Gaming to improve public policies by engaging local governments in open data policy-making

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Gaming to improve public policies by engaging local governments in open data policy-making

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ABSTRACT

Open government is a trend of public administration that strengthens the relationship between governments and the public. In open government, the opening of data is the mean to make governmental information accessible for citizens, firms, NGO's and other public bodies. However, one of the challenges is still to get national and local governments to open their data for use. There exist already national governmental policies for open data and research has been developed to support policies and to understand its effects. Opening by default requires that politicians and public servants change their behaviour towards the opening of data. The objective of the present research is to present how games can be used to change the behaviour of local government's civil servants towards providing and using open data to improve the public policies with which they work (overcome cultural resistance against opening data). Therefore, the engagement of civil servants in open data usage will be experimented through games with various interactions forms. Evaluation of what works (and what does not work) will be registered to produce new inputs on how to use gaming exercises on public policies in general and for local Open Data Policies specifically.

CSS CONCEPTS

• **Social and professional topics** → Computing / technology policy → Government technology policy; Governmental regulations;

KEYWORDS

Decision-Making; Policy Gaming; Open Data Policy

1 INTRODUCTION

We are living a new technology development that gets society to expect governments to innovate to create public value. One of its effects is having Open-Data Policies (ODP) to be increasingly adopted in order to promote access to information and to approximate administration to its citizens [3]. Added to the fast-changing context, governments needs to rethink their policy-making process and routines. It is also necessary to consider the impact of potential radical transformations and possibilities that comes with them: "the transformational phase of e-government implementation (or T-Government) is the highest level of maturity for e-government programmes, thus it is also the most challenging phase to reach" [8, p. 2]. There are many concrete examples of such changes as for their increasing speed and the resulting impact: internet, mobile communication, open data, open linked data, semantic technology. Policy gaming is one technique that was developed almost 50 years ago but is only recently starting to get attention for its capacity to deal with such situations [2]. Serious gaming is a dynamic and interactive approach to discussing and developing solutions for wicked problems [5]. As described by [6, p. 516]: "The term 'gaming' exists within a loosely demarcated field of interactive participatory activities aimed at involving participants, who may be actual stakeholders in an activity. Related terms include simulation games, gaming simulations, policy exercises, and serious gaming. Although different authors have different preferences, the terms generally depend upon the intended use of the method".

2 LOCAL GOVERNMENT ENGAGING ODP GAME

Open Data is becoming important in many countries worldwide as Governments have opened their data not only for transparency and accountability reasons but also to benefit from input from different agents to improve their public actions [4]. Many countries are formalizing laws and measures to publicize data [7][9]. Despite all efforts many politicians and public servants are still reluctant to open data and a change in behaviour of preferring 'closed by default' to 'open by default'. Particularly, local government are struggling with this challenge as they have less resources and capabilities. The goal of the game is to have stakeholders from local governments to play, leading them to experience open data policy-making. Improvements on routines or new local ODP are expected as an outcome of the interactive process. It is defined to use the Game Design approach as a tool to promote open data and improve local governments' policies [4]. Figure 1 is the conceptual model for the game (inspired by [1, p 557]).
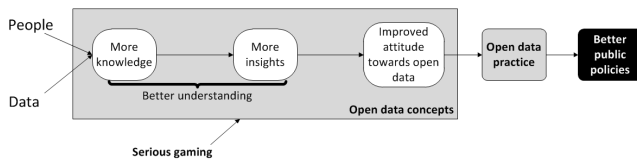
Figure 1: Conceptual Model

Figure 2: Evaluation Process

2.1 Games as method to change behavior

The goal of the research is to develop a game that results in better ODP, e.g. to have better and more effective public policy for citizens. The game will target at civil servants that operates governmental actions and can get public data to be accessible to the population. Assuming political resistance against opening data, the game will create a learning environment to experience the benefits of ODP and to deal with the risks. As discussed in the literature, if the data is available to citizens and firms, the local government will have inputs to improve their public action. This is a first challenge for the game on the field of open data for governments.

2.2 Problem definition

Given that (a) National Governments have Open Data Strategies; (b) Public Policies are executed through national schemes that are influenced by other levels (regional and local) to be implemented; (c) Street-level service delivery are normally implemented by local governments having (or being majorly supported by) national funds budgeting; and (d) Local governments usually have not Open Data Public Policies: local Open Data is key to improve public policies through citizens, firms and other levels of Government engagement.

2.3 Open Data to improve public policy

As part of the challenge, it is imperative to get local governments to play the game and adopt open data policies in order to access some possible improvements like:

- Gaining new insights from citizens and firms
- Getting civil servants to be enthusiastic about the policy they develop
- Getting civil servants to provide and start using open data themselves
- Getting local governments to understand and adopt open governmental policies (besides open data)
- Enhancing legitimacy of public action with the local population (transparency and participation)

These outcomes, as well as changes in terms of performance of public policies, will be measured to discuss the effects of the game both in public servants behavior as in its effects for the policies they execute.

2.4 Evaluation

After playing the game, players need to give a simple feedback sheet to comment on the particular game play. Each different exercise can lead to different feedbacks that can be used to improve the game. The feedbacks will also be used to compare each player's behaviour towards open data in real world (base line). People playing the game will be informed that they are part of an experiment and ask if they are willing "just to play the game" (with anonymized data),
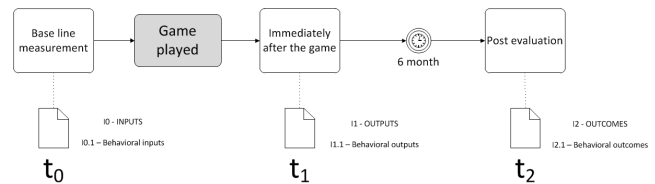
"play the game and give feedback" (to improve the game) or "play the game and participate on a later survey" (to test the impacts of the game on their routine). Post evaluation: every player will be asked afterwards (by email or telephone) to answer to some questions (evaluate the concrete effects of the game in changing their behaviour and in applying it to the public policy) – and it will be possible to measure on the answers and performances the grade of participation in the survey afterwards.

3 DISCUSSION AND FURTHER RESEARCH

Developing Open Data Policies is a great large-scale, interconnected, highly complex and dynamic challenge for socio-technical systems dealing with emergent IT technologies. The present research intends to develop better policy-making using open data through multiple-stakeholders interactions in local level governments. Specific policy fields will be set for the play test in several municipalities from different countries. Comparison between the results will lead to explore limits and possibilities to generalize the approach for other contexts, fields and players.

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