Project to Enhance Online Social Media Usage Towards the Political System in Colombia

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I. Theoretical part

• Prepare literature review focusing on online media channels in the political communicating system in Colombia.

II. Practical part

- Describe the structure of political communication system in Colombia.
- · Analyze and evaluate the behavior of the citizenry in Colombia.
- Develop a project to enhance online media usage/channel towards the political communication system in Colombia.
- · Elaborate the cost, time and risk factors of the project.

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- I. Theoretical part
 - Preparing literature review focusing on online social media usage towards the political system in Colombia.
- II. Practical part
 - Analyze and evaluate the behavior of the citizenry in Colombia regarding the social media usage.

- Describe the structure of political system in Colombia
- Develop a project to enhance media usage towards the political system in Colombia
- Elaborate the cost, time and risk factors of the project.

ABSTRACT

Recent years have witnessed the increasing use of social media by governments to enhance political communication, participation and inclusion of citizens in public decisions. The use of these new technological tools as a complementary communication channel arises as a response to the erosion of citizens' trust and confidence in their governments, which is a phenomenon that can be seen in all around the world.

This research reviews the literature on social media and e-government in the current Colombian political system and, with the aim of analysing the use of social media by the citizenry and the public policies employed by the government of Colombia, the strategy "Urna de Cristal" was considered to the extent that it is the main project focused on the use of social media tools by public entities. The objective of this thesis, framed within three eparticipation models (managerial, consultative and participatory), was to analyse the current approach employed in the "Urna de Cristal" project and restructure where necessary with new indicators and new strategies to increase its effectiveness. To do this, the researcher analysed the interaction of the project with the citizenry by collecting primary data from 502 Colombian citizens (n=502) through a semi-structured questionnaire. The statistical analyses were done using parametric and non-parametric methods (Mann-Whitney Test and logistic regression). The findings revealed that the performance of social media platforms (measured with easy navigation sections, visual attractiveness, and useful information) is not significant for individual's satisfaction and, on the other hand, the fact of knowing that an answer will be given to the question formulated lead to higher user users' satisfaction. Moreover, the results are consistent with the theory used in this project and it was found that one of the factors for users to avoid social media communication channels is the thought that their

¹ "Urna de Cristal" refering to cristal ballox box

opinions will not be considered by the government and will not have a real impact in the decision-making making process. The cost, time and risk of the project were reflected in detail in the thesis.

Abstrakt

V posledních letech dochází vládami k rostoucímu využívání sociálních médií především za účelem posílení politické komunikace, účasti a zapojení občanů do veřejných rozhodnutí. Využívání těchto nových technologických nástrojů jako doplňkového komunikačního kanálu vzniká jako reakce na erozi důvěry občanů v jejich vlády. Jedná se o fenomén, který lze vidět na celém světě.

Tento výzkum shrnuje literaturu o sociálních médiích a elektronické veřejné správě v současném kolumbijském politickém systému. Cílem je analyzovat využívání sociálních médií občanem a veřejnými politiky zaměstnané vládou Kolumbie, strategie "Urna de Cristal". Jedná se o hlavní projekt zaměřený na využívání nástrojů sociálních médií veřejnými subjekty.

Cílem této diplomové práce, uspořádané do tří modelů e-participace (manažerských, konzultačních a participativních), bylo analyzovat současný přístup použitý v projektu "Urna de Cristal" a v případě potřeby restrukturalizovat novými ukazateli a novými strategiemi ke zvýšení jeho účinnosti. Za tímto účelem vypracovaný výzkum analyzoval interakci projektu s občanem, a to shromažďováním primárních údajů od 502 kolumbijských občanů (n = 502) prostřednictvím polostrukturovaného dotazníku. Statistické analýzy byly provedeny pomocí parametrických a neparametrických metod (Mann-Whitneyův test a logistická regrese). Zjištění odhalila, že výkon platforem sociálních médií (měřeno pomocí snadných sekcí navigace, vizuálně atraktivních a užitečných informací) není významný pro spokojenost jednotlivce. Na druhé straně skutečnost, že je známo, že odpověď bude zodpovězena na formulovanou otázku vede k vyšší spokojenosti uživatelů. Výsledky jsou navíc v souladu s teorií použitou v tomto projektu. Dále bylo zjištěno, že jedním z faktorů, kterým se uživatelé vyhýbají komunikačním kanálům v sociálních médiích, je myšlenka, že jejich názory vláda nebude brát v úvahu a nebudou mít skutečný dopad v rozhodovacím procesu. Náklady, čas a riziko projektu byly v práci podrobně promítnuty

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Introduction

The use of new technologies associated with the internet and the massification of social media has built a power that allows carrying messages to millions of people around the world with great speed and at relatively low cost. For this reason, large, medium and small companies, political parties and governments around the world, aware of the wide reach of social networks today, are focusing their advertising campaigns on the effective use of these new technological tools (Ghoshal, 2018). To establish a chronological start, it can be said that before 2008 citizens learned about politics and knew the government policies, mainly through television, newspapers and radio (Gerber; Karlan; Bergan; 2009). However, after the Barack Obama's campaign in 2008 it was proved the effectiveness of social media as a direct communication channel between governments and citizens. (Vladimir, 2018; Delany, 2009)

The evolution of different communication strategies using social media and the use of the Internet for political purposes has a major breaking point and it is Bill Clinton's campaign in 1992 when the candidate used this new technological tool to publish information from his campaign to reach journalists who could replicate this information in more widely used media such as radio, television and newspapers (Vladimir, 2018). Subsequently, the internet made possible, in the first instance through blogs and after through new applications, the information revolution in which we currently are.

Today, technological developments have influenced directly the models of political communication and the way governments approach society in general. As a result, the messages sent to people are more customized and sophisticated because of the use of microtargeting and data (Kreiss, 2016). The growing interest of governments in social media is a phenomenon that has been replicated in various parts of the world as a result of the lack of legitimacy and disconnection with citizenship presented by most governments (Delany, 2009).

Lately, the online social media apps influence on the population, specifically Facebook, Twitter, WhatsApp and Instagram, has change the way the governments communicate the idea or the message they represent (Williams, 2017). This thesis aims to evaluate the social media usage in Colombia as a channel for communication between the government and the

citizens. This analysis will allow to have a broader view of the real impact of these new forms of communication that are becoming the main tool for many governments to get closer to the population. According to Chaves-Montero, to communicate and to explain with details the projects and the public policies is the best way to build a participative government and also it is an opportunity for the citizens to reach more political accountability and responsibility from both central and local government (Chaves-Montero et al., 2017)

This thesis focuses on empirically analysing the main strategy of social media usage in the current government of Colombia called "Urna de Cristal" in the theoretical framework of e-government and e-participation. The objective is to identify the main shortcomings and to design a project to improve the use of social media as an effective communication tool between the government and the citizenry within the current Colombian political system. To achieve this goal, a survey was conducted among the Colombian citizens to understand the real perceptions they have of the tools provided by the government in terms of social media and the use they are giving to them. Moreover, an interview was conducted with the coordinator of the project "Urna de Cristal" to have a better overview of the government strategies. This allows contrasting public policy and citizens' perceptions of it, in order to identify the opportunities for improvement of the project. Certainly, the findings of this research will contribute to a better understanding of the government strategies regarding the social media usage within the landscape of e-democracy y and will provide the government with enhancement strategies that can improve the project's impact in the medium and long term.

OBJECTIVES AND METHODS OF MASTER THESIS PROCESSING

Objectives of the study

The general objective of this research is to asses social media tools effectiveness in the communication between Colombian government with the citizenry. The specific objectives are:

1. To analyze the behavior of the Colombian citizenry regarding social media usage.

- 2. To examine the current social media communication strategies used by the Colombian government.
- 3. To find out the extent to which people prefer to use social media channels to communicate with the government.
- 4. To evaluate the effectivity of social media as a communication tool between the government and the citizens.

Research Questions

This research will provide answers to the following questions:

- 1. What are Colombian citizens using social media for?
- 2. What are the main social media communication strategies used by the government in Colombia?
- 3. To what extent people use social media to communicate with the government?
- 4. How are the government social media projects enhancing participation?

Methodology

This investigation adopted a mixed-method approach that involved surveys between Colombian citizens and an interview with the head of the project "Urna de Cristal". This will involve both qualitative and quantitative research techniques.

Research Process

The following chart illustrates the research process used to validate the intended study.

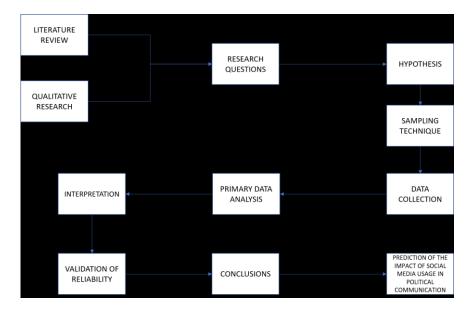


Figure 1. Research into the impact of social media usage in political communication in Colombia.

Source: Own

In this investigation two main instruments were used to collect data:

1. A questionnaire

2. A semi-structured interview guide

The questionnaire was designed along with the Likert scale and both open and close-ended questions were used. Additionally, a semi –structured interview was developed with the coordinator of the project "Urna de Cristal".

ORGANIZATION OF THE STUDY

The final report of the study was organized as follows:

I. Theoretical part

 Preparing literature review focusing on social media usage towards political communication.

II. Practical part

- Analyze and evaluate the behavior of the citizenry in Colombia regarding the social media usage.
- Describe the social media communication strategies used by the Colombian government.
- Develop a project to enhance social media usage towards political communication in Colombia.
- Elaborate the cost, time and risk factors of the project.

THEORY

1.1 INTRODUCTION TO LITERATURE REVIEW

The objective of this first chapter is to present the theory related to the investigation and to stablish clear conceptual bases that will allow to understand the relationship between the collected data and Colombian real context regarding the people's perception of social media communications channels. Among other things, this review will help to realize the current potential that Colombia has regarding the implementation of new technologies in the public sphere. Moreover, it can be an opportunity to elucidate the effects generated in the population with the creation of a project aimed at improving how the government communicates its actions and invites citizens to participate in the different decisions that are debated and taken in Colombian daily life.

Furthermore, the evolution of the Colombian citizens perceptions towards the use of social media and the trust they give to these communication channels can be understood through the different theories displayed in this investigation. Indeed, it is pertinent to understand the particularity of the Colombian society, the characteristics of the current environment, the barriers and the opportunities to the extent that this information will serve as a ground for comparing the findings, to make conclusions and finally to make specific recommendations to the Colombian government.

This review aims to fill some gaps regarding the use of social media tools as a powerful instrument for enhancing public participation, especially in a non-developed country where this field has not been deeply studied. Also, after reading the literature review, it will be possible to understand from different theories the current trends that other countries have experimented and implemented to transform the relation between governments and citizens. This will allow the reader to analyze from a different perspective the importance of the adoption of these new digital communication channels in the public sphere.

1.2 BACKGROUND OF THE PROJECT AND JUSTIFICATION

The technological changes developed especially in the last decade are transforming most aspects of people's lives and are especially revolutionizing democracy as we know it so far (Ward & Vedel, 2006). Moreover, the evolution of the Internet and the influence it is having on citizens' personal lives have led governments around the world to become increasingly interested in social media networks as tools to manage information and to reduce the deteriorating public trust in government (Hong, 2013).

However, while some authors argue that the Internet can be a tool for governments to control and monitor the information that citizens receive every day, which can lead to totalitarian and repressive governments (Barber, 1999; Krueger 2006), other authors have proved that the use of the internet and specifically of social media can be an effective channel of communication between government and citizens to transform the latter from passive readers and listeners to potential speakers and participants of the political conversation (Benkler, 2006).

Likewise, regarding citizen participation in political discussions through online media, many approaches have been made to find the real effects of these new scenarios on our society (Velasquez, 2012). Some authors have focused on the effects of social media use on the confidence and transparency perceived by citizens in their government (Song & Lee, 2016); others have conducted studies to measure the effectiveness of the use of social networks as a communication tool for communities to raise their voice against dangerous economic projects (Specht & Ros-Tonen, 2017) and others have studied the role of social media in civic engagement and political opinions (Rojas & Puig-i-Abril, 2009).

Democracy is directly linked to the use and equitable distribution of information, whatever it may be. Thus, the continuous work into the democratization of State policies becomes essential in the search for a more informed society, a more active citizenship and transparent institutions. Consequently, the digital revolution established the conditions to overcome the phenomenon of Web 1.0 where the consumer was limited to a passive role and the possibility to interact with the website was impossible. (Choudhury, 2014). The Web 2.0 did a complete revolution of the previous limitations and focused on the end-user, including its active

participation in the process. This means to include the user in the content's creation, developments and applications that met the needs of the population. The big change that Web 2.0 imposed was a new model of information circulation that came to question the old hierarchy of sender - receiver. In this way, the user began to have more and more influence on the contents that he was accustomed to receiving passively without being able to supply them, thus becoming an active and indispensable link in the dynamic traffic of said information (Magro, 2012). The arrival of Web 2.0 marked a significant change as it enabled the common citizen to feedback, create content and influence directly in public decision (without intermediaries) (Mintic, 2010).

Therefore, the efficiency of social media is visible not only for political campaigns, but also for governments that are constantly searching for effective and fast communication channels to publicize state proposals, procedures and policies to their citizens. Today it can be found successful cases in the use of Web 2.0 technologies in different countries of the world and specifically in the use of social media, OECD (Organisation for Economic Co-operation and Development) data suggest that for example the accounts of the main governmental institutions in Ecuador (@Presidencia_ec), the United Kingdom (@Number10gov) and Chile (@Gobiernodechile) managed to build a very significant community of Twitter followers that is equivalent to over 4% of the domestic population and information tweeted by the United States White House (@WhiteHouse) are re-tweeted by users on average 270 times, which is a clear sign of the relevance that the social media users give to the information the government is sharing every day (Mickoleit, 2014).

The social media usage in Colombia has had a major break with the 2010 presidential campaign where candidate Antanas Mockus mobilized a large number of citizens through messages posted on his social networks. At that time the social media mobilized the country around a new political proposal that sought mainly to vindicate the ideas of justice and legality, contrary to what the previous governments represented (Arancibia & Salinas, 2016). Despite not winning the elections, the positive results showed a new milestone in how new technological tools could surpass traditional ways of approaching the citizenry to communicate a message, ask for their opinion and even to invite them to join a new movement. (Sanchez, 2018).

Although it has great potential to influence the population, the effect of social media as a channel of effective communication between the government and the citizenry has been little studied in Colombia. This research seeks to investigate the strategies used by the Colombian government regarding social media usage for political communication with to propose new dynamics that can improve the way the government communicates a message to the population. To achieve this, the researcher analysed the current policies and projects designed by the government institutions regarding the social media channels, found the current flaws in these strategies and also the opportunities for improvement, designed a questionnaire for citizens in Colombia who use social media and finally used the results to propose a project with the capacity to function for at least 4 years that is what currently lasts a presidential term in Colombia.

This investigation is aimed to transform not only the government's perception of these new technological tools but also to renovate the citizens perceptions so they can start to see social media as an opportunity not only to get information from the government but to express their disagreements, their opinions, their ideas and proposals to make a change in society and in the way we communicate since this is fundamental to facing the current post-war context in which Colombia lives.

1.3 INTRODUCTION TO SOCIAL MEDIA

1.3.1 Definition of social media

The concept of social media is very flexible and the growth of technological advances and the mobile applications have made the fan spectrum ever wider. According to Mangold and Faulds (2009) the concept of social media involves the Internet-based applications and services communication, collaboration, creation and exchange of contents by individuals and groups (Mangold & Faulds, 2009). These groups or communities are built or reinforced around the notion of shared interests and tend to reinforce people's pre-existing ideas about different thoughts from the social to the economic and political scales (Brown, 2009)

The majority of the investigations developed on social media use have focused mainly on social networking sites (Ross et al., 2009; Zywica & Danowski, 2008; Valenzuela et al., 2009) These social network sites, often referred as social media are promoted by the advancement of technologies 2.0 and touch most of the aspects of citizens personal lives to the extent that people use them to get informed, to discuss important issues of the day to day, getting closer to journalists, to work and in current times even to get the information from the government about the last updates of the country changing laws. (Bennett, 2012; Howard & Parks, 2012; Stieglitz & Dang-Xuan, 2013). In these sites it is possible to create virtual public or semi- public within a bounded system profiles that can be shared with people around the world, to create lists of companions and maintain contact with others only by using a smartphone or a computer (Raacke & Bonds-Raacke, 2008).

In the same connection, social media can be defined as a group of technologies that allow public institutions to increase citizen engagement (Criado, Sandoval-Almazan, & Gil-Garcia, 2013). Bowley (2009) defined social media as collaborative online applications and technologies that generate scenarios to encourage participation, conversation, creation and socialization (Bowley, 2009). Correa et al. (2009) added to this definition the characteristic of instant messaging is being include the new social media apps and that allows a better interaction among its users.

Additionally, according to Klinger & Svensson (2015) social media are online platforms where it is possible to generate content, organize information in databases and get the news of the current events happening (Klinger & Svensson, 2015). A more technocratic definition defines social media as a group of Internet-based application build under the ideological and technological ideas of Web 2.0 that mainly allow the creation and exchange of User Generated Content (Kaplan & Haenlein, 2010)

Nonetheless, Sims et al (2017) argued that it is important to highlight the social media as an information system that is built upon a set of three components: Internet, communication and computing technologies and ideological beliefs regarding the way the information should be created, accessed and distributed. (Sims et al., 2017). Moreover, Bonsón et al., (2012) argued that social media is an important tool to enhance government transparency, policy-making, public service delivery and knowledge management.

Social Media									
Social Networking Sites, Blogs, MMORPG, Virtual Words, Knowledge Sites, Online						ie			
	Communities of Practice, Corporate In-House Platforms								
Web 2.0 Technologies Web 2.0 Ideology		IT Technologies and Market							
Media Richness	Interactive Applications	Content Creation	Transparency	Information Availability	Tools Availability	Smartphones fast CPUs and GPUs		Fiber Broadband, WiFi, 4G	GPS

Figure 1. Technological, Ideological and Market foundations of Social Media

Source: (Sims et al., 2017)

1.3.2 Characteristics of Social Media

After delimiting the concept of social media and understanding that the concept is constantly evolving due to different technological advances, it is pertinent to highlight the characteristics of social media with special emphasis on those that may be useful for the present research.

According to Panahi & Partridge (2012) the characteristics of social media can be categorized in four main features considering the capabilities of encouraging, supporting and enabling people to share efficiently the knowledge through different instruments:

User-generated content: one of the main characteristics of social media is the co-creation of the content (Bowley, 2009). This means that the users are no longer simple readers but now they have the capability of contributing to the information flow by creating, editing, commenting, annotating, evaluating and distributing different contents in the different social media platforms. In this same line, O'Reilly's (2005) created the concept of "harnessing collective intelligence" that refers to the capacity of the users of collaborating in the content generation and becoming an active agent in the communication dynamics (O'Reilly's, 2005).

Peer to peer communication: the differentiation of the new social media tools with classic or old web technologies is the connectivity. Social media enabled people to easily stay connected with each other in real-time and in different parts of the world with just a click through chatting, video conferencing, videocalls, etc. (Mathee, 2011)

Multimedia oriented: social media permits users to share multiple content forms such as text, image, audio, video, and other formats that allow them to easily store their own created multimedia files, tag and post, comment and share in social web sites (Canali et al. 2008). The unlimited content created by the users talking about a wide variety of topics remains on the Internet and are exchange every day through platforms like Youtube, Facebook, Instagram, Podcast services, twitter, among others.

Networking: another main characteristic of social media is the creation of communities around common interests. The human being is social by nature and the spaces generated by social media platforms enable users to find people thinking and looking for similar topics. This capacity of building a community of users has aid people to develop relationships, discuss freely about general issues and transfer their knowledge and experiences with other users all around the world. (Sarkkinen, 2009)

User friendly: the social media applications, in general, are very simple to use and it is one of the factors that have caused the massification of their use. New users get easily familiarized with the dynamics of the applications and do not need any technical support for the basic use. The simplicity, the attractiveness, the low cost and the possibility to customize the applications according to the user preferences are inherent attributes of the social media applications. (Wolland & Smith, 2011; Zheng & Zeng, 2010)

1.3.3 Social Media Classification

The evolution of social media in recent years is undeniable and the barriers to differentiate between them are becoming shorter and shorter. Social media applications that used to have only one use and had a unique target audience, each time they seek to venture into new fields to embrace more users. For example, the feature of instant messaging (Correa et at., 2009), was a decade ago a distinctive feature of few social media applications and now most of them seek to incorporate this function as it has become an almost indispensable factor to capture the attention of the public.

Thus, taking into account the difficulty that exists to carry out a definitive classification of the different social media applications, the investigation has taken the work done by Kaplan & Haelein (2010) to the extent that they designed a scheme that allows stablishing a

systematic classification of different applications based on theories in the field of media research (social presence, media richness) and social processes (self-presentation, self-disclosure), that are two fundamental pillars of social media. (Kaplan & Haenlein, 2010)

In this order of ideas, the higher the social presence, the larger the social influence that the communication partners have on each other's behaviour. Now, closely related to the concept of social presence is the concept of media richness developed by Daft & Lengel (1986) which argues that the ultimate aim of any communication is the resolution of uncertainty and ambiguity. Subsequently, social media can differ in the degree of richness they possess, this understood as the amount of information they can transmit in determined time and space and therefore some social media have more effectivity in resolving uncertainty and ambiguity.

On the other hand, concerning the social dimension of social media, the concept of self-presentation states that in all social interactions, people intend to control the impressions that other people may have of them primarily to obtain some kind of reward or benefit (Goffman, 1959). Also, one of the main reasons people create profiles on social media or personal pages is because they want to present themselves in the internet world. This presentation is usually made through the self-disclosure which is the revelation (conscious or unconscious) of personal information that goes beyond of personal data and reaches preferences, feelings and thoughts that are consistent with the image that users want to project. (Schau & Gilly, 2003).

The conjunction of the previously explained concepts leads us to the social media classification shown in Table 1.

Table 1. Classification of Social Media by social presence/media richness and self-presentation/self-disclosure

		Social presence/ Media richness				
		Low	Medium	High		
Self- presentation/	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)		
Self- disclosure	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)		

Source: (Kaplan & Haenlein, 2010)

According to this classification, it can be inferred that regarding the social presence and media richness, applications such as collaborative projects (e.g., Wikipedia, Dimdim.com, Google,Docs) and blogs have a low score to the extent that they are often text-based and the exchange between the users is low. Then, there are the social networking sites (e.g., Facebook, Instagram, Twitter, Whatsapp) and content communities (e.g., Youtube, Flickr, Slideshare, Vimeo, Picasa, Voices of Undergraduate Research Podcast, iTunes) that can share messages, videos, photos and other media forms. Finally, on the highest level are the virtual game and social worlds (e.g., Wold of Warcraft, Second Life, Habbo, OurWorld, Club Cooee) which main objective is to try to replicate the face to face interactions in a cybernetic world.

When one has a look in the self-presentation and self-disclosure classification it can be seen that blogs usually have a higher score than for example collaborative projects to the extent that the latter tend to focus on specific content domains. In the same connection social networking sites allow for more self-disclosure than content communities and finally virtual social worlds involve a higher level of self-disclosure than virtual game worlds to the extent that the latter has strict rules that drive people to have a specific behaviour.

1.3.4 Social Media Functionalities

A key to understanding social media and the great potential they have is by knowing the different ways they can take. To achieve a comprehensive approach, Kietzmann's "honeycomb" theory (2011) was explored, to the extent that it seeks to establish a variety of functionalities and their respective implications to better understand the audience and the needs of the users to design more effective strategies regarding the political communication through social media tools.

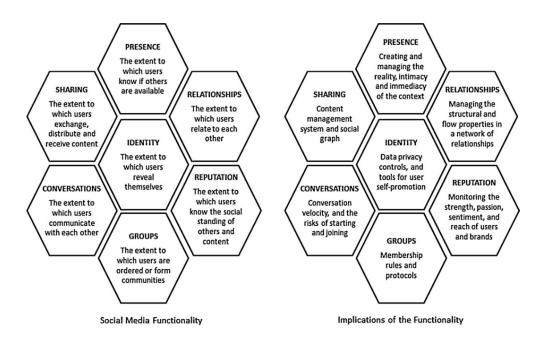


Figure 2. Building blocks of Social Media

Source: (Kietzmann et al., 2011)

The framework designed by Kietzmann allows to understand each functionality and its implications. However, it is important to highlight that the blocks are neither mutually exclusive, nor do they all have to be present in a social media activity. This theory is important to figure out how different levels of social media can be configured and interact. (Kietzmann et al., 2011)

Identity

The identity represents the extent to which a user reveals his or her identity in the online world. Here we can find disclosing information such as name, age, gender, profession, time using the application, location, preferences, hobbies, family relationships, etc. In connection with the classification explained previously, according to Kaplan and Haenlein (2010) the presentation of the identity of the users can happen to conscious or unconscious self-disclosure such as likes, dislikes, thoughts or feelings.

Conversations

Users of the different social media applications communicate through a global network with several proposes: from trying to find love to discuss relevant and current political issues of their countries. They see the spaces generated by social media as a possible way to express different feelings and to make their message heard and impact different spheres of their daily life. The characteristics of the conversations and the messages created and shared through social media are mainly ephemeral and without the obligation to respond. Currently, some companies reproduce dynamics that control the topic of conversation in social media applications to divert attention on one topic and focus on another. (McCarthy, Lawrence, Wixted, & Gordon, 2010). These actions show the high sensitivity of the online spaces and in turn the fragility of users who are exposed to a large amount of information daily that they must process at high speed.

Sharing

The sharing brick refers to the activities through which the content on the internet is received, spread and modified by the users through the social graph. Here are two main implications: firstly, the need to evaluate the objects of sociality that the different users have in common and that can mediate the mutual interests, this can generate higher interest between the users to the extent that these shared interests will connect users together. Secondly, the degree to which the information can be shared. For example, to be able to post a video on Facebook it is necessary not only to create an account and a profile but to agree with some terms of use. These terms allow the management of the content and as a consequence the different information that we can see is monitored for specialized employees of the different social media applications.

Relationships

This functionality represents the extent to which a user can be related to other users of the same community. This association makes possible a posterior conversation, meet up or just list each other as a follower or a friend. Also, the relationships types determine the kind of

information they will share and the way they will do it, this can be formally or informally, in a public or private way. In the same connection, there are two properties of this brick: the structure and flow. The first one refers to the number of connections the users have and the respective position they have in the social network and the second one refers to the types of sources that people use in the individual relationships and the way users use, share, edit or transform them. (Kietzmann et al., 2011)

Groups

The capacity that users have to create communities and subcommunities is a fundamental functional block to the extent that people can increase the number of contacts or friends within the social media application with relatively high speed. Here we can find two kinds of groups: one in which users can sort through their contacts or friends and place their followers or fans into different sub-groups and other called "online groups" that can be analogous to clubs in the offline world that can be with approval requirements, by invitation only or open to anyone.

Reputation

The relationships and the way the community users visualize their networks is a very important aspect nowadays. People are always checking how many likes and followers they have to the extent that this is a virtual representation of real-life relationships. However, reputation can mean in social media a matter of trust but not only in people but also in the content they share. The fact that one person or institution has a lot of followers does not necessarily means that a lot of people are reading the content they publish. Thus, it is pertinent to evaluate the trust levels between community members with accurate metrics (e.g, rating system) to have a real vision of the real impact the content is generating in the population.

Subsequently, each social network tries to have a balance between all the previously explained functionalities, however, it is clear that some applications focus on a specific brick, this in order to stand out among others and it is important to highlight that none focuses only in one brick. (Smith, 2007). The developers of this theoretical framework established that the sites tend to focus on the first three or four bricks. In figure 3 it is exemplified the approach

made by four applications: Linkedln, Four-square, Youtube and Facebook. In this figure the social media functionality is determined by the darkness of the bricks.

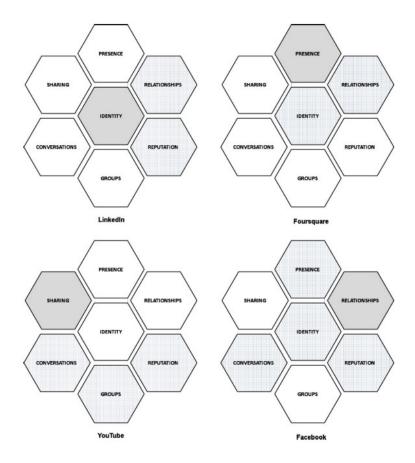


Figure 3. Example of functionalities for different sites.

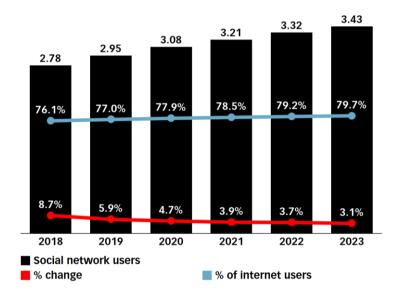
Source: (Kietzmann et al., 2011)

1.3.5 Social media usage in the world

The massification of the Internet and the constant advances of technology have made social networks a key element for communication in almost all countries of the world (Himelboim, Lariscy, Tinkham and Sweetser 2012). It is pertinent also to analyse the growth of internet users in the world to understand the dynamics that come out of this increase. Internet users have increased steadily on average, owing among other factors to attempts by Governments to increase existing networks and infrastructure to connect more people. Table 2. shows the social network users in relation to Internet users in the world projected to 2023. For this

statistic the author considered the internet users who use a social network via any device at least once per month.

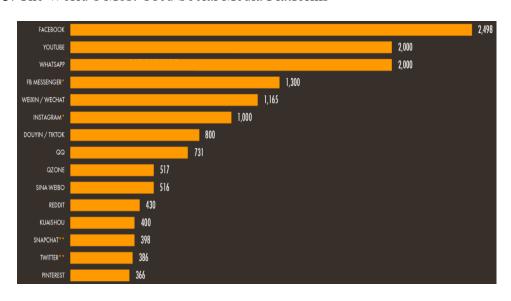
Table 2. Social Network Users Worldwide, 2018 projection to 2023 in billions.



Source: eMarketer (2019)

Now, the following table shows the most used social media platforms in the world based on monthly active users, active accounts, advertising audiences or unique monthly visitors updated to April 2020.

Table 3. The World's Most Used Social Media Platforms



Source: Datareportal, 2020

1.4 E-Governance and E-participation

The importance of bringing government closer to citizens through new technological tools has made e-government no longer an option but a necessity for governments seeking to increase their levels of governance and legitimacy. (Gupta & Jana, 2003). Before understanding the idea of E-governance it is important to say that government in general is a dynamic mixture of goals, structures, functions and projects (Pardo, 2000). Thus, E-government was defined by Vassilakis et al (2007) as the use of information and communication technologies to improve the functioning of public services and to extend their interaction with the outside world in the context of the Information Society.

According to Almarabeh and Abuali (2010) the objectives of the E-government programs is to reach greater efficiency in government performance through increasing the performance of public services for all the society in an accurate and efficient way. On the other hand, the World Bank (2003) stablished that when we talk about E-government we refer to the use of the information technologies (such as wide area networks, the internet, and mobile computing) by the government with the capacity of transform relations with citizens, businesses and the government itself.

Clearly, the evolution of the social media has created an opportunity to expand government communication networks and to bridge the gap between citizens and governments. To achieve this goal, different governments around the world have started to use various egovernment tools such as social media, smartphone apps and e-government websites (Porumbescu, 2016).

A simple definition was given by Metaxiotis and Psarras (2004) who defined E-government as the use of information technology to deliver public services directly to the citizens. Nowadays e-government has a high potential yet to be developed to the extent that it can alter the traditional way the government communicates with the citizenry by creating a virtual government that has the highest response capacity in less time (Wong & Welch, 2004).

On the other hand, the concept of e-governance, although relatively new, covers many aspects of democracy and especially of communication between governments and citizens (Yildiz, 2007). For this reason, emphasis will be placed on e-participation to the extent that it is a concept that will allow a thorough analysis of the real impact of the "Urna de Cristal"

project not only as a channel for communication and to obtain information but to directly influence the government's decision-making process.

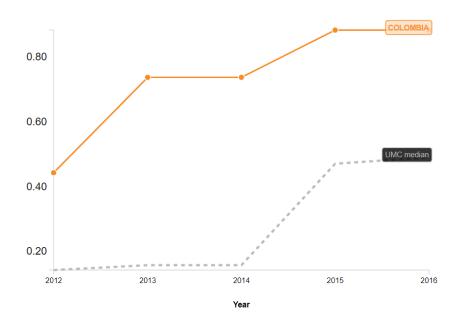
Undoubtedly, the use of technology tools specifically related to the Internet can improve access to information and public services and at the same time can promote a more inclusive decision-making process. This is the basis of e-participation, of leaving no one behind and of trying to consider as many citizens as possible in order to promote effective and comprehensive public policies. (UN, 2018) According to Saebo et al. (2008). E-governance refers to the renovation of the participation exercise in societal democratic and consultative processes mediated by information and communication technologies, especially the Internet.

Lately, many studies have also been carried out to differentiate between whether this new digital form of participation (e-participation) actually can be understood as an extension of conventional participation or whether it has the capacity of producing new forms of participation. Answering to this question, Cantijoch and Gibson (2011) determined that online participation cannot be considered as a new and independent mode, but links and combines with existing forms.

Subsequently, it is important to highpoint that E-participation can be presented in two ways: the first, which is top-down, the E-participation is the responsibility of the government and it is also primarily enacted and managed by governments. The second, bottom up or citizendriven, the citizens are in charge of creating the initiatives or projects and are enabled by social networks. (Saebo et al, 2008; Coleman & Blumler, 2009). To the extent that an existing project of the government of Colombia is being analysed, only the top-down e-participation will be considered.

Nonetheless, before presenting the levels of participation and the theoretical model on which the research will be based, I consider it appropriate to present the World Bank data on which the E-participation index is measured from 0 to 1 (best), considering quality, the relevance and usefulness of government websites and information, as well as participatory tools and services to citizens. In this Global Information Technology report, Colombia stands out with an eye-catching high rating (0.88) well above the Upper Middle Countries (UMC) average and in 11th place globally.

Table 4. Colombian E-Participation Index



Source: World Bank (2016)

1.5 Levels of E-participation

The levels of participation have been analysed and classified from many points of view in order to evaluate the effectiveness of the different strategies employed by the government, an example of this is the Arnstein's Ladder of Citizen Participation (Fig. 8) which established 8 levels of participation: 1) Manipulation, 2) Therapy, 3) Information, 4) Consultation, 5), Placation, 6), Partnership, 7), Delegated power and 8), Citizen control. At the first two levels, the objective of those who control power is to move citizens away from participation or the creation of programs and instead to "educate" them. At levels 3, 4 and 5, citizens can hear and be heard, but their opinions will not be considered in creating public policies. Finally, on levels 6, 7 and 8 citizens get the majority of decision-making seats. (Arstein, 1969)

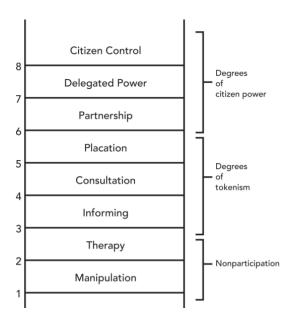


Figure 4. Arnstein's Ladder of Citizen Participation.

Source: Arstein, 1969.

Nevertheless, in this research, 3 models of e-participation will be considered in an integral way. The managerial model, the consultative model and the participatory model were proposed by Chadwick and May (2003); Macintosh (2003); Kamal (2009) and Reddick (2011) and will be used to the extent that they allow us to analyse e-participation as a continuum and will facilitate the evaluation of the influence citizens have in public policies and moreover the use that government give to social media in relation with the roll of the citizens.

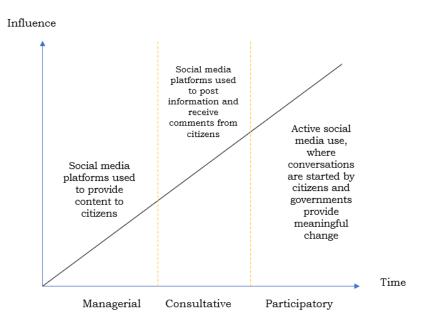


Figure 5. Conceptual framework.

Source: Adapted from Chadwick and May (2003); Macintosh (2003); Kamal (2009) and Reddick (2011).

Managerial

The managerial is a directed model by the government and its focus is especially on the efficiency of public service delivery. (Millard, 2006). In this model, the government perceives citizens as "customers" and therefore focuses merely on responding to what citizens ask. Thus, information flows in a unidirectional way from the government who is the one that determines and controls the interaction in its entirety (Chadwick & May, 2003; Pina, Torres, & Royo, 2010).

In this model, citizens are limited to using the online tools that the government offers which are typically used to improve the bureaucratic effectiveness of state entities through the use of technologies such as public information on websites. Moreover, social media platforms such as Facebook and Twitter are used to provide content and broadcast information to the citizens, however the level of interaction is low (Norris & Moon, 2005).

Clearly, this form of e-participation has high limitations as not only is the interaction between government and citizens low but the latter do not have the capacity to change the public service delivery process or output, then their role is limited to receiving information only.

Second, according to Reddick (2017) The model focuses on being responsive to customers which is not necessarily optimal to the extent that citizens differ in their characteristics and behaviours with customers given the fact that they are interacting with the government as the sole provider of the service and do not have the capacity to choose or change provider.

Consultative

In the consultative model the relationship between government and citizens ceases to be merely focused on providing more efficient services delivery to "customers" and the role of government seeks to create better public policies with the participation of people in the decision-making process (Macintosh, 2004). This model is more focus in the citizens than the managerial one, however, the opinions and the feedback from the citizens do not generate inputs to raise a fundamental question of whether or not what "customers" want are the right programs or public services. (Reddick et al., 2017).

Regarding the use of social media platforms, in this model the government uses these tools to receive comments and questions from citizens and to publish diverse information. The information flow depends on the government but the citizens have the capacity to respond and to express opinions on the proposed topics. Thus, the consultation model gives some power to citizens to be considered in the improvement of public policies as they are no longer treated as "customers" but as an agent that plays a relevant role in the decision-making process.

The limitation of this model is that communication remains solely dependent on government and the role of the citizen remains being passive. This leads to the fact that there are not necessarily sufficient incentives for citizens to participate in the proposed debates and generate an adverse effect, because few individuals end up defining the fundamental points of public projects. (Shulman, 2005)

Participatory

Finally, this model is the one that has the greatest degree of citizen e-participation to the extent that the main objective is to enhance the citizen interaction and influence in the

development of public policy. Although in the previous model the citizen has the capacity to communicate with the government, this communication is limited to the spaces that the government wants to create. In the participatory model, citizens have the capacity to initiate discussions with the aim of promoting a debate that generates results that ultimately directly affect the course of public policies (Chadwick & May, 2003).

Subsequently, in the participatory model the citizen has an active role and social media are the mechanism through which feedback is received and interactions between government and citizens are made. The participation of the citizens has a high influence in the public policies to the extent that the opinions and ideas are structured through a complex flow of information. Tools as e-voting, polling or electronic town hall meetings can be used to generate a real impact in the government decisions and, consequently, the citizens can propose change from the bottom up, which is not feasible in either the managerial or the consultative model. (Andersen et al., 2007).

2 The Political system in Colombia

2.1 Concept of political system

Almond (1956) and Easton (1957) were the first authors to develop a solid theoretical framework for defining the concept of political system. For Easton (1957), a political system refers to a set of political interactions which differ from other interactions to the extent that they are oriented towards the authoritarian allocation of values to a specific society. This set of interactions generates a flow of inputs and outputs. The inputs are the demands and supports that the institutional system received from society or other entities, and outputs are the answers that this institutional system gives to the former. This would form a feedback loop to probe the operation of the system and correct errors, and anticipate disruptions.

Also, Easton identified four main elements in the definition of political system:

- 1. The formal institutional system, in which the constituted authority is the centre.
- 2. The institutionalized social actors, ranging from business groups to lobbyists
- 3. The political and ideological values established in society (also known as political culture)

4. The fact that there are other national political systems, with which the political system of a given country is related in the international arena

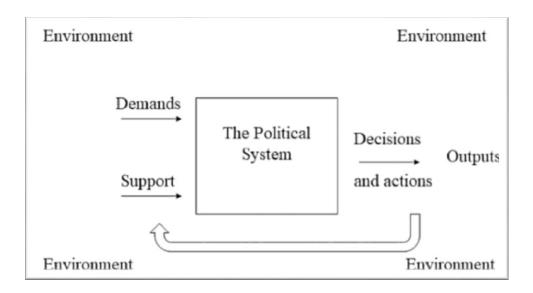


Fig 6: Easton's political system model

Source: Easton (1957)

In the same connection, Almond (1976) argued his theory based on the fact that there are independent societies in which exist dynamics of integration and adaptation, both internally and in relation to others, and these relationships occur through the use or possibility of using physical violence more or less legitimately.

According to Spencer (1967) the concept of political system is linked to the theory of modernity; it refers to the different conditions and situations of individual and collective interaction that have reached a high degree of complexity and functional differentiation (Echeverría, 1997). Phillips (1968) complemented his theory with the legal factor, since for him the concept of political system is formed by a succession of formal expressions identifiable in the legal regime which have a certain level of participation and also manifests itself in behaviours that are capable of being observed empirically through government institutions and actions.

Additionally, a contemporary definition developed by Fung and Cabrera (2002) establishes that a political system is a set of political interrelations that can occur in two scenarios: objective: between institutions; States; lobbying organizations; political parties; interest groups; social classes; international and national organizations; economic; scientific; environmental and cultural, and subjective: norms consciences; traditions; political cultures; the formation of policies, decision-making, aiming at a systemic organisation of the production and reproduction of societal power and the exercise of its distribution based on equilibrium. (Arias, 2008)

2.2 Colombian political system overview

The 1991 Political Constitution repealed the 1886 Constitution and ratified the democratic tradition in which Colombia has been registered since independence. The democratic model chosen by the original constituent is based on three pillars: popular sovereignty, the guarantee and realization of political rights and the existence of mechanisms for citizen participation (MOE, 2010).

Article 1 of the Colombian Constitution establishes that Colombia is a Social State of Law, organized in the form of a unitary, decentralized Republic. Moreover, the Political Constitution of 1991 introduced a number of reforms, including partial recognition of multiculturalism and multi-ethnicity, as well as the rights of indigenous and black people, the primacy of civil rights over religious rights; the monitoring of the constitutional order (Constitutional Court); the right of the individual to claim his rights and to receive a prompt response (Right of Guardianship) and the establishment of the Office of the Ombudsman. (Valbuena & Mahecha, 2004).

The Colombian government system is characterized by being presidential. Thus, the President of the Republic is the head of State, Government and supreme administrative authority, as indicated in the 1991 Constitution, and is elected by direct and secret vote of all citizens of the country for a period of four years without the possibility of re-election. If no candidate obtains an absolute majority in the first ballot, a second ballot shall be held three

weeks later in which the two most voted candidates shall participate. The person elected shall be the one who obtains the most votes (Constitución Política de Colombia, 1991).

Subsequently, within the framework of the Colombian political system, a general description of the executive branch will be made to understand the administrative hierarchies of the entities that carry out the "Urna de Cristal" project, which are Presidency of the Republic and the Ministry of Information Technologies and Communications.

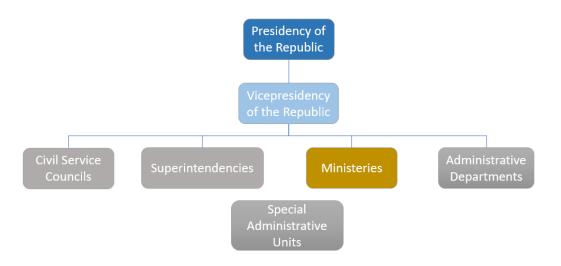


Fig 7. Executive Branch in Colombia

Source: Own

2.3 Ministry of Technology and Telecommunications

The Ministry of Technology and Telecommunications, formerly known as the Ministry of Communications, was created with the Law 1341 of 2009 which established the normative frameworks for the development of the telecommunications sector and for the promotion of access and the use of new technological tools through mass production, the promotion of free competition, the efficient use of available infrastructure and the protection of users' rights. (Ley 1341, 2009)

The law 1341, also known as the Law ICT (Information and Communication Technologies), also established the main mission of the Ministry of ICT, which is the digital transformation of the State under a sustainable model that generates development throughout the country. Furthermore, the main objectives of the Ministry of ICT, as set out in article 17 of Law 1341 of 2009, are: firstly, to design, formulate, adopt and promote policies, plans, programmes and projects in accordance with the Constitution. Secondly, to promote the use and appropriation of information and communication technologies among citizens, businesses and the government as a support for social development, economic and political of the nation. Thirdly, to promote research and innovation, seeking its competitiveness and technological advancement in accordance with the national and international environment. (MinTIC, 2020) Within the ICT Ministry, in so far as the project "Urna de Cristal" is responsible for managing social networks and the government's digital communication strategies in general, the office in charge of implementing the project is the Digital Government Directorate. The functions of the Directorate of Digital Governance are to formulate policies, plans and projects that use the information technologies of state entities as a tool, with the aim of ensuring the effectiveness of public management. (MinTIC, 2019)

II. Analysis

Introduction

This section of the research considers the analytical issues from both points of view: the public institution that executes the project and the citizens. First, it is pertinent to highpoint that the entity in charge of digital communication between the government and the citizenry in Colombia is the Ministry Ministry of Information Technologies and Communications and the policy in charge of managing the social media usage for political communication is the "Urna de Cristal" project. Thus, with the aim of re-engineering the strategy of the "Urna de Cristal" project, the researcher intends to investigate citizen behavior and perception as well as the government actions towards social media usage towards the political communication in Colombia.

2.4 "Urna de Cristal"

"Urna de cristal" is a multichannel platform for citizen participation and government transparency, created by the Presidency of the Colombian Government in 2010 with the main objective of bringing the citizen closer to the Government through digital media. Moreover, this initiative searches for the possibility of giving to Colombians citizens the ability to interact with local and national government, to know the public policies and to participate in the design of current and new projects. (MinTIC, 2015)

The "Urna de Cristal" strategy is based on three dimensions or working fronts: 1) exercises of participation on information and transparency: it seeks to make the results visible and progress of the government's management; 2) participatory exercises for citizen consultation: seeks to generate interaction and greater relationship with the citizenry and 3) participatory decision-making and advocacy exercises: it seeks participation, problem-solving and citizen advocacy in public administration decision-making. (MinTIC,2015)



Figure 8. "Urna de Cristal" basic rationale.

Source: MinTIC (2015)

Since its creation in 2010 "Urna de Cristal" has served as a channel of communication in which citizens can ask questions on any topic, consult government information and has also played a role in promoting participatory exercises in which the opinions of the people are their main input. In order to promote an effective communication process, the platform works with a multidisciplinary team called the Digital Task Force, which, together with the various government entities, is responsible for identifying the needs for citizen participation, give answer to the petitions and create spaces of inclusive participation. Hence, Colombians can influence the decisions of their leaders and learn about the Government's programmes, progress and results, by communicating their concerns and proposals directly to public entities, and participating and interacting on government management, services and policies. (Gobierno de Colombia, 2019)

Furthermore, "Urna de Cristal" is part of the Colombian Government's Digital Strategy and interacts with other governmental organizations, influencers, social groups and spokespersons with the objective of improving the perception of the government and the President strengthening citizen participation in peace, education and equity issues; creating spaces for collaboration between both national and subnational governments for the development of participation campaigns in digital media with emphasis on citizenship and promoting the Government's offer of transparency.

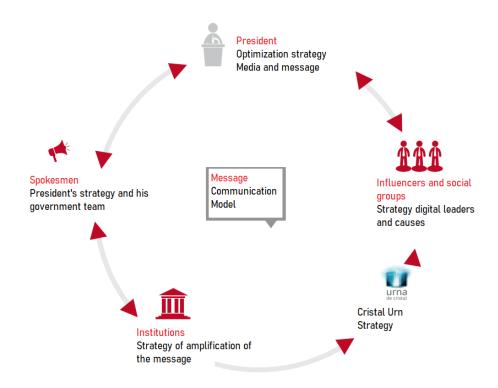


Figure 9. "Urna de Cristal" in the Colombian Government's Digital Strategy

Source: (Gobierno de Colombia, n.d)

The "Urna de Cristal" strategy includes two types of media channels to communicate with the citizenry: on the one hand, traditional media for users without internet among which are radio, television, SMS and a call centre service; and on the other hand, is the approach for "digital citizens" in which is the website www.urnadecristal.gov.co, Facebook, Twitter, Instagram, YouTube and Linkedln. It is important to highlight that "Urna de Cristal" is not only a project that includes the social media platforms of the government but it is also a platform in which the citizens can participate in certain exercises that the government offer or ask questions about specific topics that the government propose. Considering that this research focuses on digital government, the traditional media mechanisms are not addressed for the empirical analysis and discussion.

2.5 Analysis of "Urna de Cristal" initiative

All policies are created with the aim of solving a previously identified social problem, in the case of Cristal Urn the main problem was the government's poor communication with the citizenry. With the purpose of enhancing the communication strategy of the "Urna de Cristal" project, the SWOT (strengths, weaknesses, opportunities and threats) and PESTL (political, economic, social-cultural, technological and legal) analysis are carried out in order to have a more comprehensive vision of the perspectives and possible difficulties that could diminish the effectiveness of the project. Moreover, based on the conceptual framework displayed in the theoretical rationale of this research (Fig. 7) in which 3 models of e-participation (managerial, consultative and participatory) were identified, the "Urna de Cristal" project can be characterized, according to the government performance indicators, in the participatory model, to the extent that, in theory, the participation of citizens through social media platforms has a high influence in the public policies. However, it is worth to inquire on whether this is the case of 'Urna de Cristal' or not. Next subsections address this question, by conducting a qualitative investigation based on the SWOT and PEST methods and a quantitative analysis with data collected from a survey among 502 Colombian users. (See survey in **Appendix A**)

2.6 SWOT analysis

The SWOT analysis identifies the internal strengths (S) and weaknesses (W), and the external opportunities (O) and threats (T) in an organization's environment. Through the evaluation of the internal factors of the "Cristal Urn" project it is possible to asses the resources, capabilities, competences and main advantages of a determined organization. In the other hand, the external analysis let identify the opportunities and threats by analyzing the resources, the organization's environment, and the general environment.

	1 .	
	Strengths	Consolidated technology platforms
		Not many resources are needed to improve the
		project
Ja		Stablished protocol for responding to citizens'
Ξ.		requests
9		Comprehensive vision of government
Interna		communication with citizens
	Weaknesses	Low Citizen Participation
		Low Digital Literacy
		Legitimacy Undermined by Corruption
		Low Level of Personification of Citizen Responses
		Unclear Performance Indicators
	Opportunities	High potential benefits (time and money) of using
al		the platforms
Externa		High rates of use of social media platforms
Ξ		Constantly increasing connectivity across the
K (country
$\stackrel{f C}{f E}$		Great variety of online platforms
	Threats	> It is not a State policy for which its continuity is not
		guaranteed in future governments
		Answers that do not solve the problems of
		citizenship and ineffective exercises of participation
		can generate apathy

2.7 PESTL analysis

When analysing the impacts of social media in generating effective channels of communication between government and citizens, it is vitally important to consider the different contexts in which strategies are developed (Islam, 2008). Hence, it is pertinent to analyse the Colombian specific political, economic, technological, political-legal, and social-

cultural environment to the extent that these factors will affect directly the performance of the "Urna de Cristal" project.

Political

The political context in Colombia today has a high historical relevance as the country is in a post-conflict process. In 2012, talks began to reach a peace process and end America's oldest war, which began in 1967 with the creation of the Revolutionary Armed Forces of Colombia (FARC-EP), the country's largest guerrilla group. This guerrilla group was born as a group of liberal self-defences and later adopted communist ideologies in the context of the Cold War. Subsequently, it was permeated in the 80's by drug money and its goal of achieving political power exacerbated violence throughout the country. Why the conflict lasted so long has many explanations, including concentration of wealth, state neglect, lack of jobs and opportunities; inequality, social injustice; lack of tolerance, indifference and corruption. (Historical Memory Center, 2013)

In 2016, during the government of Juan Manuel Santos and after four years of negotiation in Havana, Cuba, a historic peace agreement was reached that ended a conflict that left more than 260,000 dead, 7 million displaced people and a series of countless tragedies that opened a big wound in the Colombian people that will take many years to close. However, two months after the peace deal, a referendum was held that sought Colombians to ratify the agreement and the results were that 50.2% of the population voted against the agreement and 49.8% were in favour. Campaigns of systematic misinformation, fake news, a lot of speculation and the lack of political education in the population have produced these results that to this day show the polarization of the country that is wobbling between walking towards peace or seeking war solutions to the problems that persist in Colombian society (Avila, 2019).

It has to be noted that, up to the date of this thesis development, 198 FARC ex-combatants have been systematically murdered in the light of government's inability to effectively react, even in times of pandemic (ElTiempo, 2020). These events denounced to the United Nations

and the Inter-American Commission on Human Rights jeopardize the peace building efforts and make the illusion of peace an unattainable dream, at least in the present government.

To the extent that the "Urna de Cristal" strategy was designed by the previous government of Juan Manuel Santos, it is recurrent that in Colombia the new government does not consider previous policies and designs new ones. In an analysis of the current President's development plan, "Pact for Colombia, pact for equity" it was not formally demonstrate the continuity of the project. However, an interview with Ana María Luzardo, who is the coordinator of "Urna de Cristal", confirms that the project has the support of the government of Ivan Duque, president of Colombia since 2018. Interview attached in **Appendix B.**

Economic

Colombia is going through one of the most paradoxical moments in terms of its economy, because despite showing growth above the countries of the region, its volatility and dependence on oil prices and international currencies, added to the current context of pandemic makes the picture quite complicated. The Colombian economy is the fourth largest in Latin America measured in gross domestic product, with a total of 331 billion USD below Argentina, Mexico and Brazil. (World Bank, 2020).

The base of the Colombian economy is mainly the primary sector, this tend have not change in decades and this is due to the extractivist vision that its leaders have of the country. Colombia has negative trade balance with a total export of 41,831,520.22 in thousands of US\$ and total imports of 51,230,566.65. The top exports are Crude Petroleum (\$13.8B), Coal Briquettes (\$7.45B), Refined Petroleum (\$2.96B), Coffee (\$2.35B), and Cut Flowers (\$1.46B). On the other hand, the main imports of Colombia are Refined Petroleum (\$2,94B), Cars (\$2,19B), Broadcasting Equipment (\$2,04B), Packaged Medicaments (\$1,23B), and Corn (\$1B). (OEC, 2018).

The National Administrative Department of Statistics (DANE) revealed that the economy grew by 1.1% in the first quarter of 2020 just before being hit by the Covid-19 pandemic and low oil prices. For the month of March, the official data showed a contraction of the economy

by 4.9% and an unemployment rate close to 13.4%. In times of pandemic, the current context reflects the following behaviours by sector: agriculture increased in 6.8 % and was the sector performed best, mining and quarrying (-3.0%), manufacturing (-0.6 per cent), public services (+3.4%), construction (-9.2 per cent), wholesale and retail trade (+0.9%), information and communications (+1.4%), financial activities (+2.1%), real estate activities (+2.6%), professional activities, scientific and technical (+2.7%), public administration (3.4%) and arts and entertainment activities (-3.2%). (Portafolio, 2020)

An important feature of Colombia's economic landscape is the high inequality that persists over the years. The Gini coefficient in Colombia is 50.4, which makes it one of the most unequal countries in the region and the world (World Bank, 2018). This gap is recurrent when analysing the population living in urban and rural areas.

As in the whole world, the economic panorama in Colombia is not encouraging today and according to Finance Minister Alberto Carrasquilla the second quarter of 2020 will be the worst in the economic history of the country (Semana, 2020). However, in order not to close this part with such a pessimistic vision, Colombia has historically emerged faster than other similar countries from economic crisis and the International Monetary Fund's projection for 2021 states that the economic growth will be more than 3%, a positive result compared to the projections of other Latin American countries such as Brazil and Mexico (IMF, 2020). Moreover, the resources for "Urna de Cristal" are assigned in the Ministry of Information Technologies and Communications and, in theory, the impacts of the current economic crisis do not affect the continuation of the project.

Social-Cultural

According to the latest population census carried out by the National Administrative Department of Statistics (DANE), by the end of June 2020 the Colombian population is projected to reach 50,372,424. Women represent the 51% of the Colombian population and are estimated at 25,777,542, while men account for 24,594,882. Forecasts of population growth indicated that Colombia would reach 50 million by 2023, however, the phenomenon of Venezuelan migration has intensified in recent years to the point where currently there are

approximately 1.408.055 Venezuelans living in Colombia representing almost 2.8% of the total population (DANE, 2018).

The Colombian population is distributed as follows: 22.6% are in the 0-14 age group, 68.3% in the 15-64 age group and 9.1% in the 65 and over age group. 77.1% of the population live in municipal capitals, 15.8% in scattered rural areas and 7.1% in populated areas. In addition, the capital, Bogotá, has 7,743,955 inhabitants and is the most populated city followed by Medellín with 2,576,133 inhabitants and Barranquilla with 1,274.250.

On the other hand, Colombia is a country with a high ethnic diversity, this is due to the mixture of three main groups: Native Americans, Africans and Europeans. 11.04 per cent of the population identified themselves as Afro-Colombian, 4.31 per cent as indigenous and 0.01 per cent as Gypsy. The other 87.58% of the population did not identified themselves in a specific ethnic affiliation and this percentage of the population includes mestizos, whites, Jews and other minority groups that are not officially registered in government statistics. (DANE, 2018).

Subsequently, illiteracy indicators in Colombia are close to 5.24%, which shows that there are still major educational challenges facing the country to the extent that there are approximately 1,857,000 illiterates. According to the Large Integrated Household Survey (GEIH), the number of illiterates in Colombia is and in rural areas the percentage rises from 5.24% to 12.6%. (DANE, 2018).

Illiteracy rates represent a limitation for the project as these indicators increase when we speak of digital illiteracy. Hence, it is low the possibility that the "Urna de Cristal" project can work as an effective communication channel for this population. This generates the necessity of designing complementary strategies in order to generate inclusive public policies through digital tools.

Technological

Following the global trend, Colombia has experimented a large increase not only in internet connections but also in social media users over the past 10 years. This increase is due among

other factors to the initiatives of the Colombian Government, especially the Ministry of Technology, focused on installing submarine cables, offering more than 1500 public wi-fi areas around the country, reducing the cost of the connection for poor villages, among others. It should be noted that there is still a large gap between the cities and the rural part as the latter has much lower levels of connectivity. (Dinero, 2018). According to data from the World Bank, internet penetration in Colombia is 64.1%, which is almost twice as high as it was 10 years ago. (World Bank, 2018). In addition, official data from the government of Colombia for the last quarter of 2019 show that the number of people with broadband internet access was 6.9 million, 260,000 more than the year immediately before and the number of mobile connections is 30.9 million. (DANE, 2018)

In the landscape of connectivity there is a very important factor that let us see that the potential of the project is very high and it is the time spent by Colombians on the internet. Despite not being among the top 30 countries in terms of internet penetration, Colombia is in 4th place with 9.1 hours per day spent on the internet.

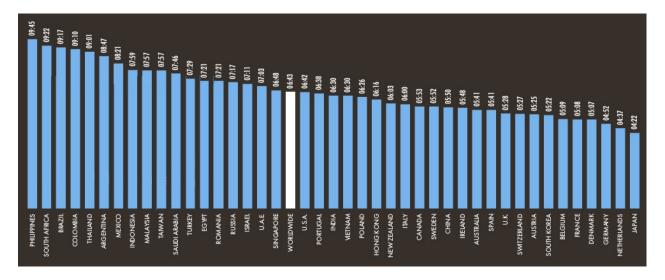


Figure 10. Time spent per hour on internet

Source: Wearesocial & Hootsuit, 2020.

In parallel with the increase in Internet connections, the number of users of social networks has made significant progress, especially as a result of the increase in the use of mobile

devices. It is estimated that 8 out of 10 Colombians are active users of social networks, among which we can highlight: Facebook, in which 15 million Colombians review their profile every day; YouTube, with 24 million users per month is a special case to the extent that per day 200 million videos are watched and it is seen more in Colombia than television itself: it is estimated that for every 60 seconds of video transmitted in the country, 44 seconds correspond to YouTube; WhatsApp, with approximately 34 million users and Twitter with 6 million users. (MinTIC, 2020; Vanguardia, 2016)

This panorama evidence the social media as an important window into the homes of Colombians to the extent that the chances of a message projected by the government reaching a high impact are quite high (Lees-Marshment, 2019). Hence, it is a great opportunity for the "Urna de Cristal" project to become an effective digital channel between government and citizens.

Legal

Subsequently, the legal framework covering citizen participation in Colombia will be presented below in order to understand the parameters to be followed by the project for its implementation. It is true that the legal framework may limit the flexibility of the project to the extent that there are certain guidelines that must be respected. However, Colombian legislation also promotes citizen participation mechanisms as a fundamental tool in the construction of democracy. In this connection, the changes made to the project in order to increase the influence of citizens on government decisions are in favour of the democratic principles laid down in the 1991 Constitution.

Table 5. Legal framework covering citizen participation in Colombia

All the citizens have the right to know the public documents
Making respectful requests to the authorities for reasons of general or particular interest and obtaining prompt response is a fundamental right of Colombians
Spaces through which citizens can exercise control over government actions must be guaranteed.
Every citizen has the right to be regularly informed about the activities of public and private entities performing public functions or administering State resources
Stablishes as a principle the massification of online government
Creates the possibility of State intervention in the massification of the online government strategy
Defines the use and appropriation of technology in different sectors, including government, as an objective of the Ministry
The TIC fund can finance Government programmes with the objective of developing the Online Government strategy
It defines the components, guidelines and responsibility for the implementation of the Online Government strategy
It defines the e-government strategy as a good governance strategy and makes it mandatory for all public administration entities
It defines the implementation of Government online as a strategic TIC guideline to improve the attention to the citizens.
It is the obligation of the government to ensure the functioning of the telecommunications infrastructure in order to ensure the proper operation of the Government's online strategy.
Facilitate community access to public information produced and maintained by different public entities
Defines the active transparency, passive transparency and information management tools.
Defines the time limits by which government entities must respond to citizens' requests
Defines the technical parameters for publication under Ordinance 103 of 2015
Defines the obligations of public entities to ensure citizen participation in the definition of their policies and in accountability
Regulates the processing of petitions, complaints, consultations, complaints, suggestions and complaints submitted to the Ministry/Information and Communications Technology Fund

Source: own

2.8 Space for research derived from "Urna de Cristal" flaws

The "Urna de Cristal" project was born with the objective of bringing the government closer to the citizens through technological channels and also has among its goals to improve the image of the government both nationally and in the territories. The last survey that analysed the Colombian citizens made by Edelman (2020) shows that most people (75%) perceive that the government is not honest, lacks a purpose (60%) and has no vision of the future (53%). Moreover, the 64% of the population surveyed think the system has failed them and the 85% desire a change in the country. The widespread discontent and high distrust of the government poses a high challenge to the "Urna de Cristal" project to the extent that the incentives for citizens to use the social media platforms are very few given the low levels of government legitimacy.

Furthermore, the indicators that measure the impact of the project are conceived only from a quantitative perspective and are based on process and output indicators and not on impact indicators. This can be evidenced in a very clear way in the Report of Interaction and Collaboration of the National Government in Social Networks (MinTIC, 2017) where a record is made of the questions received by the platform "Urna de Cristal", the data and methodology used to assess the rate of responses to citizens are presented below.

Entity A	ssigned	Q	%	PQ	%	Valuation
URMIN VIVIENDA	2283	2283	100%	0	0%	1 IDEAL
URNA DE CRISTAL	1204	1204	100%	0	0%	1DEAL
MIN TRABAJO	803	803	100%	0	0%	1DEAL
MIN AGRICULTURA	181	181	100%	0	0%	1DEAL
MIN AMBIENTE	135	135	100%	0	0%	1DEAL
MIN COMERCIO	103	103	100%	0	0%	1DEAL
MIN MINAS	72	72	100%	0	0%	1DEAL
SENA	70	70	100%	0	0%	1DEAL
MIN RELACIONES EXTERIORE	S 61	61	100%	0	0%	1 IDEAL
MIN CULTURA	41	41	100%	0	0%	1 IDEAL
COLDEPORTES	21	21	100%	0	0%	1 IDEAL
MIN INTERIOR	18	18	100%	0	0%	1DEAL
MIN EDUCACIÓN	1545	1539	100%	6	0%	1DEAL
MIN SALUD	879	874	99%	5	1%	1DEAL
PRESIDENCIA	214	211	99%	3	1%	1DEAL
DPS	293	287	98%	6	2%	1DEAL
MIN TRANSPORTE	518	502	97%	16	3%	1DEAL
FNA	336	328	98%	8	2%	1DEAL
MIN HACIENDA	276	266	96%	10	4%	1DEAL
MIN DEFENSA	409	393	96%	16	4%	1DEAL
MIN JUSTICIA	83	75	90%	8	10%	1DEAL

* (Q) Questions (PQ) Pending Questions

Fig 11. Report of questions received through "Urna de Cristal" platform

Source: MinTIC, (2017)

Current measurement indicators do not account for the impact and quality of governmental responses to requirements done by citizens. Therefore, low measurement standards, based on mere processes and outputs, tend to overrate the performance of governmental institutions in answering to public demands posed in "Urna de Cristal.".

The results obtained in this report suggest that all government entities are doing, in theory, an ideal job. However, this valuation might not correspond to reality and it is an analysis that is repeated in the other social media platforms of the government. On this point, in the interview with the coordinator of the project "Urna de Cristal" this argument was investigated to see if there was an indicator that considered the quality of the replies or gave citizens the opportunity to rate the response they got and the answer of the coordinator of "Urna de Cristal" was:

"Quantitatively we have the indicators that allow us to see how many answers we receive and how many we respond to, qualitatively the observations are taken from daily experience, that is, to look at the response that was given to each of the users but you won't find an analysis that tells you punctually, for example: of the 100 responses that the government received in a month, we answered 80 and of those 80, the same 80 were accurate responding what the citizen asked, you will not find this indicator". (Source: Interview)

Clearly, the absence of any measure of the quality of the responses that users are getting from the government makes it difficult to determine whether the results of the participation exercises carried out by the government had any impact or influence on the policy making process.

In addition, other external assessments of the project have been made to evaluate its performance, for example, in an analysis of Colombia's digital strategy, the OECD evaluated the "Urna de Cristal" project as follows:

"Considering this is an unprecedented initiative in this country, it was decided to measure results in terms of scope, interaction and management with permanent follow-up of a table of annual indicators and goals, including how many people reaches Crystal Urn, how many interact with it, the management of replies to citizen's comments, traffic through each channel, participation exercises carried out, partnerships conducted with national and territorial agencies, among other indicators." (OECD, 2018, p.2)

Again, the indicators used do not consider the real impact that the policy is creating as they visualise participation as a quantitative exercise in which levels of interactions are considered and not the quality of responses that was given to citizens or the impact of their opinions on the design of public policies. The development of the project will show how the results of

the surveys carried out on Colombian citizens differ from the indicators, the causes will be analysed and an improvement strategy will be proposed.

3 Citizen's analysis

H1: Compare to males, females use more often the social media platforms

H2: A better performance of the social media platforms, increase the user's satisfaction when using social media platforms in contact with government

H2A: The easy the platform to navigate, the higher the satisfaction.

H2B: The more visually interesting is the platform, the higher satisfaction.

H2C: The more useful and interesting the information is, the higher satisfaction.

H3: The more government considers the citizens opinion the higher is the level of satisfaction of the users.

3.1 Unit of analyse

The unit of analysis for this research consist of individuals who have a social media account and their nationality is Colombia. The reason why the research is conducted in that context is because Colombian government introduced a project in 2010 to communicate the citizens with the government through social media platforms and this project aims to enhance the existing strategy

To achieve the aim of this thesis, primary data were collected. Based on the consulted literature of the field, a questionnaire was designed in the local language (which is Spanish) to collect that data. The respondents were reached through social media channels, conditioned even by the situation created by the COVID-19 pandemic. The questionnaire was built in a Google form, which is free of charge. The link of the form was accessible for 2 weeks (last week of May and first week of June 2020). Overall, 502 individuals completed the questionnaire which can be found in the **Appendix B**.

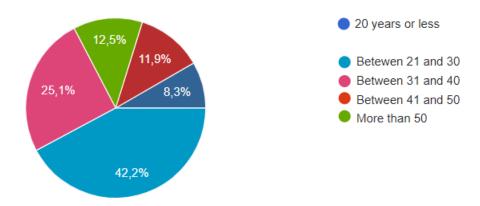


Figure 12. Age distribution of the respondence.

Source: own

The majority of respondents are between 21 and 30 years and which somehow represent the age distribution of Colombia as it is a young society and this is the age range in which the use of social media is highest in most of the world.

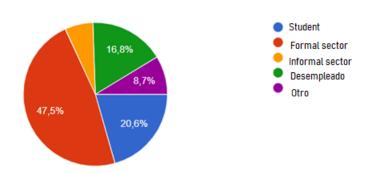


Figure 13. Occupation distribution of the respondence

Source: own

It is pertinent to note that the number of people who answered the survey and identified as unemployed (16.8) is a representative sample of the current context of Colombia in times of pandemic.

Table 6. shows the sample profile cross-tabulating demographic variables with two other questions. One question is "Have you heard about the "Urna de Cristal" strategy from the

Colombian Ministry of Information Technology and Communications?" The second one is "Have you visited the "Urna de Cristal" platform or any of their social media?" Referring to the association of age variable with the two above questions it can be said that there is not a substantial difference in the frequencies. Similar figures are observed even for other demographic variables (See Table 6).

Table 6. Cross-tabulation of demographic variables with question related to "Urna de Cristal" project

		Have you heard a	bout the "Urna de	Have you	visited the
		Cristal" strateg	gy from the	"Urna de	e Cristal"
		Colombian Minist	try of Information	platform or	any of their
		Technology and C	communications?	social media	?
		No	Yes	No	Yes
				Column N	
		Column N %	Column N %	%	Column N %
Age	Under 20 years	22.3%	18.1%	18.2%	17.8%
	21-30 years	43.6%	39.4%	36.4%	48.9%
	31-40 years	22.3%	30.3%	30.8%	28.9%
	Above 4 years	11.8%	12.2%	14.7%	4.4%
Gender	Female	48.7%	38.8%	37.1%	44.4%
	Male	51.3%	61.2%	62.9%	55.6%
Education	High school degree	13.4%	4.3%	4.2%	4.4%

	Trade/ technical/ vocational training	19.1%	16.5%	18.2%	11.1%
	University	46.2%	43.6%	42.7%	46.7%
	Postgraduate	21.3%	35.6%	35.0%	37.8%
Occupation	nStudent	24.2%	14.4%	14.7%	13.3%
	Formal sector	44.9%	52.1%	52.4%	51.1%
	Informal sector	5.7%	7.4%	7.7%	6.7%
	Unemployed	16.2%	17.6%	17.5%	17.8%
	Other	8.9%	8.5%	7.7%	11.1%

The above discussion leads to the fact that demographic variables may not be important predictors for the individuals' perception on the satisfaction they get using the "Glass Urn" platform. This means that, regardless the fact whether people know/use or not the platform, they act similarly.

3.2 Method

The used method for analysis the data are non-parametric and parametric methods. To test for differences between gender and social media usage, Mann-Whitney U test was used. The assumptions of applying t-test were not met (normal distribution of the variables), which lead to the use of the Mann-Whitney U test (Hollander et al., 2013). Mann-Whitney U test analysis the difference only between two groups. There are statistical software who can execute this test, for example SPSS.

To examine whether individuals are satisfied with the use of the "Cristal Urn" platform a logistic regression was performed, which is a parametric method. The nature of the dependent variable limits the use of the statistical method (Hosmer et al., 2013; Tabachnick & Fidell,

2013). In this case, the dependent variable is the individuals' satisfaction measured as a dummy variable (Yes/No). All the analyses shown here are done using statistical software SPSS 23.

A general for of the logistic regression is,

$$P = \frac{1}{1 + e^{-(\alpha_1 + \alpha_2 X)}}$$

Where P stands for the probability a particular even occur, X is the vector of independent variables.

Given that the demographic variables of age, gender, and education have been found to have a significant effect on social media users' behaviour, they were included in the analysis as control variables to avoid possible causal influence on dependent variable.

3.3 Results

Table 7 is a summary of Mann-Whitney test for gender and the use of different social media. Hence, there are significant differences between females and males in using some of the social media, in particular WhatsApp, Instagram, Twitter and Telegram (see second part of Table 7). The test revels that WhatsApp and Instagram are more used by females as compared to males, since the mean rank for females were bigger that the males one. Therefore, H1 is partially supported. On the other hand, Twitter and Telegram are used more by males in comparison to females, since the mean rank for males were bigger that the females (see the first part of Table 7). Thus, for these two platforms the data failed to support H1. This finding may provoke ideas on designing/upgrading the existing platform by considering gender. So, if the aim is to reach more females than males, then social media like Instagram may help in this regard.

Table 7. Results of the Mann-Whitney test

Ranks

	Gender	N	Mean Rank	Sum of Ranks
WhatsApp_use	Female	226	262.55	59337.00
	Male	276	242.45	66916.00
	Total	502		
Facebook_use	Female	226	254.58	57535.50
	Male	276	248.98	68717.50
	Total	502		
 Instagram_use	Female	226	279.69	63209.00
	Male	276	228.42	63044.00
	Total	502		
Twitter_use	Female	226	224.18	50664.50
	Male	276	273.87	75588.50
	Total	502		
Linkedln_use	Female	226	253.76	57350.50
	Male	276	249.65	68902.50
	Total	502		
YouTube_use	Female	226	249.11	56298.00
	Male	276	253.46	69955.00
	Total	502		
Telegram_use	Female	226	241.12	54493.00
	Male	276	260.00	71760.00

Total 502

Test Statistics^a

	WhatsApp	Facebook_	Instagram	Twitter_us	Linkedln_	YouTube_	Telegram_
	_use	use	_use	e	use	use	use
Mann- Whitney U	28690.000	30491.500	24818.000	25013.500	30676.500	30647.000	28842.000
Wilcoxon W	66916.000	68717.500	63044.000	50664.500	68902.500	56298.000	54493.000
Z	-1.728	442	-4.027	-3.931	401	343	-2.083
Asymp. Sig. (2-tailed)	.084	.658	.000	.000	.688	.731	.037

a. Grouping Variable: Gender

Regarding the objective to predict the individuals' satisfaction, a logistic regression was run. Its output is shown in Table 8 (which is a set of tables). The first set of data shown in this table refer to the number of cases which were processed. Hence, 260 out of 502 cases were included in the logistic regression, which represent 51.8% of the respondents. 242 cases were not counted because there were missing values in the variables included in the model.

The sub-table titled Omnibus Tests of Model Coefficients informs for the good-fit of the model. The Chi-square statistic indicate that the estimated model was improved as compared to the baseline model.

In the Model Summary sub-table it is shown the R-square of the estimated model. The value of Cox & Snell R Square was 0.168, while the value of Nagelkerke R Square was 0.278, meaning that the independent variables explain 27.8% of the variation in the dependent variable. This figure can be seen as an indicator for a good-fit model. In general, the level of R square for logistic regression is relatively small, which is related to the limited number of the categories of the dependent variable (yes/no).

Hosmer and Lemeshow Test was reported in the next sub-table. Since this statistic was insignificant, then it can be said that the model is correct and its results can be interpreted.

Table 8. Output of logistic regression

Case Processing Summary

Unweighted Cases ^a		N	Percent	
Selected Cases	Included in Analysis	260	51.8	
	Missing Cases	242	48.2	
	Total	502	100.0	
Unselected Cases		0	.0	
Total		502	100.0	

a. If weight is in effect, see classification table for the total number of cases.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	41.238	5	.000
	Block	41.238	5	.000
	Model	47.677	8	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	191.904ª	.168	.278

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	3.839	8	.871

Variables in the Equation

	В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a Gen	553	.383	2.086	1	.149	.576
Age	.295	.204	2.094	1	.148	1.344
Edu	.552	.242	5.219	1	.022	1.737
Easy_navigate_sections	.221	.249	.784	1	.376	1.247
Links_work_good_visual_atractive	.171	.257	.441	1	.506	1.186
Useful_interest_info	.033	.215	.024	1	.877	1.034
Can_ask_get_answer	.454	.195	5.429	1	.020	1.575
Importance_opinion_for_gov	.474	.135	12.372	1	.000	1.607
Constant	-7.639	1.460	27.379	1	.000	.000

a. Variable(s) entered on step 1: Easy_navigate_sections, Links_work_good_visual_atractive, Useful_interest_info, Can_ask_get_answer, Importance opinion for gov.

Finally, in the last part of the Table 8 is located the output of the logistic regression for the variables included in the model. As it can be seen, gender and age of the respondents do not

matter for the satisfaction of the individual while using the platform. Hence, there is not discrimination among individuals in terms of gender and age for the level of satisfaction they get by using the "Urna de Cristal" platform.

Interesting result is found in the relationship between level of education and individuals' satisfaction. The data emphasises that as the level of education increases, people are more prone to be satisfied while using social media platform to contact the government.

Evidence shows that the performance of the platform does not matter for getting satisfied people who use social media in contacting the government. The performance of the platform was represented by three variables which are "It is easy to navigate between the sections or topics that the website displays", "Links work well and sites are visually interesting", and "The information published is useful and is of my interest". The three of them reflected insignificant influences on the satisfaction of the people using social media to contact the government. Thus, the data failed to support H2A, H2B, H2C.

However, the two last variables were significant for this type of satisfaction. They are "I can send through my doubts and I know I will get an answer" and "do you think your opinion was considered". It can be interpreted, the more the government consider the individuals' opinion, the more its citizens are satisfied. Therefore, evidences support H3.

4 PROJECT TO ENHANCE ONLINE SOCIAL MEDIA USAGE TOWARDS THE POLITICAL SYSTEM IN COLOMBIA

4.1 Introduction

The objective of this project is to enhance the strategy of the Colombian government "Urna de Cristal" which main target is to giving Colombians citizens the possibility to interact with local and national government, to know the public policies and to participate in the design of current and new projects.

The "Urna de Cristal" strategy has very positive objectives for the citizenry as it seeks to reduce the gap that historically has put the State in an almost unattainable place for the citizenry and, thus, this has generated a disconnection from public policies with the needs of the people. However, some flaws have been found that have not allowed the strategy to perform ideally. This research will develop some strategies that can increase the effectiveness of the "Urna de Cristal" project" considering the findings of the quantitative and qualitative analyses. This thesis will develop a risk analysis, cost analysis and time analysis along with an overall evaluation and conclusions.

4.2 Situation analysis

An analysis of the "Urna de Cristal" project found a clear difference between the indicators used by the government to measure the impact of the policy and the real user's perception of it. This is a consequence from a one-way view of indicators, which leaves the quality of responses given to users outside the area of analysis to the extent that, whether the response met users' expectations or not, is an unknown indicator. Therefore, the results shown by the government do not measure the real impact of the policy. Knowing the satisfaction of citizens derived from interacting with the government social media platforms is a fundamental indicator as it directly influences the trust and confidence of citizens in government. (Mahmood, 2016)

Moreover, the statistical analyses done using parametric and non-parametric methods (Mann-Whitney Test and logistic regression) revealed that the performance of social media platforms (measured with easy navigation sections, visual attractiveness, and useful information) is not significant for individual's satisfaction and, on the other hand, the fact of knowing that an answer will be given to the question formulated lead to higher user users' satisfaction. Moreover, the results showed that one of the factors for users to avoid social media communication channels is the thought that their opinions will not be considered by the government and will not have a real impact in the decision-making making process.

This thesis seeks to redesign the project "Urn de Cristal" by creating two strategies. Firstly, the creation of a new satisfaction indicator for the users of government social media platforms. And, secondly, the creation of an analytical appendix of e-participation in the policy process. Moreover, the project will consider the risk analysis, cost analysis and time analysis in order to evaluate the potential risks prevailing in the market, how to finance the project and the time for implementing all activities. Lastly, the project will be ended with an overall evaluation.

4.3 Project action plan for "Urna de Cristal" strategy

The table below shows the project action plan with a detailed outline of the tasks, the resources needed and the potential hazards, all aimed to accomplish a goal based in a timeline.

Table 9. Project action plan

STRATEGIC	RESOURCES	DURATION	POTENTIAL	DESIRED
ACTION	REQUIRED	(MONTHS)	HAZARD	OUTCOME
DESCRIPTION				
Goal setting	Author, Development Plan ²	3	Fixed goals from existing Development Plan	Goals established
Reviewing "Urna de Cristal" strategies	Archives, previous reports and evaluations from national and international institution	2	Non-holistic indicators	Strategies identified
Strategy initiation and recommendation	Author, Digital Government Directorate, software of the platforms	3	Lack of political will to agree on the development of the new strategy	New strategy to enhance government communication channels with citizens
Proposal development	Author, Digital Government Directorate, Presidency of Colombia	4	Constant changes in public official causing delays	Strategy out-lined
Execution and control of proposed strategy	Digital Government Directorate, Presidency of Colombia	1	Lack of connectivity and internet access	Enhanced participation, high participation

² Development Plan refers to the document that stablishes the government objectives and goals to the medium and long run.

Evaluation	and	Digital Gov	vernment	3	Weak	Evaluation	outcomes
monitoring		Directorate, Presidency			performance	comprehens	ively
		of Colombia			indicators	inform	on the
						performance and	
						impact of the strategy	

4.4 Strategy "1": User's satisfaction indicator

To the extent that the "Urna de Cristal" project does not currently have an indicator that accounts for the user's degree of satisfaction regarding its interaction with the government, great opportunity for improvement is being missed to the extent that receiving feedback can increase quality standards and, therefore, the performance of the entities (Mahmood, 2016).

The construction of a new indicator arises from the need to broaden the vision of the "Urna de Cristal" project to the extent that carrying out an evaluation of results from a purely quantitative point of view does not allow to see the real impact of the project. According to Gunawong (2015) to conduct a more qualitative, rather than quantitative, analysis of citizens' interaction with government, allow to determine more precisely the level of participation and commitment that the social media platforms are guarantying.

This project is going to establish an important starting point for improving the quality standards of the responses that citizens are given to their comments and questions made through "Urna de Cristal" platforms since at present the government does not have the capacity to determine whether the answer given to a citizen resolved his concerns or if he/she was simply given a response to meet an indicator of percentage of questions answered.

The indicator is designed to be intuitive, fast with few response options so that users have incentives to answer the question that will be asked.

4.5 Implementation and control for strategy 1.

I. The satisfaction indicator will be constructed based on a question that will be asked to the user after having received a response from the government through a social media platform, and will answer with a unique selection to the following question: *How would you rate the answer to your requirement?* The answer options to this would be: Very satisfied, satisfied, neutral, unsatisfied and very unsatisfied. This option will be represented by illustrative icons that make it easier, more attractive and faster for people to respond. For the analysis user's answers, it will be assigned a value of 1 to 5 to each response, being 1 very unsatisfied and 5 very satisfied. Therefore, taking into account the findings of the surveys conducted, WhatsApp emoticons were used to represent the different levels of satisfaction considering that respondents expressed a high degree of use of this platform, hence, the system would become more familiar and the dynamics would be understood in a better way.

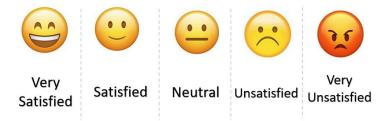


Figure 14. Illustrative representation of possible answers

Source: own

It is important to note that the adaptation of "Urna de Cristal" platforms to carry out this strategy does not require major technical modifications or major changes in the software to the extent that it would only need to include the previously designed question to the end of the answer given to the citizen's question and there is already a system that accounts for the interactions made through each social media platform. Hence, what this strategy would involve is connecting the counting of questions and answers with the new question of satisfaction.

II. At a second stage, the results obtained from the question of satisfaction of the citizen should be systematized and analysed. To the extent that the objective is to give more precision to the indicators that the government is currently using which consider the number of questions and the number of answers as it was seen in Fig. 11, this indicator will group the 3 data to generate a final weighting (satisfaction, number of questions, number of answers).

Table 10. Indicator overview

Name	Satisfaction indicator						
Objective	Measuring citizens' satisfaction with the answers obtained through the platforms of the "Urna de Cristal" project						
How to measure it?							
Formula	((Number of questions/number of answers) * satisfaction obtained*2)*100						
	Variable 1	Number of questions					
Name of variables	Variable 2	Number of answers					
	Variable 3	Satisfaction obtained					
Frequency of measurement	Biannual						
Measurement unity	Porcentage						
Base line	100%						
Frequency of measurement	Biannual						
Tendency	Constant						
	Deficient	Satisfactory	Excellent				
Ranges in meeting the target (Maximize)	0-59%	60-79%	80-100%				

Source: own

4.6 Strategy 2. Analytical appendix of e-participation in the policy process

According to the results obtained in the analysis of the survey data, there is a belief among users that their opinions are not considered by the government and therefore they are not generating the influence that the citizens consider necessary. Subsequently, it is pertinent to emphasize the theoretical framework displayed in Fig 5 in which the theories of e-

participation are established. In the participatory model, the degree of participation is the highest as the participation of the citizens has a high influence in the public policies (Chadwick & May, 2003). In order to ensure that e-participation exercises conducted through the "Urna de Cristal" platform have more legitimacy and transparency so that citizens can evidence their opinions had value in the design of public policies (Andersen et al., 2007), the strategy 2 propose to create an analytical appendix of e-participation in the policy process.

In the participatory model developed by Chadwick & May (2003), the citizen's roll is active and the government has the tools to structure and analyse the information it receives from citizens through a complex flow information system. In this sense, it is pertinent that the platform "Urna de Cristal" has the capacity to establish a technical system that allows to organize and systematize people's opinion towards stablishing a real participative dynamic instead of only communicative.

4.7 Implementation of strategy 2.

In the implementation process, two steps stand out: the first, when a space is open for citizens to participate in the design of a public policy through the "Glass Urn" platform, a methodological annex will be published indicating how people's comments will be evaluated and systematized and what criteria will be use to asses the citizens opinions.

In the appendix to be published when people are invited to participate, the methodology used should describe in detail how the relevance of people's comments was organized and what were the quality standards.

The second step arises, when "Urna de Cristal" publishes the results of the exercises, should include a link leading to the draft of the public policy that was submitted for discussion presenting the methodology that was used to determine the viability of people's comments. This is done in order to give the users who contributed in these e-participation exercises a clear answer as to how their comments were evaluated and how they were taken into account, or if not, explain why they were not considered.

With the implementation of this strategy, not only is an exercise in transparent participation guaranteed, but citizens will evidence the influence that their opinions had and that the time they spent expressing opinions had an effect on the design of a public policy. This also reduces the arbitrariness with which people's comments can be treated to the extent that the criteria used by the government to evaluate e-participation exercises are not currently known.

4.8 TIME ANALYSIS OF THE PROJECT

After defining the tasks and the objectives of the project, it is pertinent determine the amount of time needed to complete all project tasks. The time analysis is important for two reasons. Firstly, there will be urgent projects with tight deadlines that will determine the feasibility of the next projects. Secondly, not finishing the project in the agreed timeframe is considered unprofessional.

To reach an accurate time analysis of the project, the program evaluation and review technique (PERT) and Critical path method (CPM) were used. The PERT method will determine the necessary time to finish the new strategies and the critical path helps to complete all necessary activities for the "Urna de Cristal" project.

Initially, it is pertinent to identify the project tasks and the order in which they need to be completed to the extent that it is possible that some tasks can be done simultaneously, while others cannot be done until one or more previous tasks are complete. Also, with this approach, each task has three-time estimates; optimistic time, normal time and pessimistic time estimate. The optimistic time is the fastest possible time needed to complete the task and usually involves additional cost. Normal time is the most likely time, while the pessimistic time is the slowest time needed to complete the task. Using these time estimates, the expected time can be calculated with the formula displayed below:

$$T_e = \frac{O + 4M + P}{6}$$

Where:

Te — Expected time

O — Optimistic time

M — Normal time

P — Pessimistic time

Table 11. Activities supporting the reengineering the "Urna de Cristal" strategy

Activity	Description	Predecessor(s)
A	Submitting a proposal to the Digital Government Directorate	
В	Arranging a meeting with the coordinator of the "Urna de Cristal" project	A
С	Presenting new project for "Urna de Cristal"	В
D	Advising Digital Government Directorate to adopt a new project to enhance "Urna de Cristal"	С
E	Submitting formal letters to Traditional Medicinal Practitioners Association of Ghana for a consultation	D
F	Assisting in the adoption of new approach for the project	Е
G	Testing the viability of the project	F

Subsequently, the above activities will be executed with its predecessors by considering optimistic, most likely, and pessimistic times frames. The overall completion of the project will be shown in the subsequent following table:

Table 12: Time possibilities for the project (in months)

Activity	Predecessors	Optimistic	Most likely	Pessimistic
A	-	2	3	4
В	A	1	2	4
С	A	2	4	5
D	B, C	1	2	3
Е	D	1	2	3
F	Е	5	6	7
G	F	4	5	6

It is possible to evidence with the above the possibilities of time duration regarding the execution of the project where the optimistic (fastest) duration for the project is 16 months with a possibility of an additional delay of 1 month.

Table 13. Time possibilities for the project in months.

Activity	Activity time	Early start	Early finish	Late start	Late finish	Slack
Project	16					
A	2	2	3	4	3	0
В	1	1	2	4	2	2
С	2	2	4	5	4	0
D	1	1	2	3	2	0

Е	1	1	2	3	2	0
F	5	5	6	7	6	0
G	4	4	5	6	5	0

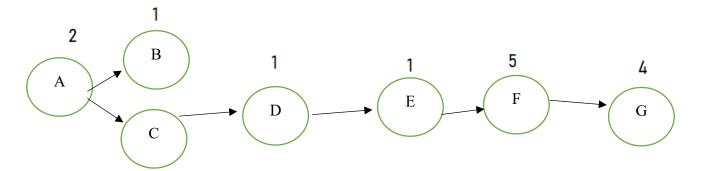


Fig 15. Precedence graph

The table 13 and the figure 15 show the connections and interrelationships between activities of the project. It also indicates the start and finish of each activity and the expected time duration of the entire project.

5 Conclusion

The aim of this thesis is to see the role social media has for the government in communicating with the public. Nowadays, social media is used by government as a tool to get to the citizens, since it has no formal barriers. Almost all politicians benefit from this approach. However, there is no clear evidence of the real impact of social media platforms for the benefit of the people in the context of getting things done by the government.

Taking into consideration this above need, the main objective of this thesis was to enhance the strategy of communication of the Colombian government though social media named "Urna de Cristal". This could be done by analysing the perceptions of the individuals and the findings revealed that the performance of social media platforms (measured with easy

navigation sections, visual attractiveness, and useful information) is not an important aspect for the citizens regarding the use of the "Urna de Cristal" platforms.

Furthermore, for citizens, to know that an answer will be given and that their opinions will be considered in the decision-making process lead to more satisfaction. Findings also showed a direct relation between education and satisfaction while using social media platforms to communicate with government and the use of social media platforms is influence by gender. This leads to the fact that gender should be consider while designing social media platforms.

Moreover, a qualitative analysis was developed and a deep investigation revealed that the indicators used for the government to measure the impact of the project are not accurate to the extent that they visualise participation as a quantitative exercise in which levels of interactions are considered and not the quality of responses that was given to citizens or the impact of their opinions on the design of public policies. The results of the findings summarized the thesis with a project to improve the performance of the "Urna de Cristal" strategy. This project has a high potential for the future and it is pertinent that upcoming governments keep working on it.

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APPENDICES

Apendix A. Interview with the coordinator of "Urna de Cristal" project

- 1. How the use of social media is planned to improve government-citizenship communication? Is it the sole responsibility of the "Urna de Cristal? Or what other government initiatives are based on using these new Web 2.0 tools?
- 2. Public policies are designed with the objective of solving a previously identified problem, which was the problem that the government identified?
- 3. Have the objectives and expectations regarding the use of social media by the government been met so far, evaluating the nearly 10 years of the "Urna de Cristal" project?
- 4. What can be done to reduce ignorance of the project?
- 5. How feasible it is to add an indicator measuring the degree to which a solution was provided to the problem that the citizen is raising and I would like to know if the Ministry is aware of this scenario.
- 6. What could be done to narrow the scope or this would be counterproductive with the intention of being a broad and inclusive platform?
- 7. What possible allies this policy may have within or outside the State?

Apendix B. Survey of social media as a communication channel between the Colombian government and their citizens.

I have created a short survey to design a project that aims to connect the Colombian Government with their citizens through social media channels. The estimated time to answer the survey is 3 to 5 minutes. The results will be shared in my master's thesis project at Tomas Bata University in Zlín, Czech Republic. The information collected from the survey through this survey will be treated with the strictest confidentiality and will not be used for other purposes without your consent. All the information you provide will be anonymous and no individual data will be disclosed. If you have any questions regarding the questionnaire, please contact me through this email: d plata lerma@utb.cz

1. Gender:
· Male
· Female
· Prefer not to say.
· Other
2. Age
· Under 20 years
· 21-30 years.
· 31-40 years.
· 41-50 years.
· Over 50 years.
3. Please indicate the highest level of education completed
· Less than High school diploma.
· High school degree.
· Trade/technical/vocational training.
· University.
· Postgraduate.
· None.
4. What is your occupation?
· Student.
· Formal sector.
· Informal sector.
· Unemployed.

· Other.
5. On average, how many hours a day do you spend on social media?
· I do not use social media.
· Less than 1 hour.
· 1-3 hours.
· 3-5 hours.
· 5-7 hours.
· 7 hours +.
6. What social media sites do you use the most? (Please rank the following options on scale of 1 to 5, with 1 being the lowest).
· WhatsApp
· Facebook
· Instagram
· Twitter
· LinkedIn
· YouTube
· Telegram
7. What is the main reason why you use social media? (Please rank on scale of 1 to 5 being 1 less important and 5 the most important reason).
· Connect with my friends.
· Share videos and photos.
· Read the news.
· Make political announcements, support causes.
· Get interaction with government platforms.

· Give/ share my opinion on different topics.

- 8. Can social media work as an effective mechanism for government communication with citizens?
- · Strongly agree.
- · Agree.
- · Neither agree nor disagree.
- · Disagree.
- · Strongly Disagree.
- 9. Have you heard about the "Urna de Cristal" strategy from the Colombian Ministry of Information Technology and Communications?
- · Yes.
- · No.
- 10. Have you visited the "Urna de Cristal" platform or any of their social media?
- · Yes.
- · No.
- 11. In which way would you rather communicate with the Colombian Government?
- · Face-to-face.
- · Phone Call.
- · Social media or Website.
- · Email.
- · I have never been in contact with the government.
- 12. How frequently do you use social media to communicate with the Colombian Government in the last year?
- · Never.
- · Less than 10 times.

· Between 11 to 20 times.
· Between 21 to 30 times.
· More than 30 times.
13. When you have contacted the government through a social media platform, have you been satisfied with the response obtained?
· Yes
· No
· Does not apply.
14.In relation to the social media platforms of public entities, you consider that:
Strongly Agree Agree Neither agree nor disagree. Disagree Strongly Disagree
It is easy to navigate between the sections or topics that the website displays
Links work well and sites are visually interesting
The information published is useful and is of my interest
I can send through my doubts and I know I will get an answer
15. Have you ever communicated with a governmental organisation through a social media channel? If so, do you think your opinion was considered? (Please rank the following options on scale of 1 to 5, with 1 being the lowest).
· I have never participated
\cdot 1
\cdot 2
· 3
· 4
· 5
16. Which of the following actions would you like to carry out through social media?
· Follow up or supervise the management of public entities

- · Participate in the definition of programs, projects and initiatives of public entities
- · Report irregularities or inappropriate behaviour of public servants
- · Receive information on the different plans and projects of the government
- · Carry out government procedures and inquiries.
- · Other.
- 17. What the Government should do to incentive the use of social media as a channel of communication with the citizens?
- · Outreach campaigns/ efforts to promote current programs.
- · Offer online training of their tools to users
- · Improve citizen care
- · Create more programs that cover more topics of interest

Other