ICT and accelerate change towards Smart Growth. The DAE embodies the "strategy for a flourishing digital economy by 2020. It outlines policies and actions to maximise the benefit of the Digital Revolution for all."⁶ It specifically addresses the need for effective use of ICT based on (very) fast internet and interoperable applications to deliver social and economic benefits.

The **eGovernment Action Plan 2011-2015**⁷ contributes towards fulfilling two key objectives of the DAE:

- to have 80% of businesses and 50% of citizens making use of eGovernment services, and
- to have a number of key cross border services online by 2015.

The Action Plan focuses on four political priorities:

- the empowerment of citizens and businesses,
- the reinforcement of mobility in the Single Market,
- enabling efficient and effective governments and administrations, and
- the establishment of necessary key enablers and pre-conditions so as to make things happen.

These four pillars form the foundation of our benchmarking study.

The Commission aims to lead by example. The recently published '**vision for public services**'⁸ illustrates that ambition. It acknowledges the current societal, economic and user-driven challenges that force governments to rethink their approach to creating public value. It provides the outline of a new model based on **open government and open governance**. Various funding mechanisms (CEF, ICT PSP) support this call to modernise public administrations.

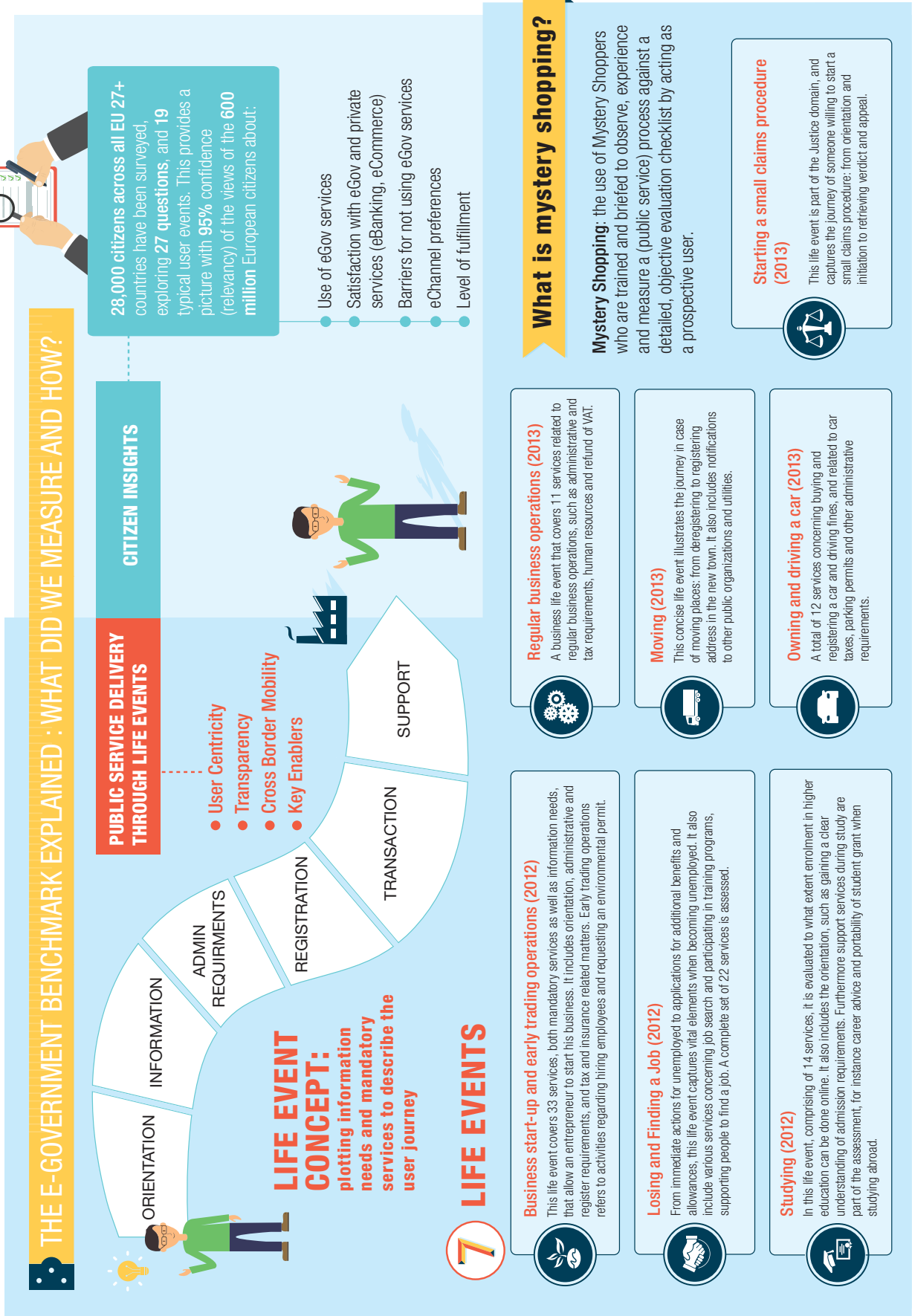
Alongside ambitions for an open, transparent and collaborative government, the Commission⁹ distinguishes two more principles to be taken into account when looking forward: **digital by default** and **cross-border by default**, as necessary ingredients for transforming the public sector, creating new business opportunities and delivering more targeted, personalised on-line services.

This policy landscape and action plan steer progress across Europe and support developments in Member States.



There is a key role for policy makers to play in directing and guiding Europe's actions

Figure 1.1 What we measure and why



IS EUROPE DELIVERING TO PLAN?



*Don't lower your expectations to meet your performance.
Raise your level of performance to meet your expectations.*



Ralph Marston

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03

Member States' performance in providing public eServices

The goal of our benchmarking exercise is to measure progress towards the achievement of the main priorities of the e-Government Action plan, which together design a vision of an open and user-centered government, leveraging innovation to provide better services with lower costs.

To do this we have designed four top level benchmarks around four main pillars of the Action Plan: user-centricity, cross-border mobility in the digital single market, transparency of services, and the deployment of the key ICT enablers making it all possible.

But this is no simple measurement of the supply side of online public services. Our benchmarks have been designed to measure the process of eGovernment services delivery, using the “mystery shopping” methodology, where trained

researchers follow step by step the path citizens must follow when they need something from governments. To reach the end of their journey, citizens and businesses normally use more than one public service: some mandatory, some optional – some even providing added value to make their life easier. We have analysed the customer journeys related to a sample of seven business and citizen life events, a metaphor for some of the most common situations in life requiring interaction with public administrations (See figure 1.1).

Life events cut across the silos of public administrations, underlining the need for collaboration between different administrations to satisfy the users' needs. Our measurements show clearly where collaboration fails or which pitfalls lie in wait for citizens.

This chapter will show that:

- Europe can stretch further in all areas of eGovernment: better serving users, more open, facilitating a single market and using the potential of technology;
- Businesses are better served than citizens.

Table 3.1 presenting dashboards to illustrate performance

Presenting dashboards to illustrate performance

Maturity Model

Score	Maturity Stage
0-25%	Insufficient
26-50%	Moderate
51-75%	Fair
76-100%	Good

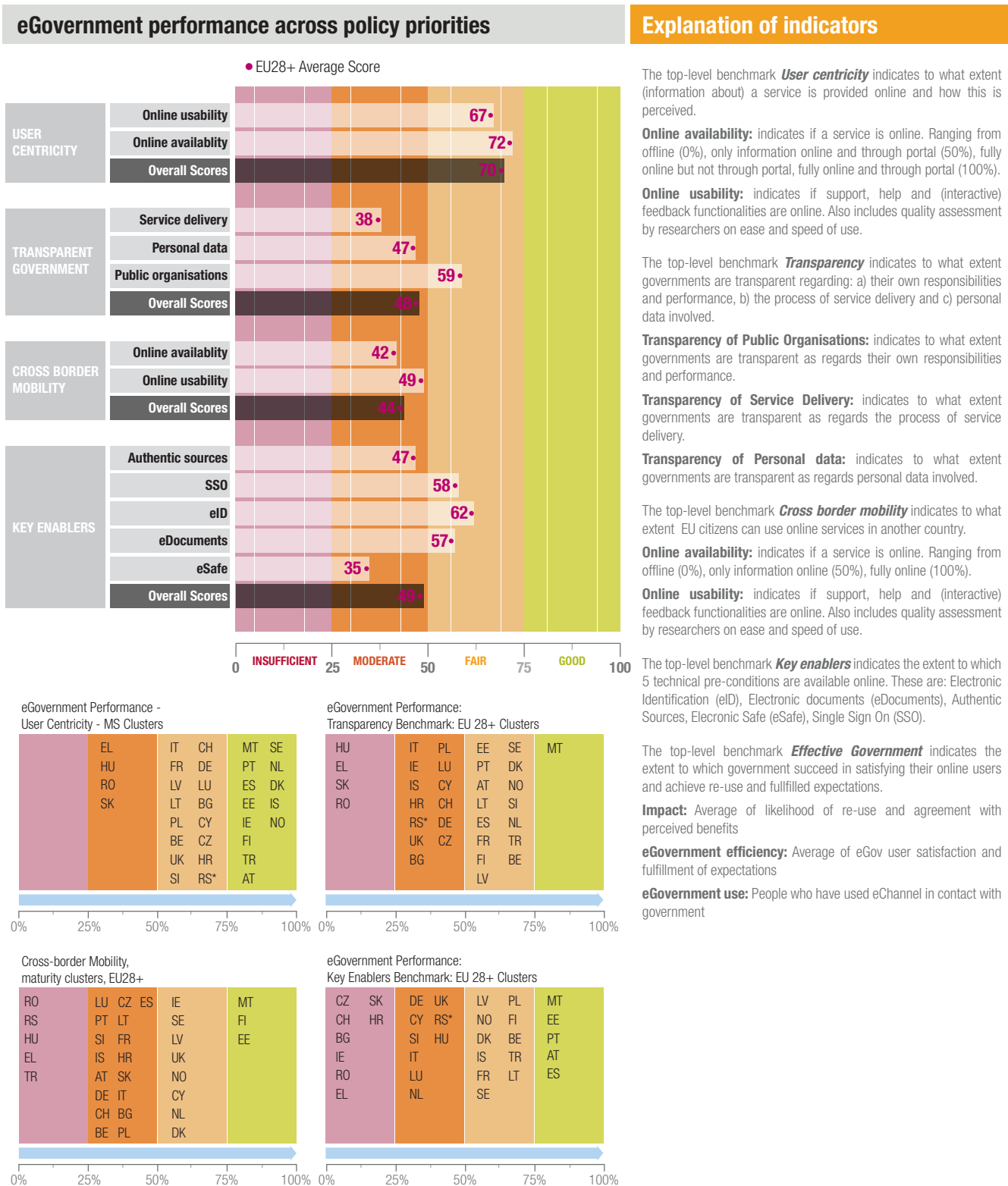
To highlight the meaning of the benchmarks, we have designed a simple dashboard based on four maturity stages color-coded from red to green, linked with the scoring scale used for all indicators, from 0 to 100, with 100 equal to full achievement and/or best performance.

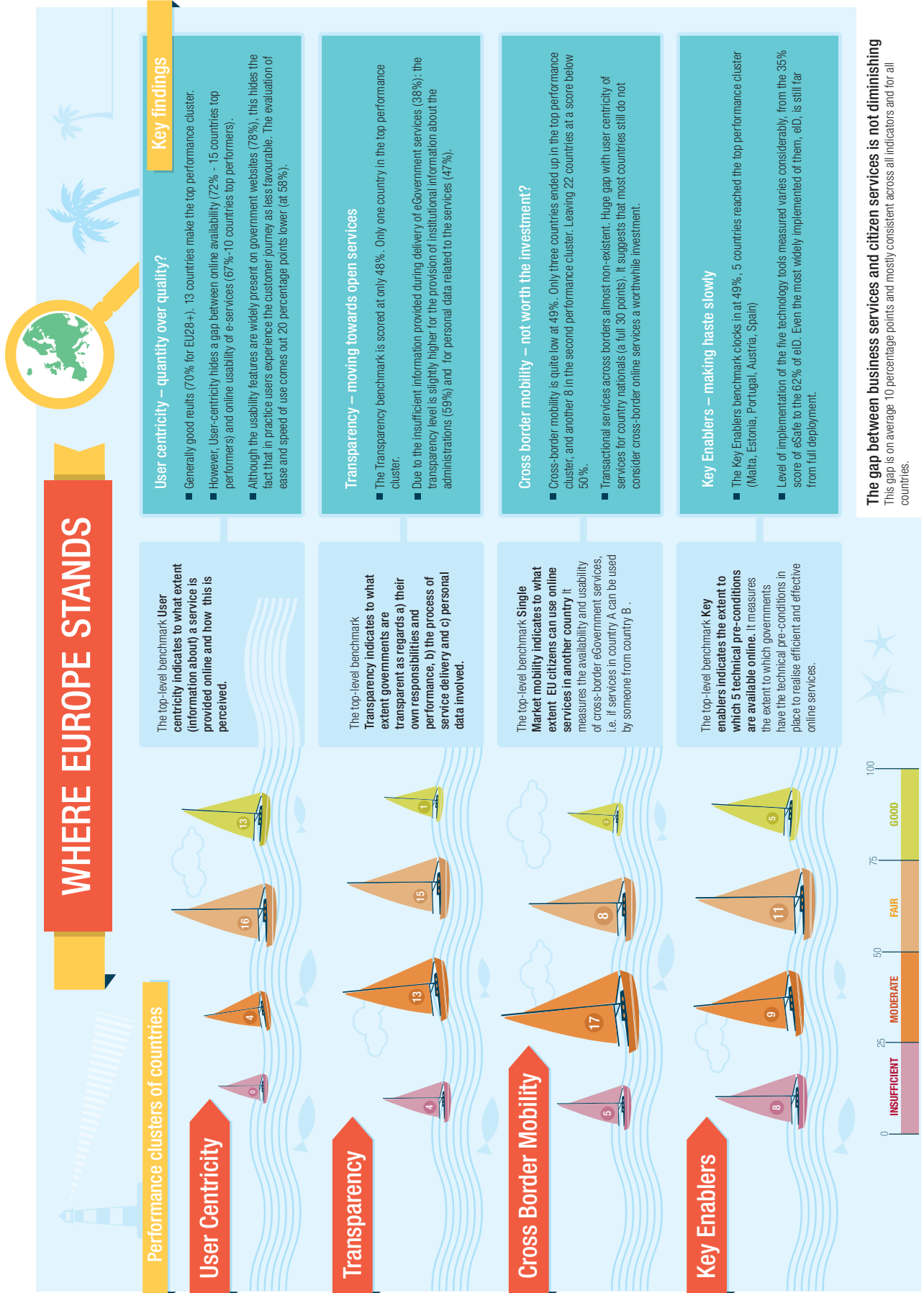
The maturity stages are:

- Score from 0 to 25 = Insufficient (Red)
- Score from 25 to 50 = Moderate, still far from full achievement (Orange)
- Score from 50 to 75 = Fair, closer to full achievement (Yellow)
- Score from 75 to 100 = Good, full achievement (Green)

For each benchmark, we will cluster the countries in four groups depending on their score, identifying their maturity level from the point of view of the achievement of the Action Plan priorities.

Figure 3.2 EU-28+ dashboard of Member States' overall performance against policy priorities





3.1 Action Plan priorities getting closer to full implementation

The e-Government Performance Dashboard presenting the results of our top benchmarks (Fig 3.2) shows that on average, European governments have not yet reached full maturity in any of the policy areas measured, however some areas (user centricity) show promising results. Basically, citizens still experience considerable problems in their online customer journey, particularly when it comes to online usability and efficiency of delivery. This is unfortunate, since improving quality of experience and saving time are the key motivations of eGovernment usage.

The Dashboard presented in figure 3.2 shows the average performance at EU28+ level, and that of individual countries collected in four performance clusters (from top performers, the green cluster, to laggards, the red cluster).

Of the four top level benchmarks, User-centricity is most advanced (at 70% for EU-28+). Governments have made considerable investments in making e-Government services available online, but so far have concentrated less on the ease and speed of use, i.e. the convenience when using public eServices.

Cross-border mobility is also quite low at 49% on the benchmark. The range of services offered to support citizens' mobility in the EU is very limited, especially as regards transactional services. This is shown by the very large gap between the benchmark of online availability of domestic services and that of cross-border services (a full 30 points). It suggests that most countries still do not consider cross-border online services a worthwhile investment.

The Transparency benchmark is scored at only 48%. This is due mainly to the insufficient information provided for users during the delivery of eGovernment services: the transparency level is slightly higher for the provision of institutional information about the administrations and of personal data related to the services. Still, there is still a long way to go if governments want fully open and transparent services and organisations.

The Key Enablers benchmark clocks in at 49%, but the level of implementation of the five technology tools measured varies considerably, from the 35% score of eSafe to the 62% of eID. The enablers were measured in connection with the delivery of services. Even the most widely implemented of them, eID, is still far from full deployment.

The results call for action: even though some countries are living up to the ambitions of the eGovernment Action Plan, many of them are not on track. The Commission's ambition of 'cross border services by default' in particular could do with a push. The following paragraphs touch concisely upon the key findings of our measurement to underline this conclusion.

Chapter 4 will the present the user perspective. Chapter 5 will reflect on these results and present five typologies of how countries appear to have implemented the eGovernment action plan priorities and what elements influence the governance of realising better, faster, cheaper public eServices.



The results call for action

3.2 User-centricity: quantity over quality?

Although the results for this indicator are generally good across Europe, User-centricity is a compound indicator which hides a gap between online availability and online usability of e-services. There are 15 countries in the top performers cluster for online availability and only 10 for online usability. For one of the sub-indicators, speed of use, there are no top performers – no country scored higher than 75% of progress.

The indicator for online usability measures the relevant aspects of the quality of the user experience, by assessing usability (support, help, feedback functionalities), ease of use and speed of use. Although the usability features are widely present on government websites (78%), this hides the fact that in practice users experience the customer journey as less favourable. The evaluation of ease and speed of use comes out 20 percentage points lower (at 58%).

On average, the online usability score is at least five points lower than the online availability score for all countries. Moreover, the gap is much higher for the top performers: the top four – Malta, Portugal, Spain and Ireland – show an average difference of minus 13 points between the two scores. It is in fact the least advanced performers who tend to show similar scores for the two indicators. In other words, the countries we analysed are expanding their online offerings fast, but are not progressing as fast in ensuring their quality. And as we shall see in the chapter 4, there is a broken link somewhere in the chain of each life event, because one of the

services is not online or difficult to reach. This is fatal for user satisfaction as the weakest link of the chain will be the one most remembered.

The fact that the maturity of User-centricity policies is rather advanced is shown by the concentration of countries in the advanced performing clusters. The User-centricity dashboard shows a high number of top performers; thirteen countries fall in the Green cluster overall, and three (Malta, Portugal and Spain) are very close to fully achieving our priority benchmark with a score over 90. These leading performers are a mix of small and large countries with a record of high investment in eGovernment technologies. They include many of the “usual suspects” (the Scandinavian countries) and surprisingly enough also Turkey, with a score of 82. The group of runners-up (16 countries) with a good performance score includes the largest European economies as well as Switzerland and the Republic of Serbia. Remarkably, only four countries fall in the low progress cluster and none in the last, insufficient performance, cluster.

3.3 Transparency: moving towards open services

Transparency is one of the key elements of modern public governments and a cornerstone of the open government vision. Unfortunately, based on our benchmark results, the achievement of transparency seems far from satisfactory. Each of the three elements of transparency under assessment are in line with our conclusion that in growing towards an open public sector, Europe has a long way to go.

1. The benchmark of **transparency of service delivery** is dismally low (38%). This means service delivery processes in two-third of Europe are not providing information about crucial elements of service delivery that any user needs when dealing with a public administration, i.e. being informed an application has been received, how long the administration will take (or is allowed to take) to answer a request, where the application stands in the entire process, and what general service performance is to be expected of the administration. For example, the simple provision of a delivery notice (a receipt when a citizen sends a document online requested by a service process) is guaranteed on average only for 40% of citizen services and 60% of business services.

For a majority of services, the user – whether a starting entrepreneur, a student, or someone wanting to move to another city – is not proactively well informed. Yet all these elements are fairly easy to organise. Truly open and performance-driven administrations not only set themselves targets and guidelines, but also publish these openly to inform users about their ambitions for serving citizens and businesses, thus also enabling their users to track their performance and keep them sharp. **This is how businesses operate on a daily basis.**

2. Sharing information about **public organisations** is necessary in any democracy to understand who is responsible for what, how decisions come about, which laws are valid and what the ambitions are. This is information to share on government websites and is

common practice in Europe. The overall score for this indicator seems reasonable (59%) – though this triggers the question of what elements are not provided for online.

Public administrations across Europe are more hesitant, moreover, to share information that offers insights into the functioning of the administrations themselves. **Only a third of countries** share external reports (e.g. audits), information on monitoring methods used and information on the user's satisfaction. Administrations are not keen either on informing citizens about possible participation in policymaking processes.

Insight into performance and participation are vital elements of modern public organisations, yet too often are missing. Whenever we looked for information from external actors, be it users or auditors, only a third of the administrations we looked at revealed that information. **It shows public organisations are still primarily focused inward instead of outward.**

The eGovernment Action Plan states that: '[...] new technologies and services allowing users to trace their **personal data** stored by public administrations, [...] are featuring amongst the most demanded eGovernment services'. Our research shows, however, that these services are available in approximately half of the cases, leaving much room to further improve users' autonomy. The overall indicator is at 47%.

Half the public authorities provide the user online access to their personal data and allow them to notify the authority when data is incorrect. To a lesser extent, authorities allow actual online modification of personal data. The service least provided online is that of the complaints procedure against use

of personal data by the public authority. **It shows that there is clear room to improve the user's autonomy as regards their own data.**

Compared to User centricity, the country comparison shows more countries in red, and fewer in green. Almost all (28) are in the middle segments. Countries with a good performance in User centricity tend to perform relatively well also for this benchmark (at a lower absolute level of progress, of course) as there is a logical coherence between user-centred and transparent policies.

3.4 Cross-border online public services: digital single market does not yet exist

Mobility for businesses and citizens implies seamless services, without any burdensome procedures, when crossing borders within the EU. In a recent speech on the way forward for eGovernment in Europe, the European Commission stated that 'Cross-border by default' is one of the 'necessary ingredients to transform the public sector, create new business opportunities and deliver more targeted, personalised on-line services'¹⁷.

If this is the target, EU governments are not close to achieving it. Once more e-Government performs much better for business services than for citizen services. Business mobility shows a relatively advanced score (53%) while maturity is still at the low stage (39%) for citizen mobility.

Surprisingly, the online usability benchmark for cross-border services is more advanced than that for online availability (49% versus 42%). It is likely that this is driven by the 65% score of usability for the business services. This

may well be caused by the availability of basic support and help functions on business portals which have been installed especially for this purpose (the single points of contact for businesses). However, the level of sophistication of services is lower than that of domestic services (most of them are information rather than transactional services) and they are generally aimed at country nationals living or going abroad, rather than at other Europeans (the language barrier plays a very important role here, for cost and practical reasons).

The experience of ease and speed of use of cross-border services by our analysts resulted in considerably lower scores compared to evaluation by country nationals. This is especially true of the life events 'Owning and driving a car' and 'Starting a small claims procedure', which are hardly available online. However, both are important for stimulating citizen mobility and increasing cross-border e-commerce.

Only three countries are top performers for citizen mobility services (Malta, Finland and Estonia – and we know Finland and Estonia have a history of close cooperation!) Most countries are below the 50% score in the low or insufficient progress clusters. In the case of business mobility services, there are six countries in the top performers clusters (Malta and Finland again, plus UK, Norway, the Netherlands and Ireland), followed by a group of 12 countries in the good performers cluster.

3.5 Key enablers: making haste slowly

Basically, eGovernment is using technology to improve services for its users as well as increasing the efficiency of the service provider. Of course 'technology' covers many things, and

in the context of the eGovernment Action plan includes interoperability and open specifications, key enablers and innovative technical approaches (Cloud, IPv6, SOA – but also open and big data, mobile and social media). All these aspects are vitally important if the potential of ICT for doing ‘more with less’ is to be fully exploited. This benchmark assesses the availability of five key technology tools as a proxy for the deployment of ICT in eGovernment processes.

The overall benchmark is at 49%. We see that three enablers are relatively well used (eID, eDocuments and SSO) and two are less commonly available in the life events under assessment (authentic sources, eSafe):

- **Electronic Identification (eID)** is the most widely available enabler, with an average score of 62%, i.e. it is in the good progress maturity stage. This is particularly relevant, since a new regulation for electronic ID and trust services in the Digital Single Market is due to be approved by the European Parliament in April 2014 following political agreement by the

European Parliament, Commission and Council in February 2014;¹¹

- **Electronic Documents (eDocuments)**, which allows users to send and receive authenticated documents online, has an online availability of 57%;
- **Single Sign On (SSO)**, which is a functionality that allows users to obtain access to multiple websites without the need to log in multiple times, has a benchmark score of 58%;
- **Authentic Sources**, which are base registries used by governments to automatically validate or fetch data relating to citizens or businesses, have a benchmark score of 47%;
- **Electronic Safe (eSafe)** is a virtual repository for storing, administering and sharing personal electronic data and documents and its benchmark score is 35%.

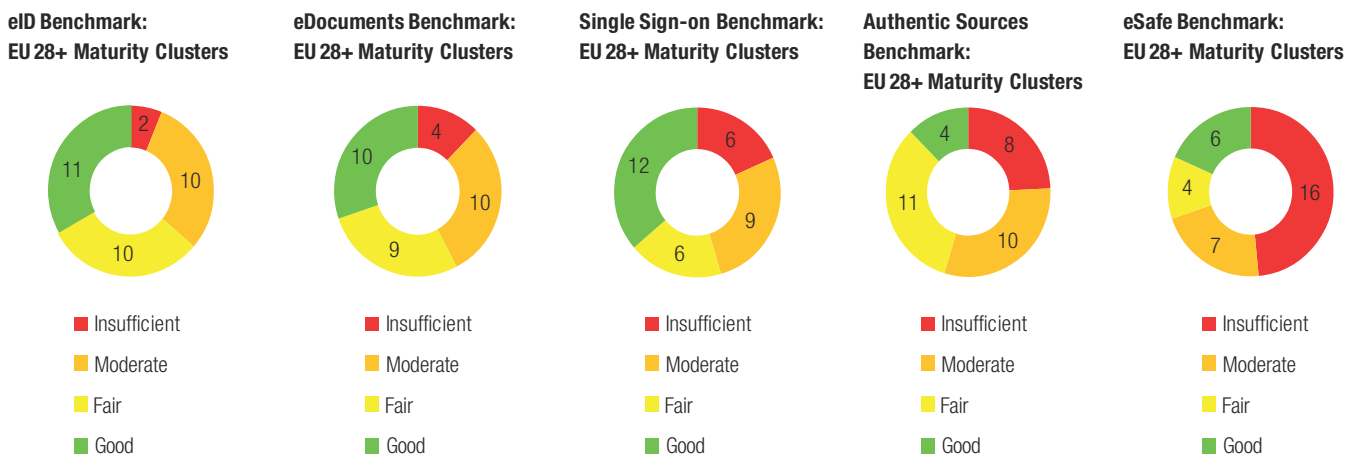
It is notable that the three best implemented enablers (eID, eDocuments and SSO) could be seen as functional for all e-services, while the two less used (Authentic Sources and eSafe) are very

important for advanced, transactional, automated services. In other words, only a minority of governments is investing in the development of the back-office tools necessary for automated, advanced services.

Looking at the EU-28+ performance cluster for key enablers (in Fig 3.2) we can see that the four groups of countries are almost evenly distributed, with a smaller cluster of top performers (Malta, Estonia, Portugal, Austria, Spain).

In this case, the countries’ choices to adopt or refuse certain tools influence their positioning in the benchmark – and this does not necessarily mean a lack of progress in overall eGovernment policies. For example, the UK has a low score for the ‘key enablers’ benchmark (27%), while it is highly positioned for the other indicators. In the case of eSafe scores are particularly low: 11 countries score zero, which means they have not implemented it at all, and five more have extremely low scores.

Figure 3.3 eGovernment Performance: Key Enablers benchmark: EU 28+ Maturity clusters by Enabler



3.6 The gap between business services and citizen services is not diminishing

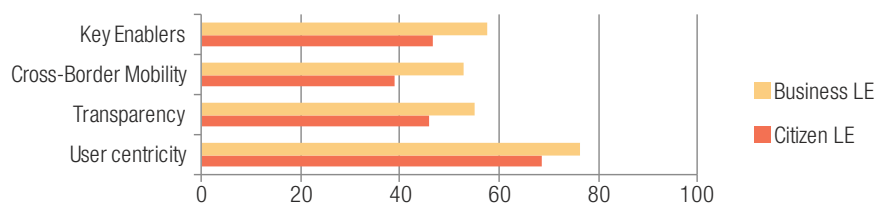
Another important consideration emerges from the comparison of the four top-level benchmarks between the business and citizen life events (LE – see Figure 3.4). This gap is on average 10 percentage points and mostly consistent across all indicators and for all countries. The more advanced maturity of business services appears clearly in the indicators below, with the largest gap between citizen and business life events occurring in cross-border mobility.

Clearly, countries perceive a stronger potential demand for cross-border services from businesses rather than citizens. There is a financial trigger in that it is, of course, beneficial to attract businesses to your country. At the same time, citizen services may require more organisational effort and investment to reach the whole population effectively – and diversity is surely greater compared to businesses. Thirdly, in addition to stronger demand for business services and possible implementation complexity for citizen services, legislation which will act as a game changer is likely to give rise to less discussion when applied to business services. Making services mandatory for citizens is often

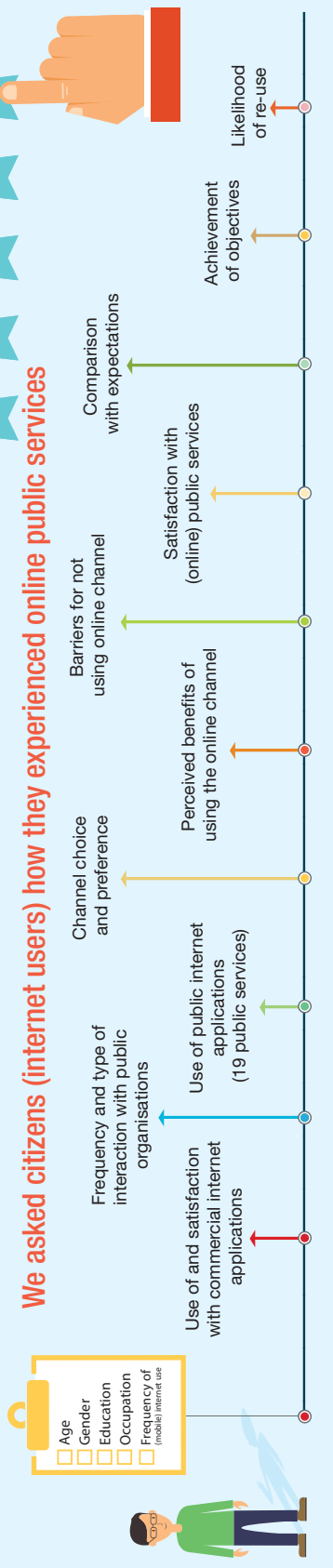
controversial and is being taken up only slowly and by only a few countries – whereas implementing obligations for businesses (e.g. relating to tax, registrations, environment, location, etc.) is common practice.

The gap between business and citizen online services has existed for many years now; earlier measurements have made that clear. However, whereas the gap was around 20 percentage points in the early part of the last decade, the 2010 benchmark indicated that it had dropped to 10 percentage points¹². That is where we are now still¹³. The question is what can be done about it? Governments need to be convinced to shift their focus. How can governments find ways to serve both customers in a similar fashion? Legislation is one way – though still controversial. The other two explanations combined might provide the answer: finding ways to reduce the complexity in delivering services to citizens, while reducing costs. Cost reductions can for instance be found by using cheaper channels and decreasing requests for support, reducing obligations for citizens and by organising governments in a more joined up way. Keeping one national registry, instead of each organisation maintaining their own, is a simple example, but exemplary for collaboration in the back office. Each example of cost reduction given produces a reduction in complexity.

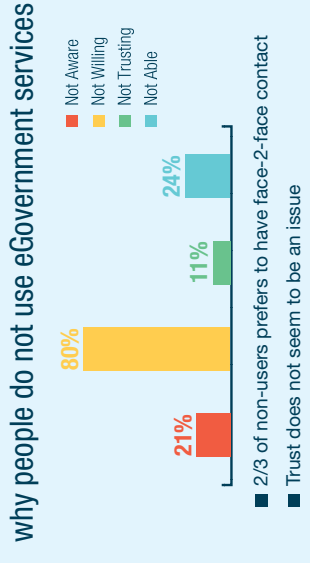
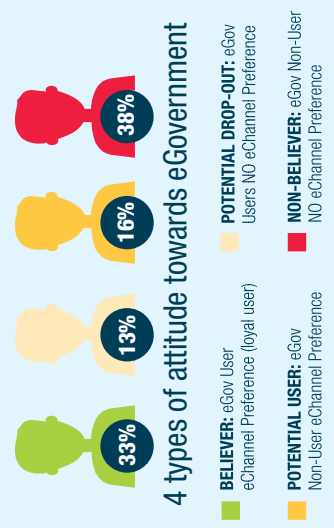
Figure 3.4 Comparison between Business and Citizen Life Events, top-level benchmarks, EU-28+



Convincing citizens to go on-line.....and keeping them there!

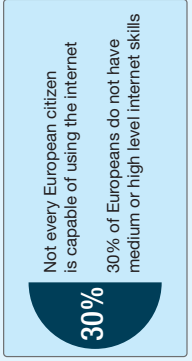
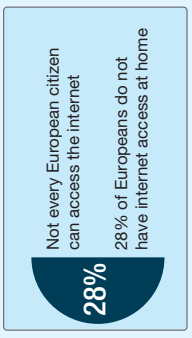


The evaluation distinguishes 4 types of attitude towards eGovernment users, and drivers for (non-)use



Key areas for attention to further increase the use of eGovernment services – now and in the future

Ensuring no one gets left behind



Mobile as game changer
we found that in some countries with low internet access, mobile internet use was high

eParticipation to build familiarity and trust
the younger generation shows a stronger preference for eParticipation activities (+10% compared to older generations)

Futureproofing eGovernment services

04

Convincing citizens to go on-line ... and keeping them there!

The previous chapter addressed the provision of public services, and explored where this can improve. This chapter reflects on how citizens experience online public services. Who is using them? Who is not? What are some of the root causes – from the user's perspective – that prevent further uptake?

With technology pervading every avenue of our daily lives, expectations of government performance are constantly growing. We see what is possible in the private sector and expect the public sector to adapt and adopt. More and more, we experience user friendly, intuitive, commercial online services that work. And on those occasions where they do not, they generally come with supportive customer service, and are increasingly responsive to social media feedback. The commercial world starts service design from the customer end. It is harder to do so with public services; it is, however, just as important.

Technology empowers users to articulate their interest, to organise themselves and to actively participate and collaborate. It also creates new ways of holding governments to account. Citizens are increasingly demanding transparent and open government. Administrations that provide insights into their core processes and managed access to the data they keep – about persons, companies and many other sources (often referred to as 'open data') – are seen to be progressive and best. Progressiveness also comes with its risks; thus the fear of adverse press coverage can often dampen enthusiasm for innovation.

It is a challenge for governments to manage their response, though not to do so is no longer an option. User-centric online services that are intuitive, simple and easy to understand can increase internal efficiency and reduce costs, avoid calls to helpdesks or face-to-face visits to the office (both much costlier channels), and improve reputation.

Whether the approach is to legislate to increase online take-up ('digital by default'), or to achieve this bottom-up through 'services you can't refuse', both approaches need to put the customer at the centre.

4.1 Converting the non-believers

To what extent are people using online services at the moment? And if they are not, then why not?

The average online usage by internet users of the basket of 19 citizen services assessed (46% for EU-28+¹⁴) leaves much scope for improvement and is below the 50% target of the eGovernment Action Plan. This is based on asking representative panels of citizens in each country if they had come into contact with government, for which service, and whether or not they used the online channel.

Based on citizens' preference for the online or traditional channel, we defined four typologies of attitudes towards online public services:

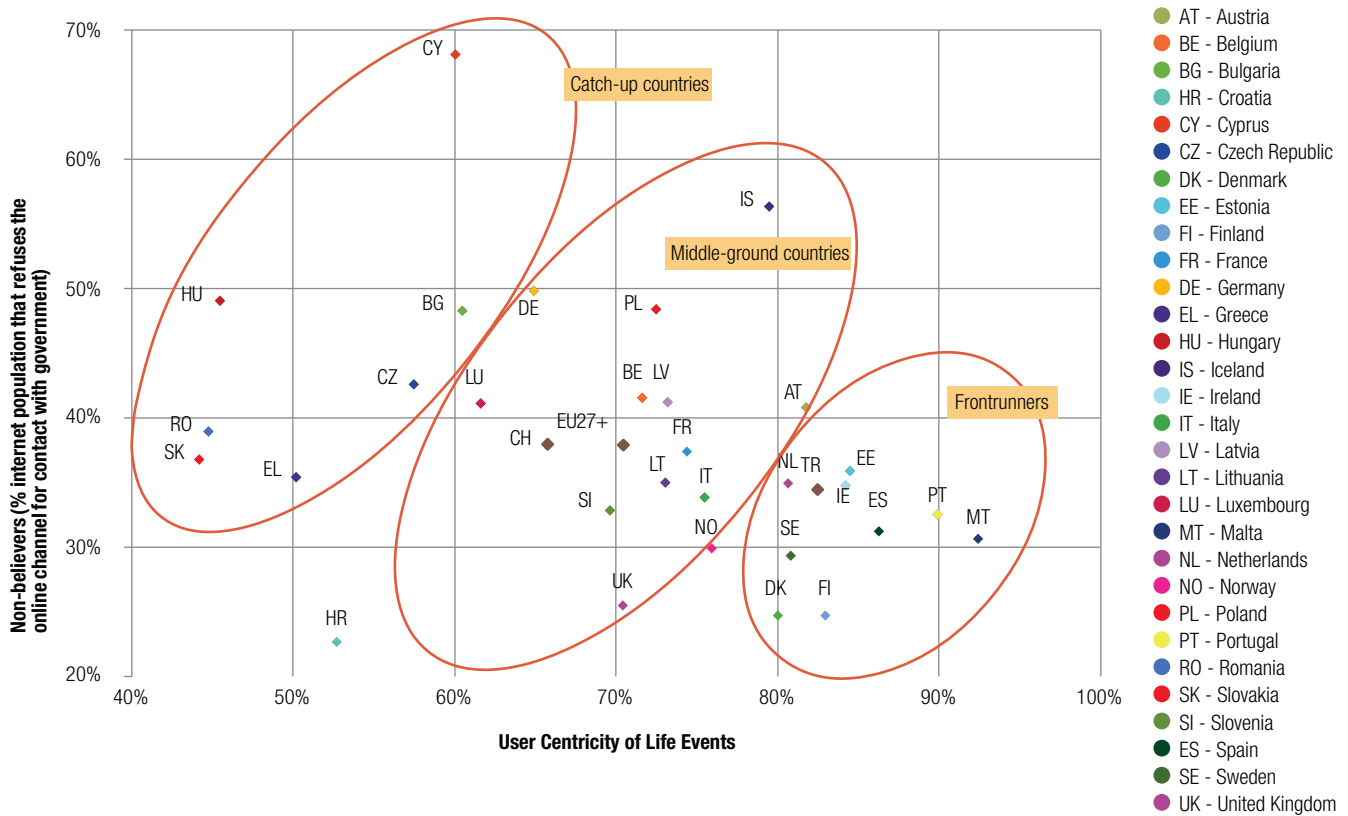
- 'Believers' (33%): citizens who had used online public services, and will continue to do so;
- 'Drop-outs' (13%): those who had used online public services, but do not intend to return;
- 'High potentials' (16%): citizens who had not used online public services, but want to do so next time;
- 'Non-believers' (38%): those who had not used online public services, and will not do so next time.

Not surprisingly, those countries who struggle to provide user-centric services also have more 'non-believers'. The figure below reveals the variations between Member States, indicating the average for Europe as well as the highest and lowest scores. So a priority to focus on becomes clearer: the customer.

This chapter:

- defines four types of citizens who interact with government
- highlights the 'non-believers' as a risk for eGov progress
- shows that mobile devices can solve the access gap,
- emphasises digital skills as critical for an online society,
- stresses the importance of understanding user's needs in order to increase take-up and improve the experience of online services.

Figure 4.1 Non-believers vs user centricity



Unsurprisingly, a gap exists between citizen's satisfaction with commercial services (higher) and public services (lower) – one point on average (7 as opposed to 6 out of 10). There is also a worrying inverse relationship between interaction and satisfaction with public services: **the more interaction with government is required, the lower the satisfaction results.** This also results in lower usage of these services.

The risk of stagnating take-up of eGovernment services can be overcome by collecting deep insights into relevant segments of citizens to understand what drivers and barriers influence their online behaviour.

Although eGovernment has been on the agenda for over a decade, more than one third of the internet population

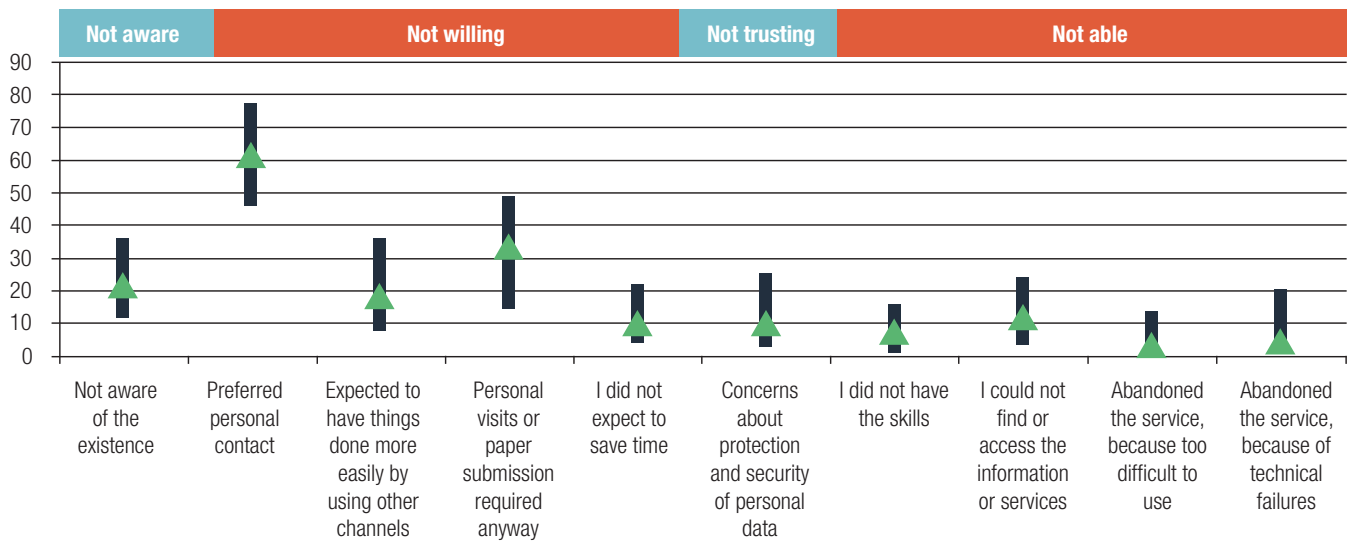
still refuses to use online services, as in their opinion the benefits are not large enough. Non-believers and drop-outs – more than 50% – present a real risk for governments. These are daily internet users. We asked them what is holding them back.



Non-believers and drop-outs – more than 50% – present a real risk for governments

Why use?

Figure 4.2 Perceived barriers preventing use of online public services



The major overall reason for citizens not using the online channel when dealing with government is a lack of willingness (80% of all those surveyed who did not use the online channel), with a notable prominence of a preference for face-to-face contact. Underlying this may well be an expectation that the complexity of services delivered from across multiple agencies will always fail at some point in the chain.

This suggests that addressing awareness and willingness is far more important than addressing trust and ability. Yet what gets our attention? Frequently it is the latter.

Interestingly, in the Netherlands and United Kingdom the 'lack of willingness' group is significantly smaller than the European average (-15 and -8 percentage points respectively), demonstrating that

internet users in these countries are less concerned about reduced personal contact in public service delivery compared to other countries. It may be that they are already used to increasing digitisation of public services?

Lack of ability is mentioned by a quarter (24%) of all non-users. This barrier is most prominent in Greece, Lithuania and Turkey.

Lack of awareness, interestingly, is more prevalent in young people. In theory, this group should be relatively easy to convert. On a geographic basis, Greece and Turkey, and also Bulgaria, Croatia, Ireland, Poland, Austria and Italy, could benefit from awareness-raising campaigns.

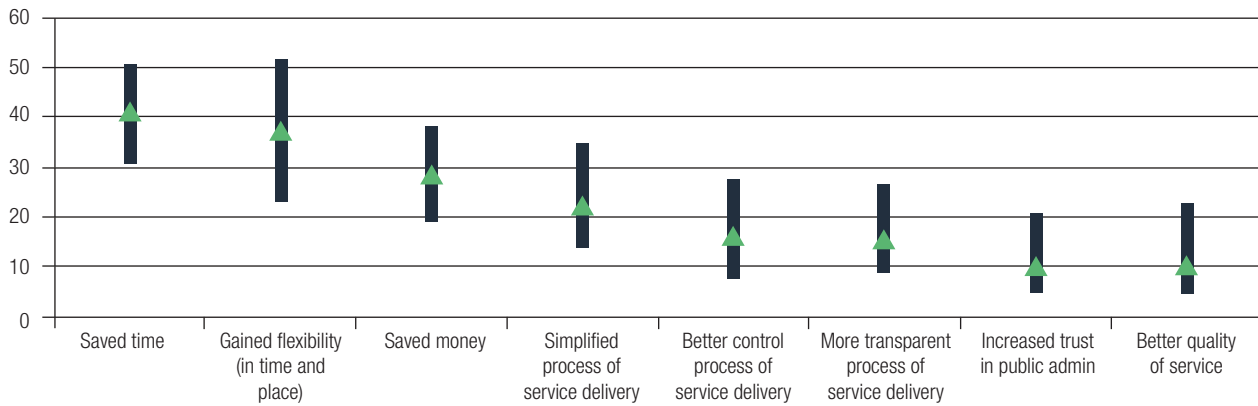
Lack of trust is modest at 11%; yet that is the one that grabs the attention.



addressing awareness and willingness is far more important than addressing trust [...]. Yet what gets our attention?

Why use?

Figure 4.3 Perceived benefits of using online public services



Convenience (time saving, flexibility, and simplification of the process) is the principal driver for using online public services. In a few countries (Estonia, Norway, Sweden and the UK) simplification was particularly prominent. In a handful of countries, **saving money** emerged more prominently (Croatia, Cyprus, Czech Republic, Estonia and Poland).

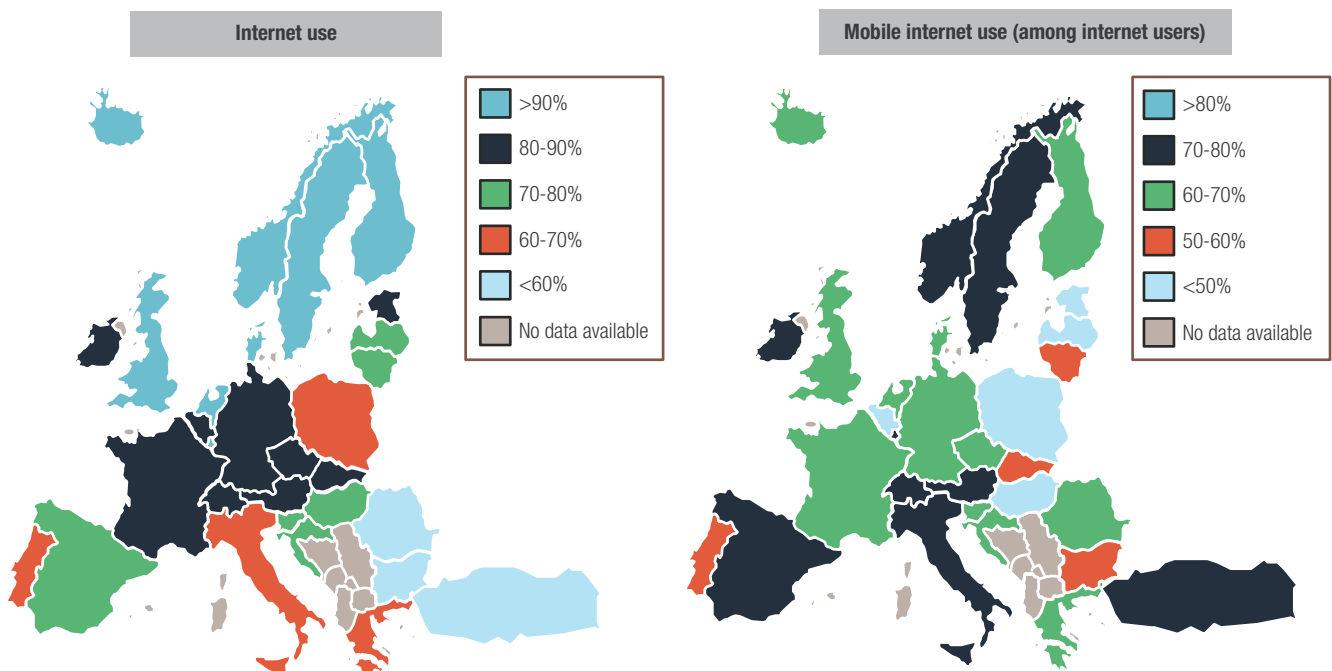
4.2 Mobile as a game changer

The 46% of Europeans that do use online public services all belong to the internet population, and almost all – 93% – are daily internet users. However, a substantial portion of Europeans are less digitally advanced: Eurostat figures show

that **one-fifth of all Europeans have never used the Internet**¹⁵.

Conventional online access is an issue. Eurostat data reveals that 28% of Europeans do not have Internet access at home¹⁶; the figures are particularly low in southern and Eastern Europe.

Figure 4.4 Internet Use (entire population, Eurostat 2013) and Mobile internet use (among internet users, user survey 2012)



Champions' initiative sponsored by the European Commission is an important means to keep this topic top of mind.

The figure below shows the percentage of citizens with a medium or high level of internet skill for each EU country as measured by Eurostat²¹ (x-axis), mapped against the online availability of eGovernment services that are part of the life events under assessment (y-axis). eGovernment use is shown by the size of the bubbles. For the four quadrants there will be different priorities for policy and programme intervention that might include:

- **Utilise:** many people are able to use online services and many services are available online. The ingredients for increasing take-up are there; it just needs the recipe to further enhance service design and solid communication to reach the non-aware.
- **Build:** many people are able to use online services, but not so many services are available. The potential target group exists. However, their opportunities to use online public services are limited. There is a need, to bring more services into an online environment. It can actually be an advantage to work from what is comparable to a 'greenfield' situation.
- **Anticipate:** many services are available online, yet a substantial group of citizens is not able to use them. Efforts should focus on training and increasing skilled people. It also requires countries, when further digitising services, to develop some kind of safety net for less digitally advanced citizens.
- **Reconsider:** few services are available and skill levels are low: clearly, for this category of countries, the current approach is not working. This should convince governments to radically shift the approach to public service delivery.

The differences in terms of people actually using online public services (i.e. the size of the bubbles) reveals the success rate in applying these approaches.

A key consideration for governments is that in advancing digitisation of public services not only the quality of services is decisive for increasing uptake and satisfying customers – it is just as important to ensure no one is left behind.

4.4 'Future-proofing' services through the participation of youth

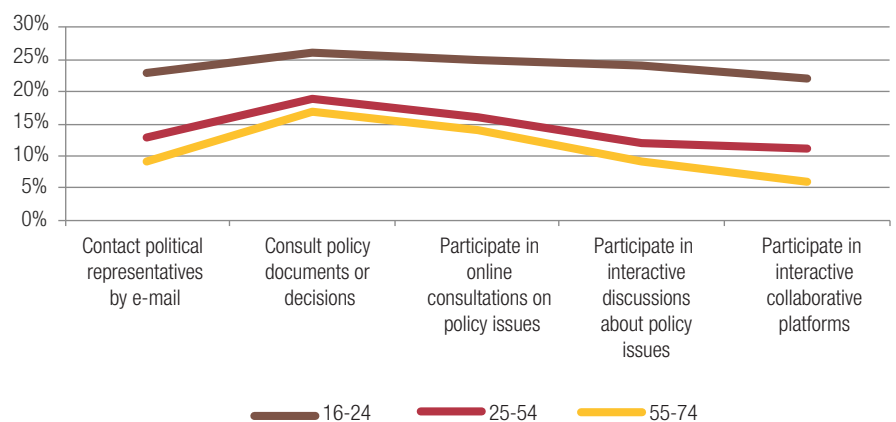
eParticipation will improve the ability of people to have their voice heard and make suggestions for policy actions in individual Member States and Europe as a whole. It will build familiarity and trust between the public and public sector: both vital ingredients without which the process of improvement can feel like 'pushing water uphill'.

This is especially true for the younger generation. As we saw in the User Survey in 2012, this age group (16-

24 years) has a stronger preference for the online channel, is more used to mobile devices, and in general is slightly more satisfied with using government applications and services than earlier generations. Young people participate more often in online consultations, interactive discussions on policy issues and on collaborative platforms than do other age groups (see Figure below). This also offers the potential to involve youth – the future users of online public services – in designing services that match the expectations of the techno-savvy new generation.

However, the life event assessment indicated that only 31% of public administrations provide information for citizens on how to participate in the policymaking process. It seems that the younger generation is willing and able to participate, and the challenge is for governments to understand how best to use this latent enthusiasm to stimulate adoption of new governance models that involve and strengthen the democratic process.

Figure 4.5 Participation (usage) for various purposes for three age categories





There is no one-size-fits-all approach – it needs strategies tuned to a country's specific historical, cultural and socio-economic backgrounds

4.5 Changing perceptions to reap the rewards of service design

Despite more than a decade of eGovernment initiatives, use of public online services is not meeting expectations: those of government leaders who seek a return on investment, and those of the actual users – businesses and citizens who seek better and faster public services (on a par with commercial providers).

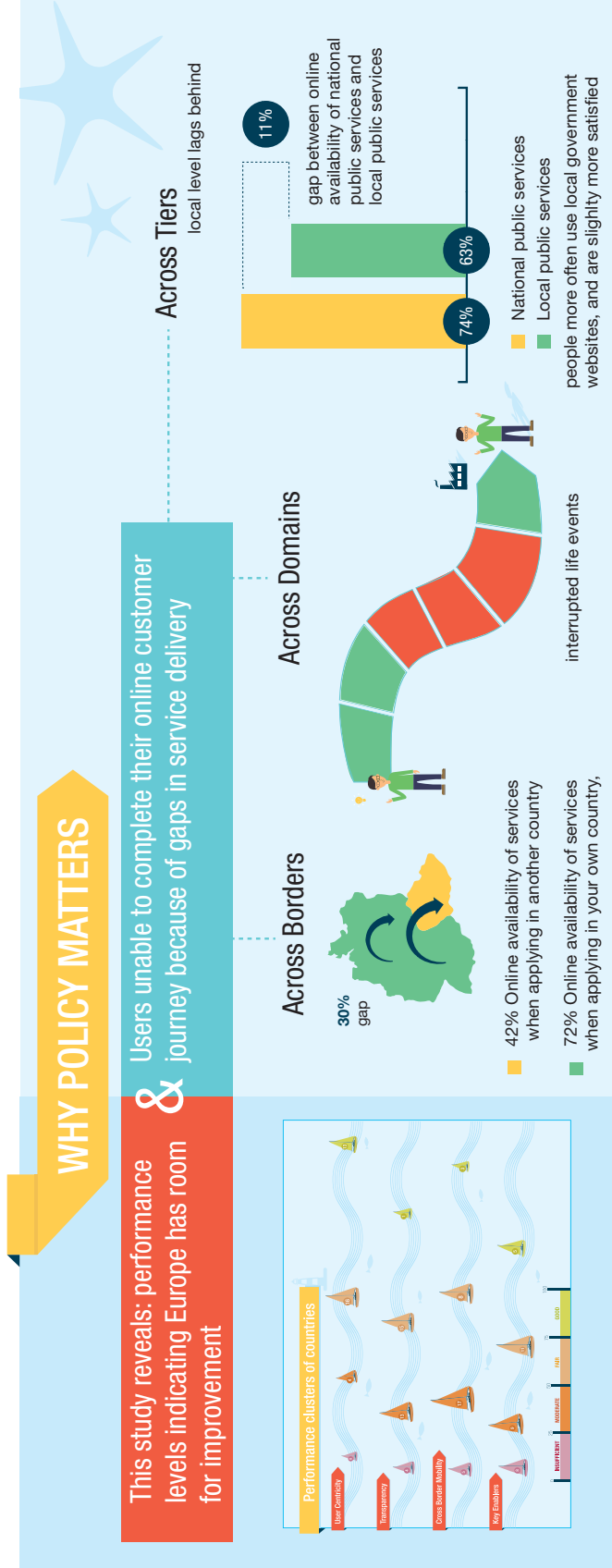
It will take a thorough re-think of how public services are organised, and of the extent to which governments can re-use data, to reduce burdens, and deliver faster and better quality services.

Gaining a profound understanding of the customer, re-designing services with a life event approach, designing with a mix of

channels intentionally in mind, increasing levels of personalisation – these are all elements that are vital in delivering at (or above) benchmark commercial service levels.

That customer may be a true 'digital native', a heavy mobile user, young and tech-savvy, but could also belong to a group that is at risk of digital exclusion. Both need to be included in the government's approach to further digitisation of public services. There is no 'one-size-fits-all' approach – it needs strategies tuned to a country's specific historical, cultural and socio-economic backgrounds.

It will then lead to increased faith on the part of citizens and businesses in Government's ability to fulfil their needs. And to increased take-up of online public services.



There is a key role for policy makers to play in directing and guiding Europe's actions

Countries take different strategies, and achieve mixed results

	Pioneers: (3 countries) a-sail to discover newlands	Steady performers: (9 countries) ship floating nicely		Business oriented: (6 countries) need to change track?		Castaways: (6 countries) need to find a vessel	
<p>'Excellent in all areas, technology driven, frontrunners in cross border services'</p>		<p>'Good consistent performance in all areas- though room to grow'</p>		<p>'Good service provision to businesses, including across border'</p>		<p>'modest performance, room for improvement in all areas'</p>	

Adapting to national characteristics – like size

- Smaller and medium-sized countries have significantly higher mobility scores than large and extra large nations. It might be the case that these countries are more prone to attracting foreigners. They also achieve higher transparency levels.
- Smaller countries achieve high scores on each priority, except for user centricity where extra large countries outperform by 1 percentage point.
- Large countries rank bottom on each indicator, except for citizen mobility where extra large countries come out slightly worse.

Nevertheless, a stronger focus on collaboration and governance is required to achieve joined-up government and to accelerate progress

05

Why policy matters

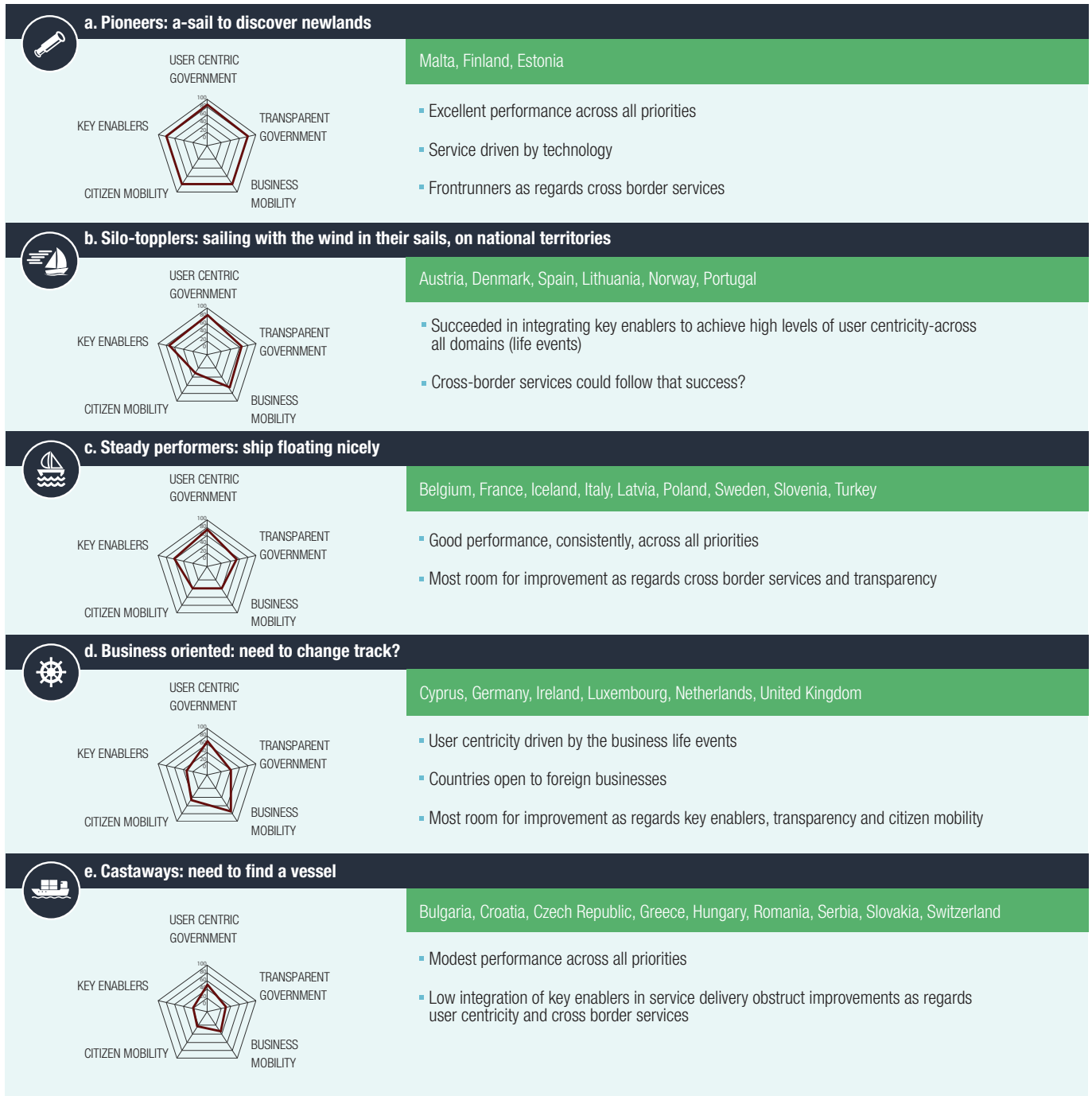
In previous sections we have seen the current state-of-play as regards eGovernment service provision in Europe and Member States. And who is (not) using those services. The previous benchmark report was provokingly titled 'Digital by default, or by detour', which led to intense discussion with some countries. With the Commission's recently published vision on public services, 'digital by default' is now on the agenda and has led to recognition that it is a realistic outlook. Clearly, however, this ambition is not (yet) on the agenda nor (yet) within reach of many individual European countries; most are at other stages of digital maturity or advocate a multi-channel strategy. Both approaches have proven to be successful.

This chapter will start by clustering Member States based on the results in this benchmarking exercise. It will show different attitudes towards implementation across Europe. We then dig deeper to see whether a country's size affects implementation of EU policy priorities, and what consequences current approaches have for the necessary collaboration and interoperability across government borders, domains and tiers because public service experiences – seen from the user's perspective – do not stop at the borders of a country, a national agency or a city council. **The success in achieving a shift to user centric online public services depends very much on whether countries succeed in governing that shift internationally and intra-nationally.** It makes clear why policy matters.

This chapter:

- show how countries have differed in their focus in implementing eGov priorities;
- reveal that size does matter;
- emphasise collaboration across domains, tiers and borders – as shown by good practice;
- suggest how countries can better deliver on the European advantage to accelerate improvement.

Figure 5.1: Implementation of eGovernment priorities: 5 typologies of countries



5.1 Five typologies of country in implementation of eGovernment priorities

The eGovernment benchmarking framework is based on the four main pillars of the eGovernment Action Plan. Measurement results hence provide insight into the extent these priorities have been converted into implementation. An overview of country performances across all the life events measured makes it possible to cluster and define five typologies, which are shown in the following figure. There are, of course, minor differences within each category.

It sketches out a picture ranging from countries that are ready for new challenges and countries that seem to be applying a more focused, step-wise approach to countries that are looking for a means to join the others.

5.2 Does size matter?

Is there a link between a country size in terms of population and its eGovernment achievements? Are smaller countries more uniform, homogeneous, perhaps even more used to adapt to others, and hence better able and equipped to improve more rapidly and more effectively?

When clustering countries based on population, and viewing the results of the measurement for each of these groups, the following becomes clear:

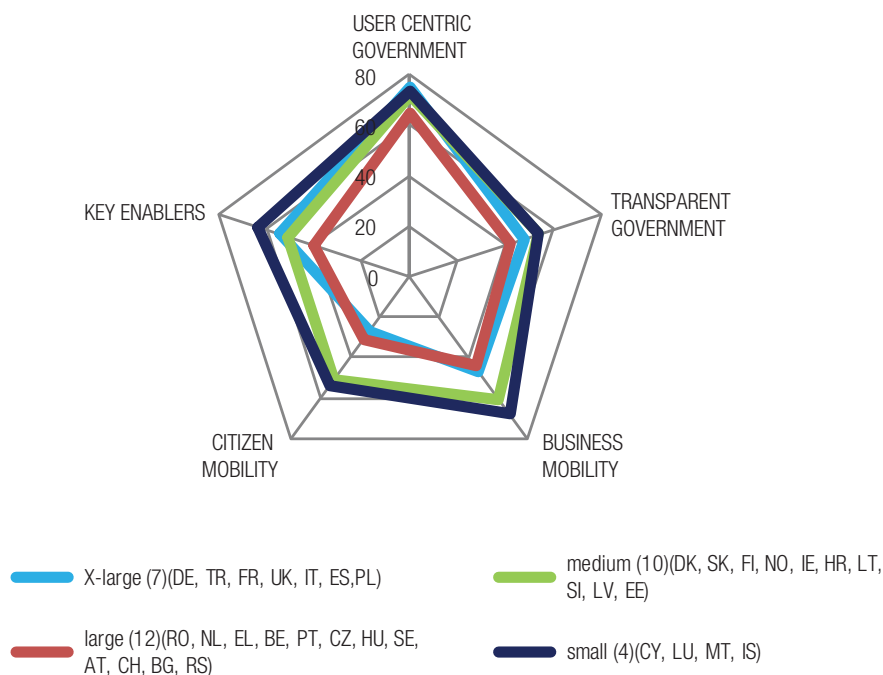
- Smaller and medium-sized countries have significantly higher mobility scores than large and extra large nations. It might be the case that these countries are more prone to attracting foreigners. They also achieve higher transparency levels.

- Smaller countries achieve high scores on each priority, except for user centricity where extra large countries outperform by 1 percentage point.
- Large countries rank bottom on each indicator, except for citizen mobility where extra large countries come out slightly worse.

From the life event measurement it can be concluded that size of country seems to influence performance, with some exceptions.

There does not, in fact, seem to be a correlation between how governments organise public eServices and people using those eServices. Citizens in small countries are using eGovernment services least (33%), compared to large countries (46%), extra large countries (47%) and medium-sized countries (50%). This makes medium-sized countries the most consistent across all indicators evaluated.

Figure 5.2: classification by country size (population²²) and results per policy priority



5.3 Interrupted life event journeys suggest lack of collaboration across domains

A coherent approach towards eGovernment development and effective use of technological enablers should lead to consistent maturity of the services in the various domains. We see, however, that consistency is not the reality yet. There are considerable performance gaps between the various life events, ranging from 'Starting a Small claims procedure' (37%) to 'Losing and Finding a Job' (60%). In addition to the performance gap between domains there also are performance gaps within life events. Customer journeys are often interrupted, demonstrating broken chains in the process.

Figure 5.3²³ below shows three life events that illustrate this interruption best: 'Losing and Finding a Job', 'Starting a Small claims Procedure' and 'Regular Business Operations'. In both 'Losing and Finding a Job' and 'Regular business Operations' we see clearly that social support mechanisms, i.e. housing, debt counselling, health support, compensation and guidance in case of illness, are not sufficiently integrated into the online journey. Another gap in performance across life events is an online service in case citizens want to appeal against a decision by a government/judicial organisation. These services help empower citizens as well as businesses. In the case of the former, this is to prevent them from further decline and keep them as part of our society. In the case of the second, it is to strengthen the independence of citizens and businesses and to increase trust in government in general.

Furthermore, we see the chain is often broken in the middle. Whereas governments do provide information on the service itself and on its outcomes (although to a lesser extent), they have difficulty facilitating the transactions needed to get from the beginning of the journey to the end. The chain in the life event 'Starting a Small claims procedure' shows this clearly. The citizen starts out online to find information on his/her rights and on how to issue a small claim. However, as soon as it comes to actually starting the procedure, face-to-face contact or paper transactions are needed. The same goes for the exchange of information back and forth during the course of the procedure (e.g. to share evidence and gain information on the case handling).

The performance gaps within life events might be caused by the complexity of certain services. Naturally, enabling digital transactional services or services which vary greatly from case to case requires more agility from the government organisation and a bigger transformation in the back-office. On the other hand, the higher performance in business services (as discussed in previous sections) and the differences in performance between life events and domains, show that some government organisations are able to provide these more complex services digitally. It could very well be however that governments still work in silos and fail to apply an integral approach to service design.

This limited collaboration between government organisations could be the true deal breaker for full online, seamless service provision. It prevents governments and citizens from reaping the benefits of digitisation of government services. As long as governments do

not collaborate closely, more money will be spent on the development of the same solutions, solutions will not be interoperable and information cannot be easily exchanged between government organisations. This leaves back-office processes as unnecessarily complex and error-prone. As long as the chains of the customer journeys remain broken, the administrative burden on citizens and businesses will remain as well. The move towards joined-up services through close cooperation could help governments to get maximum advantage from eGovernment services.

Figure 5.3 Revealing gaps in customer journeys



5.4 Re-thinking the one-size-fits-all approach towards cities' strategies

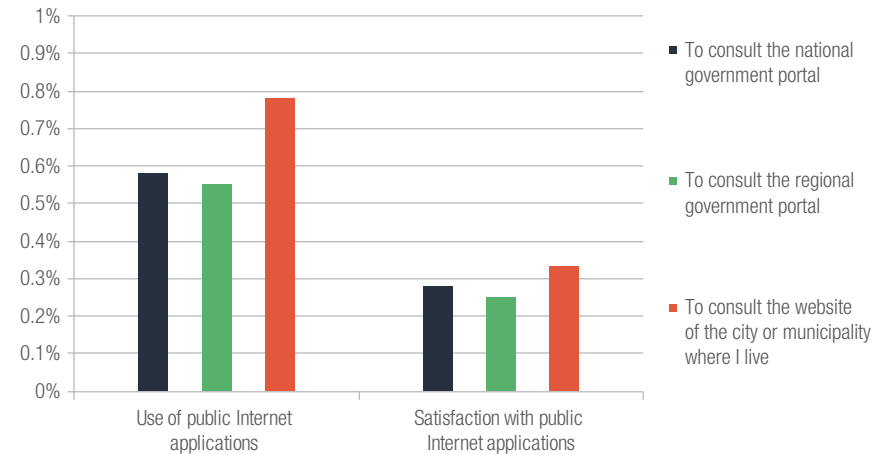
Is the current mode of conversation between national and local government working? Are they joined up and working efficiently towards strong cities, including public services that are not hindered by a lack of collaboration across the service chain (domains and tiers within life events) or by interoperability issues (key enablers)? A re-think of 'one-size-fits-all' national urban programmes and policies, and city and metropolitan development strategies²⁴ is vitally important, as has been recognised by several global organisations (OECD, World Bank, UN) and national governments.

People are increasingly moving into cities. It is predicted that by 2020 some 80% will be living in urban areas, in several countries the proportion will be 90% or more²⁵. This is causing most cities to outgrow their historic borders and become city-regions or metropolitan areas. It also means that cities have an increasing impact on the economy, especially those cities that have gained a global position. It is clear that the relationship between national and local government is changing and this requires governments to respond to this change.

The new approach to cities will evolve around two concepts²⁶:

- **'city systems'**, meaning the set of infrastructure, services, and amenities that make up the operating and management platform of any city or city region, and the way it interacts with other systems, such as market economies or ecosystems;
- **'systems of cities'**, meaning systemicising relationships between cities within a national (or even trans-national or sub-national) space, so that population shifts, mobility, resource management, economic and capital flows, amenity deployments, connective infrastructures and

Figure 5.4: use and satisfaction of national, regional and local portals/websites



services operate through dynamics of changes, flows, complementarities, competition and connectivity.

To achieve optimal functioning of these concepts, national governments and cities need to tackle several challenges. The OECD²⁷ mentions five as key. Of these, we highlight the importance of 'joined up governance'²⁸ in the context of the results in this benchmarking study. We see that in the figure above that:

- For citizens, the website of the city one lives in is the logical entry point to and starting point of any online public service. This is apparently even more the case than existing national portals. Local websites are generally slightly more appreciated than national or regional portals, and are more often used;
- Improved eGovernment services at local and city levels attract both greater use and increased trust²⁷, not least because of their greater relevance and closeness to daily life;

However, life event assessment reveals:

- In general, local services are less user-centric compared to national services. The gap between online availability of national public services and local public services is 11 percentage points²⁹ – based on samples that

consisted of the countries' largest cities;

- The gap is even wider when looking at smaller communities³⁰;
- And we have seen in previous paragraphs that the service chain within life events which involve various public organisations across domains and government tiers is frequently 'broken'.

It is essential to investigate the reasons for this national/local gap in order to increase understanding and support improvement. A major root cause of this gap seems to be the fact that key enablers (such as eID or authentic sources) are usually developed at the national level and are not sufficiently integrated in local services.

Other explanations could be that local governments spend less money on eGovernment developments because budgets are tight and/or because of other priorities, or that current funding mechanisms too often have a temporal character, through projects and programmes, but overlook continuity in the long-term. Or conversely, it could be that the various projects and programmes are not coherently founded on a 'whole-of-city' vision and approach.

It falls to national governments to recognise the (economic) importance of cities and to fulfil a different role in their relations with cities to facilitate their growth. It requires the active support of the whole 'system of cities' to fully exploit potential, as well as to focus on how to help local leaders strengthen the 'city systems'. And it requires local leaders to lead and govern individual cities, and manage, coordinate and integrate services, infrastructures and policies across wider 'city-regional' geographies.

In a similar fashion we could add a third dynamic: the system of cities in Europe. Europe will benefit in terms of competitiveness from a strong European cities network, just as national governments will benefit from aligned national 'systems of cities'. It requires tackling many challenges – which are even bigger when discussed at cross-national level. Joined-up governance is a vital one. Improved standardisation is another. But it will also require rethinking funding and ensuring a structural approach to further city development.

The question is how national governments can enable this development. Citizens using public services do not care about multiple government domains involved across various tiers: they just want better, faster and cheaper services. Government should organise itself to fulfil that expectation. Given that the national/local gap has been being reported for many years now and that the increased (economic) importance of strong cities is on the rise, the time to act on this is now and so realise the potential advantage/benefits for Europe as a whole.

5.5 Will there ever be a tipping point for cross-border services?

The business case is clear: possible savings of about €240 million savings per year for governments in Europe by digitising cross-border government services – based on analysis of only six services³¹.

However, it is not acted upon. From the eGovernment benchmark, it is evident that it is not easy for an EU citizen to use online services, or even find online information and support, in another EU country. Barriers are not just technological, language is also shown to be a hiccup in cross-border service provision. Although the situation is slightly better in smaller countries (as shown in paragraph 5.2), online transactions across borders are rare. National Interoperability Framework Observatory³² data shows that only 18 of 28 EU Member States have included the cross-border dimension in their strategies. Cross-border digital innovation thus does not seem to be supported politically Europe-wide. It is however one of the three key elements of the Commission and Member States' ambition: cross-border by default³³.

Nations are firstly focused on their internal, national organisation. They explore collaboration across borders in a pragmatic way, i.e. if there is a clear opportunity that can benefit both nations. For example, the Nordic countries have multiple programmes in place to stimulate cross-border cooperation and cross-border movement. Examples are websites with public service and legislative information for multiple Nordic countries, multi-country cooperation to help people and companies take part in cross-border activities, and funding programmes to stimulate transnational collaboration.³⁴

Austria and Germany take a sector-focused approach. They have developed a prototype implementation for secure information exchange (P23R x-trans³⁵) in the heavy transport sector. The final aim is to roll this solution out across Europe.

The Belgium, the Netherlands and the German state of North Rhine Westphalia launched an information portal especially for the border regions in 2013. The portal informs citizens living in one country and working in the other about social security, labour laws and tax systems, and provides the main contacts needed when working across borders.

These initiatives stimulate cross-border mobility and bring the European goal of cross-border eGovernment services one step closer. However, Europe is still a long way from cross-border services by default. European and cross-national initiatives often seem to focus on a specific domain, region or solution, and are financed on a short-term/ project basis. Although smaller scale initiatives help, structural cooperation structures in the field of government services (at both the policy and executive level) are needed to stimulate further improvement and innovation.

This firstly requires a structural attitude towards cross-border services on the part of governments. In a true advantageous European single market **the question should not be if eGovernment services should be available cross-border but which service(s) will lead the way.** One approach is first to implement the cross-border services that attract volume. Naturally, a higher user volume will generate a higher return on investment. However this could be easier said than done. Figures on cross-border user volumes are not always available and in order to turn government service users into e-government service users, mobile foreigners need to be made aware

of the existence of the digital service. Currently, as indicated in the report from DG Employment and Social Affairs, there is an overall lack of awareness in terms of rights and practicalities when choosing mobility. The currently relatively low user volumes of cross-border services might be a barrier to implementing them digitally.

Another barrier for the implementation of cross-border services could be the costs. However, a European Commission study on the costs of cross-border enablement of services³⁶ shows that in relation to the overall implementation and operating costs of existing national online services, **the incremental effort and costs of cross-border enabling these services are marginal**, especially now the Large Scale Pilots are delivering the necessary technical solutions. From this perspective it seems worthwhile already to cross-border enable national eGovernment services when implementing or significantly updating them. In this way, eGovernment services become cross-border by default and the focus can be placed on how to stimulate citizens and businesses to become mobile and to take up digital services.

A digital single market will help Europe become more competitive. The heterogeneity of Europe is a strength, but fragmentation is a risk compared to the USA and China. And what are the global implications of the status quo? It might be that various activities across Europe are beginning to create a momentum for cross-border services; however, it could certainly do with a push. The digital single market can be THE distinctive advantage of Europe.

5.6 Pace of improvement: press the shift button now or await necessity?

Where will Europe be in 10 years' time? Some of the issues signalled in the eGovernment benchmarking exercise has been on the agenda for a decade, such as the national-local gap and immature cross-border services. Current service provision needs to improve in terms of user centricity, transparency and use of technology – both at a national level as well as between Member States.

Will they still be talk of the town in 2024? Can European countries translate their ambitions into action and really shift attitudes towards a new, joined up approach? Can they establish the governance to operate public services free of borders between countries, domains, and tiers?

The choice governments have is either to act on this now, or tinker with the issues now, and face a far bigger challenge in 10-15 years from now. Possibly see some issues grow, while opportunities are missed. The consequences of this choice for Europe's competitiveness compared to other markets is evident. In its annual competitiveness report³⁷, the Commission calls for 'EU industrial policy that steers structural change', amongst others because the EU is lagging behind in productivity gains compared to emerging industrial powerhouses and some of its major competitors (the EU-US productivity gap is growing wider after years of narrowing).



the question should not be if eGovernment services should be available cross-border, but which services will lead the way

The same competitiveness report shows Europe has many things to offer – but not everything is on offer yet. Europe is not delivering to plan, and at the same time the plan needs an update and to adapt to advancing insights. Change is required that is not incremental but structural, and it needs to start soon. There are examples of governments that have managed to shift successfully and adopt a new approach – which will be highlighted in the next chapter. These should keep Europe on the right track, thus avoiding any derailment.

ACCELERATING THE RESPONSE TO THE NEED FOR INNOVATION



Change is the end result of all true learning.



Leo Buscaglia

A guide to reading this report

WHAT EUROPE IS HERE TO DO	Vision & Ambition	<ul style="list-style-type: none"> Context: policy goals and vision on eGovernment Introduction measurement 	Ch. 1 & 2
IS EUROPE DELIVERING TO PLAN?	Performance dashboard	<ul style="list-style-type: none"> Dashboard of eGovernment performance across policy priorities in Europe 	Ch. 3
	Citizen engagement	<ul style="list-style-type: none"> The extent to which governments succeed in matching expectations of citizens 	Ch. 4 & 5
	Government engagement	<ul style="list-style-type: none"> Interpretation of results and extent to which services are delivered 'joined up' 	
ACCELERATING OUR RESPONSE TO THE NEED FOR INNOVATION	Way forward: Transforming public eServices	<ul style="list-style-type: none"> implications and recommendations as regards stimulating public sector innovation 	Ch. 6 & 7
	Way forward: Benchmarking public eServices	<ul style="list-style-type: none"> practical next steps to be considered when further evolving the measurement 	

06 Harnessing the potential of the digital revolution

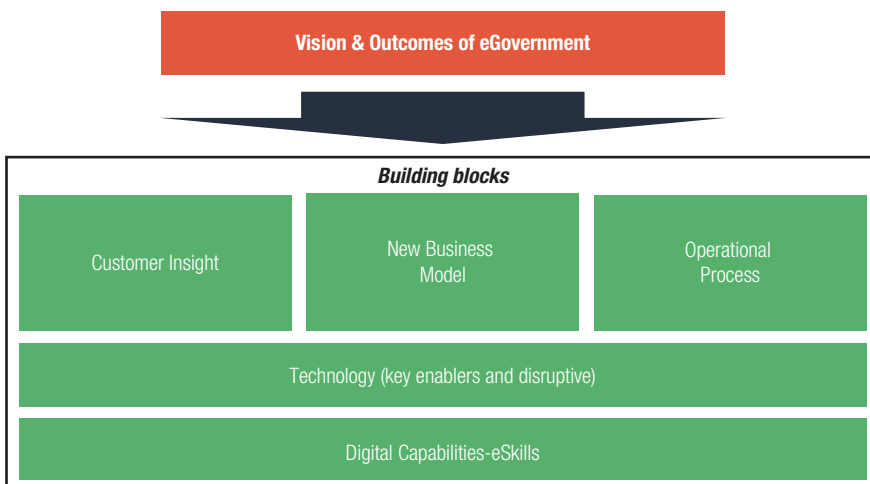
Governments have a unique position in implementing fresh approaches to solving existing problems. They are not hindered by the need to deliver short-term business results, but can plan and organise for the long term. We answered the question at the end of the previous section ‘is Europe delivering to plan?’ with a firm ‘No’. From this study, and other sources, it is clear that progressing in the same way will not deliver on the advantage that Europe has to offer. New, innovative ways are required to achieve better outcomes and meet the expectations of governments, stakeholders and citizens.

Innovation is the application of better solutions that meet new requirements, unarticulated needs, or existing market needs³⁸. Innovation is sometimes perceived to be terrifying, as if it contains creating the cure for cancer or achieving world peace. But it is not. It can be relatively simple things that have great impact.

It might mean improving an existing activity to improve the impact, adapting a proven idea to a new context or start with something entirely new. The following section where we highlight some interesting practices from across Europe shows how innovation can take various forms. They are structured alongside the model depicted in figure 6.1 and lead to five recommendations that are essential (but not exhaustive) in responding to the need for innovation:

- Service-minded: apply outside-in design;
- Joined-up governance: enable process digitisation and data integration;
- Transparent: adopting new operating models;
- Exploiting technologies: SMACS it up;
- Building an eSkilled workforce: increase society’s absorption capacity.

Figure 6.1: building blocks to realise digital ambitions



6.1 Service minded: apply outside-in design

The view that **the power has shifted to the customer**, including within the public sector, has gained ground over the past few years and there is now general consensus. This is also incorporated in the Commission's future vision of public services³⁹. The question it raises is what the public sector is doing about it and how the public sector is dealing with this shift. The results of this measurement show that it is not so easy. Possible explanations are:

- Most services and processes develop step-wise without looking at the whole and without being sufficiently conscious of the needs and experiences of customers and employees;
- It is not easy to design and create integrated and consistent customer experiences over various functional units and channels.

Arguably, it is the spectacular advances in the user experience of technology that are the most responsible for the increased popularity of IT amongst consumers. This sets the bar for public online services. Customers (and employees) interact, transact and work with organisations through a growing myriad of channels. **Their experience during these interactions is a key differentiating element as regards possible re-use of online public services.** For consistent, positive experiences to happen, they need focused attention. Build the right consciousness, desire and capability to design and deliver compelling experiences, from a radical outside-in perspective.

Customers have needs and seek to fulfill them. In their own way. During their customer journey, they will typically interact with many government channels, functional silos and technical solutions.

Norway's IKT project: cross-agency service design through use of Life Events and personae

A customer-centric solution for the process of Applying for Disability Pension: defining the end-to-end process (life event) enabled through collaboration between agencies, arriving at a common taxonomy, enabling access to one logical data register, introducing a new "rights register", and utilising mobile technology (app). It was necessary to solve an excessively complex process that resulted in a 50% error rate in applications and much frustration. It was beneficial for citizens with disabilities – but also improved the efficiency of the public organisations involved and reduced fraud. The improved efficiency will indirectly bring more people back into work (as civil servants will have more time to help people). Key success factors were: completing the work on a common taxonomy for this cross agency "business process", consistently marketing this solution as a best practice in eGovernment in the many meetings with different agencies and the public to expand the support and to attract experts who could contribute to further developments.

Poland's business portal has embraced the concept of life events to guide entrepreneurs and provide information suited to their needs. The aim is also to e-enable the back offices of public organisations involved in the various processes.

They will go through various emotions. **It is important to understand their end-to-end journeys and their emotions**, and try to understand how to respond to that in designing public services. An understanding of these personas is essential and, even better, collaborating and co-designing with them are ways to act on that understanding. However, no persona will be able to indicate precisely what is wanted. Gaining this understanding and designing optimal experiences can be complex, and can only be done through an **iterative approach**, that mixes research, creativity, intuition and experimentation. Governments should seek to be continuously collecting insights in this regard and apply these insights to create a fresh, outside-in perspective of existing public service delivery.

A design driven by user's needs will as a minimum:

- use personas and scenario maps to identify relevant contextual value (e.g. Life Events)

- collect feedback from users in target groups using prototypes.

Compelling user experiences – for the customer, for the employee, for the partner – are musts for the 'competitiveness' of governments. To create and sustain them, governments have to create the platforms that make it easy for users to turn into producers.

6.2 Joined-up governance: enabling process digitisation and data integration

We have concluded that to improve the quality of service delivery, and increase the efficiency and effectiveness of government actions, **collaboration is the key to success** – collaboration between public organisations across borders (between countries), across domains (between departments) and across tiers (between national and sub-national levels). It also involves collaboration between public and

private sector, and – as we have seen – between governments, and citizens and businesses.

We have argued that designing services around user's needs also includes mapping the customer journeys to understand how customers typically interact with various government channels, functional silos and technical solutions. **These silos are not a bad thing per se** – they represent thorough knowledge and expertise in a particular field. The challenge is to prevent silos working inside-out and focusing on output rather than the value they can create.

Could centralised management be a driver for success? Cross-government programme models, such as are in use in Denmark and UK, building on centralised management, have increased the success rate of projects. The British have gone far in the centralisation of project and programme management as they have centralised supervision and administration of the 50 largest government initiatives in their Major Projects Authority (MPA).

The 50 initiatives included in 2012 a total of some 190 projects with a total value (including operations) of GBP 354 billion. By bringing together the portfolio, the percentage of successful projects has increased from less than 30% to more than 70%⁴⁰.

Does money make a difference? Often it is argued that money determines the scope of what can be done. This is true to some extent, but not entirely. As last year's report showed mixed results in a coarse, indicative mapping of ICT expenditure and eGovernment performance⁴¹. It might be even more important to evaluate how that money is spent. Short-term financing (in programmes) and fragmented financing (organisation by organisation) can be inimical to continuity and sustainability.

Collaboration across borders: Germany and Austria cooperating on heavy goods transport

Heavy goods transport is a type of shipment which requires various forms of permit issued by different agencies. With thousands of annual heavy goods transports only between Germany and Austria this creates immense costs for the transport companies as well as the public administration. In order to overcome this unnecessary effort, the online portal "x-trans.eu" was created. X-trans.eu is the first project implementing the P23R principle in practice. This defines methods for simple, secure and transparent data exchange between the private sector and the public administration. P23R supports one of the key elements of x-trans.eu which lies in the automation of data-sharing across agencies and borders to minimise the time and costs for all involved and to avoid media breaks. It is estimated that P23R can be applied to many of the around 10,000 statutory notification obligations existing in Germany and thus help to reduce existing administrative costs of almost EUR 40 billion per year.

Collaboration across domains: once-only submission of company data in Portugal

Simplified Business Information (IES) is an electronic and totally paperless system of delivery for meeting requirements for accounting, tax and statistics declarations. Essentially, the fulfillment of each of these obligations entailed the need for companies to transmit substantially identical information on their annual accounts to four different entities (commercial register offices, tax authorities, INE and Bank of Portugal). The IES decreases the administrative burden on entrepreneurs by enabling them to deliver all the information for different authorities at once and electronically – authorities from different domains, Tax Agency, National Statistics Institute and the Bank of Portugal.

Collaboration across tiers: once-only principle at work in Netherlands and Spain

Both the Netherlands and Spain have made it easier for citizens to change their address by increasing the interoperability between public administrations. Citizens only need to indicate their change of address online once in a simple and secure way, after which other organisations are automatically notified.

In the Netherlands the registration of an address is part of a broader system of base registries that is in an advanced stage of development and use. The system consists of 13 base registries and common information services and standards. Eight of the base registries are operational as well as the common information services and standards. In 84% of executive agencies' work processes, data from base registers is used. The base registries form the foundation of the ambition of once-only data provision and reuse of data within the government. A common registration across government agencies is considered to bring a great reduction in the administrative burden and to contain efficiency potential for both citizens and governments.

6.3 Transparent: adopting new operating models

Governments can anticipate new models for public service delivery by addressing and capitalising on the changing role of citizens. The potential shift is from a model that is largely designed around the delivery of services to people towards a model that is designed to better enable co-production of services with people⁴². We have seen in this regard that the younger generation is willing to take part, but not yet fully facilitated or invited to do so.

A first step for governments is being fully transparent about performance and expenditure. Does the government spend my money wisely? We have seen this is not common practice across Europe. Good initiatives are, however, leading the way and increasing accountability, and hence performance of public institutions.

New models not only require a different attitude towards users of public services, they also imply opening up data. Working big data is often talked about, but less practiced. Some governments and cities are leading the way. It takes time and endurance, and steady faith/belief in the opportunities it offers. A strong example that has demonstrated the power of open data is the analysis of the UK National Health Service's prescription data, which found that citizens were unnecessarily paying millions for medicines that prevent cardiovascular problems⁴³.

Finally, opening up data is profitable. Potential revenue generation can accrue from two broad areas: charging for data and tax income from commercial activity on open data. The aggregate direct and indirect applications of open data across the European Union economy are estimated to be EUR 140 billion annually. The corresponding increase in tax revenues is a direct financial benefit⁴⁴.

Opening up service performance in the UK and Switzerland to increase performance and accountability:

The **United Kingdom's** breakthrough website of data.gov.uk/performance allows visitors to consult service performance: for instance, users of a service, customer satisfaction, number of applications and digital take-up of the online service. It also shows recorded errors. It also provides insight into total cost per service, and per transaction – which allows the overall efficiency of the online channel to be determined.

The **Swiss** government has developed a website on which they show, with the help of private sector companies, what e-Government services have been implemented in the different communes and cantons, including the technical details of the solutions implemented, the partners involved and contact details. It builds synergies and partnerships between communes and cantons, which is essential in a federal state to improve interoperability and general performance.

6.4 Exploiting technologies: SMAC it up

To a certain extent, for the last couple of years, many have argued the gigantic implications of disruptive technologies. **We have become used to escalating curves and off-the-charts predictions.** There are only a few who argue that the drivers of Social, Mobile, Analytics (or Big Data), Cloud, and Sensors and Internet of Things (SMAC or SMACS) are not having a powerful transformational impact. **But now what? How can governments – with their long term focus which put them in an ideal position to explore and invent – succeed in exploiting the potential of these technologies?** Slowly, some examples are showcasing the evidence.

Social is about carefully engaging with social media, and finding entirely new, more effective ways of reaching out to individuals and the communities to which they belong.

Connecting citizens: the Finnish Citizens' initiative (www.Kansalaisaloite.fi)

This is a web-based environment for creating and collecting names to support citizens' initiatives. Released on December 1, 2012, it has gained a wide base of users. The most popular initiative so far was related to equal marriage rights, which collected over 100 000 hits in just one day. The service gets regular media coverage and a few initiatives have collected enough names for the issue to be taken to parliament. This service was created by the Ministry of Justice, Finland, in a project which was part of the Action Programme on eServices and eDemocracy (SADe), which develops comprehensive services for citizens, companies and the authorities. These customer-focused and interoperable services enhance quality and cost-efficiency in the public sector.

Mobile is nowadays the first communication channel we think of and rightfully so, as it often provides the best way to connect to customers, business partners and employees. Mobile channels are not just another way of getting access to the same information and applications that are available through laptops and desktops at home or the office. It requires more than simply providing existing, complex processes with a mobile front end.

The EU's app sector has gone from zero to digital superhero in less than five years. By 2018 it could employ 4.8 million people and contribute EUR 63 billion to the EU economy according to a recent report⁴⁵.

Mobile phone signature in Austria

The Austrian government has started authenticating citizens through the mobile channel. Although qualified electronic signatures have great potential to foster trust and security in online transactions, in particular against the background of growing numbers of incidents of identity theft and phishing, the take-up and usage by the broad public has been remarkably low in Austria over the last ten years. The main reason for this could be found in the lack of usability of signature smart-cards and the need for additional hard- and software usually not part of the off-the-shelf PCs and notebooks. Therefore the Austrian mobile phone signature was developed. With this innovative solution a qualified electronic signature can be created by simply using a standard mobile phone. It is an easy-to-use qualified electronic signature that fosters trust and security, reliability and authenticity for Government and beyond. Since 2010, more than 280,000 citizens have used the mobile phone signature. The number of users is continually increasing.

Estonia. Digital signatures as mainstream way for signing.

More than 30 million digital signatures have been given in Estonia during the year 2013 (population 1.3 million). The digital signature has proved his universal concept – it is used in any open user group and in any relation – governmental, business or private. National electronic ID-cards or mobile ID-s are used for signature creation. In 2013 the Estonian and Finnish Prime Ministers signed the Memorandum of Understanding (MoU) digitally. The MoU regards two countries' information and communication technologies. Probably, this is the world's first digitally signed international agreement; it was signed using ID cards.

Analytics (or more accurately Big Data) create usable insight – and thus value – from large volumes of structured and unstructured data coming from many different sources and with differing dynamics.

The City of New York (USA), as well as other major American cities, are frontrunners in using data to steer decision making. The analytics unit has become a central component of the administration's approach to government, implementing citywide analytics-based systems for structural safety, emergency response, disaster response and recovery, economic development and tax enforcement. As an example, the city developed a catastrophic risk model, based on analysis of historic outcomes and identifying similar characteristics in those locations, that predicts and detects unsafe buildings. One of the lessons learned, according to the Chief Analytics Officer Michael Flowers, is to have strong executive support. Another is that focus is required on generating actionable insight for the client-agencies or units that can immediately be used with minimal disruption to existing logistics chains. 'But above all, remember that the point of all this effort is to help your city and its people thrive.'⁴⁸

(Source: Beyond Open Data: the Data-Driven City, Michael Flowers, beyondtransparency.org)

Cloud not only brings cost effectiveness but, more importantly, high levels of flexibility, scalability and speed-to-market of high-value solutions.

Cloud-based solution for environmental permits: municipalities in Croatia, Greece, Italy, Serbia and Turkey

Supported by the European Commission's ICT Policy Support Programme, the eEnviPer project is an integrated web-based platform for the application, administration and consultation of environmental permits. By making the environmental permits process more transparent, accessible and efficient, the environmental impact of economic activities through the environmental permits process is reduced in a cost-effective manner. It is being piloted in five countries.

eEnviPer provides digital services for permitting authorities at different levels (local, regional and central). Authorities can then offer access so that:

- Enterprises can manage their own environmental permit applications;
- Environmental engineers have access to relevant spatial data and applicable regulations to conduct environmental impacts assessments; and
- Citizens can provide comments on ongoing application processes online.

Sensors and Internet of Things: Internet of Things (IoT) is a worldwide network of interconnected, heterogeneous objects uniquely addressable, based on standard communication protocols. Machines are getting increasingly more intelligent and connected, learn about themselves and about their environment, and share what they have learned.

The City of Cologne (Germany) and the City of Eindhoven (Netherlands) are equipping cars and other vehicles with sensors that can send alerts in case of collisions, help avoid collisions, reduce traffic jams, and optimise drive energy usage, integrated with urban traffic management and control systems;

The Cities of Salamanca and Santander (Spain) are using Internet of Things-based services to monitor environmental risks, manage traffic and direct interventions at need.

Prague (CZ), the London boroughs of Croydon and Lewisham (UK) have installed intelligent lampposts or traffic lights that can detect light levels and movements, and save energy by turning themselves off when not necessary.

The City of Paris (France) has installed sensors in plants and trees located in public parks or streets to optimise maintenance and detect bacteria that can harm the health of trees and grass. Research indicates that 20% tree shade limits pavement surface deterioration by 11%, representing 30% resurfacing cost savings over 30 years.

These enablers combined provide a powerful melting pot, where the drivers amplify each other, creating something much more compelling than the sum of the parts. This is also called the 3rd Platform, with cloud computing providing scalability, Big Data providing the intelligence, mobile computing enabling better provision of information coming from objects and mobile devices being “Things” themselves, and social providing new collaborative platforms to visualise and share that information — all key enablers of the power of the IoT⁴⁶. It is incumbent on governments to explore, develop, test and apply these enablers to improve the quality of public services while reducing costs.

6.5 Building an eSkilled workforce: increase society’s absorption capacity

A vital prerequisite to successfully utilisation of the technological potential mentioned is the extent to which users, practitioners and civil servants, and leadership, understand technology and are able to use it in practice.

Users. We have seen that many citizens in Europe still lack eSkills and that it is our joint responsibility to ensure these people will not be excluded. There are many diverse initiatives across Europe to increase digital literacy. We have seen in a previous study⁴⁷ that continuity and scalability pose the biggest risk. If project funding ends, in most cases the project ends. Initiatives should be governed by or bundled in a national organisation that ensures that policy is implemented consistently, efficiently and for the longer term. In this regard, the concept of ‘digital champions’ has proven to be able to achieve success and deserves Europe-wide adoption.

Practitioners – both in the public and private sector. Another issue for governments is the worrying, and ever increasing, lack of ICT practitioners. The business sector requires more and more technically educated employees, and these vacancies are not, and will be even harder to get filled. This challenge is exacerbated by the lack of formal processes to govern IT talent and skills management within companies. A recent report showed that just 23% of executives report the consistent use of such processes to manage talent⁴⁸.

In Japan, the MITOH Program aims to discover and develop outstanding human resources called Super Creators. Specifically, these are persons possessing creative ideas and skills for achieving software innovation and who can put these ideas and skills to use. The MITOH Program is carried out under the auspices of project managers with outstanding skills and achievements. It aims to establish an environment for ongoing human resources development, such as having persons accredited as Super Creators participate in identifying other prospective Super Creators. At the same time, it promotes collaboration with industrial sectors to enable Super Creators to utilise their capabilities in transforming ideas into business, such as starting up businesses or commercialising development achievements. Super Creators discovered through this programme implemented by the IPA are expected to play active roles as world-class IT human resources that help support Japan's IT industry during the next generation.

The eSkills gap has been on the agenda since 2007 and with the Grand Coalition for Digital Jobs in the spotlight. Initiatives in this area mostly focus on closing the gap within business sectors – but what about public institutions? To keep track with the private sector and how technology is used, governments need to invest in attracting highly skilled technical employees. They also have the opportunity to invest in the longer term. Like New York, where it took three years to set up a data-driven department, to understand how big data could be successfully used to increase safety for its people. Recognising the need to adopt new ways, providing support at political level (eLeadership!) and patience were the key ingredients for success.

At the EU level the intention of strengthening international collaboration between bodies that provide the necessary frameworks to stimulate ICT professionalism is an important step forward that deserves follow up.

To harness the potential of the digital revolution and to keep pace with global competition, Europe needs to transform the skills, knowledge and capability of the workforce. Working together, industry, education and government have the power to ensure long-term action and success that will deliver jobs, competitiveness and productivity growth⁴⁹.

07 Practical next steps

We have shared our views on what public sector innovation entails and highlighted some of the areas governments should care about in their eGovernment strategies.

We also see some important lessons emerging from the eGovernment benchmark project itself.

- **Continue to work towards determining the impacts and benefits of Public Sector Innovation.** We have measured availability in the past, have moved towards the usage and demand perspective, and need to strengthen our focus towards the values of public services.
- **Continuously improve the measurement framework.** Address new technologies. Include new domains and life events. Add business user insights.
- **Accelerate the learning process.** Benchmarking needs benchlearning to be effective. A continuous focus on learning is needed, over and above incidental workshops. It should be a separate track alongside the measurement activities.
- **Compare peers.** Depending on the maturity of a nation's public services, different issues will control the policy agenda. That might be new mobile platforms and identifiers in Scandinavian countries, or the concept development of a regular eID in some parts of Eastern Europe.
- **Compare globally.** What's in here for Denmark to learn?
- **Deepen insights.** Certain topics require further research to reveal root causes.
- **Learn from failures, not just from successes.** The allied forces during WWII assessed planes that came back from bombardments and made sure that all planes were strengthened in areas where the most bullet holes were found. Extra protection in those areas was expected to bring more planes safely back home. It did not until they started to put extra protection in those areas where they did not find any bullet holes. Apparently, those areas were the Achilles heel and caused planes to crash.

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