Multi-Attribute Evaluation of E-Government Projects: Slovenian Approach

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ABSTRACT
This paper presents comparative review of existent (inter-)national approaches to e-government projects evaluation with the stress on intangible/hidden costs and public value dimension which are the two components usually missed out in traditional investments evaluation methods (e.g., net present value, cost/benefit analysis, return on investment). Based on the literature review and weaknesses identified through comparative review, the authors developed models for ex-ante and ex-post evaluation of e-government projects for Slovenian public administration. The models were developed together with representatives of Ministry of Public Administration.

Keywords: Decision, E-Government, Evaluation, Ex-Ante, Ex-Post, Multi-Attribute, Project

1. INTRODUCTION
High resources being invested in e-government development and growing pressure on public finance which is (also) a consequence of economic crisis, are the two leading reasons calling for justified and grounded selection of e-government projects as well. Namely, until recently, the decisions on how these resources should have been spent, weren’t always based on the most professional basis. Several e-government projects were subject of (or the result of) lobbying (Kertesz, 2003; Yildiz, 2007), »copying« of other organizations projects (Yildiz, 2007), or were simply conducted adhoc (Datar, 2007).

Well known and proven traditional methods for investments’ evaluation (e.g., cost/benefit analysis, net present value, return on investment etc.) are not sufficient in the field of IT and e-government projects (Milis & Mercken, 2004; Anandarajan & Wen, 1999; LaVigne, 2001; Jones, 2008). Namely, those methods do not consider wider political and social goals (Grimsley et al., 2006), including the dimensions of public value (Kearns, 2004). Another argument, calling for evaluations not only covering monetary expressed costs and benefits, lies in the fact that, even though, public sector has for a long time been under the pressure of decreasing its costs and increasing productiv-
As a respond to above mentioned weak points of traditional evaluation methods, specific e-government projects evaluation methods arose in the last decade. These are mainly approaches developed on national levels of specific countries which are not directly transferable into other countries’ public administrations.

The purpose of this paper is to compare and critically evaluate existent approaches to e-government projects evaluation. On this basis, we have, together with Slovenian Ministry of Public Administration, developed two models: one for ex-ante and another for ex-post evaluation of Slovene e-government projects. The project has been co-financed by EU structural fund.

2. METHODOLOGICAL APPROACH

The research work presented in this paper has been conducted in two steps: first, we conducted a comparative review of existent (inter-)national approaches to e-government projects evaluation, followed by development of multi-attribute models for ex-ante and ex-post evaluation of Slovenian e-government projects. Aligned with that, we used two main methodologies.

After identifying general content of existent approaches to e-government projects evaluation, we conducted comparative review in more detail. First, we checked whether the approach supports ex-ante or/and ex-post evaluation, followed by the number of operative parameters comprising each methodology. Followed by that, we analyzed the presence of parameters measuring largeness of target group (i.e., how many users does the service have regardless the channel of usage), as well as current users’ profile indicating the level of potential usage of e-service to be implemented (e.g., level of education, region with most users etc.). In addition, we analyzed coverage of intangible/hidden costs and public value dimensions. Four categories of intangible/hidden costs were adopted form EU project eGEP - eGovernment Economics Project (eGEP 2006a, 2006b):

- Cost of internal reorganization (employees implementing re-organization, output decreases due to the reorganization, costs of reorganization-related consultants);
- Cost of inter-institutional reorganization and cooperation (meetings of cooperating agencies, travel expenses etc.);
- Cost of change management (top management involved in change, change management consultants etc.);
- Cost of training (training courses-related costs).

In addition, six indicators of public value dimension have been adopted from Kearns (2004) and Heeks (2006):

- Usage of e-government services;
- Users’ priorities;
- Contribution to public trust;
- Users’ satisfaction;
- Multi-channel offering of service;
- Service quality.

When developing multi-attribute models for ex-ante and ex-post evaluation of e-government projects, we conducted three focus groups combined with Delphi method. This means that we organized group discussions (which is a characteristic of focus group method) the goal of which was to reach a consensus (Delphi method characteristic). The purpose of the first two cycles was to achieve an agreement on the set of parameters to be included in evaluation models. The third one was conducted in order to define weights of those parameters. All three cycles were conducted with two or three representatives of academia and two or three representatives of Slovenian Ministry of Public Administration.