Chapter 14
Evaluation and Metrics of E-Government:
From eEurope 2002 to Digital Agenda 2020

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ABSTRACT

This chapter discusses EU methodologies used for the evaluation of a number of e-government related strategies including: Action Plan e-Europe 2002, Action Plan e-Europe 2005, the Strategic Framework i2010 as well as the Digital Agenda 2020. It highlights differences and similarities between these plans. It is suggested that Europe should not focus mainly on the supply side (track availability and sophistication), but should also investigate indicators that might directly affect the eGovernment adoption. To this end, we have searched Eurostat Database in order to demonstrate some of the eGovernment evaluation metrics that affect the use and availability of eGovernment (eGov) in European Union concerning individuals and enterprises. We processed the row data and estimated the annual average and the annual average change of eighteen eGovernment indicators for the years 2005-2010. Furthermore, the chapter determines whether or not some of the targets of Digital Agenda 2020 will be accomplished by stated 2015. The author's estimates are based according to existing trends to determine how these indicators will affect, if nothing changes, in or by 2015.

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INTRODUCTION

eGovernment (eGov) Strategy of European Union (EU) is outlined in Action Plan eEurope 2002, Action Plan e-Europe 2005, the Strategic Framework i2010 and the Digital Agenda 2020. In this study, the availability & sophistication of twenty basic public services was looked at in the evaluation frameworks of Action Plan e-Europe 2002, Action plan e-Europe 2005, and strategic framework i2010. For this, a four stage evaluation model was adopted. In the last decade, Europe evaluated mainly the supply side of the eGov by evaluating the availability of 20 basic public services by estimating the indicator "Online availability and interactivity of public services."

In this chapter, we have demonstrated the evaluation of Europe's frameworks Action Plan e-Europe 2002 to Digital Agenda and conducted a data analysis of Eurostat Database (Eurostat - Your key to European Statistics). We processed row data and estimated the annual average and the annual average change of 18 eGov indicators for the years 2005-2010. Among these indicators are some that might affect the use of eGov. We found that availability of eGov in EU-27 for the years 2005-2010 is high (see Table 1). Here, EU-27 refers to the following countries: Austria [AT], Belgium [BE], Bulgaria [BG], Cyprus [CY], Czech Republic [CZ], Denmark [DK], Estonia [EE], Finland [FI], France [FR], Germany [DE], Greece [EL], Hungary [HU], Iceland [IS], Italy [IT], Latvia [LV], Lithuania [LT], Luxembourg [LU], Malta [MT], Netherlands [NL], Poland [PL], Portugal [PT], Romania [RO], Slovakia [SK], Slovenia [SI], Spain [ES], Sweden [SE], United Kingdom [UK]. Nevertheless, eGov usage by individuals for obtaining information from public authorities, for downloading official forms from public authorities, or for sending filled forms is very low at the same period. This indicates that it is not enough to evaluate mainly the supply side, but Europe should investigate the reasons why eGov use is low.

We note that, eGov usage by enterprises is high for the years 2005-2010 concerning usage of Internet: for obtaining information from public authorities, or for obtaining forms from public authorities, or for returning filled in forms to public authorities but it is low concerning interaction with public authorities for full electronic case handling. On the contrary, eGov usage by enterprises for interaction with public authorities for e-procurement is low. Internet purchases of goods or services, over the Internet, by individuals for private use is low as well as, online purchases in the last 3 months for the period 2005-2010. Online sales of small to medium enterprises (SMEs), not within the financial sector, 10-249 persons employed, with at least 1% of turnover, is again low for the years 2005-2010.

EU, in the evaluation of frameworks of eGov, did not give a deep focus on some indicators that might affect directly the use of eGov or might play the role of "prerequisites" for eGov adoption. These indicators may include the use of Internet. A major proportion of individuals in EU-27 had never used Internet for the period 2005-2010. This might have happened because the access or the equipment costs are too high, or access is not needed (content is not useful, not interesting, etc.), or there is lack of skills, or their content is harmful.

It is very important that, before EU implements a new eGov strategy, we see the trends of those indicators that affect directly the adoption or use of eGov services by individuals and enterprises .This will help EU to track down a strategy with more realistic targets.

In this study, we will highlight 18 eGov indicators and suggest that they be taken seriously in consideration before Europe implements a new eGov strategy. We have calculated the annual average for the years 2005-2010, as well as the annual change of these indicators. We concluded that some targets of Digital Agenda are very ambitious and might not become reality by 2015, for all European countries member states of EU27, and we found out that major differences appear in some indicators.