

User satisfaction and administrative simplification within the perspective of eGovernment impact: Two faces of the same coin?

Whilst it is difficult to quantify past -and often huge- eGovernment investments as inputs into the eGovernment value chain, it is increasingly important to justify spending (and for some public administrations to justify their mere existence) by demonstrating impact, may it be related to effectiveness or efficiency. Today, only about 124 millions Europeans are eGovernment engaged, and 86 millions of Europeans using the internet regularly are non users of eGovernment services. Enhancing take-up remains a policy challenge in the EU at a time when citizens and businesses expect the same level of quality and responsiveness from government services as they experience generally with the private sector.

In our article, we first deal with two sub-dimensions of effectiveness: user satisfaction and administrative burden. We outline challenges eGovernment practitioners are facing when trying to improve the user experience whilst lowering administrative burden. Importantly, we emphasize the need for practitioners to consider that, in practice, the two stated sub-dimensions of effectiveness produce interlinked results in terms of more user-focused eGovernment services. Secondly, we place effectiveness into the wider context of “better government” by trying to interrelate it with the dimension of efficiency.

We argue that there is a need for a more holistic vision on the eGovernment value chain, covering both efficiency and effectiveness. This need is, among certainly numerous factors, generated by: the complementary nature of qualitative and quantitative assessments, mixed policy impacts affecting both efficiency and effectiveness, and the desire of practitioners to thoroughly understand the eGovernment value chain from upstream to downstream.



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“ So what are challenges practitioners are facing when trying to improve the user experience by lowering administrative burden and increasing user satisfaction? “

1 Introduction

We work about 500 meters from each other, each of us for a different consulting firm. Nevertheless, we share several professional challenges: we both face the endeavour of measuring eGovernment effectiveness across the EU, in some cases throughout all 27 Member States; and, we both juggle with eGovernment at the interception points of EU and national policies and punctual consultancy support to make the ends of eGovernment policies meet where they should: at the end user¹.

Before the detail of our article, let us briefly share our concept of eGovernment effectiveness with the reader. For the purpose of this article, we sketch effectiveness as what has been referred to in eGovernment literature as smarter (European Commission, 2007), qualitatively better and innovative eGovernment (Heeks, 2006), embracing the two sub-dimensions of effectiveness covered in this article: user satisfaction and administrative burden. Following the eGEP model² partly illustrated in the figure below (that interestingly puts effectiveness at par with constituency value), our viewpoint on effectiveness should further cover inclusiveness of electronic service delivery. The latter is only being dealt with to a minor extent in this article though for non-normative reasons.

Effectiveness	Reduced administrative burden	Constituency value
	Increased user value and satisfaction	
	More inclusive public services	

Figure 1: Illustration of Effectiveness, based on eGep Measurement Framework Analytical Model, (adapted from Codagnone & Boccardelli, 2006)

And now to the detail, the core of our article:

In our day-to-day discussions about eGovernment effectiveness, we see two matters emerging:

1. The first issue addresses two sub-dimensions of effectiveness: administrative burden and user satisfaction. In this article, we outline some of the challenges eGovernment practitioners are facing when trying to improve the user experience whilst lowering administrative burden. Importantly, we emphasize the need for practitioners to consider that the two sub-dimensions of effectiveness produce interlinked results in terms of more user-focused services.
2. The second challenge puts effectiveness into the wider context of “better government” by trying to interrelate it with the dimension of efficiency. We will point at the necessity for a more holistic view on the eGovernment value chain and identify current evidence gaps in assessing eGovernment impact.

2 Why pinpoint at the above challenges now?

Firstly, because there is evidence for policy focus on effectiveness and efficiency with recent progress at least at the beginning of EU Member States’ policy cycles in problem identification and policy formation phases: The fact that 25 out of 30 European countries have defined a policy on efficiency & effectiveness potentially mirrors the impact of the EU i2010 eGovernment Action Plan’s effectiveness and efficiency pillar on policy design. Among the 25, fourteen have developed those policies during 2006 and 2007, demonstrating the recent relevance of efficiency and effectiveness (European Commission, 2007).

Second, practitioners in Europe are facing significant pressure to translate their policies into impact. 2010 seems to be a mental barrier for the EU (renewed Lisbon agenda, Commission’s work programme for 2007-2010 on Efficiency & Effectiveness of eGovernment etc.) and its nations; in parallel the 2015 and 2020 agendas are emerging at the cutting edge. Whilst it is often difficult to estimate past eGovernment spending of Member States- supposedly significant sums to improve operational efficiency- as their input into the eGovernment value chain (key word: efficiency in terms of “spending well” referring to an input/output ratio), it

¹ In this article, we interchangeably use the terms “end user” and “user” referring to businesses and citizens.

²The eGovernment Economics Project (eGEP) is a study conducted by LUISS Management Guido Carli and RSO Spa for the eGovernment Unit, DG Information Society, European Commission, in 2006.

has become increasingly important to justify spending and for some public administrations to justify their mere existence by demonstrating impact (key word: effectiveness in terms of “spending wisely” referring to the relation between expected and achieved impacts).

3 What counts is impact...

The below figure (based on Heeks, 2006), is one of the visual concepts illustrating the clear shift of “hot” issues in eGovernment from eGovernment readiness (United Nations, 2008; Economist Intelligence Unit, 2007) and availability (Cappgemini, 2007) to uptake (Eurostat) and impact, showing that eGovernment activities’ maturity determines practitioners’ interest and needs. In line with the change of eGovernment issues over time (x- axis) we have added in the below figure, collaterally, the ever increasing role accorded to eGovernment end-users, especially when the success of eGovernment depends on individuals’ and businesses’ awareness, adoption and perception. Policy makers risk making the painful experience that eGovernment is only what users make out of it, especially should there emerge further evidence that the correlation between eGovernment supply and uptake or supply and impact mustn’t necessarily be a positive one.

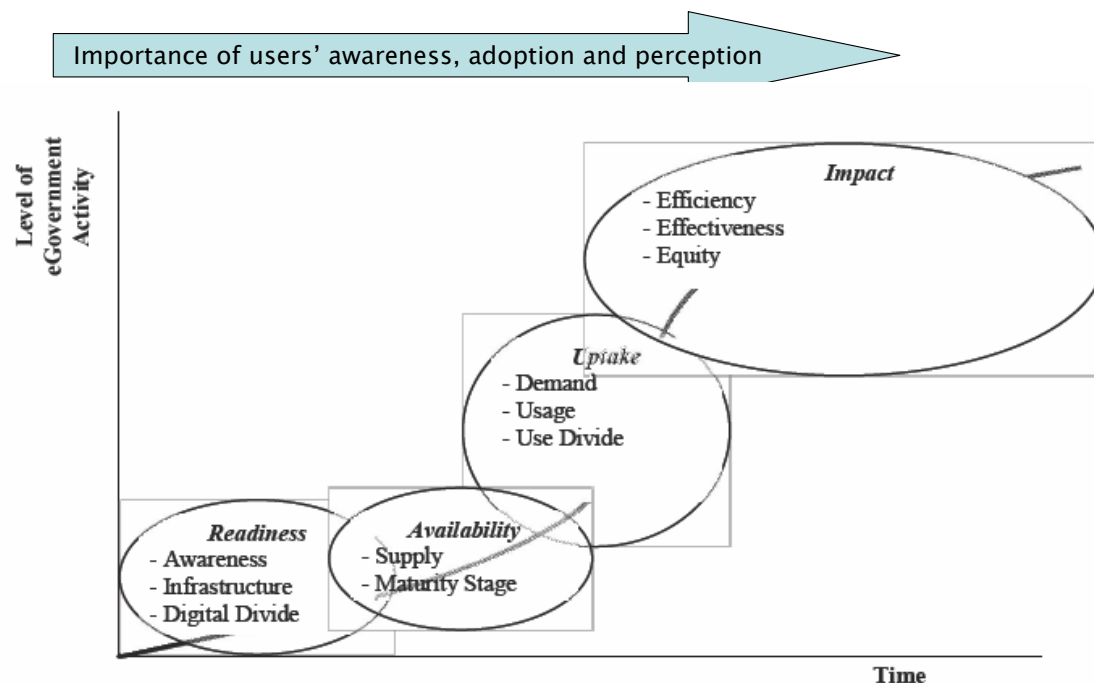


Figure 2: Changing eGovernment Issues Over Time (based on Heeks, 2006)

The next figure (Accenture, 2006) provides an empiric example of the importance of citizens’ perception in terms of policy impact, showing the particular case of governments’ capacity to recall data from previous interactions with users: when governments remember all of the details of a previous contact (such as the name and birth date of individuals) the percentage of citizens who think the government is effective at working together versus those who think the government is ineffective is 55% to 21% with an alarming drop of governments’ perceived effectiveness when none of a citizen’s details are remembered.

Figure 3: Impact of government's recall of previous interactions on citizens' perception of effectiveness (Accenture, 2006)

Some years ago, eGovernment initiatives were essentially driven by the desire to improve the public sector's operational efficiency by back-office redesign enabling the "provide once, use multiple times" principle and inter/intra- institutional data sharing. Reflecting the survey results illustrated in Figure 3, experts now point out that, to ensure impact, efforts need to be designed around the perception of constituents, not the provider, first. What counts is the user experience, may they it be driven by back- or front-office change. Welcome to the outward looking governmental organization...

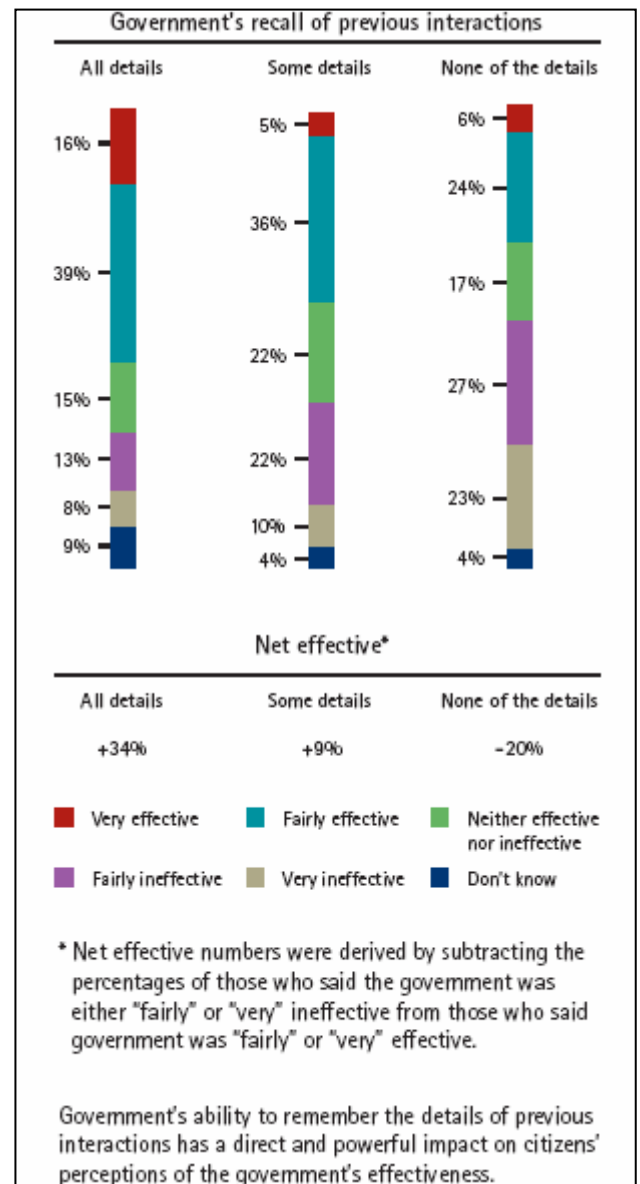
Let us now dig deeper into two sub-dimensions of effectiveness whose assessment supports governments in gearing services more adequately to (individual or collective) needs of users: customer satisfaction and administration burden.

4 Our experience: user satisfaction

As information and communication technologies increasingly permeate Europeans' work and daily life, persistent low access and use of eGovernment services can pose additional challenges: they can create new forms of exclusion, forego opportunities for more cohesion and growth, and affect both public authorities' legitimacy and industry competitiveness in a negative manner. Today, as a result of an increasing consumerist culture and rising expectations, citizens and businesses expect the same level of quality and responsiveness from government services as they experience generally with the private sector. Moreover, those end-users who are in most need of government services risk being either left behind or excluded by the innovative potentiality of eGovernment services. This can be due to the unsatisfactory usability, target-group orientation and accessibility of public services. If eGovernment services do not maximize user impact and increase user value a vicious cycle is created. Examples could include social apathy, less trust in government institutions, increased costs of social exclusion, and missed opportunities to benefit from the tangible gains that arise potentially from an increased take-up of eGovernment services.

If we compare at the aggregate EU27 scope the level of supply sophistication measured by the DG Information Society and Media supply side benchmarking (Capgemini, 2007) with the level of take up of eGovernment services (using Eurostat statistics), it is evident that there is a clear imbalance between supply and demand. A lot of governmental services are e-supplied but their consumption is low.

Low eGovernment consumption, in turn, can only be partially attributed to the fact that many Europeans are digitally excluded and do not use the Internet. According to Eurostat Statistics, in fact, among Europeans aged 15 and above (total EU population in this range is about 412 million) 51% report to use the Internet regularly, that is about 210 millions Europeans can be deemed digitally engaged. But only 30% of the same European population used the Internet in 2007, in the last 3 months, for interaction with public authorities (i.e. having used the Internet for one or more of the following activities: obtaining information from public



authorities web sites, downloading official forms, sending filled in forms). This means that only about 124 millions Europeans are eGovernment engaged and that 86 millions of Europeans using the internet regularly are non users of eGovernment services³. Therefore, enhancing take-up remains a policy challenge in the EU, foregoing user satisfaction assessments which per definition exclude non-users.

Regarding EU-wide user satisfaction assessments, currently, no common approach exists and we are far from having robust evidence in our hands: any first paneuropean work will need to detect whether there exist "European" user patterns that enable cross-country policy advice or whether each country or cluster of countries should define individual policy measures. To fill this evidence gap, Deloitte Consulting, together with the Belgian research centre Indigov, is in the process of performing for the Information Society and Media Directorate General of the European Commission a study on the development of a multilayer user satisfaction and impact measurement toolkit for inclusive public e-services. Based on existing experiences and in close collaboration with the European eGovernment agencies a measurement framework, holding a toolkit and context-methodology, will be developed as a new standard for inclusive eGovernment user measurement. The measurement toolkit will be piloted in different Member States.

As one of the few completed EU-wide studies of the last years, the Top of the Web study (Rambøll, 2004) showed how users perceived the quality of public e-services. Generally, user satisfaction seemed to be high in 2004 with more than 60% of eGovernment users being very satisfied (see figure 4 below).

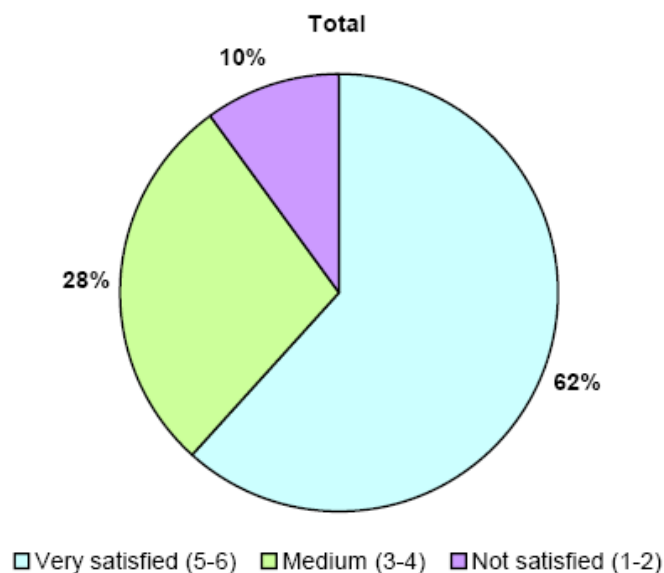


Figure 4: The level of User satisfaction (Rambøll, 2004)

In addition to assessing overall satisfaction, the Top of the Web study also tried to understand the advantages citizens expect and perceive when opting for the e-enabled channel. The results (see Figure 5) showed how many percent of the citizens felt that a usability criterion (such as time savings, more and better information) was fulfilled at the time of the survey (yes-proportion) and how important each criterion was in general to them (odds-ratio).

³ EUROSTAT, <http://epp.eurostat.ec.europa.eu/>

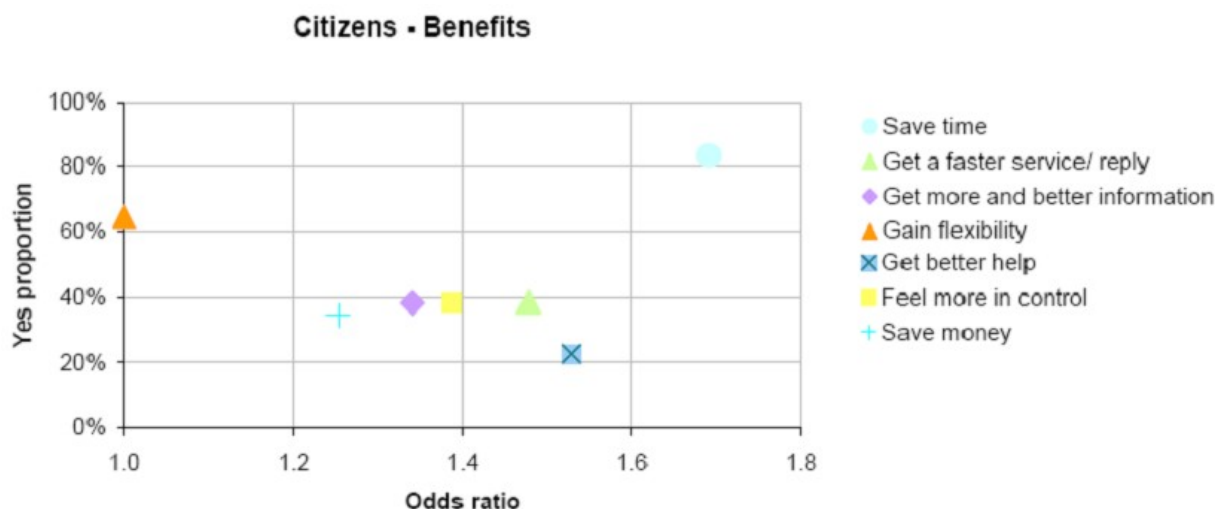


Figure 5: Importance of benefits- citizens (Rambøll, 2004)

The advantage of assessing user satisfaction at the EU and national level is that it puts end users of eGovernment into the centre of attention of eGovernment practitioners. However, users themselves are complex subjects to study with individual behaviour being a variable that is difficult to capture or to predict. Also, citizens appear in different roles that are to be addressed simultaneously: voters, citizens (participating in policy processes), subjects of the state (meeting certain legal requirements) and customers (exercising certain rights), (Hein van Duivenboden, 2002): when looking at eGovernment service delivery, the question remains whether today's end users are indeed first and foremost customers...

5 Our experience: Administrative burden

ICT can make government more user-friendly and efficient, but technology on its own will not compensate for suboptimal processes and burdensome legal frameworks, calling for business process reengineering and legislation's adaptation to eliminate the rootcauses of administrative burden.

When we look at burden created by governments throughout Europe, we see multiple levels of causers (ranging from the EU to local governments) and policy impacts (due to varying scopes, frequencies and target populations of information obligations). Interestingly within this multi-faceted picture, there recently have emerged

- a common, EU-wide endeavour: administrative burden is to be reduced by 25% until 2012, driven by the wish to increase the EU's economic competitiveness in line with the Lisbon agenda
- a widespread usage of the Standard Cost Model for assessing administrative burden
- a more or less coherent definition of administrative burden within the EU, referring to information obligations of individuals and businesses when exercising rights or responding to obligations in their relations with government

Looking at the latter definition, one aspect is striking: the lack of direct synergies between eGovernment policies and this legalistic view on administrative burden. It seems that the current clear-cut definition cannot adequately reflect the qualitative user experience in the sense of reduced processing times, accessibility, transparency and low burden, even in non-obligatory contact moments. To complement it, at least two actions should receive further attention: gathering evidence on the use of ICT as a tool for administrative simplification and a holistic view on administrative burden based on the user experience which may include more external assessments (such as focus groups) and eventually even participatory, bottom-up design (i.e. governments with end-users) of impact measures. As one example for the former, RSO Spa, Capgemini and Gov3 limited are conducting, for the Information Society and Media Directorate General of the European

Commission, three benchlearning pilots⁴, one of them specifically extracting the administrative simplification potential of ICT on eGovernment service delivery.

6 User satisfaction and administrative burden: two sides of the “user” coin?

As anticipated in the above sections, user satisfaction and administrative simplification produce interrelated impacts: in the end, users evidently don't make the difference between the two sub-dimensions of effectiveness when using eGovernment, but what seems so obvious on paper, mustn't necessarily be easy to be put into practice... So what are challenges practitioners are facing when trying to improve the user experience by lowering administrative burden and increasing user satisfaction?

Regarding both sub-dimensions, experts are refining units of measurement to assess user policies' impact. Common discussion points are whether end-users shall comment on single services (as it has been done widely in the past) or rather life events (requiring the involvement of a whole chain of organizations in a policy field e.g. unemployment) or how to best regroup users into target groups to maximize user value depending on (social, health) status (e.g. single-parent families, retirees). All these groupings somehow need to be representative and follow the logic of individual citizens at the same time...

Next to determining the demand and supply-side unit of impact assessment, practitioners are striving for a real-time or even proactive understanding of the steadily evolving end user-government relationship: notions such as personalized, tailored e-service delivery (in a potentially more individual-oriented social scenario) are emerging; also, end users are increasingly being looked upon as empowered⁵ governmental peers relying on Service Level Agreements and governments' quality charters, potentially fostering users' trust in their increasingly close relationship with governments.

Trust, it seems, plays a crucial role when sophisticated e-services requiring transactions or proactive, automated delivery come into play; and it needs to be mutual: enhancing uptake and perceived benefits from the user standpoint on the one hand and enabling self-organization and self-regulation (“light government”) for governments on the other hand. Based on mutual trust, new service paradigms could emerge developing passive citizen participation (consumption) into active citizen participation (prosumption) in public service delivery (Hein van Duivenboden, 2002). Co-active service delivery could become another operating mode so government agencies and citizens do each other a service in return every time they contact. (e.g. when citizens are provided with a permit, a subsidy or relevant information, they should be facilitated to give specific feedback or suggestions on the services delivered) (Hein van Duivenboden, 2002). In the administrative simplification policy field, feed-forward and feedback mechanisms are already frequently used, allowing users to comment on legislation and provide suggestions for improvement online, potentially giving end users detailed insight into public services' activities.

7 The link between efficiency and effectiveness

Having outlined the challenges of administrative burden and user satisfaction policies and measurements, let us now tentatively put effectiveness into the wider context of “good governance” by linking it to the concept of efficiency.

According to the conception of this article, efficiency shall embrace cheaper (producing outputs at lower total cost), more (producing more outputs) and quicker (producing outputs in less time) public service delivery⁶. eGovernment practitioners are aware that the scope of eGovernment policy has broadened from basic provision of services to service delivery's impact and from automation of processes to improve efficiency to

⁴ We refer to “benchlearning” as a bottom-up collaborative benchmarking based on a peer-to-peer experimental exchange among fairly comparable public agencies from at least two different EU Member States, designed as a symmetric learning process, that will implement and calculate more sophisticated indicators in a chosen area of impact the ICT enabled services the selected agencies provide and in the process will build transformative capacities.

⁵ Commonly cited examples for such empowerment are the options for users of e-services to manage their personal data or choose security options in online interactions with governments.

⁶ To provide one example, with back office integration, electronic public procurement can lead to dematerialization benefits, full-time-equivalent gains and reduced processing times.

more fundamental BPR and ICT-enabled effectiveness and user value creation. A vivid example of this tendency is the introduction of the EU eGovernment Awards category “effective and efficient administration” as one of four main themes according to which Member States can submit best-practice cases⁷. But what are potential reasons to look at efficiency and effectiveness from a holistic (policy and/or measurement) viewpoint on the eGovernment value chain, including upstream (input) and downstream measures (outcomes, impact)?

One reason for making the link could be the complementary character of quantitative and qualitative analysis: on the one hand, smarter, qualitatively better and innovative e-services relate to effectiveness measures and might need to be measured qualitatively. On the other hand cheaper, more and quicker governmental services relate to efficiency measures and offer opportunities for quantitative or even financial measurement (Heeks, 2006). Both components seem to be at the origin of public value though efficiency savings do have a natural ceiling unlike effectiveness impact which rather reflects the notion of incremental improvement.

Another reason why efficiency and effectiveness should be looked upon in parallel is that policies can manifest themselves with both types of impact, for example when governments seek efficiency savings by shutting down channels whilst jeopardizing inclusion objectives. In the opposite case (see figure below), the introduction of a new channel or service results, in the first place, in an additional cost to government, as both the old and new channels need to be maintained. It is only when a critical mass of users has migrated to the new channel that the old can be scaled down or even closed and major savings can be realized (Booz Allen Hamilton, 2005)⁸, overlapping eGovernment efficiency and effectiveness as potential impacts of an eGovernment project over time.

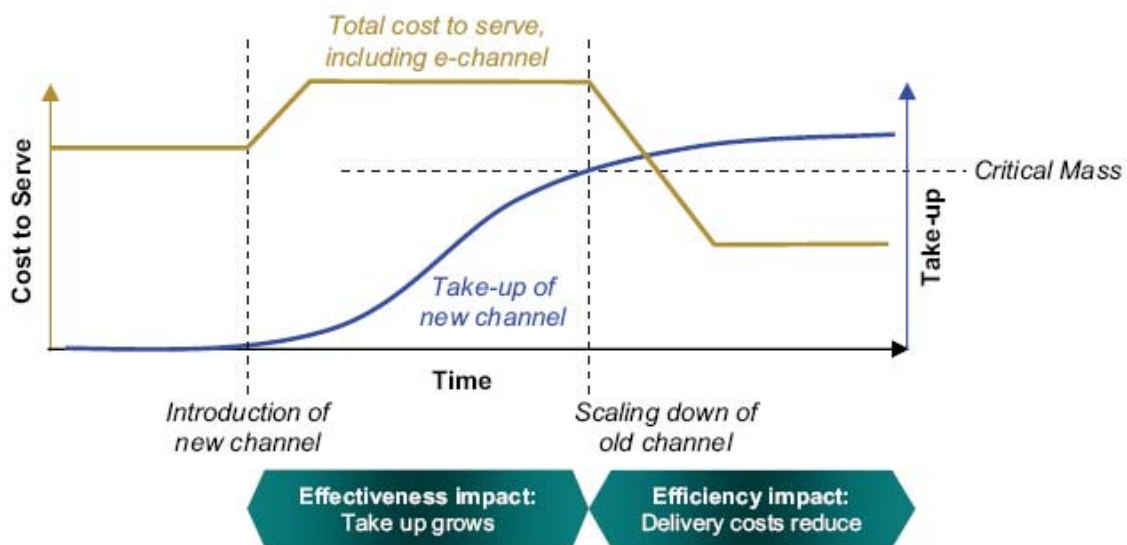


Figure 6: Phases of impact during introduction of a new channel (Booz Allen Hamilton, 2005)

Finally, an additional practical reason to holistically focus on both efficiency and effectiveness is the evidence gap on a potential correlation between efficiency and effectiveness we risk creating with punctual measures. Looking back in time, it seems that we have not yet been able to create sound evidence bases for assessing effectiveness and efficiency impact. Looking towards the future, such an evidence gap could prevent practitioners from understanding the impact of their spending, or- why not- from appreciating how to achieve effectiveness cost-efficiently...

⁷ These four themes are: “better public services for growth and jobs”, “participation and transparency”, “social impact and cohesion” and “effective and efficient administration”.

⁸ This argument applies only to the customer facing aspects of the service as efficiency gains can still be realized through intra-governmental (back office) ICT enablement.

8 Conclusions

Seemingly, justifying impact of eGovernment investments and policies remains a key concern for the European Union as well as national governments. As outlined in our article, stakeholders should, in their attempts to assess impact, adopt a more holistic view on eGovernment, creating a better understanding of effectiveness and efficiency from upstream to downstream. After all, what counts from the constituency-perspective is the result in terms of efficient, qualitatively better, more innovative and trusted eGovernment services. We, however, acknowledge that what seems obvious on paper, mustn't necessarily be easy to be put into practice. In terms of impact measurement, it once again seems important to step back and reflect on what practitioners really want to assess...

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