OPEN GOVERNMENT PROPOSAL FOR TRANSPARENCY AND INFORMATION ACCESS IN COSTA RICA

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ABSTRACT

This research deals with a public issue that affects many countries around the world, which is transparency. Therefore, an Open Government solution is proposed to face this problem. Through the multidimensional analysis, the current situation in Costa Rica can be assessed while best practices in Taiwan are identified to propose a roadmap that can be adopted in Costa Rica. Taiwan is one of the countries with the best open data index. Using comparative study case analysis, the research proposes how to implement Open Government in Costa Rica improving transparency and access to information offered by the State to general public.

KEYWORDS

Costa Rica, Taiwan, Open-government, Open-data, e-Government, Multidimensional Analysis

1. INTRODUCTION

The solution of public problems can be approached from a multidimensional analysis (Cortes-Morales, 2017), which aims to identify several key factors in potential solutions to be offered. In Digital Government solutions, this type of analysis allows us to cover not only the technological dimension, but also other factors that include the economic, political, administrative and social dimensions. Furthermore, it can identify actors, resources and variables for designing public policies that may provide solutions for specific problems generating public value. Through this analysis, the objective of this research is to propose an open government solution to improve transparency and access to information offered to citizens and other users of the public administration. Moreover, the proposal includes the creation of a knowledge repository intended to facilitate decision-making processes, not only for public managers, but also citizens and companies. The success of Taiwan in this domain has been taken as a reference for the multidimensional analysis to generate a proposal based on best practices that may solve issues related to transparency and information access in Costa Rica.

The article was organized as follows: in Section 2 the problem is contextualized. Section 3 contains the theoretical references that underlie the research. Section 4 defines the methodology used in this work. Section 5 develops the case analysis for the current situation of Costa Rica and presents a proposal based on Taiwan experience. Finally, conclusions of the research are presented in section 6.

2. PROBLEM CONTEXT

According to the results obtained by the Transparency Index of the Costa Rican Public Sector (ITSP) in 2018, the national average of transparency is of 34.55%, while access to information is 50.15% and open data availability just 21.20 %, as shown in Figure 1.

Figure 1. Transparency Index of Costa Rica's Public Sector (Costa Rica Citizen Defense Office, 2018)

The results shown in Figure 1 were obtained from the analysis of 254 Public Institutions. Considering that the transparency index of Costa Rica is 35%, it means that 166 institutions surveyed did not comply with the established parameters. An immediate conclusion is that an improvement in transparency offered by the institutions to citizens is required. Moreover, access to information is 50% representing that about 126 institutions do not provide access to information generated. Additionally, it is shown that just 21% of institutions under have an open data portal.

The survey was conducted analyzing information gathered from institution's web site. Thus, the issue corresponds in general in the way that the State provides public information to public.

Currently Costa Rica has an Open Government portal, however, it is outdated in most of the data it offers. This portal captures data coming from the different public institutions. Observing the results of the ITSP, it is concluded that the different Institutions do not provide the required data to the portal.

Additionally, Costa Rica has been making efforts to become a member of the Organization for Economic Cooperation and Development (OECD). Here is mandatory for Costa Rica to comply with OECD's requirement such as democracy, trust and progress. (OECD, 2018). Therefore, it is imperative to solve problems of openness and transparency to comply with the standards stipulated by this Organization.

3. THEORETICAL APPROACH

The research is based on the theoretical approaches of Digital Government, multidimensional analysis and Open Government. Digital Government refers to the use of technology and communications under modernization strategies to create public value. This includes government actors, non-governmental organizations, companies, citizen associations that support production and access to data, services and content, through interaction with the Government. (Pimiento, 2017)

In turn, Public Value is defined by (Moore & Khagram, 2004), as the means to establish a shared value in society, which allows resources to be invested to create a strategic triangle that provides legitimacy and operational capabilities for the implementation of public value.

Additionally (Pimiento, 2017), mentions some benefits offered by the implementation of digital government strategies, such as competitiveness, good governance, transparency, quality of service, innovation and empowerment.

Using Digital Government typologies proposed by (Fountain, 2001) described also in (UNPAN, 2010), the proposal focuses into the following ones: Government for Citizens (G2C) and Government to Business (G2B), because it looks to provide services to citizens and enterprises whom may have access to data and information efficiently. Also, Government to Government (G2G), taking into account that it allows communication between Institutions and the transfer of information in an efficient and up-to-date manner. Finally, Government for Knowledge (G4K) due to the proposal should provide a knowledge base for decision-making, and by having

a collection of historical data, action can be taken on State acquisitions and also have a repository of good practices and lessons learned in different areas that can be applied into the different institutions. As can be noticed, the proposal is transversal to all class of digital government types.

Through the Multidimensional Analysis, an analysis is performed from the political, economic, administrative, social and technological dimensions. This allows a broader approach to the problem and the proposed solution. In this approach, we aim to find evidence in the different dimensions and identify actors to validate the feasibility of the proposal.

For actors' identification, we use the typology proposed in (Subirats et al., 2008): actors are individuals or groups defending a position regarding a public problem. Those actors can be categorized as public or private, and among those categories can be beneficiaries or objectives. In turn, those actors have veto power and support in decision-making (Cortés-Morales, 2017).

Open Data is defined as information displayed on the web in a tabular format of numbers, statistics, metrics, micro and macroeconomic data, geo-referenced or not, of all types of subject, without intellectual property restriction or control mechanisms in terms of access. In addition, it has three basic characteristics: accessible, interoperable and reusable. (Durán, 2013)

Under this open data concept, the Open Government and transparency policies are based. Therefore, Open Government can be defined as *"a new paradigm and model of relationship between governments, administrations and society: transparent, multidirectional, collaborative and oriented to the participation of citizens in both monitoring and public decision-making, from whose platform or action space it is possible to catalyze, articulate and create public value from and beyond the borders of the state bureaucracies"* (CEPAL, 2019).

In summary the research has used an approach where knowledge came from the perspectives above described such as digital government, multidimensional analysis, actors and public policies and open government.

4. METHODOLOGICAL APPROACH

Transparency in the State is a public problem. That's why we use a public policy approach (Subirats et al., 2008) where the definition of phases (problem identification, formulation, decision, among others) is important, both for academics or practitioners. In addition, public problems can be approached using multidimensional analysis where the definition of key factors in political, economic, social, administrative and technological dimensions looks to provide a scope for a solution focused not only on information technologies, but on generating public value identifying the challenges on those dimensions.

Using the comparative case study strategy (Yin, 2014), the multidimensional analysis allows the comparison of dimensions in different contexts, in order to obtain success factors and generate a proposal that can be adapted to the Costa Rican context from the experience of Taiwan. Here we have proposed to gather information that in turn has been mapped to the specific dimensions the could clarify the context of the success of Taiwan while is also used to compare Costa Rica's current characteristics and to project recommendations for a solution. For example, laws, decrees, actors' support and other political variables has been analyzed both at Costa Rica and Taiwan. Budgeting, funding in the economical dimensions also has been taken into account for both countries, and we have followed such logic in the remaining dimensions (administrative, technological and social). Combining the comparative case study research with the methodology of multidimensional analysis, we have deduced the strategy to overcome the weakness of Costa Rica's lack of transparency.

5. MODEL APPLICATION

5.1 Costa Rica's Case

5.1.1 Political Dimension

In this dimension, Costa Rica has created alliances with different agencies and open data programs and has developed a series of laws and decrees that are described below.

In January 2012, Costa Rica joins the multilateral initiative “Alliance for Open Government”. In March 2014, the initiative for the "Promotion of Open Government in Public Institutions and Creation of the Open Government Intersectoral Commission" was established by resolution n° 38276-RE-MIDEPLAN-MICITT.

In April 2017, the 40199-MP decree and government guideline n° 074-MP on "Opening Open Data" was published. The decree n° 40199-MP indicates the way the Open Government will be implemented. The Ministry of the Presidency coordinates the Commission of Open Data. Furthermore, it mentions the creation of a Technical Secretary for the National Public Data Opening Policy, who is responsible for ensuring the execution of the policy, the action plans and the creation of instruments that lead to the availability and use of public open data. Moreover, it was established a progressive implementation where annual plans must be submitted to the Technical Secretariat. Finally, the decree establishes that, after two years, the implementation will be analyzed, and improvements or corrective actions will be carried out.

Following the typology mentioned on previous section, key actors from the described institutional framework can be identified:

Table 1. Costa Rica's Actors' for Open Government Strategy

Type	Dependence or Origin	Actors
Public	National Commission for Open Government (CNGA)	Secretary of Communication Secretary of Finance and Treasury Secretary of Planning Secretary of Justice and Peace Ministry of Science, Technology and Telecommunications
	Technical Secretary of the CNGA	To be defined
Objective	Public institutions	Institutions that must keep the data open and updated
Beneficiaries	Costa Rican Union of Enterprises	President of the Enterprise Unions
	Costa Rica Intact	President of Intact Organization
	Association citizen center of studies for the open society (ACCESA)	President of ACCESA
	National Council of Public Universities	President of the Council
	Citizens	Enhanced interaction between the state and citizens is expected, as well as greater transparency and accessibility to data.
	Public institutions	Both public and private organizations will have access to information
	Private business	

Some actors like “Costa Rica Intact” and National Council of Public Universities are included. Those Non-Government actors are intended for supporting the strategy for Open Government.

5.1.2 Economical Dimension

In this dimension, the Secretary of the Presidency coordinates the CNGA (who is the actor with the most confidence from the President); so, the project can be supported (hypothetically) with high support. However, since it involves several Public Institutions, each institution is required to allocate resources to support the initiative and looking to ensure that data is 100% up-to-date. No evidences (like budget or other actions) are clear in this support.

5.1.3 Social Dimension

In this dimension, Costa Rica it would be fixing a social problem from the perspectives of transparency, access, participation and accountability. It seeks to have more State / Citizen participation and obtain a transparent State with information constantly updated.

5.1.4 Administrative Dimension

In this dimension, the 3rd Plan of Action of the Alliance for Open Government is defined, which covers the period from November 2017 to August 2019. In it, social and sustainable development commitments are detailed for the institutions involved.

5.1.5 Technological Dimension

Currently, Costa Rica has an open government portal, which offers an API for information publishing. However, most of the information is outdated, revealing a lack of commitment in previous dimensions such as administrative and/or political. As part of the process of publishing information, validation of the data to be published must be carried out.

5.2 Taiwan's Open Government Case Reference

The Taiwan project for the implementation of an Open Government has allowed a greater relationship between the State and citizens, thus it is selected as a reference point for the case under study. In addition, Taiwan is selected for the similarity in territorial dimension it has with Costa Rica, this being considered a positive factor compared to other countries. In turn, both countries have laws that support the initiative of open data, transparency and access to information; Therefore, the strategy that Taiwan has implemented is seen as a success story, and can be a guide for Costa Rica.

The open data strategy in Taiwan is done by the publication of the Free Government Information Law, the Administrative Procedures Act and other legislations that were enacted and put into practice. The process of publishing the information was done gradually. (Tung-Mou, Jin, Hui-Ju, & Jing, 2013)

On the other hand, they have a value chain for the reuse of information and government data, that are composed of the following stages:

- Production and collection stage.
- The storage stages.
- The distribution stages.
- The adoption and value-added stage.
- The stage of marketing and providing service to end users.

As mentioned by Pin-Yu & Hsein-Lee (2018), Taiwan has been implementing its Open Data policy based on three principles and four strategies. The three principles are:

- Open data for public and Enterprise use.
- Free cost as a principle, charging as the exception.
- Automatic and systematic release and exchange of large volume of data.

The four strategies are:

- Proactive release of data and emphasis on people's welfare first, e.g., consumer data as priority.
- Drafting regulations for open data, e.g., Open Government Data Principles.
- Promotion of public use platform, e.g., the Open Data Platform.
- Demonstration, advocacy and promotion of services e.g. define scope for trial and encourage value addition and application.

In addition, according to Pin-Yu & Hsein-Lee (2018), since 2014 it has expanded to groups that work together with the Government in order to participate and cooperate to promotion of open data.

On the other hand, it is not only for public use. Government agencies also use open data produced by other agencies for the creation of networks and for cooperation purposes.

Some interesting facts about the implementation of Open Government in Taiwan are:

- Until September 15, 2017, the OGD platform has more than 30,090 data sets and 172 public application interfaces (APIs). Most of the datasets in the OGD platform are 3 stars, this means the data sets are available as machine-readable structured data plus a non-proprietary format.

- Open Knowledge International association has published global open data index 2016, showing that Taiwan topped the index for two consecutive years. Among the 15 key categories used to measure the state of open government data, Taiwan led 12 with 100 percent openness, such as land ownership, location and weather forecast, administrative boundaries, air quality, company register, draft legislation, election results, government budget, national maps, national statistics and procurement.
- NDC said the government would continue promoting OGD and releasing accurate and easy-to-use public data in a timely manner. The government will also collaborate with the private sector to ensure Taiwan continues to be an international reference point in this regard. (Pin-Yu & Hsein-Lee, 2018)

5.3 Proposed Solution for Costa Rica

According to the analysis carried out in the experience of Taiwan, a solution is proposed for Costa Rica that seeks to take advantage of previous efforts and try to achieve similar achievements to those of Taiwan. Having an updated Open Government platform, which currently exists in Costa Rica can be visualized as the “corner-stone” of the strategy. To do this, the proposal is described in four phases, this being a difference in how it was implemented in Taiwan, but it is adapting to the situation in Costa Rica.

- Phase 0: Consists of the period for the two years stipulated in transitory 4 of decree n ° 40199-MP to be fulfilled. At the end of this period the revision of the current state and the adjustments required for the continuity of the project will be made.
- Phase 1: This phase requires the creation of laws that establish deadlines for updating the data on the platform; this update will be made progressively. Moreover, responsible for each Institution will be defined to meet these deadlines. Each institution must have a compliance deadline that must be respected, and each institution must ensure the maintenance and updating of its information. In Costa Rica’s context, such “law enforcement” increases the chances to implement the solution. Agreement on the Congress should be accomplished to obtain necessities laws, thus, political leadership or to meet OECD’s requirements has to be triggers on such strategy. Here we can notice the importance of political dimension and economic one (since resources and funding have to be granted on the law).
- Phase 2: Define Open Government strategies to raise awareness among citizens and institutions. To do this, they can take as a reference the ones used by Taiwan that would be, (1) Proactive release of data and emphases on people’s welfare first, (2) Drafting regulations for open data, (3) Promotion of public use platform, and (4) Demonstration, advocacy and promotion of services. Social and political dimensions are important in this phase to encourage objectives of transparency.
- Phase 3: Define principles of open data, which strengthen the constant updating and publication of information. In this case, reference can be made to the success that Taiwan has had with its principles of, (1) Open data for public and Enterprise use, (2) Free in principle, charging as the exception, and (3) Automatic and systematic release and exchange of large volume of data. Here technological and economic dimensions are crucial. The first one in order to define particularities of data processing, transmission, storage among others factors. The second to define how services will be funded to provide a free access to people and enterprises.
- Phase 4: Establish a value chain in the use of data, adapted to Costa Rica that allows generating public value. Likewise, Taiwan experience is taken as a reference in this value chain, having the stages of (1) Production and collection stage, (2) The storage stage, (3) The distribution stage, (4) The adoption and value-added stage, and (5) The stage of marketing and providing service to end users. Beside the technological specifications of such value chain, an administrative structure should be implemented to manage such service.

With the development of these phases, it is intended that Costa Rica will have a platform with enough updated information to provide services as well as managerial knowledge of the situation of the country that allows them to facilitate decisions in a timely manner.

Finally, a configuration of actors both for sponsoring the project and to manage the implementation of the platform shall be defined. Formal actor’s analysis as presented in (Cortes-Morales, 2017) is beyond the scope of this research. However, the support of important political actors like the Secretary of the Presidency should be a key factor on the development of the strategy. The list presented in Table 1 defines a set of actors that could be good enough (if committed) to successful support the policy.

6. CONCLUSION

This research has allowed, through multidimensional analysis, to analyze and identify the best practices of other countries worldwide, specifically Taiwan. It has been possible to clarify that beyond technological resources, political, economic, administrative and social factors must be taken into account, for the application of laws, decrees, strategies and regulations that allow offering citizens technological resources, easily accessible and that provide updated and reliable information. Therefore, the proposed solution expects the Costa Rica's State to improve its transparency indexes at the national level and thereby recover the confidence of citizens. Moreover, multidimensional analysis reminds us of the importance of not neglecting any factor to design an accurate solution that generates public value.

Costa Rica's efforts, although important, lack from a more robust policy in this area. Taiwan with similar dimensions than Costa Rica, showed that good practices could be taken from each dimension to obtain and excel in the implementation of a platform of Open Government, a key factor for transparency.

Finally, this research as a case study doesn't look to generalize findings or conclusions. However, similar framework of analysis may be used on different political communities (national wide or local) to identify and/or suggest broad lines in solutions for similar issues.

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